PD-ABM-813

APPENDIX 3A, Attachment 1
Chapter 3, Handbook 3 (TM 3:43)

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: — DOCUMENT CODE: 3

COUNTRY/ENTITY: Uganda

3. PROJECT NUMBER: 617 0124 (PAAD 617-T-602)

4. BUREAU/OFFICE: USAID/Kampala

5. PROJECT TITLE (maximum 40 characters): Action Program for the Environment

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 08 DD 20 YY 96

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4): A. Initial FY 91 B. Quarter X C. Final FY 96

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(2,900)	( )	(2,900)	(20,000)	( )	(20,000)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1. PVOs					2,315	2,315
Other U.S. 2.						
Host Country					10,995	10,995
Other Donor(s)						
TOTALS	2,900		2,900	20,000	12,310	33,310

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1)	EVMP	NRM				2,900		20,000	
(2)									
(3)									
(4)									
TOTALS						2,900		20,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE: EVFR

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	NRM	NFM	PVU	PVL	BDV		
B. Amount							

13. PROJECT PURPOSE (maximum 480 characters)

The purpose of APE is to assist Uganda's public and private sector to more effectively and sustainably manage its natural resources base in selected areas of the country. This will be achieved through two components: The Policy Component and the Rehabilitation and Resource Conservation Component (The PAAD for this project includes $10,000,000 in Non Project Assistance under the Policy Component).

14. SCHEDULED EVALUATIONS: Interim MM 02 YY 94; MM YY; Final MM 05 YY 96

15. SOURCE/ORIGIN OF GOODS AND SERVICES: 000 941 Local Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment)

N.A.

17. APPROVED BY: Signature: Keith W. Sherper — Title: Mission Director, USAID/Kampala — Date Signed: MM DD YY

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

CLASSIFICATION: Att 1 to App 3B, Ch 3, HB 3 (FS 4:11)

AID 1120-1 PAAD	AGENCY FOR INTERNATIONAL DEVELOPMENT PROGRAM ASSISTANCE APPROVAL DOCUMENT	1. PAAD NO. 617 0124 2. COUNTRY Uganda 3. CATEGORY Action Program for the Environment (APE) 4. DATE August 20, 1991
5. TO: Keith W. Sherper, Mission Director, USAID/Uganda		6. OYB CHANGE NO. 20,000,000 7. OYB INCREASE
7. FROM: Gary Bayer, Agricultural Development Officer		TO BE TAKEN FROM
8. APPROVAL REQUESTED FOR COMMITMENT OF: 20,000,000		9. APPROPRIATION: GSS1-91-21617-KG13

10. TYPE FUNDING	11. LOCAL CURRENCY ARRANGEMENT	12. ESTIMATED DELIVERY PERIOD	13. TRANSACTION ELIGIBILITY DATE
☐ LOAN ☒ GRANT	☐ INFORMAL ☐ FORMAL ☐ NONE	5 years	N/A

14. COMMODITIES FINANCED

Office supplies, computer equipment, estimated cost $ 440,000 (see Annex IIIC Procurement and Contracting Plan).

15. PROMISED SOURCE	FY'91	LOP
U.S. only:	2,900,000	20,000,000
Limited F.W.:		
Free World:		
Cash:		

16. ESTIMATED SOURCE
U.S.:
Industrialized Countries:
Local:
Other:

17. SUMMARY DESCRIPTION

See PAAD Executive Summary

18. CLEARANCES	DATE
D/DIR: Steve Ryney	8/20/91
REDSO/ESA:RLA: Pat Shapiro (draft fax Dtd 8/19)	
CONTR: Rick Ryley	8/20
PRM: Norm Olsen	8/20
ANR: Gary Bayer	8/20
ANR Rob Clausen	8/20

19. ACTION
☒ APPROVED ☐ DISAPPROVED

Keith W. Sherper 8/20/91
AUTHORIZED SIGNATURE DATE
Keith W. Sherper
Mission Director
TITLE

CLASSIFICATION:

CLASSIFICATION: Att 1 to App 3B, Ch 3, HB 4 (TM 4:11)

AID 1120-1 PAAD	AGENCY FOR INTERNATIONAL DEVELOPMENT PROGRAM ASSISTANCE APPROVAL DOCUMENT	1. PAAD NO. 617-T-602 (617-0123) 2. COUNTRY Uganda 3. CATEGORY Action Program for the Environment (APE) 4. DATE August 20, 1991
5. TO: Keith W. Sherper, Mission Director, USAID/Uganda		6. AID FUNDING $10,000,000 7. AID INCREASE
8. FROM: Gary Bayer, Agricultural Development Officer		TO BE TAKEN FROM
9. APPROVAL REQUESTED FOR COMMITMENT OF: 10,000,000		10. APPROPRIATION GSS1-91-31617-KG39 - $1,000,000 GSS0-91-31617-KG39 - $2,000,000

11. TYPE FUNDING	12. LOCAL CURRENCY ARRANGEMENT	13. ESTIMATED DELIVERY PERIOD	14. TRANSACTION ELIG. DATE
☐ LOAN ☒ GRANT	☐ INFORMAL ☐ FORMAL ☐ NONE	5 years	N/A

15. COMMODITIES FINANCED

Approximately $3,000,000 of petroleum

	FY91	LOP
16. PERMITTED SOURCE		
U.S. only:	3,000,000	10,000,000
Limited F.W.:		
Free World:		
Code:		

17. ESTIMATED SOURCE
U.S.:
Industrialized Countries:
Local:
Other:

18. SUMMARY DESCRIPTION

See PAAD Executive Summary Attached

19. CLEARANCES	DATE
D/DIR: Steve Ryner	8/20/91
REDSO/ESA.RLA:Pat Shapiro (draft fax Dtd 8/19)	
CONTR:Rick Ryley	8/20
PRM:Norm Olsen	8/20
ANR:Gary Bayer	8/20
ANR:Rob Clausen	8/20

20. ACTION
☒ APPROVED ☐ DISAPPROVED

Keith W. Sherper 8/20/91
AUTHORIZED SIGNATURE DATE
Keith W. Sherper
Mission Director
TITLE

CLASSIFICATION

UNITED STATES OF AMERICA

AGENCY FOR INTERNATIONAL DEVELOPMENT

U.S.A.I.D. MISSION TO UGANDA

UNITED STATES POSTAL ADDRESS
USAID/KAMPALA
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20520

INTERNATIONAL POSTAL ADDRESS
P.O. BOX 7007
KAMPALA, UGANDA

August 20, 1991

ACTION MEMORANDUM FOR THE MISSION DIRECTOR

THROUGH: Stephen C. Ryner, D/DIR

FROM: Gary L. Bayer, Chief ADO

SUBJECT: Authorization of Uganda Action Program for the Environment: Program No. 617-0123 and Project No. 617-0124

1. PROBLEM:

Your approval is requested for a total grant of Thirty Million Dollars ($30,000,000) to the Government of Uganda for the Action Program for the Environment ("APE") for the five year life of project; a total of $5,900,000 will be obligated in FY 1991. Three million dollars ($3,000,000) of this initial obligation will be non-project assistance, and two million nine hundred thousand dollars ($2,900,000) will be in project assistance.

2. DISCUSSION:

USAID/Kampala proposes to grant $30,000,000 to the Government of Uganda ("GOU") for the APE. The purpose of APE is to assist Uganda's public and private sector to more effectively and sustainably manage its natural resources base in selected areas. The $30,000,000 will be used to fund two components: (1) a Policy component; and (2) a Rehabilitation and Resource Conservation Component. Ten million dollars ($10,000,000) will be in non-project assistance and twenty million dollars ($20,000,000) in project assistance.

Under the Policy Component, APE will support the development of a National Environmental Action Plan (NEAP). Government institutions, non-governmental organizations (NGO), private sector, local communities, and academics will develop the NEAP. The NEAP will examine Uganda's existing environmental laws, policies, guidelines, institutions, and objectives to achieve a national consensus on changes and future directions. Through the development of the NEAP, recommendations for necessary changes in environmental legislation will be proposed by the NEAP Secretariat to the National Resistance Council (NRC).

The Policy Component will also support creation of two new national parks and increased protection of three forest reserves. Finally under the Policy Component, the program will require additional institutional support to accompany the changed status of the parks and forest reserves to insure their adequate management and protection. APE will support the institutions responsible for the parks and reserves through an institutional contract, preferably, with a Gray Amendment entity to provide technical assistance.

Under the Rehabilitation and Resource Conservation Component, APE will provide: (1) Private Voluntary Organizations (PVO) and NGO's with subgrants for projects in and around selected national parks and forest reserves; (2) Uganda National Parks (UNP) and the Department of Forests with funding to rehabilitate and protect the national parks and selected forest reserves; (3) the national Information Center for the Environment (NICE) with assistance to broaden its services; and (4) the private sector with assistance in completing environmental impact studies.

(1) The subgrants will be managed by a PVO Grant Management Unit ("GMU'), which will be established through an umbrella grant to a PVO to be selected by A.I.D. and the GOU through a competitive bidding process. The subgrants will support activities which increase soil fertility, promote tree-planting and agroforestry efforts, provide conservation education, and improve local economies through the development of tourism.

(2) Under this sub-component, the Uganda National Parks (UNP) and the Department of Forestry will restore the infrastructure and boundaries in all National Parks and selected priority forests. Funds will be disbursed to the Ministries responsible for such restoration to implement agreed upon activities and will also be used to finance certain commodities and special technical assistance which will be proved by the U.S. National Park Service through a Participating Service Agreement.

(3) The GOU has already established a geographical information system. APE will also build upon this system to create a broader environmental information system, NICE.

(4) Finally, APE will encourage private sector firms to expand their capabilities to conduct environmental impact assessments through specific funding for environmental assessments of ongoing public projects.

3. PROGRAM REVIEW:

On June 11, 1991, Mission and AID/W reviewers identified issues and areas where resolution or clarification was necessary. As a result of the review it was decided that: 1) a proposed local currency counterpart credit fund would be dropped from the Program since it was determined that there is currently not a credit shortage at the commercial banks; 2) criteria would be modified based on the size of the subgrants; 3) the contractor providing technical assistance will administer local currency and procurement for the Policy Component of the Program; 4) the request for applications from the PVOs will require that the PVOs submit technical capabilities in their proposals; 5) the local currency counterpart deposited into an account at the Bank of Uganda will be subject to the oversight of the Ministry of Finance and advanced to the PVO and contractor as needed for program activities; 6) the Project Manager will prepare a position paper on the National Park conditionality; and 7) a covenant will require Uganda National Parks to enter into an agreement with the private sector for marketing and operations.

Since that review ANR has modified the implementation plan in relation to local currency utilization. Once the local currency is deposited in the special account at the Bank of Uganda, the Ministry of Finance will distribute the funds for the subgrants and the private sector support for environmental impact assessment to the GMU and technical assistance contractor as explained above, but will disburse all other funds (NEAP, Parks and reserves and NICE) to the Ministries responsible for those activities to specific sector line items/activities (Energy, Minerals, and Environment Protection; and Tourism, Wildlife, and Antiquities). The Mission has favorable experience with all three Ministries in project management and financial reporting, and finds those GOU institutions competent to manage these funds.

4. SPECIAL CONSIDERATIONS:

A. Conditions Precedent:

(1) To Program:

Prior to the first disbursement of funds under the program Grant (for the NEAP), the GOU will furnish to A.I.D. an opinion of legal counsel that: the GOU has appointed a Policy Level Steering Committee and that the Steering Committee has appointed A National Environment Action Plan Secretariat, Secretariat Staff, Coordinator, and Advisory Committee in accordance with the procedures explained in the Program Description.

Prior to the second disbursement of funds under the Program Grant (for protected Areas), the GOU will furnish to A.I.D. an opinion of legal counsel that the Bwindi and Rwenzori Forest Reserves have been designated as National Parks and that the conservation status of the Kibale, Semliki, and Mount Elgon Forest Reserves has been elevated.

Prior to the third disbursement of funds under the Program Grant (for the NEAP), the GOU will have completed the NEAP in form and substance satisfactory to A.I.D. and will furnish to A.I.D. an opinion of legal counsel that the GOU has formally adopted the NEAP.

(2) To Project:

Prior to the disbursement of funds for any subgrant under the Rehabilitation and Resource Component of the Project, an environmental review shall be conducted and presented for approval to the appropriate A.I.D. official.

B. Host Country Contribution: The resources provided by the GOU for the Total APE will be not less than (i) local currency counterpart funds in an amount equivalent to $10,000,000, and (ii) an additional contribution in an amount not less than the equivalent of $995,000, including costs borne on an "in-kind" basis, which shall be in addition to contributions by non-governmental organizations which are estimated to be in an amount equivalent to $2,315,000).

C. Preference given to a Gray Amendment firm: Under the policy component of the program, an institutional contract will be awarded, preferably, to a Gray Amendment consulting firm which will be responsible for providing technical assistance and training with reference to the NEAP.

D. Initial Environmental Evaluation: In the Initial Environmental Examination (IEE) the NPA, technical assistance, training and NEAP work received a Categorical Exclusion, and the PVO Interventions and Sub-grants received a Deferral. As detailed in section V. no. 4 of the IEE, all environmental reviews of subgrants will be presented to the Mission Environmental Officer for approval. The Mission Environmental Officer will refer all subgrants over $50,000 to the Regional Environmental Officer in REDSO/ESA for review prior to Mission approval and, in addition, will refer any subgrants with unusual circumstances to the Bureau Environmental Officer.

The Bureau Environmental Office has delegated authority to the Mission Director, USAID/Kampala, or to the person acting in that capacity, with the clearance of the Mission, Regional or Bureau Environmental Officer (as appropriate), to approve the environmental reviews for the PVO/NGO subgrants within the APE Program.

As noted above, a condition precedent has been included in the Grant Project Agreement that states that no funds will be disbursed to any sub-grants until an appropriate environmental review has been carried out. In addition, the Agreement includes a covenant that safeguards will be taken with respect to local currency funded activities, to ensure that environmental concerns are taken into account in the design and implementation and the Ministry staff responsible for such activities will provide progress reports to the Mission.

E. Beneficiaries: The NEAP will identify measures and promote policies for the benefit of the nation. It will be gender neutral, and not be biased in terms of ethnicity/regions. It will focus on rural more than urban populations. The elevated conservation of selected parks and forest reserves will benefit those within the protected watersheds. The subgrants will benefit the populations in areas adjacent to selected target areas where rural incomes are low and the population densities are among the highest in Africa.

F. Rate of Exchange: USAID/Kampala has obtained a waiver for a six-month period to accept less than the highest legal exchange rate on transactions between the Government of Uganda and the Mission. While this waiver is in effect (present termination date December 26, 1991) deposits of local currency required under this agreement shall be calculated at the current official exchange rate of Uganda shillings to U.S. Dollars.

5. <u>WAIVERS:</u>

The Program will require a waiver for a PASA with the National Park Service. The justification for a PASA appears in the PAAD and complies with A.I.D. Handbook 12 guidance.

6. CONGRESSIONAL NOTIFICATION AND AVAILABILITY OF FUNDS:

Congressional Notification for the Project and Non-Project Assistance were sent to Congress on June 26, 1991; the statutory waiting period expired on July 25, 1991.

7. AUTHORIZATION:

In accordance with the terms of STATE 182307, the Assistant Administrator of Africa has delegated to the USAID Uganda Mission Director, or the person acting in that capacity, the authority to approve and authorize the subject PAAD for $30 million, of which $5.9 will be obligated in FY 1991; and to approve incremental PAAD amendments with the understanding that the basic objectives of the sector reform conditionality do not change. The ad hoc delegation of authority is exercised under the other terms and conditions of Delegation of Authority 551.

8. RECOMMENDATION:

That you authorize the proposed grants for the Action Program for the Environment by signing the attached Project Authorization for the Project component, and the PAAD Face Sheet for the Program component.

Approve: Keith W. Sherper

Disapprove: _____

Date: 8/26/91

Attachments: Program Assistance Action Document
Project Authorization
Initial Environmental Examination

Clearance:

D/DIR:SCRyner
PRM:NOlsen (draft)
CONT:RRyley (draft)
ADO:GLBayer (draft)
NRMA:RClausen (draft)

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY AND RECOMMENDATIONS 1
A. Program Summary 1
1. Policy Component 1
2. Rehabilitation and Resource Conservation Component 2
B. Program Issues 4
C. Recommendations . . . . . .

II. BACKGROUND AND PROGRAM RATIONALE 5
A. Macroeconomic Performance Update 8
B. Importance of Natural Resources to the Economy . . . 9
C. Problem Statement/Constraints Analysis 10
1. Environmental Policy, Laws, and Institutions . . 10
2. Conservation Problems of Protected Areas 12
a. Soil Erosion 12
b. Deforestation 13
c. Conflicts Between Wildlife and People 13
d. Loss of Biodiversity 14
D. GOU and USAID Strategy 15
1. GOU Strategy 15
2. USAID Strategy and Program Rationale 16
E. Other Donors 17

III. PROGRAM DESCRIPTION 18
A. Goal Statement 18
B. Purpose 18
C. Policy Component 18
1. National Environmental Action Plan (NEAP) 19
2. Protected Areas 22
3. Institutional Support 24
4. Conditionalities and Timing 28
D. Rehabilitation and Resource Conservation Component . 29
1. Conservation of Natural Resources Umbrella Grant 29
a. Grant Management 29
b. Grant Selection 30
c. Selection Criteria 30
d. Illustrative Subgrant Activities 31
2. National Parks and Forest Reserves 32
3. National Information Center for the Environment . 33
4. Environmental Impact Statement 34

IV. PROGRAM ANALYSES 35
A. Economic and Financial Feasibility 35
B. Social Analysis 35
C. Gender Analysis 36
D. Institutional Analysis 37
E. Political Analysis 37
F. Environmental Feasibility 37

V. IMPLEMENTATION ARRANGEMENTS 38
A. Implementation and Mission Management Plans 38
1. Implementation Plan 38
2. Mission Management Plan 39
C. Financial Management and Financial Plan 40
1. Dollar Use and Tracking 42
2. Local Currency Counterpart 44
3. Recurring Costs 45
D. Monitoring and Evaluation Plan Summary 50
E. Contracting and Procurement Plan 50
F. Conditions and Covenants 51
1. Conditions 51
2. Covenants 53

ANNEXES

I. Standard Attachments

A. Objective Tree
B. Logical Framework
C. Initial Environmental Examination
D. Letter of Request
E. Statutory Checklist
F. Guidance Cable/Issues and Responses

II. Background and Feasibility Analyses

A. Subgrants: Illustrative Examples, Budgets, Criteria and Management
B. National Environmental Action Plan: Background and Description
C. Macroeconomic Analysis
D. Economic and Financial Feasibility
E. Social Analysis
F. Institutional Feasibility
G. Field Observations: Bwindi
H. Background of Priority Forest Reserves
I. Gender Analysis
J. Background on National Information Center for Environment

III. Implementation Annexes

A. Financial Plan
B. Implementation Plan
C. Procurement and Contracting
D. Monitoring and Evaluation Plan

TABLE OF ACRONYMS

AID	Agency for International Development
AID/W	Agency for International Development/Washington
APE	Action Program for the Environment
AWF	African Wildlife Federation
BOU	Bank of Uganda
CPI	Consumer Price Index
DANIDA	Danish International Development Agency
DFF	Development Finance Fund (of Bank of Uganda)
DOF	Department of Forestry
EC	European Community
EEC	European Economic Commission
EIL	Experiment in International Living
ERP	Economic Recovery Program
ESAF	Extended Structural Adjustment Facility
FAO	Food and Agriculture Organization
FD	Forestry Department
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GNP	Gross National Product
GOU	Government of Uganda
IBRD	International Bank for Reconstruction and Development
ICA	International Coffee Agreement
ICI	Intermediate Credit Institution
ICO	International Coffee Organization
IEE	Initial Environmental Examination
ILO	International Labor Organization
IMF	International Monetary Fund
IRR	Internal Rate of Return
IUCN	International Union of Conservation and Nature
LTC	Land Tenure Center
MEMEP	Ministry of Energy, Minerals and Environmental Protection
MTWA	Ministry of Tourism, Wildlife and Antiquities
NEAP	National Environmental Action Plan
NGO	Non-Government Organization
NORAD	Norwegian Agency for International Development
NPA	Non Project Assistance
NPV	Net Present Value
NRM	Natural Resources Management
NRMP	Natural Resources Management Plan
NUSh	New Ugandan Shilling

ODA	Overseas Development Administration
PAAD	Program Assistance Approval Document
PAIP	Program Assistance Identification Paper
PASA	Participating Agency Service Agreement
PID	Project Implementation Document
PP	Project Paper
PVO	Private Voluntary Organization
RMS	Rwenzori Mountaineering Services
RPE	Rehabilitation of Productive Enterprises project
SAC	Structural Adjustment Credit
SAF	Structural Adjustment Facility
SDR	Special Drawing Rights
SIDA	Swedish International Development Agency
SIP	Special Import Program
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNP	Uganda National Parks
UNRM	Uganda Natural Resources Management program
USAID	U.S. Agency for International Development
USh	Ugandan Shillings
USNPS	U.S. National Park Service
UTA	Uganda Tourism Association
WCI	Wildlife Conservation International
WCU	Wildlife Clubs of Uganda
WFP	World Food Programme
WRI	World Resources Institute
WWF	World Wide Fund for Nature

I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

A. Program Summary

USAID/Kampala proposes to grant $30,000,000 to the Government of Uganda (GOU) for the Action Program for the Environment (APE). The purpose of APE is to assist Uganda's public and private sector to more effectively and sustainably manage its natural resources base in selected areas. The $30,000,000 will be used to fund two componemts: (1) a Policy component; and (2) a Rehabilitation and Resource Conservation Component. Ten million dollars ($10,000,000) will be in non-project assistance and twenty million dollars ($20,000,000) in project assistance. A total of $5,900,000 will be obligated in FY 1991. Three million dollars ($3,000,000) of this initial obligation will be non-project assistance, and two million nine hundred thousand dollars ($2,900,000) will be in project assistance.

1. Policy Component

Under the Policy Component, APE will support the development of a National Environmental Action Plan (NEAP) with $5,000,000 in A.I.D. non-project assistance (NPA), $1,155,000 in A.I.D. project assistance, and $700,000 in GOU local currency counterpart funds.

Government institutions, non-governmental organizations (NGO), private sector, local communities, and academics will develop the NEAP. The NEAP will examine Uganda's existing environmental laws, policies, guidelines, institutions, and objectives to achieve a national consensus on changes and future directions. Through the development of the NEAP, recommendations for necessary changes in environmental legislation will be proposed by the NEAP Secretariat to the GOU. Total APE funding for the NEAP is $6,855,000.

The Policy Component will also support creation of two new national parks and increased protection of three forest reserves with $5,000,000 in A.I.D. non-project assistance.

Finally, under the Policy Component, the program will require additional institutional support to accompany the recent ministerial restructuring and the changed status of the parks and forest reserves to insure their adequate management and protection. APE will support the institutions responsible for the parks and reserves through an institutional contract preferably with a Gray Amendment entity to provide technical

assistance, which will be financed with $1,760,000 in A.I.D. project assistance, and $230,000 in GOU local currency counterpart funding. Total APE funding for institutional support is $1,990,000.

During the PAAD design a conditionality had been included to restructure the ministries responsible for the management of the environment and natural resources. The reason for the conditionality was to consolidate departments involved with the natural resource sector in order to facilitate communications and better maximize the use of limited resources. As of July, 1991 the number of ministries in the GOU was reduced. Both lead ministries in the APE program have been expanded with the former Ministry of Environment Protection becoming the Ministry of Energy, Minerals and Environment Protection (MEMEP), and the Ministry of Tourism and Wildlife becoming the Ministry of Tourism, Wildlife and Antiquities (MTWA).

With the formation of MEMEP, the Departments of Forestry, Water, Energy, and the Environment have been united under the Secretary for Environment Protection who reports directly to the Minister. With the corresponding personnel changes, particularly at the level of Minister and Secretary, coordination between the departments responsible for the environment has been enhanced. Thus, the original rationale for the conditionality has, to a large extent, been accomplished through this recent reorganization, and the conditionality regarding restructuring has been eliminated. USAID will support the restructuring through APE by providing funding for increased coordinated efforts of the MTWA and MEMEP at the field level, and training for staff of both ministries at all levels.

Total APE funding for the Policy Component is an estimated $13,850,000. All A.I.D. project assistance in the policy component ($2,920,000) will be used for both short and long-term technical assistance, training, and commodities.

2. Rehabilitation and Resource Conservation Component

Under the Rehabilitation and Resource Conservation Component, APE will provide: (1) Private Voluntary Organizations (PVO) and NGO's with subgrants for projects in and around selected national parks and forest reserves; (2) Uganda National Parks (UNP) and the Department of Forests with funding to rehabilitate and protect the national parks and selected forest reserves; (3) the National Information Center for the Environment (NICE) with assistance to broaden its services; and (4) the private sector with assistance in completing environmental impact studies.

(1) Subgrants - Subgrants will be managed by a PVO Grant Management Unit ("GMU") which will be established through an umbrella grant to a PVO and selected by A.I.D. and the GOU through a competitive bidding process. The subgrants will support activities which increase soil fertility, promote tree-planting and agroforestry efforts, provide conservation education, and improve local economies through the development of tourism. APE recognizes the importance of working with local communities surrounding national parks and forest reserves to promote community conservation efforts. APE support for subgrants will total $20,520,000. A.I.D. will provide $11,820,000 in project funds, the GOU $6,385,000 in local currency counterpart funds and in-kind contributions, and the participating PVOs $2,315,000 in counterpart contributions.

APE will provide three types of grants under the PVO/NGO Component: 1) macro grants, expected to be between $25,000 and $600,000 per year, to US registered PVO's and U.S. registered Ugandan NGO's; 2) mini-grants, not to exceed $25,000, to NGO's and PVO's in a manner similar to the ongoing PVO-NGO/NRMS project; and 3) one time micro grants not to exceed $1,000 to NGO's or individuals for supplies, materials and training support.

Using Mission approved selection criteria and proposal presentation standards, the Umbrella Grant PVO will solicit, analyze, and, with Mission and GOU concurrence, award grants. They will establish a Grant Management Unit (GMU) in Kampala with at least two long-term expatriate staff, a small locally hired staff, and short-term technical assistance.

(2) Parks and Reserves - During the past 15 years most of Uganda's National Parks and Forest Reserves have deteriorated to the point where rehabilitation is required to meet minimal operating standards. Using $740,000 in A.I.D. project funds and $2,220,000 in GOU local currency counterpart funds, Uganda National Parks (UNP) and Forest Department will restore the infrastructure and boundaries in all National Parks and selected priority forests. The GOU local currency funds will be disbursed to the ministries responsible for such restoration (to be transferred to specific sector line items of their respective budgets). The project dollar funds will be used to finance (i) certain commodities (to be procured by the GMU for the GOU); and (ii) special technical assistance which will be provided by the U.S. National Park Service through a Participating Agency Services Agreement (to be managed by USAID/Uganda).

(3) NICE - Effective natural resource management requires a solid information base. The GOU has already established a geographical information system. APE will build upon this system to create a broader environmental information system, NICE. APE will support NICE with $390,000 in project assistance (which will include technical assistance pursuant to the institutional contract and commodities to be procured by the GMU for the GOU), and $570,000 in GOU counterpart funding (to be disbursed to the Ministry of Energy, Minerals and Environment Protection).[1]

(4) Environmental Assessment - New Ugandan legislation is expected to require environmental assessments for all development projects. APE will encourage private sector firms to expand their capabilities to conduct environmental impact assessments. The GOU will support private sector involvement in conducting environmental impact assessments with $290,000 in local currency counterpart funds. This segment of the Rehabilitation and Resource Conservation Component will be managed by the GMU.

Total Program funding for the Rehabilitation and Resource Conservation Component is $24,730,000.

B. Program Issues

AID/Washington reviewed The Program Assistance Identification Paper (PAIP) on April 9 and 10, 1991. Several issues were raised which have been addressed in the Program Assistance Approval Document (PAAD). ANNEX I.G describes the issues, responds to the issues and/or indicates where in the PAAD each issue is resolved.

On June 11, 1991, Mission and AID/W reviewers identified issues and areas in the PAAD where resolution or clarification was necessary. As a result of the review: 1) a proposed local currency counterpart credit fund will be dropped from the Program since it was determined that there is currently not a credit shortage at the commercial banks; 2) separate criteria will apply to the various types of subgrants; 3) the contractor providing technical assistance will administer local currency and procurement for the Policy Component of the Program; 4) the request for applications from the PVOs will require that the PVOs submit technical capabilities in their proposals; 5) the local currency counterpart deposited into an account at the Bank of

[1]During the final drafting of the PAAD and negotiation of the Project Agreement, it became evident considerable funding for NICE may shortly become available from another donor. If this proves to be the case, part or all of the funds programmed for NICE will be reprogrammed for other Natural Resource Management activities.

Uganda will be managed by the Ministry of Finance and advanced to the PVO and contractor as needed for Program activities; 6) the Mission Natural Resource Advisor will prepare a position paper on the National Park conditionality; and 7) a covenant will require Uganda National Parks to enter into an agreement with the private sector for marketing and operations.

Since that review USAID has modified the implementation plan in relation to local currency utilization. Once the local currency is deposited in the special account at the Bank of Uganda, the MOF will distribute the local currency funds for the subgrants and the private sector support for environmental impact assessments to the GMU, and the policy component support to the contracting firm. All other local currency funds (Parks and Reserves, and NICE) will be disbursed to the Ministries responsible for those line item activities (Energy, Minerals, and Environment Protection and the Ministry of Tourism, Wildlife and Antiquities). The Mission has positive experience with the predecessors of both these new ministries in project management and financial reporting, and finds these GOU institutions competent to manage these funds.

In the Initial Environmental Examiniation (IEE) the NPA, technical assistance, training and NEAP work received a Categorical Exclusion, and the PVO Interventions and Sub-grants received a Deferral. As detailed in section V. no. 4 of the IEE, a clause will be included in the Grant Project Agreement that will clearly state that no funds will be disbursed to any sub-grant until an appropriate environmental review has been carried out. All environmental reviews of subgrants will be presented to the Mission Environmental Officer for approval. The Mission Environmental Officer will refer all subgrants over $50,000 to the Regional Environmental Officer in REDSO/ESA for review prior to Mission approval and, in addition, will refer any subgrants with unusual circumstances to the Bureau Environmental Officer. The Bureau Environmental Office has delegated authority to the Mission Director, USAID/ Kampala, or to the person acting in that capacity, with the clearances of the Mission, Regional or Bureau Environmental Officer (as appropriate), to approve the environmental reviews for the PVO/NGO subgrants within the APE Program. In addition, the Mission Environmental Officer will ensure that, with respect to local currency funded activities, environmental concerns are taken into account and the ministry staff responsible for such activities will provide progress reports to the Mission.

C. Recommendations

The proposed Program fully supports the Mission's stated goal of sustainable improvements in the standard of living for Ugandans, and contributes directly and/or indirectly to four of

the Mission's stated subgoals. The NEAP process promotes democratic participation in the formulation of environmental policies and legislation. The APE Program recommendations for National Park revenue sharing with surrounding communities will, if the communities so choose, increase access to social services. APE's purpose of rational long-term natural resource use in watershed management and reduction of soil erosion contributes to sustained agricultural productivity and equitable economic growth. Finally, APE is the first of several planned efforts to assist Uganda in achieving the fourth sub-goal in the Mission's program: sustained productivity of the natural resource base and maintenance of biodiversity.

The Program is technically, financially, socially, and economically feasible and sound. Therefore, it is recommended that the USAID/Kampala Mission Director authorize the PAAD.

ACTION PROGRAM FOR THE ENVIRONMENT
FINANCIAL PLAN BY IMPLEMENTING AGENCIES
PROJECT NO: 617-0123/617-0124
(UNITS - THOUSANDS DOLLARS)

	MANAGEMENT ENTITY	IMPLEMENTING ENTITY	AID PROJECT/MPA FX	GOU COUNTERPART LC	PVO COUNTERPART	TOTAL
1. POLICY COMPONENT						
NEAP TRANCHE 1	USAID	GOU	$3,000			$3,000
PROTECTED AREAS TRANCHE 1	USAID	GOU	5,000			5,000
NEAP TRANCHE 2	USAID	GOU	2,000			2,000
NEAP SECRETARIAT STAFF						0
TECHNICAL ASSISTANCE AND TRAINING	CONSULTING FIRM	MEMEP	100	$700		800
TA ENVIRONMENTAL PLANNING AND MANAGEMENT	CONSULTING FIRM	MEP/UMP/DF	2,540	230		2,770
TA THROUGH IQC	PRIVATE FIRM	MEMEP	140			140
	PRIVATE FIRM	MEMEP	140			140
2. PVO/NGO NATURAL RESOURCES COMPONENT						
PVO/NGO SUBGRANTS & SMALL VALUE GRANTS	UMBRELLA PVO	PVO/NGOs	11,820	6,385	2,315	$20,520
PARKS AND FOREST FUND	UMBRELLA PVO	UMP/DF	140	2,220		2,360
NATIONAL INFORMATION CENTER FOR THE ENVIRONMENT	UMBRELLA PVO	NICE	390	570		960 1/
ENVIRONMENTAL IMPACT STATEMENT FUND	UMBRELLA PVO	PRIVATE SECTOR		290		290
SPECIAL STUDIES	USAID	PSC	80			80
SHORT-TERM TECHNICAL ASSISTANCE	USAID	PSC	250			250
PROJECT MANAGER	USAID	PSC	540			540
PASA	USAID	US NAT PARK	600			600
EVALUATION AND AUDIT	USAID	PSC	260			260
OPERATING EXPENSES				600		600
CONTINGENCIES & INFLATION			3,000			$3,000
TOTAL PROGRAM COST			$30,000	$10,995	$2,315	$43,310

1/ Part or all NICE funding may be reprogrammed for other activities depending on the level of funding being provided by another donor.

II. BACKGROUND AND PROGRAM RATIONALE

A. Macroeconomic Performance Update

The Macroeconomic Analysis section (see ANNEX II.C) covers the macroeconomic issues in detail. This summary highlights macroeconomic information and supplements it with material not available at the time the PAIP was drafted.

The macroeconomic analysis shows that the Ugandan economy is well on its way to recovery. The GOU has shown a commitment towards establishing a sound economic and regulatory framework. The GOU has freed producer prices for most commodities, brought the exchange rate closer to its market value, established a sound investment policy, and slowed inflation to a manageable level. Exogenous factors like declining coffee prices and increasing fuel prices together with the heavy demands of a recovering economy have put severe strains on the country's financial system.

Data for 1990 indicate mixed results for the economy. While the industrial production index for 1990 increased seven percent, the economy's dependence upon coffee continued to be a source of concern. The value of coffee exports was significantly less in 1990; since the economy has traditionally relied upon coffee exports for over 95 percent of its foreign exchange earnings, an export diversification strategy continues to be critical. The recent Gulf Crisis and the increase in fuel prices during the latter half of 1990 worsened the balance of payments situation. While the future of oil prices is uncertain (oil analysts differ sharply over the future trends in prices), it is safe to assume that foreign exchange requirements for oil will remain high and may well increase.

The government has achieved considerable success in controlling domestic inflation, which had been brought down to 25.1 percent by December 1990; in comparison, inflation for December 1988 and December 1989 was running at 160 percent and 67 percent, respectively. Thus, while the Government of Uganda continued to enjoy considerable success in managing the domestic economy, unfavorable external factors beyond the control of the GOU have placed severe burdens on the national economy.

Both total external debt and public debt continue to worsen, creating a crisis in confidence from the domestic and international private sector. The debt service ratio as a percentage of exports was around 59 percent in 1987, and estimated at 65 percent in 1988. Ministry of Finance statistics show the debt service ratio as a percentage of exports at 88 percent in 1989/90 and 93 percent in 1990/91. The Ministry's

projections for 1991/92 and 1992/93 finally anticipate drops in the ratio to 59 percent and 43 percent respectively.

The government's macroeconomic objective over the next three years, from FY 90/91 to FY 95/96, is to achieve a five percent real growth rate in the GDP and to reduce the rate of inflation to below 10 percent by FY 92/93. Taking the goal of a five percent real growth in GDP, the World Bank calculates the government's financial requirements for FY 90/91 at $870 million and for FY 92/93 at more than $1 billion. At these levels, there is an expected financing gap for 1990/91, 1991/92, 1992/93 of $192 million, $315 million, and $404 million respectively. Faced with such large financing deficits, the GOU may be unable to adequately fund some important programs and projects.

B. Importance of Natural Resources to the Economy

Agriculture is the mainstay of Uganda's economy. It contributes over 66 percent of the GDP, more than 95 percent of the country's merchandise exports and much of the country's foreign exchange revenues. Over 90 percent of Ugandans depend upon agriculture for their livelihood. Even the small manufacturing and service sectors are mostly based upon agriculture.

Uganda is endowed with the climate and soil conditions that are optimal for agricultural production. Rainfall is plentiful and averages in excess of 1,000 mm a year in the south, with the northern areas experiencing drier conditions during the months of December and January. Many parts of the country support continuous cultivation. Most of the nation's farmers are small landholders; there are approximately 2.2 million small landholders on farms averaging 2.5 hectares.

Agriculture plays such a dominant role in the Ugandan economy that the country's economic growth will continue to be driven by the performance of the agriculture sector. Effective natural resources (soil, water, vegetation) management is the foundation of a sustainable agricultural society. For example, forest management in Uganda's highlands will limit flooding and drought in the farmlands below; soil conservation is a sine qua non of soil fertility management; and agroforestry can provide much needed wood, fodder, and mulch . Natural resource management is also important for the following reasons:

i) Rural/Equitable income generation: Improvements of natural resource management will benefit the most disadvantaged farmers. Also, much of the income generation will benefit the rural population.

ii) Maximum impact and benefit: Given a sound natural resource base along with the necessary inputs and

appropriate economic incentives, farmers can dramatically increase yields per hectare.

iii) Biodiversity: Uganda is one of the richest nations in the world in terms of biodiversity. Maintaining the natural resource base and biodiversity will greatly improve the tourism potential of the country. Tourism can be an important source of foreign exchange, off-farm employment, rural income, and tourism-based industries.

iv) Sustainable growth: While the productivity of the country's soil is good, tropical soil is quite susceptible to nutrient loss and erosion. To conserve this resource base, policies and programs are needed to halt and reverse the effects of deforestation, soil erosion, and population growth.

Uganda's natural resources can provide a unique economic opportunity for nature based tourism. During the 1960s, tourism was the third largest foreign exchange earner, after coffee and cotton. In 1971, for example, there were 88,630 tourists who spent $20 million in Uganda. This figure dropped precipitously and by 1982, there were only 10,000 tourists who contributed a paltry $2.5 million to the national exchequer. By 1987, this figure had started to climb and was back to 37,715 tourists. However, approximately 65 percent of these visitors were on business, rather than holiday. The number of tourists has continued to climb in recent years; the Department of Immigration reported 44,000 visitors in 1989 and 50,000 in 1990.

C. Problem Statement/Constraints Analysis

The principal constraints to sound natural resource management include: inadequate environmental policies, laws, and weak institutions; and inappropriate use of the resource base because of improper incentives for a growing population.

1. Environmental Policy, Laws, and Institutions

The GOU has a confusing set of laws and policies regarding the environment and management of natural resources. These have created overlapping and conflicting mandates for different agencies. Examples of the inappropriate legislation and policies include:

i) The Game and Forest Acts sets up conflicting institutional responsibilities for managing natural resources.

ii) The Forest Act, while revised in 1988, does not place sufficient emphasis on modern forest management concepts

such as sustained yield, multiple use and biodiversity conservation.

iii) The Reserve Species Law prohibits cutting of endangered tree species resulting in considerable reluctance to plant and manage stands of these species by private land holders.

iv) The tax policy provides disincentives for maintaining natural forests.

v) Land tenure policies limit ownership, especially by women who own only around seven percent of land, and restrict movement of people from over-populated to under-populated areas.

vi) Commercial investment laws and policies encourage industry to adopt short-term return strategies and disregard investment in environmental protection.

With respect to the institutions, until recently the two principal ministries responsible for the environment and natural resources were the Ministry of Environment Protection (MEP) and the Ministry of Tourism and Wildlife (MTW). MEP contained the Departments of Forestry, Environment and Meteorology. MTW contained the Department of Tourism, the Game Department and Uganda National Parks. In a broader sense, fundamental components of the environment (water, minerals, energy, etc.) had been located in other ministries, having little or no direct relation to MEP. Because of this, the draft PAAD had placed a conditionality on restructuring ministries responsible for the environment.

The recent ministerial restructuring has gone a long way to ameliorate this situation. MEP has been combined with two other former ministries (Energy, and Minerals and Water) to create the Ministry of Energy, Minerals and Environment Protection (MEMEP). Though less signigicant than the changes which have taken place with MEP, the MTW has added the Department of Antiquities to the ministry and is now known as the Ministry of Tourism, Wildlife and Antiquities (MTWA). Based on this recent consolidation of ministries, inter-ministerial personnel changes and reorganization, the conditionality related to ministerial restructuring has been removed from the Program.

Despite the removal of the conditionality, APE will assist both of the newly formed ministries with institutional support. In the case of MEMEP, its mandate has been considerably broadened with the addition of energy, water and minerals to environment protection. This requires additional resources and training for this ministry to successfully carry out its mandate. Similarly, MTWA has an expanded role to play in relation to Uganda's natural

resource base. Not only has the Department of Antiquities been added to the ministry, but, perhaps more importantly, the responsibilities of Uganda National Parks have recently increased dramatically with the creation of three new national parks. Again, as in the case for MEMEP, this will require a considerable increase in resources and training for MTWA to correctly respond to these changes.

Several questions still remain, however, for the new ministries to address in the near future. For example, the debate over conversion of several forest reserves to National Parks began as early as 1971, and only recently appears to have been resolved after considerable political controversy. How can inter-ministerial conflict over land classification change be avoided in the future? Other questions which have long gone unanswered in game/forest reserves include: which agency is ultimately in charge of management; how will management plans be prepared; how will various use/product goals for management be set and; perhaps most importantly, how will conflicts be resolved? The same applies to management of the buffer zones around parks and reserves. APE will work closely with the new ministries in an effort to answer these questions.

2. Conservation Problems of Protected Areas

The management of forest reserves, national parks and the areas surrounding them (buffer zones) is greatly influenced by legal, policy, and institutional constraints. While resolution of the policy and institutional constraints will significantly improve natural resource management, it will not address all of the problems encountered in the field. The most pressing of these problems include: soil erosion, deforestation, conflicts between wildlife and people, and loss of biodiversity along with the lost opportunities for tourism.

a. Soil Erosion

Although no accurate estimates have been made, soil erosion in the steeply sloping farmlands in the buffer zones area has reduced agricultural productivity. For instance, according to the USAID-funded CARE/MEMEP Development through Conservation project, farmers in Kabale have identified soil loss as a priority problem. This, compounded by increasing population in the densely settled southwest, has limited fallow periods, sharply reduced soil fertility, and increased the demand for land. The result is declining farm productivity and loss of on-farm income. Children and women suffer disproportionately from this loss and are at an increased risk nutritionally. Small animals such as goats and sheep, typically a female responsibility, are squeezed out of the farming systems as pasture land is replaced by cultivated fields, thus reducing female incomes and therefore household food supplies. The demand

for land also puts pressure on protected areas and ecologically sensitive zones such as wetlands.

Two options are available to farmers confronting declining farm productivity: adopt sustainable agricultural techniques and/or move to new lands. Both of these options have constraints. An extension system to spread awareness about improved farming techniques is not available. Land tenure problems, cultural differences, and lack of settlement sites limit emigration to new regions and increases the pressure to use protected areas.

b. Deforestation

The GOU has only recently managed to slow deforestation of some high tropical forests in southwest Uganda. For example, effective policing of the Bwindi forest reserve by game guards has limited much of the illegal pit sawing. Recently, the Forest Department placed a ban on all pitsawing for Bwindi, and reduced new agricultural encroachment. In Mgahinga National Park, the GOU has even reclaimed a few square kilometers of encroached reserve.

To sustain and expand these improvements, fundamental changes are needed including better forest management and conservation practices and strengthened institutions.

The constraints facing effective management of forests include:

i) Lack of current management plans for most of the forest reserves and National Parks.

ii) Inadequate information base concerning tropical silvicultural practices.

iii) Low salaries and benefits for forest managers and guards, since the current earning power of public servants is around one percent of what it was at independence.

iv) Supplier and consumer resistance to substituting exotic tree wood products (cypress, pine, eucalyptus, etc.) for the indigenous tree wood products.

c. Conflicts Between Wildlife and People

The record of interaction between people and wildlife in Uganda is not a happy one, stemming from the colonial tradition limiting local people's use of state-controlled wildlife reserves. Even as late as 1983, for example, the GOU established Mburo National Park without due consideration of

local people's needs or their input. Currently all hunting of wildlife (though not trapping) is prohibited. In some localized areas wildlife damages crops. Thus, it is not surprising that local people have little respect for wildlife. Uganda's two wildlife management agencies, UNP and the Game Department have only begun to explore the possibilities of community benefit from wildlife.

The two principal ways that local people can benefit from wildlife are through the harvesting of animals and wildlife- based tourism. The main constraints to rational wildlife utilization are:

i) Lack of current inventories for most wildlife populations and incomplete knowledge of sustainable resource utilization techniques.

ii) Inadequate staffing, equipment and training for Game Department, UNP, and Forest Department staff.

iii) Lack of management plans for game reserves.

iv) Overlapping mandates for wildlife management between the Game Department and UNP.

d. Loss of Biodiversity

For its size, Uganda has the greatest biological diversity in eastern Africa. Parks and protected areas are important to the overall economic well being of Uganda and critical for a tourism industry. Uganda is only slowly evolving as an alternate tourist destination, although most of this is for adventuresome (but low-spending) tourists.

Not capitalizing on tourism affects Uganda in two ways. First, the loss of tourist dollars is a lost opportunity. Second and less obvious is the effect of the loss of tourism on the natural resources base of Uganda. As tourism declines, the value of the resources that tourists formerly paid to see also declines. Forests become more valuable for their timber than their wildlife. Savannas become more important for cattle than antelope and so on. In addition, the funds to manage parks and protected areas decline. For example, UNP, which is supposed to generate a surplus for the treasury, is almost entirely dependent on the treasury for its operating budget.

The major constraints to increased tourism are:

i) Inadequate infrastructure to handle tourists.

ii) Lack of tourism promotion.

iii) Lack of local community participation in tourism development.

iv) Management limitations (training, resources) of the Ministry of Tourism, Wildlife and Antiquities (MTWA) and the nascent tourism industry.

v) Poorly trained tourist service providers.

In summary, soil erosion, deforestation, conflicts between wildlife and people, and loss of biodiversity are the major constraints and problems facing protected areas.

D. GOU and USAID Strategy

1. GOU Strategy

The priority need in the natural resource sector is for initiation of national analysis and consensus building concerning environmental laws, policies, and institutional arrangements. At the same time, areas which serve as watersheds, biodiversity reserves, and potential tourist sites need to be effectively protected and managed. The GOU approach to its natural resource constraints and problems, while not articulated in one place, follows this strategy.

In July 1990, the GOU requested assistance from the World Bank to coordinate a National Environmental Action Plan (NEAP). The general GOU feeling is that the time is ripe to assess the status of natural resource management, to recommend needed changes to the environmental legislation and institutions, and to prepare a strategy and long-term program. The GOU is prepared to open a national debate on the state and future of Uganda's natural resources.

President Museveni is an ardent supporter of sound natural resource management which is evidenced by his calling for the removal of all illegal human settlements from the country's forest reserves, creating the Ministry of Environment Protection in 1986, and initiating national tree planting campaigns.

There is a growing political commitment from the higher levels of the Ugandan government for protecting the environment. The National Resistance Council (NRC) recently approved the establishment of two new national parks, with the likelihood of a third being added in the near future. The GOU has recently revised the Forest Act, placing more emphasis on conservation. Finally, the GOU has published its intention to make tourism a priority.

2. USAID Strategy and Program Rationale

USAID proposes to support these GOU efforts with assistance that addresses the constraints and problems to sustainable natural resource use in Uganda. Of all the constraints affecting Uganda's natural resource degradation, the most pressing is an inadequate understanding of and experience with natural resource management.

The GOU and the private sector must recognize the economic rationale for natural resource management if they are to carry out sustainable environmental strategies. Ugandans have to examine their existing environmental laws, policies, institutions, and objectives, and achieve a national consensus on changes and directions as a necessary condition for programs and projects to be effective. APE funding will support a national debate and consensus building process through the development of a NEAP.

The Mission strategy will also address the second most pressing constraint: protection of areas important for water catchment, soil stabilization, climate regulation and amelioration, medicinal plants, genetic resources, education, research, and tourist revenue. APE will condition part of the non-project assistance on the creation of two new national parks and enhanced protection of three priority forest reserves. The Mission strategy will further reduce pressure on protected areas by introducing improved agricultural practices and providing employment opportunities in communities around protected areas.

The proposed Program fully supports the Mission's stated goal of sustainable improvements in the standard of living for Ugandans, and contributes directly and/or indirectly to four of the Mission's stated subgoals. The NEAP process promotes democratic participation in the formulation of environmental policies and legislation. The APE Program recommendations for National Park revenue sharing with surrounding communities will, if the communities so choose, increase access to social services. APE's purpose of rational long-term natural resource use in watershed management and reduction of soil erosion will contribute to sustained agricultural productivity and equitable economic growth. Finally, APE is the first of several planned efforts to assist Uganda in achieving the fourth sub-goal in the Mission's program: sustained productivity of the natural resource base and maintenance of biodiversity.

The Africa Bureau's Plan for Natural Resources Management (PNRM) in Sub-Saharan Africa lists Uganda as a priority #IA country. The Mission's strategy as a #IA country is to initiate a comprehensive program of policy development, appropriate training, and support for PVO/NGO activities. Because many of Uganda's tropical forests are also in the

Bureau's regional biodiversity strategy for Central and East Africa, even greater emphasis on biodiversity is expected in the future.

E. Other Donors

The European Economic Community (EEC) is a major donor to the natural resources sector in Uganda. The EEC is providing grant support in two parallel projects: the Conservation of Natural Resources (National Parks) Project through the UNP; and the Natural Forest Management and Conservation Project through the Forest Department. The EEC has indicated that they will consider a request to support the work of the NEAP with an estimated $200,000 for short-term technical assistance and workshops.

The current World Bank contribution to the natural resources sector is through its Forestry Rehabilitation Program. Initiated in 1987 with multi-donor funding, this program supports the Forest Department with a budget of some $40 million over a seven-year period. The EEC, Norwegian Agency for Development (NORAD) and Danish International Development Agency (DANIDA) are providing grant funds as part of the program.

The United Nations Development Program (UNDP) recognizes that the rehabilitation of wildlife management and tourism industries is vital for the general recovery of Uganda's national economy. To this end, UNDP is providing support to the MTWA through two projects: the 1989 support to the Wildlife and National Park Management Project and the 1990 Uganda Tourism Development Project. The UNDP will also provide $2.7 million as part of their Global Environmental Facility. They will target assistance for education and training of personnel working in the GOU institutions responsible for natural resource management.

German Technical Assistance (GTZ) has discussed the possibility of managerial and financial support to UNP or the MTWA's Game Division. The support is not the highest priority for GTZ and has not progressed from the concept stage. If the concept is developed, GTZ will probably focus its resources on Murchison Falls National Park. Any assistance would be contingent upon full management and financial control, and involve GTZ advisors at the "upper echelon" of management. If GTZ assistance were to be forthcoming as described by a GTZ advisor in Uganda, it would complement APE activities.

III. PROGRAM DESCRIPTION

A. Goal Statement

The goal of the Uganda Action Program for the Environment (APE) is sustainable improvement in the Ugandan standard of living. A viable natural resource base is essential to this goal. Because of inadequate planning, a limited resource base in relationship to demand, and inefficient production, the country's natural resources are being rapidly eroded, including its biodiversity. This is placing its potential agricultural productivity in jeopardy. The program subgoal, therefore, is the sustained productivity of Uganda's natural resource base and maintenance of its biodiversity.

B. Purpose

Because an understanding of the economic rationale for natural resource conservation is a necessary condition for its sustained use, APE emphasizes the process of natural resource planning, training for institutions responsible for natural resource management, and support for the work of organizations fostering rational long-term uses of the natural resource base among target populations. The purpose of APE, to assist Uganda's public and private sector to more effectively and sustainably manage its natural resources base in selected areas, will be achieved through two components: the Policy Component and the Rehabilitation and Resource Conservation Component.

The Policy Component funding will result in: enactment of major policy revisions recommended in the NEAP, enactment of environmental legislation, formation of two new national parks, and the enhancement of conservation status of three priority forest reserves.

The Rehabilitation and Resource Conservation Component will result in: reduction in the present rate of decline of forest cover in targeted areas, tripling of tourist revenues in target areas, increase in UNP revenues to cover recurrent costs, decline in rate of loss of endangered species, changed attitudes and behaviors related to natural resource management (especially in communities adjacent to parks and forest reserves), increased use of environmental information by the public and private sector, and increased public and private sector expertise in conducting environmental assessments.

C. Policy Component

The Policy Component combines NPA with project assistance to integrate environmental considerations into the nation's economic and social development. The activities of the Policy Component (i.e., NEAP, Protected Areas, and Institutional

Support.) will be completed within three years from the signing of the Grant Agreements.

1. National Environmental Action Plan (NEAP)

The GOU is aware of the need for environmental legislation, policies, and programs. The problem is that the GOU does not yet know what type of environmental legislation is appropriate and acceptable to the nation as a whole. The USAID program response to this constraint is to encourage and support the GOU's plan to complete a NEAP. USAID assistance will promote a process that ensures wide participation of all parties in determining the best way to manage the nation's natural resources.

The Environmental Action Planning process, initiated by the World Bank in 1987, is described in detail in ANNEX II.B. ANNEX II.B forms the terms of reference for the development of the NEAP and will be part of the Grant Agreement Program Description. The NEAP will identify and analyze major environmental problems, and develop a comprehensive national strategy. The NEAP will recommend: legislative, policy and institutional reforms; corrective environmental measures for current and future projects; and development programs related to natural resource management.

A.I.D. will measure the success of the NEAP by its compliance with ANNEX II.B. Because the objective is for Ugandans to define their environmental problems and solutions, USAID will refrain from taking a direct role in developing the NEAP.

The GOU will develop the NEAP with a policy level Steering Committee, a NEAP Secretariat, a NEAP Secretariat Staff, and Task Forces. The policy level Steering Committee will be a cabinet subcommittee, with members from key sectoral ministries. The membership list appears in ANNEX II.B. The policy level Steering Committee will provide high level policy guidance to the entire NEAP process. It will review policy issues, coordinate work on the NEAP, and brief the Cabinet.

The NEAP Secretariat will provide leadership to the Task Forces and oversee the NEAP Secretariat Staff. Secretariat membership will include the NEAP Coordinator (head of the Secretariat Staff), chairpersons of the Task Forces and three representatives from the Advisory Committee (one each from the NGOs, private sector and donors) and the NEAP Technical Advisor.

The Secretariat Staff will provide day-to-day coordination of the NEAP. It will consist of a small group of full-time specialists from the government, the private sector, NGOs and donors. The Staff will assist in the coordination of

Task Force duties, and provide the Task Forces with technical assistance and training. This Staff will be selected by the Permanent Secretaries of the ministries involved and the Executive Committee of the Advisory Group which is defined below. At least one member of the Staff will be drawn from the NGO community and one from the private sector.

An Advisory Committee will support the work of the NEAP Secretariat. It will consist of members from donors, NGOs and the private sector. The Advisory Committee will form working subgroups which will address specific issues and concerns within the NEAP process, and will form a smaller working group called the Executive Committee. The Executive Committee will interact closely with the NEAP Secretariat and coordinate the participation of the Advisory Committees members on the NEAP Task Forces. The Executive Committee will be selected at a NEAP planning conference to be held late August, 1991.

The NEAP will seek participation of the private sector through such representative bodies as the Uganda Manufacturerers Association, the Chamber of Commerce, the Uganda Tourism Association, the Uganda Tourism Development Corporation, and the agricultural cooperatives and fishermen's organizations.

The basic preparation of the NEAP will be carried out by Task Forces, each focusing on a particular major environmental issue or group of issues. The members of the Task Forces will be broadly representative of the technical expertise relevant to the subject matter. If necessary, the Task Forces will establish subgroups to allow more effective operations. A list of the Task Forces and a tentative list of representatives appear in ANNEX II.B.

In their work the Task Forces will actively involve a number of important community groups: local resource users (e.g., farmers, herders, fishermen, loggers and traditional hunters), Resistance Councils, indigenous NGOs and local community organizations (church groups, women's groups, wildlife clubs, and farmers' associations). Community participation will be sought during the process to assist the Task Forces to define the priority environmental problems and issues; to recommend solutions to these problems and issues; and to review the findings and recommendations. Special attention will be given to local level women's organizations to obtain their perception of environmental issues.

The APE designed procedures for the NEAP recognize the existing institutional structure and the commitment of Uganda by placing the MEMEP in a central role. However, given the line agency responsibilities of MEMEP (especially forestry) and the inter-sectoral/ministerial nature of the NEAP, the NEAP Coordinator (who is the head of the Secretariat Staff) will be

appointed by, and the Secretariat will be directly responsible to, the NEAP Steering Committee and the Prime Minister.

A.I.D. will fund three long-term advisors under the Policy Component. The NEAP Technical Advisor will work at the NEAP Secretariat with the NEAP Coordinator. Two other long-term advisors will be assigned in the line ministries (one each for MEMEP and MTWA). The NEAP Technical Advisor will arrange for the short-term technical assistance and training. A.I.D. will provide approximately 27 person months of short-term technical assistance for NEAP development. Identification of tentative A.I.D. funded advisors appears as Note 2 of ANNEX III.A.

The Minister for Energy, Minerals and Environment Protection, under delegation of authority from President Museveni, has appointed an interim NEAP Coordinator. The World Bank has arranged for $350,000 initial funding for the NEAP, of which $280,000 will be drawn from the Bank's on-going Forestry Rehabilitation Project. The Bank's funding will initiate the NEAP process and sustain it until A.I.D. program and project assistance becomes available.

The funding support for the NEAP process will involve non-project assistance (NPA), project assistance, and local currency counterpart funds. A.I.D. will make an NPA cash transfer of $3 million after the GOU has complied with the conditionality of appointing the policy level Steering Committee as a Cabinet subcommittee, naming and staffing the NEAP Secretariat, Coordinator, task forces and Advisory Committee, in accordance with the terms specified in the Grant Agreement. This cash transfer will be referred to as NEAP Tranche 1a.

After the transfer of NEAP Tranche 1a., local currency counterpart funds will be deposited into a special account at the Bank of Uganda (BOU). The Ministry of Finance will have oversight responsibilities for this account. A detailed description of dollar and local currency management are found in the PAAD, Section V, "Financial Management and Financial Plan". The Ministry of Planning and Economic Development and USAID will program an estimated $700,000 of these funds to the MEMEP for the Policy Component. The rest of the funds will be set aside for support to the PVO/NGO subgrants, and for USAID operating expenses (OE) in relation to APE.

MEMEP will use the local currency counterpart funds to pay the salaries and operating costs of the Secretariat Staff over a two and a half year period. It will also be used to support the work of the Task Forces. Because A.I.D. rules on salary supplements apply to host country owned local currency jointly programmed by A.I.D. and the host country, the Grant Agreement will state that no Secretariat staff members or task force members will concurrently draw a government salary or

benefits. In addition, given the complexity of the salary supplement issue which may not be satisfied wholly by the foregoing procedure, prior to any such salary payments a legal opinion as to conformity with A.I.D. rules in this regard shall be provided by the Regional Legal Advisor or, if necessary, A.I.D.'s Office of the General Counsel.

A.I.D. will use an estimated $515,000 in project assistance funds for the NEAP Technical Advisor (24 months). A.I.D. will also provide: $100,000 for personal computers, software and training, and other office equipment needs of the Secretariat Staff; and $540,000 for an estimated 27 person months of short-term technical assistance.

A second conditionality of the NEAP will be that it is formally adopted by the GOU as its official plan. A.I.D. will make an NPA cash transfer of $2 million, NEAP Tranche 1b., upon completion of the NEAP in form and substance satisfactory to A.I.D. and upon adoption of the NEAP by the GOU. NEAP Tranches 1a. and 1b. occur independently of, and are in no way tied to, fulfillment of other Program Tranches.

2. Protected Areas

A compelling case exists for making the Bwindi and Rwenzori Forest Reserves into National Parks and for elevating the protection status of the Kibale, Semliki, and Mt. Elgon Forest Reserves. As pointed out in the Problem Statement/Constraints Analysis Section, present practices in these forest reserves are having a negative impact on the flora and fauna, and watershed qualities. The great potential for tourism in these forest reserves far exceeds the benefits accruing to the nation from present uses. The tourism potential can only be tapped if these forest reserves have a protection status that maintains the biodiversity which is of interest to tourists.

Bwindi Forest represents a critical component for both the preservation of biodiversity and the development of the tourist industry in Uganda. As such, the forest's present conservation status is deemed insufficient.

The Rwenzori Forest Reserve is a catchment forest which contains the fabled Mountains of the Moon, the third highest mountain range in Africa. Towering over 16,000 ft (4500 m), the Rwenzori Mountains possess a lush assemblage of montane and alpine flora found nowhere else in the world.

The Forest Department has identified priority forests for elevated conservation status. Detailed descriptions of these forests, their problems, and potentials appear as ANNEX II.H. The Forest Department has proposed a 20-30-50 plan for the

management of Uganda's tropical high forests. Twenty percent of the natural forest estate will be set aside as strict nature reserves. An additional 30 percent of the estate will be set aside as buffer zones (within the forest reserves) surrounding the nature reserves. The remaining 50 percent will be used for sustainably managed timber exploitation. While the underlying intent of the 20-30-50 plan is well placed, the basis for the 20-30-50 management plan for the individual forests lacks proper ecological information, and the country lacks an economic analysis of both the domestic and foreign markets for native and exotic species.

APE proposes to condition NPA on the conversion of Bwindi and Rwenzori Forest Reserves into National Parks. NPA will also be conditioned on the elevation of conservation status for the forest management of the Kibale, Semliki, and Mt Elgon Forest Reserves, using the following criteria:

i) A separate Management Committee with broad based representation will govern each of the selected forest reserves.

ii) The Minister of the relevant institution will appoint the Management Committee to include, among others, the Commissioner of Forestry, the Commissioner of Game, and the Director of UNP.

iii) The Management Committee will establish the conservation of biodiversity as the primary management objective. The Committee will also determine in consultation with relevant scientific expertise, the degree and kind of all forms of exploitation. This may include tourism and taking of minor forest products for local consumption.

iv) Unless otherwise stated by the Management Committee in consultation with relevant scientific expertise, extraction of timber cannot be permitted.

v) All tourism activities must be environmentally sound and compatible with the long-term preservation of the forest's biodiversity.

vi) The management at the forest level will retain a proportion of revenues generated from commercial activities. A proportion of revenues/benefits from tourist/harvesting activities will be equitably distributed to male and female members of surrounding communities.

vii) Where applicable, the Game Department will share, on an equal basis, the protection and management activities.

Members of the Game Department and Forest Department will answer to the Management Committee.

viii) There will be an advisory committee of local authorities (RC's) to register their participation.

A.I.D. will make an NPA cash transfer of $5 million after the GOU: (i) has complied with the conditionality on converting the Bwindi and Rwenzori Forest Reserves into National Parks and approving a higher conservation status for the Kibale, Semliki and Mount Elgon Forest Reserves; and (ii) has submitted a plan for opening park concessions to private sector management, including local community involvement, in form and substance satisfactory to A.I.D. This cash transfer will be referred to as Protected Areas Tranche 1. It will occur independent of, and is in no way tied to, fulfillment of other Program Tranches.

APE project funds will be used to determine if, and to what extent, rights for the use of minor forest products should be permitted in Bwindi and Rwenzori National Parks; and if special mitigating measures are warranted, to assist the Batwa as a result of the anticipated impact of converting Bwindi Forest into a national park. The study is expected to be conducted over a 10- week period and is estimated to cost $40,000. The contract will be managed by USAID/Uganda.

3. Institutional Support

Until recently the two principal ministries responsible for the environment and natural resources were the Ministry of Environment Protection (MEP) and the Ministry of Tourism and Wildlife (MTW). MEP contained the Departments of Forestry, Environment and Meteorology. MTW contained the Department of Tourism, the Game Department and Uganda National Parks. In a broader sense, fundamental components of the environment (water, minerals, energy, etc.) had been located in other ministries, having little or no direct relation to MEP. Because of this, the draft PAAD had placed a conditionality to consolidate departments involved with the natural resource sector in order to facilitate communications and better maximize the use of limited resources. In July, 1991 the number of ministries in the GOU were reduced, and as a result, both lead ministries in the APE program have been expanded. The former Ministry of Environment Protection became the Ministry of Energy, Minerals and Environment Protection, and the Ministry of Tourism and Wildlife became the Ministry of Tourism, Wildlife and Antiquities.

With the formation of MEMEP, the Departments of Forestry, Water and Energy have been united under the Secretary

for Environment who reports directly to the Minister. With the corresponding changes, particularly at the level of Minister and Permanent Secretary, coordination between the departments responsible for the environment has been enhanced. Thus, the original rationale for the conditionality has, to a large extent, been accomplished through this recent reorganization, and the conditionality regarding restructuring has been eliminated. USAID will support the restructuring through APE by providing funding for increased coordinated efforts of the MTWA and MEMEP at the field level, and training for staff of both ministries at all levels.

The Forestry Department, in the MEMEP, operates under the authority of the Forests Act (1946) and with the guidance of an official forest policy which was revised in January 1988. This revised forest policy incorporates conservation concerns in the context of multiple use management of forests. However, the Forests Act, which regulates actual activities in the field, has not been updated and, therefore, no substantial conservation legislation exists which translates policy into practice. As it stands now, the Forests Act provides the Minister of MEMEP with singular authoritative power to regulate the forest estate.

The UNP and the Game Department (both parastatals under MTWA), manage wildlife in Uganda. The National Parks Act (1952) provides for the establishment of national parks for the purpose of preserving wild animal life and wild vegetation. Unlike the Forests Act, the National Parks Act delegates authority from the Minister of MTWA to a consensus governing body, the Board of Trustees of the UNP.

UNP has the legislative mandate to be both financially and administratively independent. Unfortunately, this is not the case in practice. UNP receives almost 80 percent of its funding from the government and, as a result, MTWA leverages that funding into a very active role in the administrative affairs of UNP.

National Parks are gazetted as areas where wildlife is given complete protection under the management of the UNP Board of Trustees. Game Reserves, Animal Sanctuaries and Controlled Game Areas provide for the protection and utilization of wildlife outside of National Parks. They are under the jurisdiction of the Game Department in MTWA. Through legislation set forth in the Game Act (1959), the boundaries of a game reserve can be altered and/or reduced by the Minister in consultation with the Chief Game Warden (similar to the management provisions in the Forests Act).

Since the ban on hunting in Uganda in 1979, the Game Department's mandate has shifted from utilization to preservation of wildlife resources. Although there is no official wildlife

and national parks policy, as of June 1991, MTWA was reviewing a draft policy. This new policy includes safeguards for the preservation of Uganda's national heritage as well as provisions for local community benefits from the country's wildlife resources. In addition, the new draft policy has proposed the amalgamation of UNP and the Game Department into one parastatal institution.

In general, UNP, the Game Department and Forest Department have made great efforts to broaden their mandates with regard to the conservation of Uganda's natural heritage. This is especially true in light of the recent ministerial restructuring. To successfully carry out their mandates both ministries will need additional support. APE will provide project assistance to these institutions through training and technical assistance. APE will provide an estimated $732,000 in project assistance for short-term technical assistance and training to the Forest Department, the Department of the Environment, the Game Department, and Uganda National Parks. The GOU will supplement the A.I.D. project assistance with $230,000 in local currency counterpart from the special account at the Bank of Uganda (BOU). The GOU will allocate this funding to the consulting firm awarded the technical assistance and training contract under this component for locally provided training.

The aim of these technical assistance and training activities for the Forest Department is to sensitize the institution to alternative uses of the Forest Reserves. To date, cost/benefit analyses of forestry activities have quantified the financial value of timber products harvested, without determining the foregone values of watershed protection and soil productivity, or the potential market value of minor forest products which are of a non-consumptive character with respect to the forest estate. Consequently, technical assistance and training will be provided in determining alternative uses and managing the resources accordingly. Appropriate courses are also anticipated to support the Forest Department's extension work, and to sensitize the staff on gender-specific concerns in forestry.

The Department of Environment within the MEMEP faces some unique problems. As the youngest Department in MEMEP, it is not fully prepared to carry out some of its responsibilities in natural resource management, environmental education, monitoring and control, and information and research. Priority areas identified for Project-funded technical assistance include: curriculum development; disaster preparedness planning; and training in conducting environmental impact assessments.

The UNDP has funded training for the Game Department. However, the program focus has been largely on paramilitary training, rather than instruction in wildlife management.

Project funds will provide technical assistance and training oriented to wildlife management in areas such as establishing standards and methods for wildlife inventory, buffer zone conservation and utilization, conservation education, and study tours to ongoing programs in selected African countries.

UNP will require significant levels of support to fulfill its mandate. The legislation governing UNP does little more than describe the procedure for designation of Parks. Project assistance will be provided for staff development planning, conservation education, and tourism infrastructure planning and monitoring.

In addition to the short-term technical assistance, APE will provide $1,780,000 for four long-term advisors: a Community Conservation Adviser (CCA) at MEMEP for two years; a Chief Financial Officer (CFO) for two years and a Park Support Advisor (PSA) at UNP for three years; and a Personal Services Contract Natural Resource Management Advisor for five years to coordinate project activities at USAID/Kampala.

The CCA will assist the Department of Environment in targeting key areas where community conservation efforts will be developed. The CCA will also assist the Commissioner for Environment in developing a national policy to support field efforts with local communities around protected areas, making sure the needs and concerns of both female and male residents are addressed. The CCA will maintain contacts and collaborate with government bodies, NGOs, other extension agencies, and private sector institutions working around protected areas. Finally, the CCA will provide assistance to the NEAP with technical advice on community conservation and buffer zone management.

To assist with the financial management of UNP, project funds will provide the CFO to work with UNP accounting staff for 24 months. UNP is unique in that it retains revenues generated by the Parks. However, proper accountability procedures for fee collection and disbursement do not exist. A disproportionate amount of resources allocated to the organization is utilized by the main administrative offices. Even though UNP earns revenue, it does not produce financial reports. It has no system of internal financial and management control. The CFO will preferably have National Park financial experience. The advisor will establish financial and budgetary reporting procedures, and administrative monitoring.

At UNP the capacity to manage the natural resource base, plan for tourism, and provide educational/interpretive services, is limited. APE will fund a Park Support Advisor (PSA) to assist UNP in the field. The PSA will rotate through the Parks over a three year period. The PSA will establish

administrative and operational procedures for each park, and provide guidelines and plans for eco-tourism development.

4. Conditionalities and Timing

Non-project assistance will be conditioned on: (1) the preparation, completion and approval of the NEAP; (2) the classification of the Bwindi and Rwenzori Forest Reserves as National Parks, ensuring the highest protection status of the Kibale, Semliki, and Mt. Elgon Forest Reserves and park concession private sector management and local community involvement. Table 1 below displays conditionalities, timing and amounts of tranches.

Table 1 - CONDITIONALITIES AND TIMING

	Condition	Expected Timing	Tranche
1.	NEAP Tranche 1		
	GOU forms NEAP Steering Committee	Year 1	3,000,000
	NEAP is staffed	Year 1	
	Task Forces formed	Year 1	
2.	Protected Areas Tranche 1		
	Bwindi, and Rwenzori Forest Reserves converted into National Parks	Year 1	5,000,000
	Enhanced protection status for Kibale, Semliki, and Mt. Elgon Forest Reserves	Year 1	
	Plan for private sector management of concessions	Year 1	
3.	NEAP Tranche 2		
	GOU approves NEAP	Year 3	2,000,000
	TOTAL		$10,000,000

D. Rehabilitation and Resource Conservation Component

Accelerating natural resource degradation and loss of biodiversity in certain national parks, forest reserves, and surrounding communities requires immediate attention. The Rehabilitation and Resource Conservation Component will use project assistance and local currency counterparts to fund: subgrants to PVOs and NGOs for projects supporting sustainable resource use; rehabilitation of protected areas; a natural resource information system; and environmental impact assessments.

1. Conservation of Natural Resources Umbrella Grant

a. Grant Management

USAID will award an umbrella grant to a competent U.S.-registered PVO. The Umbrella Grant PVO will subsequently provide three levels of grants: macro, mini, and micro. Each grant type will have similar but distinct application, evaluation, approval, management and oversight procedures. All grants will focus on either or both of the following two themes:

i) the support of sustainable resource use (including tourism) in and around parks and protected areas in selected areas of Uganda by building human resource capacity, infrastructure and public support for environmentally sound development;

ii) the implementation of environment and natural resources inventory, training, education and applied research activities in areas of important biological diversity.

Using Mission approved selection criteria and proposal presentation standards, the Umbrella Grant PVO will solicit, analyze, and, with Mission concurrence, award grants. They will establish a Grant Management Unit (GMU) in Kampala with at least two long-term expatriate staff, a small locally hired staff, and short-term technical assistance. While the PVOs will be free to recommend various management configurations in their proposals for the GMU, illustrative descriptions of anticipated positions for planning purposes appear in ANNEX II.A.

The GMU will conduct workshops, seminars, retreats and training programs to enhance the capabilities of NGOs and individuals in improved natural resources management. The GMU will also provide procurement services for the foreign exchange purchases of items such as vehicles, computers, photocopiers and facsimile machines for all activities of this Component.

The GMU will also be responsible for assuring that all subgrant activities are environmentally sound. The GMU will carry out an environmental review for each subgrant, which will be presented to the USAID/Kampala Natural Resources Project Officer for approval prior to the signing of the subgrant. For subgrants in excess of $50,000, the environmental review must be approved by the REDSO Environmental Officer. In addition, the Natural Resources Project Officer and/or the REDSO Environmental Officer will, prior to approval, refer any subgrants for which unusual circumstances exist or significant negative impacts are expected, to the Bureau Environmental Officer.

b. Grant Selection

The grant program will consist of three types of grants: macro, mini, and micro. All grants will require the approval at the appropriate GOU level.

Macro grants for U.S.-registered PVOs and U.S.-registered Ugandan NGOs will exceed $25,000 per year. A single organization may possess more than one grant in different geographic areas. Proposed selection/evaluation criteria would include: 1) impact, 2) sustainability, 3) administrative competence, 4) priority geographical and sectorial area, and 5) levels of collaborative financing, including in-kind contributions. In addition to GOU approval, APE will require approval from both the USAID Mission Director, or his/her authorized representative, and the GMU. Mini grants will average about $6,000 in size, and never exceed a life-of-project (LOP) value of $25,000. The mini grants program will use proposal guidelines, selection criteria, accounting procedures, and reporting procedures similar to that of the Macro grants.

Micro grants are one-time grants, not to exceed $1,000. The GMU will award micro grants using local currency counterpart funds to NGOs and individuals for supplies, materials and support for natural resources management programs. These grant funds cannot be used for salary or labor. The total amount of micro grants will not exceed $20,000 per year. The GMU will approve the micro grants and send a copy of the application and notice of award to USAID. The application procedure will include endorsement by the appropriate government unit, and a simple application form including estimates or bids on all materials.

c. Selection Criteria

The preliminary selection criteria are listed in ANNEX II.A. The GMU will develop the final guidelines in consultation with USAID/Kampala, the GOU, and other members of the PVO/NGO community for both the Macro and Mini grants.

d. Illustrative Subgrant Activities

Sustainable natural resources management activities funded by grants in this area will include:

i) Buffer zone projects: These will assist local farmers and other resource users to develop sustainable resource use activities on land inside or around Forest Reserves. Male and female members of the local communities will identify the buffer zone activities to assure local participation. The types of activities may include agroforestry, small woodlots, soil conservation, sustainable agriculture, animal husbandry, fishing, and timber and other forest product harvesting.

ii) Tourism development: These activities will develop nature tourism in the project area to generate benefits for the buffer zone community. Such activities may include construction of tourist facilities, campgrounds, modest cabins, and interpretation centers. Other activities might include small provision stores, craft shops, transport, equipment rental, and restaurants. Grant activities may include general tourism development such as training of tour operators, preparation of nature tourism guides, and studies to assist tourism development in Uganda, and reintroduction of key indigenous species into the parks and reserves if warranted. Equitable recruitment of both male and female trainees will be required.

iii) Public conservation education: These activities will support programs such as mass media campaigns, development of a national conservation education program, fellowships for graduate students and researchers, training for journalists in environmental reporting, and support for the school programs involving national parks, zoos and botanical gardens.

iv) Applied research on sustainable use of renewable natural resources: These activities will support additional work to more fully understand resource uses such as: pit sawing, wildlife utilization, mixed wildlife/cattle ranching, artisanal fisheries, gender roles in resource use, and sustainable harvesting of tropical hardwoods.

v) Biological and natural resources research: These activities will primarily involve biological inventories.

Illustrative budgets and examples of subprojects appear as ANNEX II.A. Based on these examples and the projected GMU staffing, A.I.D. project assistance will provide $1,880,000 for the GMU staff and operations, and $9,940,000 for subgrants. The MOF will provide the GMU with $820,000 in local currency

counterpart funds from the special account at the BOU for GMU staff and operations, and $6,385,000 for subgrants. Some of this contribution includes in-kind services. The GMU will be responsible for disbursing and accounting for local currency transactions made under the Rehabilitation and Resource Conservation Component of APE in relation to the subgrants. The PVO/NGOs receiving subgrants will contribute $2,315,000 to the Program; this will include in-kind services.

2. National Parks and Forest Reserves

During the past 15 years, most of Uganda's National Parks and Forest Reserves have deteriorated to the point where rehabilitation is required to meet minimal operating standards. A major reason for the deterioration is insufficient budgetary support. The Parks and Forests do not have adequate funding to protect the integrity of these protected areas and to provide facilities for all but the heartiest tourist. This in turn hampers their ability to attract visitors and begin earning enough revenues to make them self-sufficient.

Because of inadequate budgets, UNP and the Forest Department have had trouble maintaining full staffing levels. Park and Forest personnel are poorly uniformed, poorly housed, and without the incentives to do their assignments. APE will provide $2.2 million in local currency counterpart funds and approximately $140,000 in foreign exchange to support National Parks and Forest Reserves of Uganda. The local currency counterpart funds will be disbursed from the BOU special account by the MOF directly to the ministries responsible for such Parks and Reserves, to be included in the specific sector line items of their respective budgets with reference to agreed upon activities, as outlined below. The foreign exchange will be used to purchase commodities which will be procured by the GMU on behalf of the GOU.

All national parks and selected priority forest reserves will benefit from this funding since they represent some of Uganda's most valuable natural areas. APE will assist national parks by providing resources for construction, equipment, trail/boundary/road work, and by helping each park cover most operating costs for a three year period. The National Parks will be expected to increase user fees over this period to the point that they at least cover field operating expenses.

In most parks and forest reserves, the boundaries have been surveyed but the physical demarcations have deteriorated. Many of the trails and roads have also fallen into disrepair and could be brought back into good condition with basic labor-intensive rehabilitation work. The local currency counterpart funds will support work crews on a year round basis

for three years at each park and at selected forest reserves for boundary and trail rehabilitation.

Since the purpose of the assistance to the National Parks is to improve the parks so that they may once again be self sufficient, APE will require as part of the Grant Agreement that the UNP enter into agreements or letters of understanding with the private sector describing how the private sector will assist in marketing and management of park facilities and concessions and hotels.

UNP will be expected to establish sound financial management procedures to assure that a portion of the revenues generated by the Parks goes back into the Parks. UNP will provide revenue and expense projections to demonstrate its strategy for generating revenues which exceed field operating expenses within a three year period. This will be one of the primary responsibilities of the UNP Chief Financial Officer.

3. National Information Center for the Environment [2]

Environmental policy analysis and planning require a solid information base. APE will support the establishment of the National Information Center for the Environment (NICE). NICE will be a broad based environmental data management system with the already existing Geographic Information System (GIS) as its core.

NICE activities will include 1) identification, collection, organization, duplication, and distribution of bibliographic information, 2) facilitating the inventory of programs, projects, and activities for each NEAP Task Force, 3) referencing data sets into the national GIS, and 4) assisting in the establishment of new information networks.

NICE will make available on a cost reimbursable basis its information resources and processing capabilities to government agencies, NGOs, and the private sector. NICE core staff will include a Director, bibliographic data specialist, GIS and remote sensing specialists, research associates and financial and administrative support staff. Anticipated hardware and software needs include additional computing capacity, improved output capacity (including color printers, pen plotters and color photocopy machine), desk top publishing and graphic capacity, scanners and digitizers, and office equipment.

---

[2] During finalization of the PAAD and negotiation of the agreements with the GOU, it became evident that considerable funding for NICE may shortly become available from another donor. If this is the case, part or all of APE funds programmed for NICE will be reprogrammed for other Natural Resource Management activities.

NICE will establish a reference library to ensure that the major environmental literature for Uganda is available to the task forces, the NEAP Secretariat, and general users.

APE will provide $960,000 in local currency counterpart and foreign exchange for the fixed and operating costs of NICE over the life of the project. An estimated $435,000 of this will be in foreign exchange. Although the NEAP will primarily rely on available data, there are specialized studies that will be necessary to complement the process. Approximately $245,000 of the $960,000 will fund special studies as needed for NEAP and Program monitoring and impact evaluation.

4. Environmental Impact Statement

The Department of the Environment under the MEMEP is currently collaborating with UNEP/Nairobi to develop environmental assessment legislation. It is believed that the legislation will require environmental assessments for all development projects. As such, the demand for environmental assessments will increase.

Currently, the Department of the Environment has one individual trained in environmental assessment. MEMEP has allocated funding under the IUCN Wetlands Program for the Makerere University Institute of Environment and Natural Resources to train MEMEP staff in environmental assessment procedures for wetlands analysis. However, even with training, MEMEP is not expected to have the resources, especially with expected reductions in public sector staff, to meet the demands for future environmental impact studies.

Given the institutional constraints, MEMEP will have to rely on the private sector to provide support in the area of environmental assessment and review of development projects. For instance, it is likely that development projects will require an up-front cost by an investor or donor to complete an environmental assessment prior to approval of its project. This will be required when either directly in the area of natural resources or in other sectors.

In many instances neither the foreign investor nor donor will have the technical skills required to understand the local ecology to conduct the environmental assessments. Increasingly, Uganda will have to rely on indigenous environmental consulting firms to conduct environmental assessments.

APE will provide $290,000 in local currency counterpart funds for indigenous environmental consulting firms to conduct environmental impact assessments of on-going public

projects that were started without an environmental impact study. This sub-component of the project will be managed by the GMU. The funding will produce the dual benefit of incorporating environmental considerations into existing projects, and provide the incentive for capable private sector consulting firms to expand their services to include environmental consulting. Several private sector firms and the Makerere University Institute of Environment and Natural Resources (MUIENR) have some experience and have expressed interest in this type of work.

IV. PROGRAM ANALYSES

A. Economic and Financial Feasibility

ANNEX II.D examines the economic and financial feasibility of the Action Program for the Environment (APE). Feasibility is examined at the level of the government resources, macroeconomic benefits and costs, benefits and costs at the individual level. At the government level, the analysis clearly establishes the need for a program approach because the GOU is financially unable to carry out the major conditions and tasks under APE. At the macroeconomic level, the benefits from increased agricultural production, better management of the nation's biodiversity and the consequent boost to the tourism industry, and efficiencies from institutional reorganization together outweigh the investments made under this program. For individuals, the financial benefits from the tourism industry and the reflows into communities, increased yields at the farm level from better management of the natural resource base, and the viability of individual projects all imply increased incomes.

B. Social Analysis

The APE has incorporated various features to help ensure that the program has a positive impact, and that any deleterious features will be identified and ameliorated. The program is intended to benefit the Ugandan population at large. In addition, specific aspects focus on populations in areas adjacent to game parks and forests in targeted areas.

Participation is a central feature of the APE. Local communities, NGOs, the private sector, bureaucrats, technicians and politicians are all expected to contribute to the NEAP. In the Grants Component, local communities, the intended target population, will be consulted in the design of activities to be undertaken in the buffer zones. Equitable participation of females is essential, in view of women's critical role in natural resources management.

Based on the Social Analysis, A.I.D. will finance a special study, disaggregated by gender, on the Bwindi and

Rwenzori forests to ensure that vulnerable groups are not adversely affected by the change in their classification from reserves to National Parks. A.I.D and the GOU are expected to use the results of the study in their decision making process. A.I.D. Uganda will be responsible for contracting of this work.

C. Gender Analysis

Dependence on the natural resource base is particularly critical for women, who perform 60-80 percent of agricultural labor and contribute 60 percent of domestic food production. The impacts of soil erosion, deforestation and inadequate water supplies are most severe for women who are the fuel and water collectors.

Because of the dominant role of women in agriculture and natural resource management, APE identifies particular problems that have an impact on women's participation in improved natural resource management practices (see Annex II.J for elaboration of these problems). The most critical problems identified through interviews and literature reviews are: 1) inadequate gender disaggregated data collection; 2) underemployment of women in parks and forest reserves; 3) poorly funded and disorganized institutional support for the development of women's programs; 4) lack of access to education and training (including extension services) for girls and women; and 5) traditional land tenure systems that restrict women's ownership of land.

The APE program proposes to address some of the problems described above in several ways. These include:

i) Socio-economic data collection disaggregated by gender to better understand the specific needs of both men and women in buffer zones and any other areas targeted by the program.

ii) Employment opportunities for both men and women in National Parks and Forest Reserves and in the tourist industry, including a campaign to recruit more women professionals into forestry and wildlife management positions.

iii) Personnel training, including a specific workshop proposed for the Forestry Department on gender awareness in forestry problems, and naming a women in development specialist in the Forestry Department to respond to requests from rural women's groups for assistance in Natural Resource Management (NRM) activities.

iv) Participation of women representatives (including the Ministry of Women in Development, Youth and Culture, and the

National Council of Women) to address women's needs in the NEAP task forces.

v) Micro grants that will reach groups such as Save Mothers and Children's Association and the Ugandan Women's Tree Planting Association to address the needs of rural women involved in conservation, tree planting, environmental education and other NRM activities.

vi) A policy study on women and land/tree tenure that will recommend ways to improve women's access to land, and thus promote their participation in agroforestry and tree planting.

vii) Monitoring and evaluation for APE that specifically assesses the program's impact on both men and women in local communities (the number of males and females trained in conservation education and agroforestry techniques and the number of male and female farmers adapting improved NRM practices).

D. Institutional Analysis

ANNEX II.F presents a detailed description of institutional problems and the need to consolidate and strengthen natural resource management institutions. Many of the findings and recommendations also appear under Section III.C.3. With the technical assistance, training, and the recent reorganization of several institutions, the APE Program activities will be institutionally feasible.

E. Political Analysis

The APE design acknowledges that the most cost-effective and lasting way to bring about change is for a widely representative group of host country counterparts to analyze, debate, formulate, and implement environmental policy; conditionalities are therefore predicated on the GOU's elevating a discussion of APE proposed changes to the level of open and, in most cases, national debate. The political feasibility of airing the issues before the National Resistance Council, the legislative body, and the public is consistent with the GOU's policies.

F. Environmental Feasibility

The Action Program for the Environment will promote conservation and development, linking the sustainable management of Uganda's natural resources to economic development. A series of environmental safeguards are incorporated into the Program design. These include:

i) Institutional strengthening of MEMEP including development of an environmental assessment process, and standards and criteria for various sectors of the economy.

ii) Funding of the NEAP to identify environmental policies for sustainable natural resource management.

iii) Setting environmental criteria for PVO/NGO subgrants.

iv) Strengthening and encouraging the private sector to develop environmental assessment capabilities.

v) Providing long-term technical assistance to the MEMEP for the purpose of environmental planning, implementation of an environmental assessment process and environmental monitoring.

In the Initial Environmental Examiniation (IEE) the NPA, technical assistance, training and NEAP work received a Categorical Exclusion, and the PVO Interventions and Sub-grants received a Deferral. As detailed in section V. no. 4 of the IEE, a clause will be included in the Grant Project Agreement that will clearly state that no funds will be disbursed to any sub-grant until an appropriate environmental review has been carried out. All environmental reviews of subgrants will be presented to the Mission Environmental Officer for approval. The Mission Environmetnal Officer will refer all subgrants over $50,000 to the Regional Environmental Officer in REDSO/ESA for review prior to Mission approval and, in addition, will refer any subgrants with unusual circumstances or for which significant negative impacts are expected, to the Bureau Environmental Officer.

The Bureau Environmental Office has delegated authority to the Mission Director, USAID/ Kampala, or to the person acting in that capacity, with the clearances of the Mission, Regional or Bureau Environmental Officer (as appropriate), to approve the environmental reviews for the PVO/NGO subgrants within the APE Program. In addition, the Mission Environmental Officer will ensure that, with respect to local currency funded activities, environmental concerns are taken into account and the ministry staff responsible for such activities will provide progress reports to the Mission.

V. IMPLEMENTATION ARRANGEMENTS

A. Implementation and Mission Management Plans

1. Implementation Plan

An implementation plan of major events appears as ANNEX III.B. The most critical events in the implementation of

the Program are the fulfillment of conditionalities. Once the conditionalities are met and funds are disbursed under the grant, the GOU is required to make a deposit of local currency counterpart funds into a special account at the BOU. The counterpart contribution is an important element to the success of APE. If a conditionality is not met, it will compromise the counterpart deposit and adversely affect other activities in the Program. If this worst case scenario were to happen, the Mission and the GOU would have to revise and redesign the Program. The probability of this occurring is low. USAID expects the GOU to fulfill the conditionalities. The Mission and the GOU can manage unexpected delays in all the other Program events without adversely impacting the Program.

2. Mission Management Plan

The Program is designed to maintain a minimal administrative burden on the Mission, and not be staff intensive, while at the same time keeping the Mission involved in policy dialogue and general Program direction. The Mission's contracting and procurement responsibilities for the functional portion of the Program have been limited to less than 10 contract actions.

USAID will issue a request for proposals, preferably from women and minority owned firms to supply the technical assistance and training for the Policy Component of the Program. The selected firm would provide three long-term advisors and approximately 22 person months of short-term technical assistance over the first two years of the Program. The Mission expects a lag of six months between the date of Grant obligation and the arrival of the long-term consultants under contract. To provide short-term technical assistance for the Policy Component during the lag, USAID will utilize a buy-in to the centrally funded Environmental Planning and Management Project. The buy-in will supply the NEAP Secretariat with approximately five person-months of technical services. The Mission will also use an Indefinite Quantity Contract (IQC) throughout the Program for specialized technical assistance.

Using a Participating Agency Services Agreement (PASA), the Mission will arrange for the U.S. National Parks Service to provide a Park Service Advisor in Uganda for up to three years (as further described below).

USAID will issue an invitation for application for assistance from PVO's to manage the Rehabilitation and Resource Conservation Component of the Program. A technical and financial review will then be made by a committe which will consist of, but not be limited to, USAID Project Officers and representatives from MEMEP, MTWA, and UNP. The applicants' proposals will then be numerically graded on a series of criteria set up by USAID and

the GOU. The selected PVO will be awarded a Grant for the purpose of evaluating, awarding, and managing the subgrants, as well as the management of the local currency special accounts directly related to grant activities. However, with the exception of the micro-grants ($1,000), all grants will be sent to the USAID Uganda Mission Director for review and final approval. All subgrant, Parks and Reserves, and NICE funded procurement of goods will be managed by a resident specialist of the PVO Umbrella Grant Management Unit.

Finally, the Mission will be responsible for several Program support functions: contracting with a Natural Resource Advisor (to be based in the Mission) and other short-term technical assistance as needed, using Personal Services Contracts; making the cash transfers of the NPA; contracting for special studies; and arranging for Program evaluations and audits.

The Agriculture and Natural Resource Office (ANR) will coordinate program implementation for USAID. ANR, with support from the Program and Project Development Office, will be responsible for monitoring and evaluation of the conditionalities, and preparation of the reports for USAID and AID/Washington as required.

C. Financial Management and Financial Plan

The APE Program will have a total budget of $43.3 million. A.I.D. will contribute $30 million; $10 million in NPA and $20 million in project assistance. The GOU will contribute the equivalent of $10 million in counterpart local currency funds and an additional amount equivalent to $995,000 (which may include in-kind services), which surpasses the minimum 25 percent counterpart requirement for the Program. The subgrantees will also provide counterpart contributions, estimated at $2,315,000. The standard tables to the financial plan indicate the overall allocation of financial responsibilities and the sources from which each individual project element will be financed. Detailed component budgets along with notes appear as ANNEX III.A.

Since the Program design includes the deposit of some of the counterpart local currency into an account to be managed by the GMU, that local currency is budgeted with the same detail as the A.I.D. project funds. APE will use counterpart funds for the NEAP Secretariat staff (note 1), training (note 2), the GMU (note 3), PVO/NGO subgrants (note 4), rehabilitation and maintenance of the national parks and priority forest reserves (note 5), the operating costs of a natural resource information system, NICE (note 6), and the completion of environmental impact statements.

All GOU local currency couterpart funds will be deposited into a special account in the BOU. Funds for the

rehabilitation and maintenance of the priority forest reserves, and the operating costs of NICE will be disbursed directly from the special account in the BOU to the MEMEP for specific sector line items with reference to agreed upon activites. The MEMEP is then responsible for the disbursement of these funds for their predetermined activities. Funds for the rehabilitation and maintenance of the National Parks will be disbursed directly from the special account in the BOU to the MTWA for specific sector line items with reference to agreed upon activities related to UNP. The MTWA will then be responsible for the disbursement of these funds for their predetermined activities. Each ministry, MEMEP and MTWA, will be responsible for submitting a quarterly report to the GMU and USAID describing how these funds have been utilized.

Funds for training, the GMU, the PVO/NGO subgrants, and the completion of environmental impact statements will be disbursed from the special account into an accounts set up by the technical assistance contracting firm and the GMU. Both NGO's will be responsible for the disbursement of these funds for their predetermined activities. They will also be responsible for submitting quarterly reports to MEMEP, MTWA and USAID describing how these funds have been utilized.

Based on the performance of the MOF in having oversight for the PL-480 local currency accounts and the EIL-AIDS Project local currency, the Mission has determined that the MOF has the capability to provide financial oversight for the separate local currency account. In addition, based on the performance of the MEMEP in managing local currency in the Impenetrable Forest Conservation Project, the Development through Conservation Project, and the AFRENA Project, and the MTWA in managing local currency in the Lake Mburo Community Conservation Project, the Mission has determined that the MEMEP and the MTWA also have the capability to provide the financial management necessary for their respective local currency activities.

A formal financial assessment of the GOU and/or USAID's capability to manage local currency was performed by Price Waterhouse in late 1987 at the request of AID. Nine of the ten USAID's reviewed in East Africa as part of the same study were considered to have fair of adequate overall controls. One mission, Uganda, was rated as having good controls. Uganda, in the 8 areas PW rated, received a fair to good in the various categories with no unsatisfactory ratings. An updated in-depth formal assessment of this 1987 review is now targetted for the second quarter, FY 1992.

Expectations are that the next rating will, in general, again be fair to good. The new review should have the additional benefit of specific recommendations being made to further enhance

GOU institutional internal controls, accounting, assessment and auditing capabilities, particularly within the MOF.

Since FY 1987 USAID has programmed the dollar equivalent of over $60 Million in local currency projects (excluding the $10 million current APE NPA). Overall, the Bank of Uganda's participation in ensuring funds are received on a timely basis in the special accounts, in correct amounts, and then properly recorded in the bank statements has been good. This is in view of strong USAID coordination and monitoring of the BOU program. Similar favorable BOU experience is expected with the APE NPA special account handling. The history of the Ministry of Planning and Economic Development's (MPED) participation in the process has been entirely successful from the joint MPED/USAID programming viewpoint and a continuation of the same favorable track record is expected with the APE NPA program.

The Ministry of Finance (MOF) has recently indicated to USAID/ Uganda that they are committed to performing a strong disbursement, accounting, control, assessment and auditing function for USAID's local currency funding. In this regard, the MOF is presently preparing a request for local currency funding to strengthen their financial oversight role for USAID generated local currency. Overall, USAID's current assessment of the MOF's ability to provide oversight of the APE local currencies would be fair. For this reason USAID will continue to directly engage a strong personal service contractor with previous local currency management skills to closely monitor the APE NPA program. This continued USAID contractor support, together with the forthcoming updated formal financial assessment and the related MOF efforts to strengthen their internal procedures and controls, provide USAID's basis for the conclusion that the MOF can provide adequate financial oversight for the APE NPA project.

In summary, USAID's overall conclusion is that the GOU currently has the management capability to properly administer and account for the APE NPA. This is due to their proven track record with USAID in the BOU, MPED and MOF, notwithstanding continued strong monitoring by USAID.

1. Dollar Use and Tracking

The plan for dollar utilization and tracking follows guidance provided by 1990 STATE 194322 "Financial Management Guidance on Separate Dollar Accounts for ESF Cash Transfers and ESF-, DA- and DFA-Funded Non-Project Sector Assistance Cash Disbursements." The GOU will expend funds from the dollar disbursements for the purchase of petroleum, or such other uses as the Parties may agree to in writing.

Currently the GOU has serious balance of payment problems requiring foreign exchange. Recent increases in the international prices of petroleum products have added substantially to the CIF Uganda price of petroleum products. Program funds under APE will be disbursed in tranches into a separate interest bearing account in the Bank of Uganda's correspondent bank, Citibank. USAID/Uganda has not sought a waiver of Section 575 (b) (1) of the FY 1991 Appropriations Legislation, inasmuch as although there have been distinct improvements in the foreign exchange allocation system in Uganda the allocation system is still heavily controlled. Consequently, the USAID Controller will certify that dollar tracking mechanisms are adequate to safeguard funds provided under the cash disbursement mechanism employed for APE.

Following the signing of this agreement and the GOU's presentation of evidence that it has met the conditions precedent to the disbursement of the first tranche, USAID will notify the GOU that the conditionality has been met and request disbursement from the U.S. Treasury. The U.S. Treasury will transfer the first $3.0 million tranche to the Federal Reserve Bank of New York with instructions to transfer it into a special account in the BOU's correspondent bank (Citibank). This will be a special account with a single payor (Federal Reserve Bank of New York) established for the sole purpose of receiving the $10.0 million authorized by this agreement.

For the first tranche, upon confirmation of credit of the deposit at Citibank, the BOU will advise the petroleum companies and their commercial banks of the availability of FX and confirm its reservation against outstanding, approved pro-formas. The commercial banks will then confirm to the BOU the availability of sufficient local cover, through the submission of Form "E", the BOU's FX application. The BOU will process the approved petroleum company (ies)'s application for FX. Upon notification from the BOU that the FX purchase has been effected, the commercial bank will open a Letter of Credit (L/C).

Simultaneously the BOU will reduce the commercial bank's account by the Uganda Shilling equivalent (local cover) of the foreign exchange (and the commercial bank will reduce the petroleum company's account by the same amount) and deposit these shillings into a special APE account established in the BOU's Development Finance Department.

The BOU will either provide importers with the special account number and authorize direct disbursement from the special account to the importers, upon presentation of an executed L/C, or treat it as a routine commercial transaction completed between the BOU and commercial banks following which BOU will replenish its commercial FX account from the special account subsequent to authorized drawdowns.

In addition, USAID will establish, through an Implementation Letter, criteria for the application of the available FX. This Implementation Letter will specify program guidelines and make allowance for post-audit disallowances in the case of deviance from those guidelines.

The BOU will document every withdrawal from the special account and track and advise USAID on their movements through to their final disbursement. The Grant Agreement will require the GOU to deposit each sector dollar grant into a non-commingled, interest-bearing account at a commercial bank in the United States. The bank will be selected by the GOU. All interest earned on the bank account shall be used only for the purposes identified above. At the time of the request for the cash transfer from AID/Washington, the Mission will identify the separate, non-commingled account established by the GOU at a United States bank to which the funds will be disbursed.

The MOF will be responsible for oversight of the separate dollar account. Based on the performance of the MOF in exercising oversight over the separate dollar account for the Agricultural Non-traditional Export Promotion Program (ANEPP), the Mission has determined that the MOF has the capability to provide the necessary oversight for this project. The Ministry of Finance will have oversight for disbursement, accounting, control functions, and assessment, including audit and reporting to USAID. Any other activities in relation to dollar use and tracking which are not specifically assigned to other Government of Uganda institutions will also be carried out by the Ministry of Finance. The MOF will provide USAID with quarterly reports on the separate bank account for the APE separate dollar account. These reports, to be outlined in a Project Implementation Letter (PIL), will provide information on deposits to, withdrawals from, and disposition of dollars from the separate dollar account. The PIL will also identify any documentation necessary to verify the accuracy of the reports, and which documentation should accompany the reports which are submitted to the Mission. In addition, the Mission will make arrangements to receive statements on the separate dollar account directly from the bank where the account has been established. The Mission will verify the reports at least once per year by inspection of GOU records pertaining to the special account.

An annual review of the account will be conducted by the Mission. Given past positive experience with ANEPP, the Mission does not feel that a full audit is warranted on an annual basis. However, the Mission will reserve the right to conduct non-Federal audits of the account.

2. Local Currency Counterpart

Following the BOU's transfer of FX to the commercial bank's account, the local currency proceeds of this sale will be deposited into a special account. USAID and the Ministry of Planning and Economic Development will jointly program the estimated Ugandan shillings which will be generated by this transaction.

The schedule of deposits is subject to agreement betweeen USAID and the GOU. The Bank of Uganda will submit monthly statements on the special account to USAID and the Ministry of Planning and Economic Development who will mutually program the use of these local currency generations.

On at least an annual basis, the Mission will review program performance to determine whether continued allocations of separate account funds are warranted and overall program purposes are being met. Periodic audits of local currency uses, and GOU reports on supported programs, will be stipulated in Implementation Letters.

The Sector Program Grant Agreement will require the GOU to deposit the local currency counterpart equivalent to the amount of each sector dollar grant received from APE within 180 days upon receipt of each such dollar grant. The amount of local currency shall be calculated at the highest official exchange rate for any purpose in Uganda on the date of the sector grant disbursement by A.I.D. This is subject to conditions existing in the Grantor's present waiver permitting a rate other than the highest exchange rate per U.S. Dollar which is not unlawful.

The Sector Program Grant Agreement will specify that the GOU will deposit the counterpart into a separate account at the Bank of Uganda. The MOF will have oversight for the local currency account in accordance with both the Sector Program and Project Grant Agreements. With the approval of USAID and the GOU, the GMU and the Technical Assistance Contractor for the Policy Component will be authorized to use a portion of these funds for the activities of the Program; the remainder will be disbursed directly to the appropriate ministries, in accordance with the terms of the Project Grant Agreement. As is standard, A.I.D. will maintain the right to conduct a non-Federal audit of the uses of the local currency and of the organization to which the local currency is disbursed. The GMU will be required to furnish quarterly reports to A.I.D. on the local currency special account and bank statements on the local currency special account to A.I.D in the format already used by the Bank of Uganda.

The GMU will require the subgrantees and other assorted recipients to maintain, in accordance with generally accepted accounting principles and practices consistently applied, books and records relating to the special account. A.I.D. will reserve the right to inspect these books and records

at all times. The books and records will be maintained for three years after the last disbursement by A.I.D. under the Grant.

3. Recurring Costs

Recurring costs are not relevant to most aspects of APE. The technical assistance and training to support the environmental policy making process and establish new institutional operating systems will remain without maintenance costs. The Program requires the GOU to reallocate or reassign staff to the NEAP process. It will not create and maintain continuous funding of new positions. The PVO/NGO subgrants will be evaluated for funding against sustainability criteria. The environmental impact fund will give the private sector an opportunity to gain experience in producing environmental impact studies on existing projects. Future projects will be required to fund environmental impact studies as a cost of the project.

Recurring costs are a concern for NICE and the Rehabilitation and Maintenance of Parks and select Forest Reserves. As proposed, each activity should generate revenues from user fees. Estimating the user demand, however, is difficult at best. The National Parks and Forest Reserve revenues will depend on improvements in the Ugandan economy and increased traffic of foreigners to and through Uganda. The users for the environmental information generated and sold under this Program are primarily in the public sector. Since the budget of the GOU will be tight for the near future, the primary users for NICE output will be the international donors. The Economic and Financial Feasibility Annex (ANNEX II.D) examines the sustainability of these two activities using varying assumptions. The conclusion is that they should be viable given the expected set of assumptions.

CTION PROGRAM FOR THE ENVIRONMENT
ROJECT BUDGET AND DETAIL
ROJECT NO: 617-0123/617-0124

PROJECTIONS OF EXPENDITURES BY FY

	AID (U.S. $)	GOU	PVO	TOTAL
FY 91	3,000,000	350,000	0	3,350,000
FY 92	8,630,000	2,880,000	827,500	12,337,500
FY 93	8,610,000	2,290,000	662,000	11,562,000
FY 94	4,180,000	2,080,000	827,500	7,087,500
FY 95	3,250,000	1,330,000	662,000	5,242,000
FY 96	2,330,000	1,070,000	331,000	3,731,000
TOTAL	30,000,000	10,000,000	3,310,000	43,310,000

CTION PROGRAM FOR THE ENVIRONMENT
UMMARY COST ESTIMATE AND FINANCIAL PLAN
ROJECT NO: 617-0123/617-0124

LIFE OF PROGRAM

USE/SOURCE	A.I.D. FX (U.S. $)	GOU LC	PVO FX	PVO LC	TOTAL
NONPROJECT ASSISTANCE	10,000,000				10,000,000
TECHNICAL ASSISTANCE	4,100,000				4,100,000
SUBGRANTS	11,820,000	6,385,000	1,160,000	1,155,000	20,520,000
TRAINING	380,000	280,000			660,000
CONSTRUCTION		1,080,000			1,080,000
COMMODITIES	440,000	20,000			460,000
OTHER COSTS		2,630,000			2,630,000
AUDIT & EVALUATION	260,000				260,000
AID OPERATING EXPENSES		600,000			600,000
CONTINGENCY & INFLATION	3,000,000				3,000,000
	30,000,000	10,995,000	1,160,000	1,155,000	43,310,000

ACTION PROGRAM FOR THE ENVIRONMENT
COSTING OF PROJECT OUTPUTS/INPUTS
PROJECT NO: 617-0123/617-0124

COSTING OF PROJECT OUTPUTS/INPUTS

PROJECT INPUTS\OUTPUTS	NEAP	INSTIT SUPPORT	PROTECTED AREAS	PVO SUBGRANTS	PARK REHAB	NICE	EIS	SPECIAL STUDIES	AUDIT/EVAL PROJ MGMT	TOTAL
A.I.D. (U.S. DOLLARS)										
NON PROJECT ASSISTANCE	5,000,000	0	5,000,000							10,000,000
TECHNICAL ASSISTANCE	1,055,000	1,415,000			600,000	160,000		80,000	790,000	4,100,000
TRAINING		345,000				30,000				375,000
SUBGRANTS	0			11,820,000						11,820,000
COMMODITIES	100,000				145,000	200,000				445,000
OTHER COSTS										0
AUDIT & EVALUATION									260,000	260,000
CONTINGENCIES & INFLATION									3,000,000	3,000,000
OPERATING EXPENSES									600,000	600,000
SUB TOTAL	6,155,000	1,760,000	5,000,000	11,820,000	745,000	390,000	0	80,000	4,650,000	30,600,000
GOU										
TRAINING		230,000				50,000				280,000
CONSTRUCTION					1,060,000	20,000				1,080,000
COMMODITIES					20,000					20,000
SUBGRANTS				6,385,000						6,385,000
OTHER COSTS	700,000				1,140,000	500,000	290,000			2,630,000
SUBTOTAL	700,000	230,000	0	6,385,000	2,220,000	570,000	290,000	0	0	10,395,000
PVO										
SUBGRANTS (COUNTERPART)				2,315,000						2,315,000
SUBTOTAL	0	0	0	2,315,000	0	0	0	0	0	2,315,000
TOTAL	6,855,000	1,990,000	5,000,000	20,520,000	2,965,000	960,000	290,000	80,000	4,650,000	43,310,000

D. Monitoring and Evaluation Plan Summary

APE will support the monitoring and evaluation (M&E) of the two components. The emphasis, as mandated under the DFA, will be in monitoring impacts at the people level (including farmers, rural households, and vulnerable groups). Rather than emphasizing the evaluation of the provision of inputs and funding obligations, M&E under DFA-funded NPA programs must be more comprehensive. For that reason, APE will provide considerable resources to ensure that sufficient data collection and analysis is undertaken during the life of the Program, and that results of this analysis directly feed back to implementation.

As discussed in Annex III.D, the monitoring and evaluation of APE will be related to the impact indicators for the Mission's Country Program Strategy Paper (CPSP).

In addition to the monitoring required to track program impacts of APE activities per se, the Program will assist in the establishment of a monitoring and evaluation mechanism , through the NICE to ensure the continued long-term monitoring of impacts on the environment. This will provide the needed analytic foundation required to justify future large-scale interventions in the sector by A.I.D. and other donors.

The M&E system of the PVO/NGO component will assist in the evaluation of proposals, ensure that baseline information is gathered by NGOs, and ensure that sufficient effort is taken under each grant to continue analysis of impact. Most importantly, this component will ensure that information and lessons learned from the subgrant activities are fed back to the larger monitoring and evaluation of the APE program. This feedback mechanism will be especially important if APE and the Mission's CPSP are to adequately measure people-level impact.

APE will have two external evaluations; first, a midterm evaluation and then a final evaluation. Outlines for these evaluations are found in Annex III.D.

E. Contracting and Procurement Plan

1. Contract and Procurement Plan

A detailed contract and procurement plan appears as ANNEX III.C. The organization responsible for procurement of commodities is the PVO responsible for the GMU. The selected PVO will develop specifications required to initiate procurement and sign PILs or other obligating/earmarking documentation to authorize the expenditure of project funds and acknowledge receipt of project-funded commodities.

USAID and, preferably a woman- or minority-owned firm will be responsible for the technical assistance contracting (TAC). USAID will obtain most of the technical services for the Program through a contract with the TAC. The technical assistance contract will be for an estimated $2.6 million dollars. This represents 60% of total project funding for technical assistance.

USAID will supplement this technical assistance with a buy-in under the Environmental Planning and Management Project, an Indefinite Quantity Contract (IQC) already in effect, a PASA with the U.S. National Park Service, and direct contracts for special studies. USAID reserves the right to enter into other PASAs as needed with organizations such as the USDA and USGS.

A PASA with the U.S. National Park Service is justified as the U.S. National Park Service is uniquely and particularly suited to provide this technical service. While the private sector does operate hotel, food, and beverage concessions in national and state parks, it does not manage them. Only the public sector entities such as the National Park Service determine park policies, formulate park operating procedures, hand out work assignments to park staff, coordinate with private sector concessionaires, resolve visitor complaints and emergencies, and answer to governing boards. Park management of natural resource areas in the U.S. is the responsibility of the federal, state, and local governments. Amusement and theme parks, the only private sector comparison, do not have the experience or capability with the management of natural resources and the interaction between visitors and wildlife. Finally, only through a PASA would the Park Service Advisor have access to administrative and management backstop resources of the National Park Service.

F. Conditions and Covenants

1. Conditions

The Grant will contain the standard conditions precedent to first disbursement: a legal opinion that the Agreement has been duly authorized, a statement of the names and titles of the persons who will act as authorized representatives, and a statement designating the United States bank and the number of the Separate Dollar Account into which disbursements should be made.

Special conditions to disbursement include:

a. Conditions Precedent to the First Disbursement under the National Environmental Action Plan:

Prior to first disbursement of funds under the Grant for the National Environmental Action Plan of Three Million United States Dollars ($3,000,000) or to issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing:

Furnish to A.I.D. in form and substance satisfactory to A.I.D. an opinion of legal counsel that: the GOU has appointed a policy level Steering Committee as a cabinet subcommittee which is chaired by the Rt. Hon. Prime Minister with the Hon. Minister of Energy, Minerals and Environment Protection as the Secretary; and that the Steering Committee has appointed a National Environment Action Plan Secretariat, Secretariat Staff, Coordinator, and Advisory Committee in accordance with the procedures explained in ANNEX I (Program Description) to this Agreement.

Prior to second disbursement of funds under the Grant for the National Environment Action Plan of Two Million United States Dollars ($2,000,000) or to issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing:

Furnish to A.I.D. in form and substance satisfactory to A.I.D. an opinion of legal counsel that: the National Environmental Action Plan was prepared in accordance with the requirements as described in ANNEX I (Program Description) to this Agreement; and that the NEAP is formally adopted by the GOU.

b. Conditions Precedent to First Disbursement for Protected Areas:

Prior to first disbursement of funds under the Grant for Protected Areas of Five Million United States Dollars ($5,000,000) or to issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing; furnish to A.I.D. in form and substance satisfactory to A.I.D.;

i) an opinion of legal counsel that the Bwindi and Rwenzori Forest Reserves have been designated as National Parks and that the conservation status of the Kibale, Semliki, and Mount Elgon Forest Reserves has been elevated in accordance with the criteria and covenants as described in ANNEX I of the Program Description of the Sector Program Grant Agreement; ii) a plan from Uganda National Parks on how and when it will open park concessions, including tourist

accomodations to private sector management, including local community involvement, in form and substance satisfactory to A.I.D.

C. Conditions precedent for the First Disbursement for Subgrants:

Prior to the disbursement of funds for any subgrant under the Rehabilitation and Resource Component of the Project, as more specifically described in ANNEX 1 (Project Description) of this Agreement, or to the issuance of documentation by A.I.D. pursuant to which disbursement will be made, an environmental review shall be conducted and presented for approval to the appropriate A.I.D. official, which shall include, among other elements, an inventory of species present in the area and an assessment of the impacts of the subgrant activity on any such species, or critical habitat, and shall be otherwise in form and substance acceptable to A.I.D..

2. Covenants

a. Special Covenants for the Sector Grant Agreement

(1) General Action:

The Grantee will not in any way discontinue, reverse or otherwise impede any action it has taken in satisfaction of any condition precedent or covenant herein, except as A.I.D. may otherwise agree in writing.

(2) Local Currency Counterpart Deposits:

The GOU will deposit the local currency counterpart funds in an amount equivalent to the amount of each sector dollar grant received from the Action Program for the Environment within 180 days upon receipt of each such dollar grant. The amount of local currency shall be calculated at the highest current official exchange rate of Uganda Shillings to U.S. Dollars as of the date of each such disbursement by A.I.D. This is subject to conditions existing in the Grantors present waiver permitting a rate other than the highest exchange rate per U.S. Dollar which is not unlawful.

(3) Program Evaluation:

The Grantee will cooperate with A.I.D. in establishing an evaluation program as part of the Program. Except as the Parties may otherwise agree in writing, the evaluation program will include, during the implementation of the Program and at one or more points thereafter:

i) evaluation of progress toward attainment of the objectives of the Program;

ii) evaluation of the impact of the Program on objectives and review of covenants and conditions;

iii) evaluation, to the degree feasible, of the overall development impact of the Program.

(4) Involvement of Private Sector Entities:
After the UNP, or any successor organization, has developed a plan on how and when it will open national parks to private sector management, the UNP will enter into agreements or letters of understanding with private sector entities describing how those entities will assist in the marketing and management of park concessions and lodging accomodations.

b. Special Covenants to the Project Grant Agreement

(1) Project Evaluation:
The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

i) evaluation of progress towards attainment of the objectives of the Project;

ii) identification and evaluation of problem areas or constraints which may inhibit such attainment;

iii) assessment of how such information may be used to help overcome such problems; and,

iv) evaluation, to the degree feasible, of the overall development impact of the Project.

(2) Salaries:
The Grantee agrees that no NEAP Secretariat staff members or task force members paid salaries from Project funds will concurrently draw a government salary or benefits.

(3) Local Currency Uses:

The Parties agree that the local currency which has been generated and deposited into the Separate Local Currency Account pursuant to the terms of the Program Agreement shall be used for agreed upon activities under the Project, as well as the administrative expense requirements of A.I.D., as more specifically set forth in ANNEX 1 (Project Description) of this Agreement, which may be supplemented by Project Implementation Letters. The Grantee further agrees that it will disburse the local currency from the separate account for such agreed upon purposes (and to specified accounts) promptly upon the request from A.I.D. for said disbursement, and in no event later than 30 days thereafter.

(4) Assistance to the NEAP:

The Parties agree that the disbursement of dollar funds under this Agreement for the purpose of providing technical assistance, commodities or other services in connection with the NEAP, as more specifically described in ANNEX 1 (Project Description) of this Agreement, shall be conditioned upon the continued performance of the Grantee in furtherance of the completion of the NEAP in accordance with the terms of the Program Agreement.

(5) Parks and Forest Reserves:

The Parties agree that prior to the disbursement of any dollar funds for the purpose of providing technical assistance, commodities or other services for the national parks and forest reserves, the Grantee shall have disbursed or otherwise provided the counterpart local currency funding which has been jointly programmed for such parks and reserves to the unit/entities responsible for carrying out the relevant activities therefor, as more specifically described in ANNEX 1 (Project Description) of this Agreement, which may be supplemented in a Project Implementation Letter.

6) National Information Center for the Environment (NICE):

The Parties further agree that prior to the disbursement of any dollar funds for the purpose of providing technical assistance, commodities or other services for the NICE, the Grantee shall have disbursed, or otherwise provided, the counterpart local currency funding for the NICE to the unit/entities responsible for carrying out the relevant activities therefor, as more specifically described in ANNEX 1 (Project Description) of the Agreement, which may be supplemented in a Project Implementation Letter.

(7) Evaluation of Environmental Impact:

The Parties agree that safeguards shall be taken to ensure that environmental concerns are taken into account in the design and implementation of projects, programs and activities

which are supported by jointly programmed local currencies. Further it is agreed that the responsible staffs in the ministries charged with implementation of such activities will conduct evaluations of long-term environmental impacts of such local currency funded activities, with assistance as necessary by A.I.D., and will provide progress reports to A.I.D., in form and substance satisfactory to A.I.D., as more specifically described in a Project Implementation Letter.

USAID/KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT SECTORAL PROGRAM
LOGICAL FRAMEWORK MATRIX

PROJECT NARRATIVE	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL			
SUSTAINED IMPROVEMENT IN THE STANDARD OF LIVING	REAL GDP INCREASES OVER THE NEXT DECADE ACCOMPANIED BY REAL ANNUAL INCREASES IN RURAL INCOMES	MISSION SECTOR SURVEYS IBRD COUNTRY REPORTS	POLITICAL ENVIRONMENT CONTINUES TO SUPPORT POLICIES THAT PROMOTE SUSTAINABLE DEVELOPMENT AND PRIVATE INVESTMENT
SUBGOAL			
SUSTAINED PRODUCTIVITY OF UGANDA'S NATURAL RESOURCE BASE AND MAINTENANCE OF ITS BIODIVERSITY	REDUCTION IN RATE OF DECLINE OF FOREST COVER INCREASE IN YIELDS/ACRE REDUCED RATE OF LOSS OF ENDANGERED SPECIES	SECTOR ASSESSMENTS GIS/RS PROJECT IMPACT MONITORING REPORTS	CONTINUED GOU COMMITMENT TO NATURAL RESOURCE ISSUES GOU CONTINUES TO RECOGNIZE CRITICAL RELATIONSHIP BETWEEN LONG-TERM SUSTAINABILITY OF AGRICULTURE AND NATURAL RESOURCE MANAGEMENT
PURPOSE			
TO ASSIST UGANDA'S PUBLIC AND PRIVATE SECTOR TO MORE EFFECTIVELY AND SUSTAINABLY MANAGE ITS NATURAL RESOURCE BASE IN SELECTED AREAS	ENACTMENT OF AT LEAST 4 MAJOR POLICY REVISIONS RECOMMENDED BY NEAP ENACTMENT OF ENVIRONMENTAL LEGISLATION, REGULATIONS, AND STANDARDS NEAP SECRETARIAT ABOLISHED AFTER 2 YEARS TRIPLING OF TOURIST REVENUES FROM TARGET AREAS REDUCTION IN RATE OF LOSS OF FOREST COVER IN TARGET AREAS RATE OF LOSS OF ENDANGERED SPECIES IS REDUCED IN TARGET AREAS UWP REVENUES COVER AT LEAST ITS RECURRENT COSTS CLEAR MANDATES AND OPERATING PROCEDURES FOR NATURAL RESOURCE INSTITUTIONS CHANGED ATTITUDES/BEHAVIORS RELATED TO NRM INCREASED USE OF ENVIRONMENTAL INFORMATION BY INSTITUTIONS INCREASED PRIVATE/PUBLIC EXPERTISE IN CONDUCTING EIAs	LEGISLATION/REGULATIONS LEGISLATION/REGULATIONS LEGISLATION/REGULATIONS MTW FINANCIAL STATEMENTS AND PROJECT EVALUATION PROJECT EVALUATION PROJECT EVALUATION AND IMPLEMENTATION REPORTS PROJECT EVALUATION SURVEYS NICE'S ANNUAL REPORTS PROJECT EVALUATION	POLICY AND LEGISLATION CONTINUE TO BE BASED ON SOUND ANALYTICAL FINDINGS

USAID/KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT SECTORAL PROGRAM
LOGICAL FRAMEWORK MATRIX

PROJECT NARRATIVE	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
OUTPUTS (POLICY COMPONENT)	MAGNITUDE OF OUTPUTS		
A NATIONAL ENVIRONMENTAL ACTION PLAN DEVELOPED BY INTERMINISTERIAL SECRETARIAT WITH PARTICIPATION OF MINISTRIES, DEPARTMENTS, PRIVATE SECTOR, UNIVERSITIES, PVO/NGOs, RESISTANCE COUNCILS, LOCAL POPULATIONS	ESTABLISHMENT OF MINISTERIAL LEVEL STEERING GROUP ESTABLISHMENT OF NEAP SECRETARIAT WITH SEPARATE OFFICES AND STAFF HEADED BY COORDINATOR ESTABLISHMENT OF TASK FORCES	NATIONAL GAZETTE NATIONAL GAZETTE PROJECT IMPLEMENTATION LETTERS	PUBLIC SERVICE REVIEW COMMISSION RECOMMENDATIONS ON EFFECTIVE REORGANIZATION OF MINISTRIES IS IMPLEMENTED
NATIONAL ENVIRONMENTAL ACTION PLAN ADOPTED	PUBLICATION IN NATIONAL GAZETTE	NATIONAL GAZETTE	SALARY AND BENEFIT LEVELS OF GOVT EMPLOYEES ADJUSTED TO PROVIDE WK INCENTIVES
CONVERSION OF BWINDI AND ALL OF RWENZORI TO NATIONAL PARKS	PUBLICATION IN NATIONAL GAZETTE FULL STAFFING OF PARKS PARK FACILITIES OPEN TO TOURISTS AND PUBLIC LOCAL COMMUNITY INVOLVED W/PARK ACTIVITIES AND IN REVENUE SHARING	PROJECT IMPLEMENTATION LETTERS PROJECT DOCUMENTS/ ON-SITE INSPECTIONS/SYMPOSIA	
ENHANCED PROTECTION STATUS FOR KIBALE, MT.ELGON, AND SEMLIKI FOREST RESERVES	PUBLICATION IN NATIONAL GAZETTE	NATIONAL GAZETTE	
INSTITUTIONAL STRENGTHENING OF LINE MINISTRIES,	REORGANIZED MINISTRIES OPERATE AS FUNCTIONAL UNITS	PROJECT EVALUATION	
MINISTRIES TRAINED IN NATURAL RESOURCES, ENVIRONMENTAL, TOURISM MANAGEMENT	TRAINING COURSES COMPLETED OFFICIALS UNDERGOING TRAINING	PROJECT EVALUATION/DOCUMENTS	

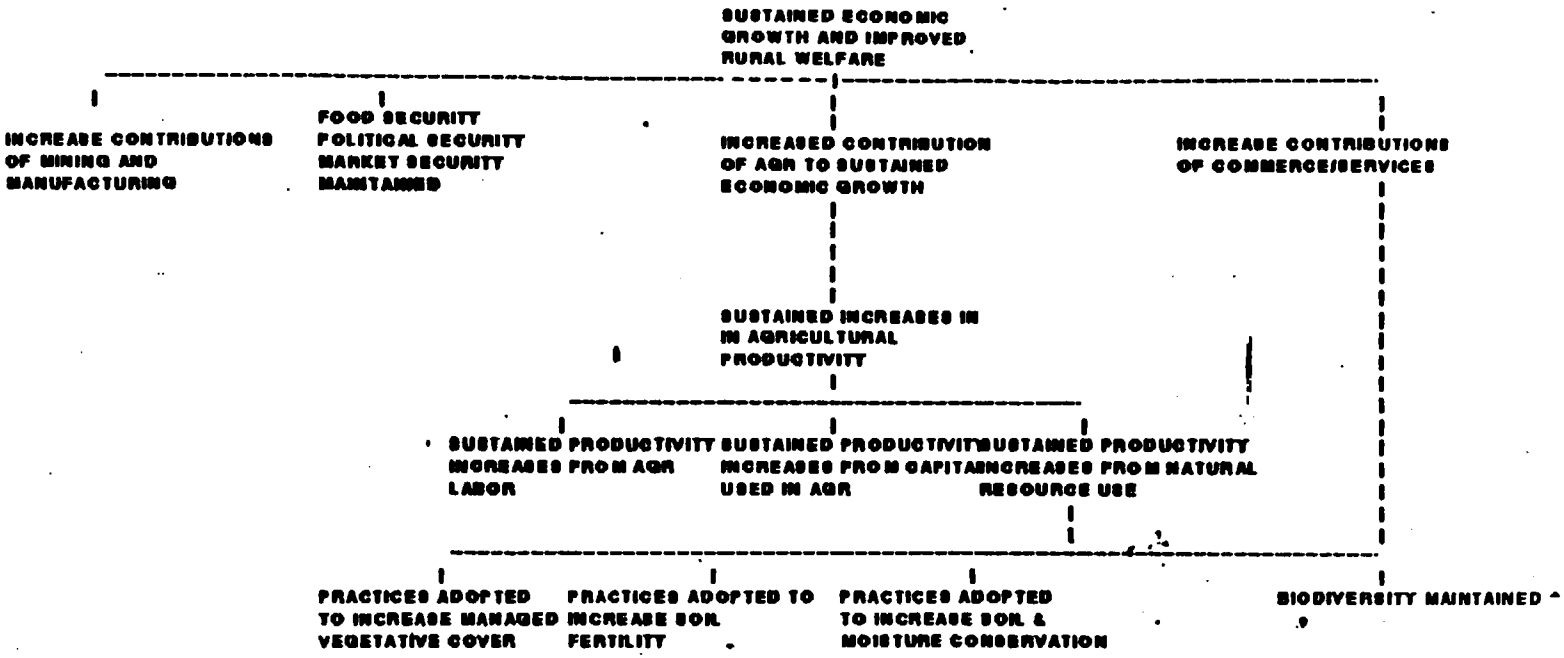
USAID/KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT SECTORAL PROGRAM
LOGICAL FRAMEWORK MATRIX

PROJECT NARRATIVE	VERIFIABLE INDICATORS	MEANS OF VERIFICATION
OUTPUTS -- UMBRELLA GRANTS (PROJECT ASSISTANCE)		
PARK BOUNDARIES DELINEATED	CLEAR BOUNDARY MARKERS	PROJECT EVALUATION/SITE VISITS
MACRO GRANTS PROJECTS: AT LEAST 10	AT LEAST 5 AGROFORESTRY ACTIVITIES AT LEAST 5 SOIL CONSERVATION PROJECTS	UMBRELLA COORDINATOR QUARTERLY REPORTS
MINI GRANTS PROJECTS: AT LEAST 20		UMBRELLA COORDINATOR QUARTERLY REPORTS
MICRO GRANTS PROJECTS: AT LEAST 100	INCREASED CONCERN FOR ENVIRONMENT	SURVEYS/PROJECT EVALUATION
NATURAL RESOURCES INFORMATION SYSTEMS	"NICE" ESTABLISHED, OPERATIONAL, SELF-SUFFICIENT	"NICE" ANNUAL REPORTS/EVALUATION
ENVIRONMENTAL IMPACT ASSESSMENTS	MEP STAFF TRAINED IN EIAs QUALIFIED PRIVATE SECTOR FIRMS IN CONDUCTING EIAs	PROJECT EVALUATION

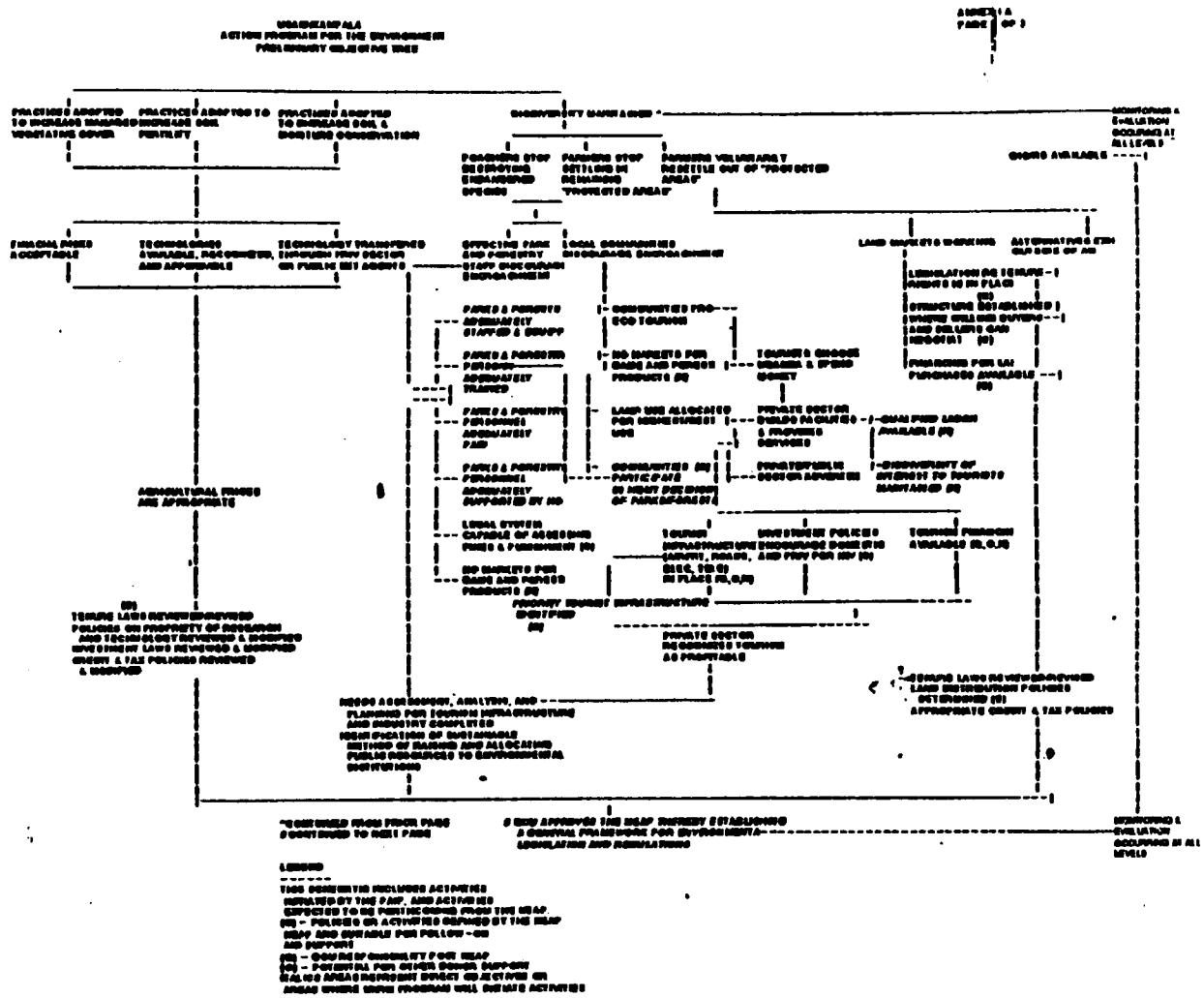
USAID/KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT SECTORAL PROGRAM
LOGICAL FRAMEWORK MATRIX

PROJECT NARRATIVE	VERIFIABLE INDICATORS				MEANS OF VERIFICATION	ASSUMPTIONS
INPUTS	A.I.D.	GOU	PVO	TOTAL		
NON PROJECT ASSISTANCE	10,000,000			10,000,000	USAID CONTROLLER REPORTS	INPUTS ARE AVAILABLE IN A TIMELY MANNER
TECHNICAL ASSITANCE	4,100,000			4,100,000	PROJECT AUDITS	
SUBGRANTS	11,820,000	5,990,000		17,810,000		
TRAINING	380,000	280,000		660,000	UMBRELLA GRANT FINANCIAL REPORTS	
CONSTRUCTION		1,080,000	3,310,000	4,390,000	BOU QUARTERLY/ANNUAL REPORTS	
COMMODITIES	440,000	20,000		460,000	NICE" ANNUAL REPORTS	
OTHER COSTS		2,630,000		2,630,000		
AUDIT & EVALUATION	260,000			260,000		
CONTINGENCY & INFLATION	3,000,000			3,000,000		
TOTAL	30,000,000	10,000,000	3,310,000	43,310,000		

USAID/KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT
PRELIMINARY OBJECTIVE TREE

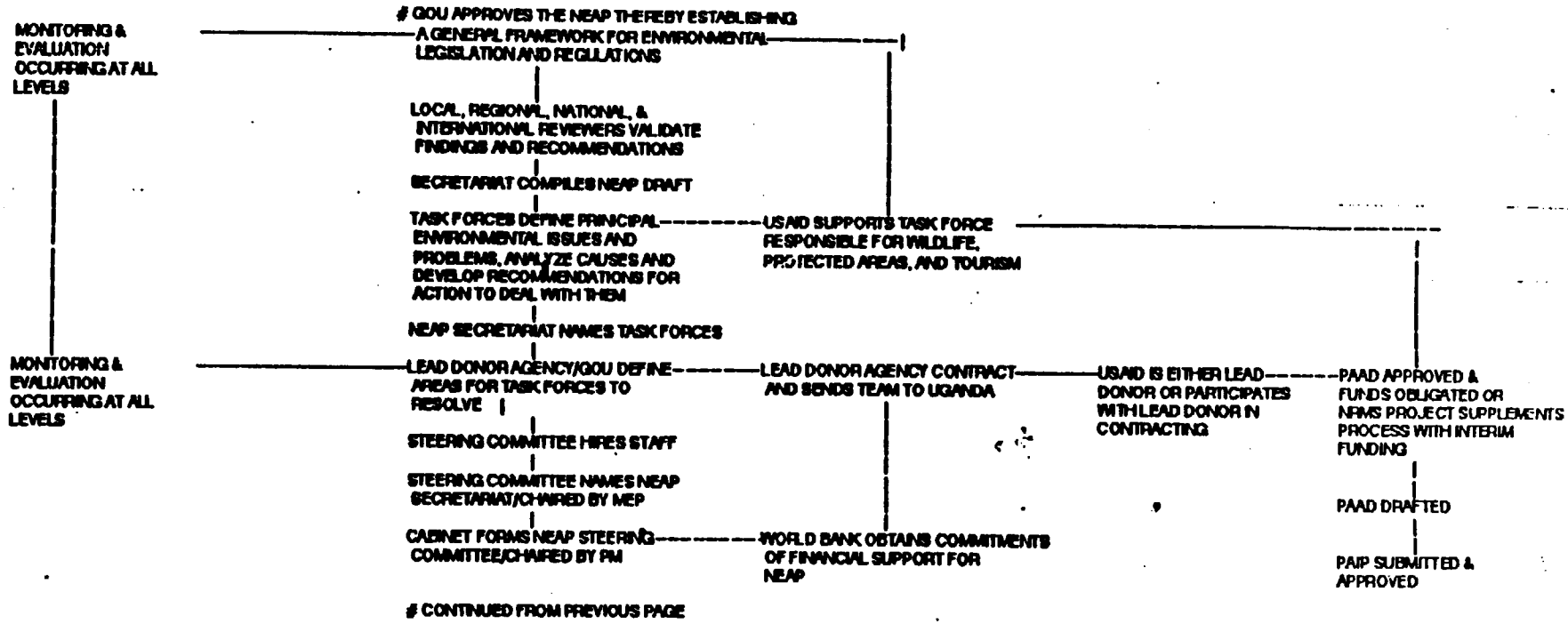


^ CONTINUED TO NEXT PAGE


PRACTICES ADOPTED TO INCREASE MANAGED INCREASE GOAL VEGETATING COVER
PRACTICES ADAPTED TO INCREASE GOAL PERTILITY
PRACTICES ADOPTED TO INCREASE GOAL & MONITORING CONSERVATION
BIODIVERSITY MAINTAINED
MONITORING & EVALUATION OCCURRING AT ALL LEVELS
PARKERS STOP DESTROYING ENDANGERED SPECIES
PARKERS STOP SETTLING IN REMAINING "PROTECTED AREAS"
PARKERS VOLUNTARILY RESETTLE OUT OF "PROTECTED AREAS"
CHOICE AVAILABLE
FINANCIAL PRICES ACCEPTABLE
TECHNOLOGIES AVAILABLE, PROCURED, AND APPROPRIATE
TECHNOLOGY TRANSFERED THROUGH PRIV SECTOR OR PUBLIC SET AGENTS
EFFECTIVE PARK AND PERSONNEL STAFF PROGRAM ENFORCEMENT
LOCAL COMMUNITIES PROGRAMS ENFORCEMENT
LAND OWNERS WORKING
ALTERNATIVES ITH SUPPORT OF AID
LEGISLATION (IN TENURE - AGENTS IN IN PLACE (IN))
STRUCTURE ESTABLISHED WHERE VILLAGE SUPPORT AND DELIVER GAM MEDICINAL (IN)
FINANCING PER UN PURCHASED AVAILABLE (IN)
PARKS & PERSONNEL ADEQUATELY STAFFED & SUPPP
PARKS & PERSONNEL ADEQUATELY TRAINED
PARKS & PERSONNEL PERSONNEL ADEQUATELY PAID
PARKS & PERSONNEL PERSONNEL ADEQUATELY SUPPORTED BY HQ
LOCAL SYSTEM CAPABLE OF ACCEPTING FINES & PUNISHMENT (IN)
NO MARKETS FOR GAME AND PERSON PRODUCTS (IN)
COMMUNITIES PRO-ECO TOURISM
NO MARKETS FOR GAME AND PERSON PRODUCTS (IN)
TOURISTS CHOOSE VISAGES & SPEND MONEY
LAND USE ALLOCATED FOR MORE SUSTAINED USE
PRIVATE SECTOR BUILDS FACILITIES & PROVIDES SERVICES
QUALIFIED LABOR AVAILABLE (IN)
COMMUNITIES (IN) PARTICIPATE IN MORE DECISION OF PARK ENFORCEMENT
PRIVATE PUBLIC SECTOR ADVERTISE
BIODIVERSITY OF INTEREST TO TOURISTS MAINTAINED (IN)
AGRICULTURAL FINDS ARE APPROPRIATE
TOURISM INFRASTRUCTURE ENCOURAGE DOMESTIC (AIRPORT, ROADS, AND PRIV PER NEW (IN)
INVESTMENT POLICIES
TOURISM PROGRAM AVAILABLE (IN, O, R)
DEC, TOUR IN PLACE (IN, O, R)
PRIORITY MARKET INFRASTRUCTURE IDENTIFIED (IN)
PRIVATE SECTOR RECOGNIZES TOURISM AS PRIORITIZE
(IN) TENURE LAWS REVIEW/REVISED POLICIES ON PROPRIETY OF RESEARCH AND TECHNOLOGY REVIEWED & ADOPTED INVESTMENT LAWS REVIEWED & MODIFIED CREDIT & TAX POLICIES REVIEWED & MODIFIED
NEEDS ASSESSMENT, ANALYSIS, AND PLANNING FOR TOURISM INFRASTRUCTURE AND INDUSTRY COMPLETED
MODIFICATIONS OF SUSTAINABLE METHOD OF RAISING AND ALLOCATING PUBLIC RESOURCES TO ENVIRONMENTAL INITIATIVES
TENURE LAWS REVIEW/REVISED LAND DISTRIBUTION POLICIES DETERMINED (IN) APPROPRIATE CREDIT & TAX POLICIES
"CONTINUED FROM PRIOR PAGE
CONTINUED TO NEXT PAGE
A NEW APPROVED THE MAP INTENT ESTABLISHING A GENERAL FRAMEWORK FOR ENVIRONMENTAL LEGISLATION AND REGULATIONS
MONITORING & EVALUATION OCCURRING AT ALL LEVELS
LEGEND
THE COMMITTED INCLUDES ACTIVITIES INITIATED BY THE PMP, AND ACTIVITIES EXPECTED TO BE PERTINENT FROM THE MAP
(IN) – POLICIES OR ACTIVITIES DEFINED BY THE MAP MAP AND SPECIALLY FOR FOLLOW-ON AID SUPPORT
(O) – COURSES CONSISTENT FOR MAP
(R) – POTENTIAL FOR OTHER DONOR SUPPORT
MAPAG AREAS INDIRECT DIRECT OBJECTIVES OR AREAS WHERE MAPA PROGRAM WILL INITIATE ACTIVITIES

29

USAID KAMPALA
ACTION PROGRAM FOR THE ENVIRONMENT
PRELIMINARY OBJECTIVE TREE



INITIAL ENVIRONMENTAL EXAMINATION
or
CATEGORICAL EXCLUSION

PROJECT COUNTRY: Uganda

PROJECT TITLE AND NO.: Action Program for the Environment (617-0123)

FUNDING: FY(s) 5yrs US$30.0 mil.

IEE PREPARED BY: Dave B. Straley, PDO/PSC

ENVIRONMENTAL ACTION RECOMMENDED:

Positive Determination	
Negative Determination	
Categorical Exclusion	X
Deferral	X

SUMMARY OF FINDINGS:

(see Discussion and Recommendations next page)

CONCURRENCE:

Bureau Environmental Officer
John J. Gaudet, AFR/TR/ANR

APPROVED: (7/30/91)
DISAPPROVED:
DATE: 7/30/91

CLEARANCE:

GC/AFR: Ann Kreuzer

DATE: 7/31/91

I. GENERAL

The goal of the ACTION PROGRAM FOR THE ENVIRONMENT (APE) is sustained economic growth through improved rural economic development. Improved natural resource management is essential to this goal. The country's natural resource base is being rapidly eroded, including its biodiversity and its potential agricultural productivity. The program subgoal therefore is the sustained use of Uganda's natural resource base and the maintenance of its biodiversity.

By the end of the program the GOU will have enacted several policy revisions, enacted environmental legislation and regulations, and abolished the Secretariat. In work with target populations in selected areas, the program will have reduced the decline in forest cover, increased soil fertility & agricultural output, reduced the rate of loss of endangered species, and increased tourist revenues in selected parks and forests.

The purpose of APE is to: (1) establish a country-wide legal, policy, institutional system that is necessary for effective and sustainable use of its natural resources base; and (2) reverse the degradation of the natural resources base in order to increase rural income for the target population. The activities of APE place considerable emphasis on process, rather than the rapid definition and execution of a "policy agenda" solely among senior GOU and donor staff.

APE has two primary components: 1) the development of a national environmental policy framework, and 2) the funding of PVO grants.

II. PROJECT COMPONENTS

A. National Environmental Policy Framework Project Component:

(1) provision of technical assistance, training, and commodities such as computer software to support the GOU in the development of a NEAP (National Environmental Action Plan); and

(2) an NPA component designed to promote actions by the GOU to ensure the development of an effective, and implementable plan. This component will include: (a) dollar (cash) disbursements upon accomplishment of specified policy reforms; and (b) activities funded with host-country owned local currency generated by the cash disbursement.

B. Grants Program:
Grants will be provided to PVO/NGOs for park

65

management, buffer zone development, and other activities.

III. DISCUSSION

Technical Assistance, training and commodities related to these activities would fall under a categorical exclusion Reg 16, Section 216.2(c)(2)(i).

Local Currency The non-project sector assistance activity which is included in the APE program, will subsequently generate local currency for development activities. In the case of such host-country owned local currency, which is programmed for use in development activities, Reg 16 does not apply. However, the PAAD should contain a full discussion of the impact of the policy reforms, especially their impact on environment, and an explanation of why these impacts will not be negative, or how they will be mitigated.

Under the Grants Program, the **Buffer Zone activities** would include: conservation education, training, demonstrations, land management planning, tree nurseries, community conservation, guide training, pilot projects in land tenure, needs assessments and tourism development. **The Tourism and Wildlife activities** would include a wide range of activities, such as: biological inventories, development of management plans, hostels, improved campsites, dirt tracks, transport, water supply systems, telecommunications, rehabilitation of key access roads between protected areas, the implementation of the European Community park management plans, habituation of wildlife to human contact, managing vegetation and restoring wildlife attractions.

IV. MITIGATION

Concerning the PVO grants component, the Umbrella Organization acting as Project Coordinator for the PVO/NGO subgrants will conduct an internal review of each subgrant to ensure that it is environmentally sound. This environmental review process will be outlined in the PAAD and should take the form of a positive, dynamic process intimately connected to the institution-building activity of APE.

The environmental review for each subgrant will be presented to the Mission Environmental Officer for review prior to the signing of the subgrant. It should be comprehensive but not necessarily lengthy. The Mission Environmental Officer will refer all subgrants over $50,000 to the Regional Environmental Officer in REDSO/ESA. In any event, the MEO and/or the REO will refer any review to the Bureau Environmental Officer if any unusual

66

circumstances are found to be present within the subgrants, or if significant negative impacts are expected, regardless of the dollar level involved.

V. ENVIRONMENTAL ACTION RECOMMENDED

1. Technical Assistance-

Several of the components of the proposed APE program meet the criteria for a categorical exclusion under Regulation 16; these would include technical assistance, institutional support, training and related services provided to the GOU in support of the NEAP.

2. Policy Reforms and Dollar Disbursements-

It is recommended that the PAAD contain a full discussion of the impact of the policy reforms, especially their impact on environment, and an explanation of: why these impacts will not be negative, or if the will be negative, how they will be mitigated.

AID/W also recommends that the Mission assist the GOU in developing the indigenous capability to perform environmental reviews that take into consideration the effects of policy reforms, similar to the IEE analytical process. This would ensure that any specific policy reforms undertaken by the GOU would be within the spirit of Reg 16.

3. Local Currency-

Although in the case of local currency use discussed above, Reg 16 does not apply, the Agency is no less committed to sound environmental review of the consequences. The guidance cable on this subject (88 State 066242) recommends that responsible safeguards ensuring that environmental concerns be taken into account in the design and implementation of projects and programs supported by jointly programmed local currency and trust funds.

In-country procedures to evaluate any long-term environmental impacts of activities funded with generated local currency already exist in the Mission and in AID/W, therefore, the Mission Environmental Officer will ensure that the responsible staff in the appropriate ministry will be asked to provide progress reports to the Mission. This program will also include support for adequately training GOU environmental staff to carry out monitoring of these activities, and in developing additional guidelines as needed.

4. Grants Program-

Because the individual subgrants have yet to be designed, this component must receive a deferred threshold review as per Section 216.3(a)(7)(ii) of Reg 16. In this case the environmental review will be carried out by the Umbrella Organization acting as Project Coordinator for the PVO/NGO subgrants. A clause will be included in the Grants Project Agreement that will clearly state that no funds will be disbursed to any sub-grant until an appropriate environmental review has been carried out. This environmental review process will be outlined in the PAAD and should take the form of a positive, dynamic process intimately connected to the institution-building activity of APE, and will ensure that each subgrant will be environmentally sound.

The environmental review for each subgrant will be presented to the Mission Environmental Officer for approval prior to the signing of the subgrant. It should be comprehensive but not necessarily lengthy. The Mission Environmental Officer will refer all subgrants over $50,000 to the Regional Environmental Officer in REDSO/ESA for review prior to Mission approval. In addition, the MEO and/or the REO will, prior to approval, refer any subgrant to the Bureau Environmental Officer if any unusual circumstances are found to be present within the subgrants, or if significant negative impacts are expected, regardless of the dollar level involved.

4. Delegation of Authority-

The Bureau Environmental Officer hereby delegates authority to the Mission Director, USAID/Kampala, or to the person acting in that capacity, with the clearances of the Mission, Regional or Bureau Environmental Officer, as indicated above, to approve the environmental reviews for each PVO/NGO subgrant within the APE Program.

5. Monitoring and Evaluation-

The Monitoring and Evaluation Plan proposed for the APE program should include key indicators for the mitigation of environmental impacts.

6. Conditions Precedent-

Because threatened or endangered species or their critical habitats may be affected by the activities undertaken under the PVO Grants Program, a condition precedent will be included in the Project Agreements that no activity will be conducted in any area until: (a) an inventory of species present in the area has been conducted; and (b) an environmental review of impacts of the proposed activity on any such species, or critical habitat, has

68

been carried out to the satisfaction of A.I.D. The goal here is to ensure that A.I.D. is not prevented from meeting the requirements of Reg 16 Section 216.5 (endangered species).

TELEGRAMS "MINTOUR"
TELEPHONE 232971/4

MINISTRY OF TOURISM, WILDLIFE
AND ANTIQUITIES
P.O.BOX 4241
KAMPALA, UGANDA

IN ANY CORRESPONDENCE ON
THIS SUBJECT PLEASE QUOTE NO. C/TW/137

THE REPUBLIC OF UGANDA

13th August 1991.

Mr. Gary L. Bayer.
Agricultural Development Officer,
USAID,
KAMPALA.

Dear Mr. Gary L. Bayer,

Proposed Action Programme for the Environment(APE)

This is to acknowledge receipt of yours dated 8 August,1991 in connection with the above subject.

I have received the 3 copies of the draft Project and Sector grant agreements under the proposed Action Programme for the Environment and found them consistent with our priority needs in the Conservation of Wildlife and Tourism Development in an Integrated and Self Sustainable manner.

You may go ahead and present the document for signing.

Yours Sincerely,

David Abura Ogwang.
Head of Planning Unit.

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

A. CRITERIA APPLICABLE TO BOTH CHECKLIST UP TO DATE?

1. **Host Country Development Efforts** (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage developments and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.	(a) Yes, through greater agricultural productivity. (b) Yes, through private sector activities. (c) N/A (d) Yes, through greater involvement of private sector in nature-based tourism. (e) Yes, through subgrants. (f) N/A
2. **U.S. Private Trade and Investment** (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	U.S. consulting firms and U.S. PVO's will implement the Program. As much procurement as possible will come from the U.S.

3. Congressional Notification

a. General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)?	A Congressional Notification will be sent to Congress as required.
b. Notice of new account obligation (FY 1991 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided with a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?	N/A
c. Cash transfers and nonproject sector assistance (FY 1991 Appropriations Act Sec. 575 (b) (3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?	Yes.
4. Engineering and Financial Plans (FAA Sec. 611(a)): Prior to an obligation in excess of $500,000 will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonable firm estimate of the cost to the U.S. of the assistance?	a) Yes b) Yes
5. Legislative Action (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?	The GOU is committed to improved natural resource management.

6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)	N/A
7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575 (b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?	Yes.
8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?	N/A
9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	(a) Yes, through greater agricultural productivity. (b) Yes, through private sector activities. (c) N/A (d) Yes, through greater involvement of private sector in nature-based tourism. (e) Yes, through subgrants. (f) N/A
10. **U.S. Private Trade** (FAA Sec. 501(b)): Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	U.S. consulting firms and U.S. PVO's will implement the Program. As much procurement as possible will come from the U.S.

11. Local Currencies

a. Recipient Contributions (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

N/A. The GOU will contribute local currency equivalent to the NPA dollar disbursement.

b. U.S.-Owned Currency (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No.

c. Separate Account FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?	N/A
12. Trade Restrictions	
a. Surplus Commodities (FY 1991 Appropriations Act. Sec. 521(a)): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and in such assistance likely to cause substantial injury to U.S. procedures of the same, similar or competing commodity?	N/A
b. Textiles (Lautenberg Amendment) (FY 1991 Appropriations Act Sec. 521(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?	N/A
13. Tropical Forests (FY 1991 Appropriations Act Sec. 533(c) (3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?	a) Program will protect tropical forests. b) Program will reduce timber extraction in priority forests.

14. **Sahel Accounting** (FAA Sec. 121(d)): If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?	N/A
15. **PVO Assistance**	
a. **Auditing and registration** (FY 1991 Appropriations Act Sec. 537): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?	PVO's awarded the umbrella grant and subgrants will comply with audit and registration requirements.
b. **Funding sources** (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?	Those participating will have at least 20 percent.
16. **Project Agreement Documentation** (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).	Mission will comply when date of signing is confirmed.
17. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the	No. Most procurement will be for computers and office equipment.

extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

18. **Women in Development** (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased? — Yes.

19. **Regional and Multilateral Assistance** (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs. — No.

20. **Abortions** (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525): — N/A

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

b. Will any funds be used to lobby for abortion?

21. **Cooperatives** (FAA Sec. 111): Will assistance help develop cooperative, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life? — N/A

22. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs.. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.	Schillings will be used in the Program.
b. Release of currencies (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?	The U.S. does not own excess Ugandan currency.

23. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?	Small businesses are expected to supply commodities and technical services.
b. U.S. procurement (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?	Yes.
c. Marine insurance (FAA Sec. 604(d)): If the cooperating country discriminated against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?	N/A
d. Non-U.S. agricultural procurement (FAA Sec. 604 (e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)	N/A
e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible	N/A

under code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

f. Cargo preference shipping (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? — No.

g. Technical assistance (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? — Yes. Yes.

h. U.S. air carriers (International Air Transportation Fair Competitive practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? — Yes.

i. Termination for convenience of U.S. Government (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? — Yes, standard clauses.

j. Consulting services (FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? Yes.

k. Metric conversion (Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? N/A

Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage? N/A

l. Competitive Selection Procedures (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.

24. Construction

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used? N/A

b. Construction contract (FAA N/A

c. **Large projects, Congressional approval** (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the Congressional presentation), or does assistance have the express approval of Congress? N/A

25. **U.S. Audit Rights** (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A

26. **Communist Assistance** (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes.

27. **Narcotics**

a. **Cash reimbursements** (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops eradicated? No.

b. **Assistance no narcotics traffickers** (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entitles which we know or have reason to believe have N/A

either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

28. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? N/A

29. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.

30. **CIA Activities** (FAA Sec.. 662): Will assistance preclude use of financing for CIA activities? No.

31. **Motor Vehicles** (FAA Sec... 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes.

32. **Military Personnel** (FY 1991 Appropriations Act. Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? No.

33. **Payment of U.N. Assessments** (FY 1991 Appropriations Act. Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes.

34. **Multilateral Organization Lending** (FY 19911 Appropriations Act Sec. 506): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) transfer of FAA funds to multilateral organizations for lending)? Yes.

35. **Export of Nuclear Resources** (FY 1991 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes.

36. **Repression of Population** (FY 1991 Appropriations Act Sec. 511): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human rights? — Yes.

37. **Publicity or Propaganda** (FY 1991 Appropriations Act Sec. 516): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? — No.

38. **Marine Insurance** (FY 1991 Appropriations Act Sec. 5633): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? — Yes.

39. **Exchange for Prohibited Act** (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (included any instrumentality of agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law? — Yes.

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. **Agricultural Exports (Bumpers Amendment)** (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?	N/A
2. **Tied Aid Credits** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?	N/A
3. **Appropriate Technology** (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	Yes, through subgrants.
4. **Indigenous Needs and Resources** (FAA Sec. 281(b)): Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	The National Environment Action Plan and the subprojects require broad based participation.

5. **Economic Development** (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?	Yes.
6. **Special Development Emphases** (FAA Secs. 102(b), 113, 281(a)): Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.	a) Subgrants will involve poor in appropriate natural resource efforts. b) NEAP involves local level govt. and organizations. c) Subgrants require community self-help. d) Program is designed with a special focus on women's problems and needs. e) N/A
7. **Recipient Country Contribution** (FAA Secs. 110, 124(d)): Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?	Yes.
8. **Benefit to Poor Majority** (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?	Program includes an extensive monitoring and evaluation activity to assure beneficiary impact.

9. **Abortions** (FAA Sec. 104(f); FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 535):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? N/A

b. Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? N/A

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? N/A

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? N/A

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? N/A

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? N/A

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization? N/A

10. **Contract Awards** (FAA Sec. 601(e)): Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes
11. **Disadvantaged Enterprises** (FY 1991 Appropriations Act Sec. 567): What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?	13%
12. **Biological Diversity** (FAA Sec. 119(g): Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?	a) Part of Program purpose is to prevent loss of biodiversity. b) Yes. c) Yes. d) No.
13. **Tropical Forests** (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c)-(e) & (g)):	
a. **A.I.D. Regulation 16:** Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16?	Yes.
b. **Conservation:** Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent	Yes.

feasible: (1) stress the importance of conserving and sustainable managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts,and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watershed and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss or degradation; (9) conserve biological diversity in foresty areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. Government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

1) Yes
2) Yes
3) Yes
4) Yes
5) Yes
6) Yes
7) Yes
8) Yes
9) Yes
10) Yes
11) Yes
12) Yes
13) Yes

c. **Forest degradation:** Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?	1) No 2) No 3) No 4) No. Roads and trails only in protected areas. 5) No 6) No
d. **Sustainable forestry:** If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?	Yes
e. **Environmental impact statements:** Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment?	No EIA is seen as necessary. Funds are available if needed.

14. **Energy** (FY 1991 Appropriations Act Sec. 533(c)): If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?	a) Yes through NEAP b) Uganda is not a key country for emissions.
15. **Sub-Saharan Africa Assistance** (FY 1991 Appropriations Act Sec. 562, adding a new FAA chapter 10 (FAA Sec. 496)): If assistance will come from the Sub-Saharan Africa DA account, is it: (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant;	a) Yes
(b) to be used to promote sustained economic growth, encourage private sector development, promote individual initiatives, and help to reduce the role of central governments in areas more appropriate for the private sector;	b) Yes
(c) being provided in accordance with the policies contained in FAA section 102;	c) Yes
(d) being provided inclose consultation with African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa;	d) Yes
(e) being used to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups;	e) Yes
(f) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks,	

to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

16. **Debt-for-Nature Exchange** (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management. N/A

17. **Deobligation/Reobligation** (FY 1991 Appropriations Act Sec. 515): If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified? N/A

18. **Loans**

a. **Repayment capacity** (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest. N/A

b. Long-range plans (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?	Yes.
c. Interest rate (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter?	No.
d. Exports to United States (FAA Sec. 629(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?	N/A
19. Development Objectives (FAA Secs. 102(a), 111, 113, 281(a)): extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?	1) NEAP is broad based and paticipatory. 2) NEAP is based on democratic principles. 3) The Program is based on self-help principles. 4) The Program provides special measures to ensure the participation of women. 5) N/A

20. **Agriculture, Rural Development and Nutrition, and Agricultural research** (FAA Secs. 103 and 103A):

a. **Rural poor and small farmers:** If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor, or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

PVOs are to directly assist rural poor in natural resource management.

b. **Nutrition:** Describe extent which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

N/A

c. **Food security:** Describe extent to which activity increases national security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

N/A

21. **Population and Health** (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of

N/A

92

mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

22. **Education and Human Resources Development** (FAA Sec. 105): If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

a) Program provides conservation education and specialized training for natural resource mgmt.

b) Program involves training workshops for NEAP.

23. **Energy, Private Voluntary Organizations, and Selected Development Activities** (FAA Sec. 106): If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collected and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources, energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment;

Program's energy focus is on planning and policy.

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

Program will work with several US PVOs.

c. research into, and evaluation of, economic development processes and techniques;	National Environment Action Plan if major component.
d. reconstruction after natural or manmade disaster and programs of disaster preparedness;	Disaster Planning is part of NEAP.
e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance;	N/A
f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development.	N/A
24. Sahel Development (FAA Secs. 120-21): If assistance is being made available for the Sahelian region, describe: (a) extent to which there is international coordination in planning and implementation; participation and support by African countries and organizations in determining development priorities; and a long-term, multidonor development plan which calls for equitable burden-sharing with other donors; (b) whether a determination has been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of projects funds (dollars or local currency generated therefrom).	N/A

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? — Yes.

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes? — No.

3. **Commodity Grants/Separate Accounts** (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? — N/A

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? — N/A

5. **Cash Transfer Requirements** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)): If assistance is in the form of a cash transfer:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds? — Yes.

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?	Program does not generate local currency.
c. U.S. Government use of local currencies: Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. Government as the U.S. determines necessary for the requirements of the U.S. government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?	Program does not generate local currency.
d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?	A Congressional Notification is being sent to AID/W for transmittal to Congress.

PROGRAM ISSUES

1. GENERAL DISCUSSION

ISSUE: Examine how the program will assure the integration of environmental considerations into Uganda's social and economic development.

Sections III.D.5. and IV.E. examine the issue of integration of environmental considerations. The NEAP will have a task force that examines the existing environmental framework. The review will reveal the shortfalls and will propose standards and regulations that must meet certain environmental standards. The output will be mandatory environmental guidelines for each sector and type of project.

ISSUE: Besides changes from reserve to national park status, the PAAD should provide additional information of other policy reforms anticipated as a result of the adoption and implementation of the NEAP, general areas of the NEAP focus.

Section III.C. analyzes the policy component, including the conditionalities, timing and the expected outputs. The NEAP is expected to result in at least three major policy reforms, to be passed by the National Resistance Council. These policy reforms will be the result of the analysis conducted by the Task Forces. Because the emphasis under the APE program is on process rather than products, some of the conditionalities relate to fulfillment of processes and procedures that will lead to products.

In addition to conversion of forest reserves to national parks, the NPA will be conditioned upon introduction of legislation before the NRC for enhanced protection status for three existing forest reserves: Kibale, Semliki, and Mt.Elgon.

Section III.C.4. lists the conditions and timing.

ISSUE: Links between the PVO umbrella program and the underlying GOU policy framework; that is, will the funding help or constrain the NEAP process?

The NEAP is a two-year comprehensive process, which will result in a Plan of Action for the natural resources sector. There will be a further time lag in tabling proposals for legislation, reviewing them, and, if passed, implementing them. Considering the importance of halting the natural resource degradation, the projectized assistance cannot wait for input from the NEAP process.

Furthermore, on-going experience from the subgrants component will feed into the NEAP and future natural resource activities of the Mission.

2. PROBLEM ANALYSIS

ISSUE: The PAAD needs to include a complete analysis regarding present practices in protected areas which are detrimental to the environment.

Section II.C.2. deals with the conservation problems of protected areas. ANNEX II G includes a trip report that details on-the-ground activities in Bwindi, many of which are harmful to the environment.

ISSUE: The PAAD should rank order constraints and make it clear how the chosen NPA conditionality flows from the constraints analysis.

Section II.C. rank orders the constraints. Sections II.C. and III.C.4. both analyze the conditionalities, and the relationship with the constraints.

ISSUE: If the conditionality does not address the highest ranking constraint, the PAAD should explain why.

The PAAD (in Section II.C.) points out that the lack of a rational set of environmental policies, laws, and institutions as the biggest constraint to sustainable natural resources management, and degradation of the potential long-run benefits of unique biodiversity as the second most pressing constraint. Section III.C.1. details the two conditionalities -- (1) formation of NEAP Steering Committee, proper staffing, formation of Task Forces; and (2) approval of the NEAP -- that relate to the process for fulfillment of the highest ranking constraint. Sections III.C.1. and C.2. explain the conditionalities proposed to address the degradation of protected areas.

3. FEASIBILITY

ISSUE: Why are buffer zones needed and what problems will they deal with?

Buffer Zones, as the terms is used in this PAAD, refers to an area adjacent to parks and protected areas. Annex II.E. discusses the buffer zones and their critical importance to the local communities and for sustainable resource management.

99

ISSUE: The PAAD should discuss the types of activities to be carried out and give examples. If relevant, reference should be made to the recent DTC evaluation.

Section III.D.1.c. discusses the selection criteria and Section III.D.1.d. the illustrative subgrant activities under the PVO/NGO Umbrella Grant Component. The DTC evaluation and design team field visits to DTC sites were used in designing this component.

ISSUE: Explain the substantive criteria and procedures for PVO subgrant selection. Explain how the substantive criteria flow from the constraint analysis and will help achieve the program purpose.

Section III.D.1. analyzes the management of the umbrella grant, the types -- macro, mini, and micro -- of grants, the selection criteria, and several illustrative subgrant activities.

ISSUE: The PAAD should include an illustrative list of subactivities costed out equal to the amount of that budgeted for the component.

Annex II.C. lists several illustrative examples and budgets of subgrants. The demand for grants and loans in the natural resources sector is so high that, even without any advertisement, proposals to the design team for inclusion under the APE PAAD exceed the availability of funds.

4. CONDITIONALITY

ISSUE: What are the essential elements of an acceptable NEAP. This should flow from the analysis of the constraints. It should not be a table of contents, but types of issues covered and the substantive outcomes necessary for A.I.D. to find the plan acceptable. NEAP issues AID/W sees as essential are: soil erosion; deforestation; interaction of wildlife areas and peripheral populations; strategies to promote tourism.

The essential elements are described in detail in ANNEX II B. Most of this ANNEX will become a part of the Grant Agreement Program Description. The ANNEX includes terms of reference for the NEAP that use concise wording such as develop, propose, create, and determine which are outcome specific. If the GOU does not develop, propose, create, and determine, it will not have produced substantive outcomes. The NEAP terms of reference specifically include the issues that AID/W sees as essential.

100

ISSUE: Is adoption of the plan feasible, or are contentious issues involved in it that make it not feasible?

The NEAP will have winners and losers. Those earning unearned rents and/or utilizing public natural resources at the expense of others will probably oppose the NEAP. However, since the NEAP will be prepared using a participatory approach and will rely on sound analysis, it is expected to be adopted.

5. AFR/TR/ANR CONCERN

ISSUE: The PAAD needs to discuss debt swap mechanism, direct institution of an endowment.

A local currency counterpart fund will be set up (See Section III.D.2.) that will assist national parks and forest reserves with activities, including: development of management plans, road and trail construction within parks, rehabilitation of tourism facilities, and research. In addition, a local currency counterpart credit fund for tourism development (Section III.D.3.) will be set up with the Bank of Uganda to provide much-needed credit to small and medium-scale private sector businesses.

The potential for an endowment fund for National Parks will be examined as part of the NEAP. Preliminary review of a debt swap for Uganda indicated that it would not be feasible. The public debt of Uganda held by the private sector is relatively minor, around $112 million. With such a small amount on the market, the ability to obtain favorable terms is very limited.

ISSUE: The design should involve indigenous and international PVOs in the NEAP development process.

The NEAP development process will include participation of government staff, academics, private sector business people, local communities, as well as indigenous and international PVOs/NGOs. Section III.C.1. and ANNEX II B detail the NEAP process and the participants in the plan design.

6. GENDER CONCERNS

ISSUE: The PAAD should discuss private and public sector issues relevant to women's employment in the tourism.

See ANNEX II J for a complete discussion of public and private sector issues relevant to women's employment and tourism.

101

ISSUE: The PAAD should establish performance monitoring, reporting, and evaluation systems with respect to gender.

See ANNEX II J and ANNEX III D concerning performance monitoring, reporting, and evaluation.

ISSUE: The PAAD should include strategies and loose targets for training women in tourism management, services and technical skills.

Direct Project-funded training for the tourism industry is no longer contemplated under APE. Such training takes place in a GOU parastatal. APE will encourage training of women through the PVO Umbrella Grant Component; a discussion of women in tourism management and services is included in ANNEX II J.

7. LEGAL CONCERNS

ISSUE: The PAAD should discuss how the Mission will track the foreign exchange uses in accordance with the 1987 cash transfer guidance, and the capability of the GOU to manage a separate dollar account.

Dollar use and tracking appears as Section V.C.1.

ISSUE: The PAAD needs to state reasons why Mission believes legislative action on part of the GOU will be accomplished on a timely manner.

The President and the GOU have consistently shown their commitment to natural resources management. Constraints have included the lack of: rational environmental policies, laws and regulations; baseline data; financial capability; and training and institutional preparedness. Assuming that the GOU continues to exhibit at least the same level of commitment, the Mission believes that its technical and financial assistance will be sufficient incentives to pass enabling legislation in a timely manner.

ISSUE: The PAAD needs to include a contracting and procurement plan. A contracting policy question exists if the Mission chooses to use a contractor to make subgrants.

A Contracting and Procurement Plan is included as Section V.E. The Mission will contract with a PVO/NGO to manage the subgrants under the umbrella grant.

ISSUE: The PAAD needs to identify the 25% host country counterpart contribution.

102

The GOU will contribute $10,995,000 (25% of the total program funds) as counterpart contribution. Because of the severe financial pressures facing the government and the importance of the natural resources sector for Uganda's national economy (as detailed under the Economic and Financial Analysis), the Mission feels justified in allowing the conversion of conditionality funds by the GOU as their counterpart contribution to the APE program.

ISSUE: If a PASA is to be used, it must be justified under standards of A.I.D. Handbook 12 of unique or particular suitability.

The Mission intends to use a PASA with the U.S. National Park Service for the services of a qualified parks manager. Since park management even in the U.S. is the mandate of federal, state and local governments and since no private entity will be able to provide the backstopping depth needed, a PASA with the U.S. NPS is seen as necessary. Section V.E. and Annex III C detail the procurement and contracting plans.

ISSUE: The PAAD should explicitly state how vulnerable groups will not be adversely affected.

The Social Analysis ANNEX II E and the Program Description have added studies and safeguards to protect vulnerable groups from adverse effects of policy changes.

8. GRAY AMENDMENT

ISSUE: The PAAD should discuss its plans for involving women and minority-owned firms in the implementation of this program.

The technical assistance and training activities of the Policy Component will preferably be carried out by women and/or minority owned firms, to be selected through open bids. The contract is expected to be over $2.6 million, which is 13% of the total A.I.D. project assistance.

SUBRANTS: ILLUSTRATIVE EXAMPLES, BUDGETS, CRITERIA, AND MANAGEMENT

ANNEX II C provides illustrative examples of the types of subgrants the GMU can be expected to make. The list of illustrative examples provides a basis for reasonable cost estimates. This ANNEX does not commit the Program to funding these illustrative examples. Criteria and management arrangements also appear in this ANNEX as a planning guide for Program implementation.

Project: Queen Elizabeth National Park Conservation Project

Implementors: CARE, GOU Ministry of Tourism and Wildlife, Uganda National Parks, Peace Corps, GOU Department of Fisheries, GOU Department of Forestry, GOU Ministry of Agriculture.

Background: Contiguous to Zaire's Parc National des Virunga, Queen Elizabeth National Park is Uganda's oldest and premier Park. On the shores of the two lakes within the Park are located ten fishing village enclaves. Villages outside the park impact on Park resources yet dèrive inadequate benefit for their cooperation.

Objectives: Improve management capabilities of Park staff and integrate and enhance the participation in conservation issues by farmers living in surrounding communities together with existing communities within the park boundaries.

Expected output:

1. Strengthening of local and UNP capabilities in natural resources and buffer zone extension and management.

2. Changing attitudes, knowledge and practices vis-a-vis natural resources conservation through education regarding the importance of the Park and the relationship of these communities to the Park.

3. Realizing more sustainable production from the land and lake waters by the inhabitants of the buffer zone and existing communities within the Park.

Target group/area: Village communities in and on the periphery of Queen Elizabeth National Park.

Project duration: Five years with a planned second three year phase implemented by trained Ugandan staff in order to support woodlot growers through their first harvest.

Funding request: $1,336,000 (of which 50% could be UShs) with additional $400,000 CARE and $100,000 GOU (in kind).

Project: Institute of Tropical Forest Conservation Support

Implementors: Mbarara University of Science and Technology, Institute of Tropical Forest Conservation; Multi-institution Advisory Board and Management Committee.

Background: Three natural forests remain in southwestern Uganda, the Impenetrable (Bwindi), Echuya and Mgahinga. The Impenetrable contains half the world's known population of mountain Gorilla. The other two are similarly important for the conservation of many plant and animal species. The Impenetrable Forest Conservation Project, which this project subsumes, has been active, with the support of many donors including USAID, in creating a center for conservation and ecological research initiatives in SW Uganda.

Objectives:

1. Help reduce the present shortage of qualified Ugandan biologists capable of undertaking effective tropical forest research, conservation, management and tourism development.

2. Help provide the research information necessary to manage and conserve Uganda's tropical forests.

3. Help increase the productivity and sustainability of rural production systems through research and improved resource management in the vicinity of tropical forests in Uganda.

4. Assist in the development and implementation of conservation-related activities in and around the tropical forests of Uganda, particularly tourism.

5. Help develop and establish a team of experts capable of conducting biological inventories and assessments in Uganda and elsewhere in Africa.

Expected output:

1. Education activities: Post-graduate research and education, undergraduate field courses and practicals, international scientific exchange, public awareness and training, training of natural history interpreters and tourist guides.

2. Conservation activities: Assessment of conservation values, data provision, advisory service, advocacy, development of comprehensive management plans, development of tourism development plans, development of a Uganda Mountain Gorilla recovery plan, assist in implementation of management, recovery and tourism plans,

Target group/area: Inhabitants in and around the Impenetrable and Echuyu Forests and the Mgahinga National Park. The scientific community will also benefit from improved knowledge of the areas ecology and from the scientists trained during project execution.

Project duration: Four years (June 1, 1991 to May 31, 1995)

Funding request: $814,000

105

Project: Construction and improvement of Mt Rwenzori facilities
Implementors: Rwenzori Mountaineering Services (RMS)

Background: Rwenzori Mountaineering Services (RMS) is a well organized indigenous membership NGO with mixed community development and profit motives. It provides tourist trekking services in the Rwenzori Mountains and manages a community development fund. It has been supported by PL 480 local currency (377m Ushs since 1988), entrance fees from tourists and membership fees from guides and porters. The Rwenzori Mountain Service has created substantial benefits in part-time employment for over 200 guides. Up to 25 percent of the males in the area above the age of 15 are employed sometime during the year as part of the tourism activities organized by the RMS.

Objectives: Formation of a management structure which handles tourism activities in the Rwenzori Mountains, such as provision of mountaineering facilities like huts, climbing equipment, mountain tourist guides, porters and other personnel. Long term vision includes provision of transport, communication and hotel services.

Expected output:

1. Construction activities: Bog/swamp bridging for trails, tourist houses and headquarters improvements including water and hydroelectric generation, field camps, bridges, transport and road improvements.

2. Education and training: Guide and support staff training and development of environmental education materials for tourists and local populations.

3. Community development: School and clinic improvements, development of service industries such as craft industries, tourist food service, and diversified agriculture crops.

Target group/area: *Inhabitants in and around the Rwenzori National Park and* the associated Rwenzori Forest Reserve. Tourists will benefit through an improved higher quality experience available to a larger number of persons.

Project duration: Five years with declining budget to self-sufficiency.

Funding request: $476,000

106

Project: Makerere University Biological Field Station (MUBFS) in Kibale Forest

Implementors: Makerere University with management committee composed of several government representatives including Departments of Forests and Game. Wildlife Conservation International/New York Zoological Society provides one of the two co-directors. Harvard University runs two linked research /conservation programs at MUBFS

Background: MUBFS, established 1970, is one of the oldest continuously running research and training units in African Forests and the largest in Uganda. The station has been one of the most productive scientific field stations (over 150 scientific publications by 35 national and international researchers) in forest ecology in the world. The Kibale Forest Reserve represents a key area for the conservation of Uganda's medium altitude forest zone. Kibale Forest contains the greatest diversity of forest primates in Eastern Africa and the greatest density of forest primates in the world. The forest also contains one of largest populations of elephants left in Uganda. The Kibale Forest Tree Planting Project is the conservation extension arm of the station. This project is the oldest agro-forestry/indigenous tree species extension project working around a forest reserve in Uganda.

The AID Africa Bureau Biodiversity program funded WCI for $237,000. This two year project (PACD 9/91) is supplemented by a $84,875 contribution by WCI. USAID/Kampala has made available to 9/91 135m Ushs from the PL 480 account.

Objectives: The objectives of the project are to : 1) continue monitoring of key wildlife species and ecological processes in undisturbed forest; 2) study the influence of human activities on the forest, particularly timber logging (pit sawing); 3) evaluate multiple use options for buffer zones (e.g. agro-forestry and extension); and 4) assist in the training of Ugandan scientists and technicians.

Expected output: The project will develop tropical forest management plans for the Kibale Forest based on forest/wildlife inventories and research, develop alternative forest products and implement out-of-forest activities such as agro-forestry and community environmental education.

Target group/area: Inhabitants in and around the Kibale Forest Reserve. The scientific community will also benefit from improved knowledge of the areas ecology and from the scientists trained during project execution.

Project duration: Five years

Funding request: $2,380,000

Project: Kibale Tourism Development

Implementors: Makerere University Biological Field Station (MUBFS): Frontier, a U.K.-based volunteer organization, and U.S. Peace Corps.

Background: Beginning 1991 with 10m UShs from USAID/Kampala this project seeks to alleviate tourism pressure (2-3 vehicles of unofficial visitors per day) impacting on research activities and chimpanzees habituation. This project controls and supervises tourism in a separate adjacent area.

Objectives: Create tourism opportunities to view wild unhabituated chimpanzees and other nature viewing generating revenue for local rural development.

Expected output: Construction of three cabins, a campground, and a visitor center/office on the Dura river in the south center of Kibale Forest Reserve. A network of nature trails in a 20 km^2 area would be established. Tourism guides would be trained.

Target group/area: Tourists interested in viewing wild chimpanzees, scientists through reduced time pressure from tourists, inhabitants around the Kibale Forest through improved employment opportunities and revenue sharing schemes.

Project duration: Two years

Funding Request: $235,000.

Project: Kibale Chimpanzee Feeding Research

Implementors: Makerere University Biological Field Station (MUBFS), Harvard University

Background: Harvard University Peabody Museum and Museum of Comparative Zoology is researching feeding patterns of wild chimpanzee population in the Kibale Forest. USAID/Kampala provided 36m UShs in 1991 to support this effort.

Objectives: Determine the role of chimpanzees and other frugivores (fruit eaters) in assisting the forest regeneration and structure.

Expected output:

1. Improved understanding of mid-altitude forest tree fruiting patterns, role of chimpanzees in system, and forest regeneration and management options.

2. Improved predictability of locating chimpanzee populations for tourist viewing based on feeding patterns.

Target group/area: Scientific community, forest land managers and managers of chimpanzee populations, chimpanzee tour operators. Target area is Kanyawara and Ngogo with links to Dura river tourism development.

Project duration: Five years

Funding Request: $390,000.

Project: African Crater Lakes Research and Tourism Development

Implementors: Makerere University Biological Field Station (MUBFS) and Harvard University.

Background: Initiated in June 1990, this research received in 1990/91 13m UShs in support and has an outstanding request for an additional 13m UShs. Researcher salaries, travel and per diem are contributed by Harvard University.

Objectives: Generate information on the distribution and abundance of fishes in major aquatic habitats within and surrounding the Kibale Forest Reserve, with an emphasis on the role of oxygen and water level fluctuations as factors limiting the distribution and movement of resident species.

Expected output:

1. Document the distribution of fish species over a series of lakes and assess the degree of endemism associated with each system.

2. Document factors which relates to water quality of the lakes.

3. Examine the distribution and movements of cichlids relative to the variation in oxygen supply.

4. Evaluate the potential of these lakes as models for examining fisheries and water quality problems of a more general nature.

5. Rehabilitation Lake Nkaruba near Kibale as a tourist attraction.

Target group/area: Ugandan staff and students, scientific community, inhabitants surrounding water resources, tourists adding fishing as an activity.

Project duration: Five years.

Funding Request: $446,000.

Project: Development through Conservation (DTC)

Implementors: CARE, GOU Forest Department, Game Department, National Parks in cooperation with Mbarara University Institute of Tropical Forest Conservation, the German Fund for Animal Protection, and the EEC Forest Conservation and National Parks program.

Background: The DTC project, initiated in late 1988 with a two year $246,000 grant from AID/W and extended in 1991 for an additional $215,000, has cooperated with the Impenatrable Forest Conservation Project to do conservation education and community developmnet in the agricultural buffer zone in the areas surrounding the Bwindi (Impenatrable) Forest Reserve and the Mgahinga National Park. The project to date has established infrastructure and conducted extension agent training and in-forest biological inventories. Recent efforts have focused on community awareness raising and establishing on-farm demonstration plots. USAID/Kampala will have supported the DTC project for a total of 280m UShs (~$330,000) by July 1992.

Objectives: To contribute to the conservation of Bwindi and Mgahinga Forests and to improve the natural resource-based economic security of 9,600 farm families in the surrounding farmlands by 1996

Expected output:

1. Management plans for the Bwindi, Mgahinga and Echuya Forests.

2. In-forest multiple product use and management.

3. Extension program through teams of conservation extension agents, information packs, training, and newsletter.

4. On-farm demonstration of soil conservation, agroforestry, sustainable agriculture, and small animal husbandry.

5. Conservation education centers in Ruhija, Ikumba, and Mgahinga.

Target group/area: The inhabitants in and around the forest estates of Bwindi, and Mgahinga. The Echuya Forest Reserve will benefit from biological inventories and assistance in the development of a management plan but will not have agricultural buffer zone management assistance.

Project duration: Five years (July, 1991 to June, 1996) with an extension for three additional years anticipated before closeout.

Funding Request: $3,000,000 (of which 50% could be UShs.) with CARE contribution of $500,000 and GOU in-kind contribution of equivelent $250,000 for a $3,750,000 total program.

Project: Uganda Land Access Project

Implementors: University of Wisconsin Land Tenure Center and Makerere Institute of Social Research (MISR) with complimnetary supprt through the World Bank (IDA).

Background: The AID/W S&T/RD Access to Land, Water and other Natural Resources II Project (ACCESS II) has provided mission buy-in of $550,000 for two year activities to complete July 1992. Workplan focusses on 1) studies on land markets/transactions/valuation/compensation and property taxes; 2) common property management focusing on free range livestock; 3) buffer zone management issues including multiple use forest zones as well as agricultural buffer zones; and 4) land dispute resolutions including governmental designations such as forest reserves, forest parks, game reserves, national parks and their respective legal and actual uses; inheritance questions, and rights of common property use. USAID/Uganda has provided 1990-1991 249m UShs (~$293,000) for rehabilitation of MISR headquarters.

Objectives: Improve the understanding of land and property tenure in Uganda with a view to a more equitable and transparent system.

Expected output:

1. Extension of studies in a) land valuation, b) common property management, c) buffer zone management and d) dispute resolution.

2. Support studies to the National Environemntal Action Program.

Target group/area: Project area is nationwide with focus on APE target areas. Beneficiares include

Project duration: Four years

Funding Request: $2,475,000

Project: Agroforestry research, training, extension and demonstration project

Implementors: International Council for Research in Agroforestry (ICRAF) Agroforestry Research Network for Africa (AFRENA) Uganda Program

Background: In 1986, with funding from AID/W S&T/FENR, ICRAF implemented a collaborative agroforestry research program in the highlands of East Africa in the countries of Burundi, Kenya, Rwanda and Uganda. The purpose was to develop appropriate agroforestry technologies and to develop national and regional capabilites to plan, formulate and implement agroforestry research. The USAID/Kampala has provided 46m UShs (~$54,000) for field support.

Objectives: To identify, test and extend, in collaboration with GOU research and management institutions, agroforestry technologies appropriate to the bimodal (rainfall) highlands of East Africa in general and the Kabale area of Uganda in particular.

Expected output:

1. Selecting and screening appropreiate multi-purpose trees for boundry and uperstory planting.

2. Develop appropriate managemnet practices for upperstory tree management for poles, timber, fuelwood, fodder, green multch and fruits.

3. Local testing and demonstration of proven technologies such as alley cropping, hedge-row inter-cropping, shrub and grass strips on terrace bunds and risers, upperstory trees on hedges, grass/shrub strips and plot boundaries, and fruit trees in crop land.

Target group/area: Research has been conducted at three sites - Kampala, Bushenyi and Kabale. The Kabale area, also an APE focus area, is the agroforestry research focus area.

Project duration: Five years.

Funding Request: $1,974,000. AID/W would likely additionally support regional and international research networking.

Project: PVO-NGO/NRMS project

Implementors: The Private Voluntary Organizations and Non-governmental Organizations in Natural Resources Management (PVO-NGO/NRMS) managed by a consortium of the Experiment in International Living, CARE and the World Wildlife Fund and guided in Uganda by a five member Country Lead Agency (CLA) and a 53 member Country Working Group (CWG).

Background: Initiated in late 1989 with funding of $210,000 from AID/W Africa Bureau, this two year project was designed identify and strenghten the response of the PVO/NGO community in management of natural resources. Similar activites were supported in Cameroon, Mali, and Madagascar. USAID/Kampala in 1990-1991 provided about 65m UShs. (-$76,000) to PVO-NGO/NRMS.

Objectives:

1. Create broad awareness of natural resources management needs and opportunities among PVOs and NGOs and increase their commitment to effective natural resource management.

2. Enhance the technical capabilities of PVOs and NGOs in such fields as soil and water conservation, agroforestry, and the conservation of biological diversity.

3. Strenghten the organizational capacities of PVOs and NGOs involved in natural resurce activitieis in such areas as program mangement, design, monitoring and evaluation, financial management and accounting.

Expected output:

1. Identification, elaoration and selection through the CLA of mini-grants to NGOs and micro-grants to NGOs and individuals for natural resource management activities.

2. Management, monitoring, evaluation and accounting of mini and micro grants program.

3. Workshop, seminars and information dissemeination to strenghten the technical and administrative capabilities of PVOs and NGOs to conduct natural resource management activities.

Target group/area: Nationwide with bias to APE focus areas.

Project duration: Five years.

Funding Request: $910,000 (of which 65% could be UShs.)

Project: Budongo Research Unit (BMU)

Implementors: Makerere University Faculties of Science and of Agriculture and Forestry in collaboration with GOU Forest Department and with other finacial and technical support from Oxford University, Overseas Development Administration and National Geographic Society.

Background: The Nyabyeya Forestry College (NFC), the field training institution of the Forest Department, will receive substantial rehabilitation under the World Bank Forestry Rehabilitation Project in 1991. NFC is located in the in the Budongo Forest Reserve, adjacent to Murchison Falls National Park. It has been heavily logged and encroched. Of the 793 km^2 gazetted area, 428 km^2 is forested and of that 40 km^2 is undisturbed. BRU is proposed to be a small research and training center running parallel to NFC. USAID/kampala has requested to provide ~95m UShs ($112,250) in 1991-1992 for local costs. Other FY 1992 donated funds will equal $153,573.

Objectives:

1. To join with Uganda Forest Department in conducting training programs for Forest Department staff, Makerere University students.

2. To assist in collecting management information for use in development of an updated forest working plans and formulation of sustainable forest management strategies.

3. To conduct research on conservation topics, particularly on ability of wildlife to survive and adapt to forest harvesting systems and resultant forest types.

4. To develop a tripartite linkage with the Makerere Biological Field Station and the Mbarara University Institute of Tropical Forest Conservation for the sharing of staff and graduate students and in promoting liaison with Forest Department management and training units.

Expected output:

1. Establishment of field station, including offices, housing, equipment, vehicles, local staff, and running costs.

2. Initiation of collaborative training of NFC and Makerere students.

3. Initiation of field research.

Target group/area: Budongo Forest Reserve representing the mid-altitude moist semi-deciduous forest and a forest area harvested periodically since 1930.

Project duration: Five years.

Funding Request: Assuming first year costs from USAID/Kampala local currency special account, subsequent APE contribution would be $113,000.

ANNEX II A

Project: Biodiversity Data Bank

Implementors: Makerere Univerisity Institute of Environment and Natural Resources (MUIENR).

Background: Uganda with a great diversity of plant and animal species has a foundation of historical information on this diversity. Numerous entities, many with USAID support, are implementing biological inventories to update and localize this information. The community of conservation professionals in Uganda have supported (Forum I,II and III) the establishment of a National Biodiversity Data Bank to collect, process and diseminate biological information on species distributions.

Objectives: Gain adequate knowledge of a) the flora and fauna and b) other pertainent information such as climate, soils and land use for the whole of Uganda. Adequate means sufficient to a) assess the conservation status of major species and eco-systems and to hence b) make appropriate management recommendations. Flora include bryophytes, pteridophytes and all higher plants. Fauna include all groups of invertabrates and key groups of invertabrates such as molluscs and arthropods.

Expected output:

1. Community agreement on survey methodologies.

2. Establishment of a compatible recording and data processing methods.

3. Establishment of with computers and library.

4. Data collection in key areas in key groups by a network of professional, research associates and competant volunteers.

5. Coordination with the National Herbarium, Kawanda Research Station insect collection and the Zoology Museum.

6. Completion of field work and publication of Atlases of Biodiversity volumes for mammels, trees and birds. Initial publications of national and local species lists and guides.

Target group/area: National in scope with data provision for scientists and key information for land managers.

Project duration: Three years.

Funding Request: Concept paper request is for $1,465,000 (of which 65% could be UShs).

ANNEX II A

ANNEX II A

Project: Rehabiltation of Entebbe Zoological and Botanical Gardens

Implementors: Cooperating Zoo to be determined (New York, Atlanta, Houston, San Diego?), U.S. Peace Corps, GOU Game, Fisheries and Forest Departments.

Background: The Entebbe Zoological and Botanical Gardens have deteriorated after twenty years of civil unrest and neglect. The Botanical Gardens were established in 1901, the grounds are reasonably well maintained and abut Lake Victoria. The Zoological Gardens, established in the 1920's as an animal orphanage, host over 10,000 visitors per year, predominately Ugandans and expatriate resisdents. Almost 50% of Uganda's population resides within 100km of Entebbe and this arc also includes 65% of all school children. (TO BE VERIFIED) It represents with minimal input a premier and unique opportunity for national conservation education.

Objectives: Rehabilitation of the Entebbe Zoological and Botanical Gardens to improve the quality of the visitor experience while quintupling visitor use by 1995.

Expected output:

1. Development of a five year master plan for development.

2. Construction of new facilties including visitor cneter, interpretative trails, a chimpanzee sanctuary in Lake Victoria, petting zoo, and conservation education buildings.

3. Development of an on-site and traveling conservation education program for all ages.

Target group/area: Centered in Entebbe, focus will be the adult and youth populations within a 100 km arc.

Project duration: Five years.

Funding Request: $450,000 (of which 50% could be UShs).

ANNEX II A

SELECTION CRITERIA FOR PVO/NGO NATURAL RESOURCES COMPONENT

The GMU will develop a simple criteria list for the micro gants. The following criteria will apply to the macro and mini grants and must be satisfied before a proposal will be considered for competitive selection:

Submission of a satisfactory proposal in the format requested by the GMU and USAID/Kampala.

Demonstrated technical competence in the sector of application.

Demonstrated administrative and fiscal management capacity as judged by (1) satisfactory completion of a finance and administration short-course hosted by the GMU or (2) satisfactory administration and fiscal control of prior USAID grants.

Project approval of an appropriate Government of Uganda authority.

Documentation and demonstration of the extent to which the targeted men and women have been involved in identifying the activities to be undertaken. Or, evidence that this will be a first step prior to development of a work plan specifying the activities to be undertaken. (For the latter the report should be a condition for release of furhter funds.)

Specification of ways and at what stages local men and women will participate in project implementation, with specific attention to the decision making process.

Specification of the targeted number of male and female participants and beneficiaries. Monitoring and evaluation to document the actual number of participants and beneficiaries and the benefits received.

Presentation of a satisfactory technical.

Must have a minimum of 25 percent grant counterpart contribution either cash or in kind.

Must have an acceptable monitoring and evaluation plan and agree to adhere to reuqirements stipulated by A.I.D., including an external evaluation.

Demonstrate environmental soundness, if required.

Other criteria to judge the quality of and to select among competing proposals includes:

Cost effectiveness.

Use of a participatory extension methodology.

Level of cash counterpart contributions.

Ability to become financially self-sustaining within the grant period.

Plan for involvement and benefit of women.

115

ANNEX II A

Contributions (in order of priority) to the overall objectives of the APE, of the research and inventory priorities of the NEAP or the GOU research plans.

Contribution to the national research/inventory capacity of the GOU.

Plan for the training or co-research of Ugandan graduate students and researchers.

Strategiy to relate activities in buffer zone as a benefit from conservation of the nearby park or forest.

Agreemnent to seriously consider and follow the advice of the community conservation officer of MEP.
Commitment to providing data in a form satisfactory for use in the Uganda National Information Center for the Environment.

Capacity of institution to extend environmental messages to key audiences.

Cost effectiveness in developing human resources.

ANNEX II A

PVO MANAGEMENT OF PVO/NGO NATURAL RESOURCES COMPONENT

The expected staff and functions required of the Umbrella Grant PVO are:

Grant Management Unit Coordinator: the coordinator will provide overall management and technical guidance to the PVO/NGO grant program, develop of project design guidelines, oversee grant selection, liaise with USAID/Kampala, the NEAP technical assistance team and the GOU, and oversee monitoring and evaluation of grant activities. The coordinator will be an experienced PVO/NGO grant manager, have demonstrated technical competence in development of PVO/NGO capacity, training experience, and project management. Natural resources technical experience would be a plus but primary technical review will be vested elsewhere.

Financial Administrator: The Financial Administrator will organize and oversee the Umbrella Grants program administration, maintain all financial records for the GMU in a form that meets all A.I.D. requirements, supervise procurement, design and NGO accounting program and monitor accounting of grants.

Mini/micro Grants Officer: The Mini/micro Grants Officer will provide technical guidance to small (especially indigenous NGO) grantees. The officer will assist with technical review of proposals, project monitoring and evaluation, supervision of technical component of training programs, coordination of technical activities and exchange of information/experience between grantees.

Training Coordinator: will organize training needs assessment and plan, develop curricula (in concert with the above specialists) for training grant recipients and candidates recipients in project conceptualization and design, project administration, gender sensitivity, accounting and management, extension techniques, technical subject areas, monitoring and evaluation and reporting.

Assistant Financial Officer: will assist the Mini/micro Grants Officer and the Financial Administrator with field review of projects, training, monitoring and evaluation, and reporting.

Short-term technical consultants will be provided from both Ugandan and expatriate sources to support training programs, monitoring and evaluation of certain project (especially the macro grants) and support of smaller NGO grants that do not have the capacity to access the type of short-term assistance needed. Specific short-term technical assistance areas might include: agroforestry, natural forest management, soils science, survey techniques, geographic information systems and data base management, protected area management planning, wildlife management, monitoring and evaluation planning, and training of trainers.

THE UGANDA NATIONAL ENVIRONMENTAL ACTION PLAN BACKGROUND AND DESCRIPTION

I. Background

A. Review of the Environmental Action Planning Program for Africa

The Environmental Action Planning process, initiated by the World Bank in 1987, is intended to provide a framework for integrating environmental concerns into a nation's overall economic and social development. The NEAP identifies the major environmental problems, lays out a comprehensive national strategy to deal with these problems, and provides a very specific plan for action to address:

- Legislative, policy and institutional reforms needed to be taken by government;
- Corrective measures that need to be taken to improve environmental impact of current projects either in preparation or implementation; and
- New environmental investment programs that need to be prepared and implemented.

To date National Environmental Action Plans (NEAP) have been completed in seven African nations. They typically take about two years to complete.

The NEAP is led by a Steering Committee formed from the highest levels of decision making in the government. Strong political commitment is critical to the success of the NEAP exercise. It has multi-donor support that will help insure that initiatives coming out of the NEAP are adequately funded. As environmental concerns cut across all sectors, a wide range of ministries, NGOs and the private sector[1] are invited to participate in the NEAP. To orchestrate the NEAP preparation, the Committee is assisted by a small team of dedicated full-time national and international experts from both the public and private sectors. The NEAP requires effective public participation by

---

1 For the purposes of simplicity nongovernmental organizations (NGO) in this document are defined as including officially recognized nonprofit, church organizations and local community grassroots organizations. Private sector refers to for profit firms and institutions, agricultural cooperatives and trade associations.

121

involving representatives from organizations and local individual input.

The policy analysis and planning components of a successful NEAP require a solid information base. Generally, NEAPs have been supported by information systems, such as the Environmental Information System (EIS). The core of an EIS is a Geographic Information System (GIS), a computer based system designed to store, process, and present data referenced by their geographical location. An Environmental Information System incorporates both a GIS containing environmental data sets (e.g., species frequency and distribution, climatic data, and location of toxic hazards or pollution plumes) and, more broadly, any organized system for environmental data management (e.g., documentary information, analytical reports, specimen collections such as herbaria, maps, and photographs).

Training for national environmental managers and specialists is an important element of the NEAP. While the NEAP anticipates some outside technical assistance during its development it is intended to be driven by the host-country institutions and personnel. Certainly the implementation of the NEAP process will require in most cases a substantially strengthened national institutional capacity for environmental quality management. Training during the NEAP can be accomplished through both on-the-job training of co-workers by their more experienced colleagues or through more formal workshops and seminars.

B. Status of Uganda's NEAP

The Uganda NEAP was initiated in mid-1990 with several visits from World Bank officials. These meetings described the NEAP program and found a receptive audience in the GOU, culminating in a formal invitation in July 1990 from the Minister of Environment Protection to the World Bank requesting support for a NEAP in Uganda.

The Minister of Environment Protection under delegation of authority from President Museveni has appointed an interim NEAP coordinator. Meetings were held with over 15 ministries to discuss the program and prepare a draft plan for the NEAP. This draft plan forms the basis of these terms of reference for the NEAP.

The World Bank has arranged a US$350,000 initial funding for the NEAP, of which $280,000 is drawn from the Bank's on-going Forestry Rehabilitation Project.

The Uganda NEAP management structure closely follows that used in other African countries. Both a high-level Steering

Committee comprised of Ministers from relevant ministries and the Secretariat has been authorized by the Cabinet. At present, the Secretariat is staffed by the interim coordinator with support from a small team from Ministry of Environmental Protection (MEP). An Advisory Committee comprised primarily of representatives of donor agencies has been identified. Representatives from MEP have initiated dialogue with the private sector through a series of meetings with local NGOs.

C. Overall Approach to the NEAP

The approach to the NEAP outlined in this section is based on experience with the NEAP process in the other African countries. It emphasizes the multi-sectoral support required to deal with environmental issues along with the wide participatory effort needed to implement solutions.

[It also recognizes the existing institutional structure and the commitment of Uganda by placing the Ministry of Environment Protection in a central role with membership on most task forces and the initiating responsibility. However, given the line agency responsibilities of MEP (especially forestry) and the inter-sectoral/ministerial nature of the NEAP, NEAP Coordinator will be appointed by, and the Secretariat will be directly responsible to, the Steering Committee and the Prime Minister.]

In terms of task force functions the suggested process will involve:

- The GOU will official launch the NEAP;
- The NEAP Secretariat will organize a meeting of all task force Chairpersons, members of the task forces and the executive committee of the Advisory Committee to define the goals and objectives of the NEAP and explain the process. During this meeting the roles of the task force Chairpersons will be defined and means by which they can access technical assistance and training to assist them in their duties will be reviewed. They will also be introduced to their contact persons on the Secretariat. Membership on the task forces from the private sector, NGOs and donors will be finalized in consultation between the Advisory Committee (including USAID) and the Secretariat;
- Task force meetings will then be called by the respective Chairperson. The task force may be broken into sub groups to deal with more focussed issues. The task force subgroups' responsibilities will include: definition of principal environmental issues/problems and their causes, collection and

review of secondary sources of information, field interviews with RC II and III representatives (plus other community representatives e.g. church and local NGOs) to determine their views on priorities and solutions, and collection and analysis of original data. The analysis will specify the magnitude and extent of each problem, and the recommendations for action to deal with the problems. Recommendations will cover legal, policy, institutional and ongoing project adjustments and new project needs;

- Each task force will review the work and recommendations of the subgroups and develop a comprehensive analysis of the entire task force sector. This will be presented and discussed in a meeting of the task force and secretariat staff resource persons;

- The Secretariat will compile a first draft of the NEAP from the work of the task forces;

- The task force reports, draft legislation, policy and project recommendations will be reviewed in local, regional and/or national seminars, conferences or workshops, with male and female participants from NGOs and provide private sector and government leading to new drafts;

- The Advisory Committee will review the Task Force reports;

- The Steering Committee will conduct final reviews and revisions, and will present to the Cabinet for approval;

- The Cabinet will forward to Parliament for debate and enactment;

- GOU will take subsequent action on policies, legislation and institutions;

- Where appropriate, Government and donors will take actions to modify ongoing projects to meet the NEAP;

- The NEAP Secretariat will develop an environmental investment program of projects designed to implement new parts of the NEAP, incorporate the program within the national planning process, followed by donor action to support and implement the program; and

- Define an institutional mechanism for and conduct ongoing monitoring and review of environmental conditions, as necessary, leading to revisions and updating of the NEAP and its implementation.

D. Outputs Expected from the NEAP

While the NEAP is based on a participatory process, it is also highly product-oriented. Specific products will be developed through the integration of highly specialized technical assistance with the consensus forming process introduced above and discussed more fully in Section I.D. This will foster economic, ecological, social and institutional soundness to be built into the NEAP from the outset. This, in turn, will facilitate the adoption of the NEAP's legal, policy, institutional and operational recommendations. Specific outputs are likely to include:

- Institutional: Recommendations will be made to redefine inter-institutional relationships to achieve greater coordination in dealing with cross-cutting environmental concerns. These will include means to reduce jurisdictional disputes and problems arising from overlapping mandates. Establishment of effective environmental impact assessment institutional mechanism and environmental analysis capabilities to support the District level planning authority currently being developed under the GOU's decentralization program will both be important topics;

- Legal and policy reform: Each task force and subgroup will examine existing laws and policies as they relate to environment for the areas of their specific concern. They will prepare recommendations for legal and policy reform including revision of existing policies and formulation of completely new policies (including a National Environmental Policy). The task forces would also set priorities for consideration of these legal and policy reforms. The Legal, Policy and Institutional task force would make recommendations to the Steering Committee for addressing the overall environmental concerns and institutional structure of environmental management. This would include Environmental Impact Assessment requirement and strategic planning for national level environmental program and the appropriate institutional structure for environmental law enforcement.

- Adjustments to ongoing and proposed projects and enterprises: Each task force will review projects and enterprises that have a potential negative environmental impact on the sector of their concern. They will formulate recommendations for revision of these project to reduce undesirable impacts. It is likely that some enterprises and projects will be proposed under one sectoral heading that have impact in another sector, e.g., the proposed hydroelectric plant at Murchison Falls with its potential impact on wildlife (herein defined as terrestrial vertebrates) and tourism. In these cases, task

125

force members from each of the affected sectors will form a special project analysis group.

- Recommendations for new projects: Each task force will explore the possibilities for and outline brief descriptions of potential projects. An important distinction of this work is that the task forces would not be charged with identifying general development projects (that are environmentally sound) but would be seeking those activities that would deal with priority environmental problems in their sector.

II. Participation in the NEAP

The NEAP broad-based participation requires careful coordination of the participants' involvement from all concerned parties. The following preliminary outline of roles and responsibilities of involved agencies defines how this participation will be developed.

A. Role of the Government of Uganda

The GOU will provide overall leadership for the NEAP. It will provide the bulk of the analytical assistance, be responsible for the NEAP report preparation and presentation, modify and approve the final Action Plan and be responsible for implementation of the Plan. The GOU will carry out these responsibilities through the following bodies:

- Policy Level Steering Committee: The policy level steering committee will be one of the important structures to serve the NEAP process. This committee will be a cabinet subcommittee to be chaired by the Rt. Hon. Prime Minister with the Hon. Minister of Environment Protection as its Secretary. Other members are to come from key sectoral ministries represented on the task forces. The membership of this committee will include:

  The Rt. Hon Prime Minister: Chairman
  The Minister of Energy, Minerals and Environment Protection: Secretary
  The Minister of Finance
  The Minister of Agriculture, Animal Industry and Fisheries
  The Minister of Local Government
  The Minister of Planning and Economic Development
  The Minister of Education and Sports
  The Minister of Lands, Housing and Urban Development
  The Minister of Tourism, Wildlife and Antiquites
  The Minister of Industry and Technology

126

The Minister of Justice and Constitutional Affairs/Attorney General The Minister of Women in Development, Culture and Youth

The Minister of Information and Broadcasting

The Steering Committee will provide high level policy guidance to the entire NEAP process including review of policy issues, guidance and provide needed coordination for the work of the NEAP and to brief the cabinet as to progress on the NEAP and related matters. It will meet at least quarterly.

- The NEAP Secretariat: The Secretariat will be chaired by the Secretary for the Environment in the Ministry of Energy, Minerals and Environmental Protection. The Secretariat will provide leadership to the task forces and oversee the NEAP Secretariat Staff. Secretariat membership will include the NEAP Coordinator (head of the Secretariat Staff), chairpersons of the task forces and three representatives (one each from the NGOs, private sector and donors) from the Advisory Committee and the NEAP Technical Advisor.

  The NEAP Secretariat will meet regularly, but not less than monthly. At the start of the process it would be charged with reviewing the terms of reference and the composition of each of the task force. It is charged with the responsibility of ensuring an adequate balance in representation of different segments of the population on the task forces. In particular, there shall be a mix of members from government, private sector, and NGO's; regional/ethnic group affiliations; women as well as men; and technocrats as well as bureaucrats and politicians. It will also receive nominations for task force chairpersons, ensure that they meet minimum selection criteria and oversee the election of the task force chairperson by the Permanent Secretaries of the Ministries represented on the task force. It will be responsible for developing orientation workshops for each task force and providing guidance for orientation of subgroups. During the process it will review and support the work of the task forces including the papers and recommendations prepared for proposed symposia at district, regional, or national levels. It will be responsible for the coordination and preparation of the revisions and the final draft of the NEAP document for presentation to the Steering Committee for ultimate Government approval and action.

- The NEAP Secretariat Staff: The Staff will provide day-to-day coordination of the NEAP. It will consist of a small staff of full-time specialists from both the government, the private sector, NGOs and donors. External short and long-term technical assistance will be provided primarily by the USAID Action Program for the Environment among other donors.

The Staff as a part of the Secretariat will assist in the coordination of task forces duties, provide technical assistance and training, information and documentation services (through a formal linkage with the Uganda National Environmental Information Center), transportation and equipment support. The task forces will commission studies to be lead by the Secretariat with assistance from the staff of the task forces' ministry staff.

The Staff will led by the NEAP Coordinator who will be a Ugandan with substantial environmental expertise and professional standing in order to work with senior policy makers and the international community supporting the NEAP. The Coordinator will be supported by a number of Ugandan professionals assigned fulltime to the Secretariat Staff. These professionals will serve as resource persons to the task forces and will include: an information systems specialist, an environmental law and policy specialist, a sociologist with expertise in gender issues, an agronomist, a water resources specialist, an economist, a forest ecologist, a wildlife manager, an urban and industrial environmental quality specialist and an energy specialist. Short-term consultants will be provided by USAID, the World Bank and other donors to support the Secretariat Staff and their work.

The professional staff will be selected by the Permanent Secretaries of the ministries involved and the Executive Committee of the Advisory Committee. At least one member of the Staff will be drawn from the NGO community and one from the private sector.

The NEAP Coordinator will also be supported by a small administrative support staff. It will be fully equipped with computers, copiers, telephones, fax machines, and transport. The Secretariat shall be sufficiently large to allow for meeting rooms for the task forces, offices for the Staff and visiting missions from the Advisory Committees, and a reference library (discussed below).

- **Task Forces:** The basic preparation of the NEAP will be carried out by task forces, each focussing on a particular major environmental issue or group of issues. The task forces will be chaired by persons of pre-eminent expertise in the subject most relevant to the task force subject focus. If the task force chairperson is from a GOU ministry, the co-chairman will be from outside government (i.e. from an appropriate NGO, private sector or university). These leaders should be knowledgeable in the subject matter, capable of carrying through tasks to successful completion, and of a high enough stature to command cooperation.

128

The members of the task forces will be broadly representative of the technical expertise in the subject matter from within and without government. Task forces shall not be so large as to be unworkable, and consequently, task forces will establish sub-groups to allow more effective operations. The Secretariat and the Coordination Unit will provide direction for the creation of task force sub-groups.

Below is a list of task forces to be formed. Specific participants of the task forces will require further review and will depend on agreement on the issues to be covered. However a tentative list of representatives is attached as Annex A. In order to avoid a proliferation of task forces, combinations of some of the closely linked environmental sectors have been made.

- Task Force on Policy Legal and Institutional Arrangements.
- Task Force on Education, Research and Human Resources Development.
- Task Force on Land Management: Agriculture, Livestock and Rangelands.
- Task Force on Wetlands, Water Resources, Fisheries and Aquatic Biodiversity.
- Task Force on Forestry, Wildlife, Tourism and Terrestrial Biodiversity.
- Task Force on Population, Health and Human Settlements.
- Task Force on Mining, Industry, Hazardous Materials and Toxic Chemicals.
- Task Force on Energy and Climate Change.

B. Role of Donors

The NEAP program will be a joint effort supported by USAID and the World Bank in concert with other donors. USAID in Uganda has agreed to provide support in this process. The Bank will assist by drawing on its experience from conducting NEAPs in other countries in addition to providing initial impetus to the NEAP process. A donor NEAP Advisory Committee will be formed to allow all interested donors an opportunity to participate actively.

- USAID: USAID/Kampala will provide technical assistance, training, equipment and material support to the NEAP. This will include:

  - a long-term advisor to the NEAP Secretariat and NEAP Coordination Unit;

  - short-term technical specialists in areas such as land tenure, community conservation and development, environmental economics, information system management, urban and industrial environmental quality management, environmental law, natural resources management, and tourism;

  - procurement of computer and other office equipment;

  - support to related information collection and intervention testing (including pilot project and innovative policy field trials) through a grants program;

  - workshops and seminars in relevant topics;

  - local currency (through its non-project assistance (NPA) program) for support to the NEAP GOU costs; and

  - possible future funding for follow-on projects identified by the NEAP.

- The World Bank: The Bank will assist the process by:

  - providing initial funding for the NEAP;

  - mobilizing additional outside expertise;

  - working with donors to harmonize activities and coordinate the financing to develop the NEAP and subsequently to implement the plan;

  - helping in evaluation (based on experience from other countries) of the technical work of the task forces and their interpretation in terms of Uganda's overall development strategy; and

  - possible future funding of interventions identified in the NEAP.

- Other Donors: can assist the process through:

130

- technical support to the Advisory Group to the NEAP Secretariat and elsewhere (e.g., in some of the work of the task forces) as appropriate;

- funding of the development of the NEAP; and

- future funding of the implementation of the NEAP.

o International Multilateral Organizations (other than the World Bank) which have been active in environmental activities in Uganda (such as FAO, UNEP and IUCN) can assist the process through:

- building on their detailed analyses and advising on the policy changes and other actions needed to address the causes of the environmental problems;

- integrate their ongoing work programs into the NEAP to provide missing inputs;

- technical support as members of the Advisory Group to the NEAP Secretariat; and

- selective funding of development of the NEAP and possible future funding of NEAP implementation.

C. Participatory Mechanisms

o NEAP Advisory Committees: The work of the NEAP Secretariat will be supported on a regular basis by an Advisory Committee. The Advisory Committee will consist of three subcommittees for donors, NGOs and the private sector. Membership on the subcommittees will be open to all bonafide members of each community and will contain members who are either present in Uganda or who can travel here on a regular basis. The Advisory Committee will form working subgroups which will address specific issues and concerns within the NEAP process.

o Private Sector Participation: While commercial private sector involvement in the NEAP is difficult to secure, it is important to the ultimate success of the NEAP. The difficulty stems from the relative scarcity of representative bodies that could easily assist with the NEAP process. Their importance, of course, stems from the fact that they are the engine of growth and that also much of the environment degradation is caused by private sector agents. They will be acutely interested in environmental laws, regulations and policies.

The NEAP will seek participation of such representative bodies as the Uganda Manufacturing Association, Chamber of Commerce, Uganda Tourism Association, Uganda Tourism Development Corporation, agricultural cooperatives and fisherman's organizations. In addition large firms that have potentially significant environmental impact (e.g., the Mukwano soap factory, Uganda Fisheries Enterprises, large sawmill operators, and tour operators) will be visited and issues will be discussed with them on a case by case basis. Special meeting will be held between the Secretariat and these bodies. Appropriate representatives will be invited to sit on task force subcommittees.

o **Community Participation:** In their work the task forces will actively involve a number of important community groups: local resource users (e.g. farmers, herders, fishermen, loggers and traditional hunters), Resistance Councils, indigenous NGOs and local community organizations (church groups, women's groups, Wildlife Clubs, and farmers associations. Community participation will be sought at various times during the process to assist the task forces:

- Define the priority environmental problems and issues;

- Recommend solutions to these problems and issues; and

- Review the findings and recommendations.

The community participation effort will be coordinated by the fulltime sociologist assigned to the Secretariat Staff. Mechanisms to be used will include visits to local communities, regional or district conferences, seminars or other types of consultations. It is essential that there be meaningful local participation in the NEAP process.

Formal interviews will be conducted with a representative sample of RC committees. These will review their perception of priority environmental problems and programs designed to resolve such environmental problems (e.g., forest and wildlife conservation programs).

Special attention will be given to local level women's organizations to obtain their (gender disaggregated) perception of environmental issues.

III. Information Support for the NEAP

Through a separate program the World Bank/UNEP/Norad is providing limited funding to the MEP to establish a National

132

Environmental Information Center for Uganda. This center is designed to process information gathered from a number of sources, both within and outside of government, and process it through a Geographic Information System program. This GIS will focus on collecting spatially coordinated data related to demographic, agricultural, biological and natural resources variables; however, at present it does not meet some of the requirements of the more comprehensive EIS and additional data in the realm of non-spatially determined data are needed (e.g., ecological relationships, herbaria, and analytical reports). A proposal for a complementary biological data base that will round out the EIS requirement of the NEAP is being prepared by the Makerere Institute of Environment and Natural Resources (MIENR). This may be funded by the Umbrella grant program of the USAID Action Program for the Environment.

A reference library shall be established at the NEAP Secretariat offices to ensure that the major environmental literature for Uganda is available to the task forces and the NEAP Secretariat. Arrangements are being made with institutions such as Duke University, World Resources Institute, and the International Institute for Environment and Development to identify and obtain relevant documentary materials. An early priority for the NEAP Secretariat staff should be to augment these efforts with others (e.g., IUCN, UNEP, Makerere University, the Oxford Forestry Institute, the British Council and the donors) who have been active in environmental issues in Uganda.

A description and analysis of environmental issues in Uganda has been performed by UNEP through its strategic resources plan for the country's environmental sector. Additional efforts may be initiated through the proposed IUCN National Conservation Strategy and the Tropical Forestry Action Plan for Uganda. The NEAP effort shall take full account of, build on, complement and extend this existing work.

Although the NEAP will primarily rely on available data, there are specialized studies that will be necessary to complement the process. One such study that has already begun is the UNEP work on revision of the legal framework for environmental protection. Other areas already identified are institutional arrangements for implementation of agreed actions, specific technical training programs and environmental economics.

IV. Scopes of Work for Task Forces

The following scopes of work are preliminary definitions of the work the task forces will be asked to carry out. They will be modified in early meetings of the task forces and during the course of preparing the NEAP as new information becomes available and as

the participatory process defines additional priority areas of concern.

The scopes of work have been broken into three sections: a brief background and introduction to the task forces' sector; a definition of areas of concern; and a list of tasks to be performed.

Each task force will follow a similar process for implementing their assignments including:

- A review of relevant documentation for Uganda;
- Examination of current laws, policies and institutional structure related to the sector and recommend policy/legal reform;
- Assessment of current projects, programs and enterprises as to their environmental impact, information and technologies that may be used for the NEAP;
- Assessment of institutional mechanisms for improving environment and natural resources management in the respective area of interest; and
- Review of technologies and interventions for environmental management in other countries.

The task forces on Policy, Legal, Institutional Arrangements and Education, Research and Human Resource Development cut across sector boundaries and as such they will be informed by and respond to the findings and recommendations of the other task forces. Thus much of their work will be done only after the other task force are well along with their jobs.

A. Task Force on Policy, Legal, and Institutional Arrangements

1. Background

People's participation in environment protection and improvement depends upon their being informed about environmental problems and possible remedies/solutions. People need to be aware and understand what Government policies, regulations, laws and programs on Environment Protection are.

Environmental legislation is a necessary prerequisite in providing practical frameworks to enhance enforcement of environment standards, regulate activities of enterprises and people, in the light of environmental objectives.

Consequently, in Uganda there is an urgent need to develop a broad and flexible national environmental policy to integrate environmental consideration into the national socio-economic development programs.

2. Areas of Concern

- Environmental, economic and social sustainability as an overall policy goal which should be incorporated in all sectoral policies.
- Status of laws and policies as related to the principles of sustainability.
- Land use policy and regulations.
- Enforcement and implementation of environmental laws and policy.
- Role of taxes, incentives, and other economic instruments in environmental conservation and sustainable use of natural resources.
- Appropriateness of local approaches to conservation and resource management including local community access to resources; their use, rights, and obligations; and management of resources.
- Incorporation of environmental concerns in the national/regional/district development plans.
- The impact of environmental degradation on environment and natural resources management.
- Capability of environmental institutions and mechanisms for coordination between agencies.
- Levels of remuneration for public servants including those responsible for environment and natural resources managers.
- Lack of environmental impact review processes for wildland management interventions.

3. Scope of Work

- Develop standards and criteria for development sectors that assure long-term environmental, economic and social sustainability and conservation of biodiversity.

- Review existing policy, legislation and reports on umbrella environmental framework law for Uganda and policy recommendation reports that have a bearing on environmental protection.

- Review existing land use policy and regulations, especially as they relate to soil conservation, watershed management, and land adjacent to forests and protected areas.

- Inventory of data and reports on national level environment and natural resources management.

- Assess and recommend improvements in inter-institutional coordination of environmental matters.

- Advance proposals for the drafting of a comprehensive Environmental Legislation.

- Advance proposals for the drafting of guidelines on a National Environmental Policy including institutional arrangements as well as environmental education, research and training programs.

- Review need for and establishment of an independent cabinet level authority to: (1) monitor and control public and private sector activities that have significant environmental impact, (2) conduct national level environmental policy reviews and (3) develop and update national environmental plans.

- Recommend guidelines and institutional mechanisms for environmental impact assessments.

- Assess staff incentives structure for environment and natural resources management agency staff and recommend appropriate adjustments.

- Review and recommend to government the nature of Uganda's participation in international treaties, conventions, and programs related to environment, e.g., CITES, World Heritage Program, and International Mountain Gorilla Program.

- Liaise with other task forces on matters related with legal and institutional arrangements under their respective Terms of Reference.

B. Task Force on Education, Research and Human Resource Development

1. Background

The protection of Uganda's environment for today and the future depends on the establishment of a solid foundation of information and the human resources to collect, analyze and interpret environmentally-related information. At the same time, substantial public support for improvements in environmental quality depends on a well-informed public to generate the political will to translate environmental knowledge into effective action. Finally, decision makers in government must have information presented to them in clear concise terms that lay out their options. These people need a much improved understanding of the social, economic, and environmental impacts of their decisions.

2. Areas of Concern

- Low level of awareness among public of environmental issues and impact on their daily lives as well as the nation's overall well-being.
- Lack of environmental education in the school curricula at all levels.
- Lack of effective coordination of environment and natural resources research and data management including issues such as research clearance and training of Ugandan researchers.
- Inadequate attention to application of research to Uganda's priority environmental and development application issues.
- Lack of information on the training needs for environment and natural resources managers in areas such as research, environmental impact assessment, and information dissemination.
- Lack of knowledge about indigenous knowledge and practices related to use of natural resources.
- Identify indigenous knowledge and practices related to use and management of natural resources which should be enhanced and incorporated into environmental education programs.

3. Scope of Work

- Inventory environmental education and public awareness programs, and assessment of a sample of these.

- Develop environmental curriculum in primary and secondary schools and institutions of higher learning.
- Develop plans for environmental awareness through mass-media.
- Develop research guidelines and data collection standards that reduce inefficiencies in research programs (overlap, lack of application, etc.)
- Develop plans to streamline data storage and retrieval and establish central data management facilities.
- Conduct environmental training needs assessment and prepare training plan.

C. Task Force on Land Management: Agriculture, Livestock and Rangelands

1. Background

Land management in Uganda is mainly governed by land tenure system which encompasses both statutory and customary laws. Sectoral development policies, e.g., in agriculture, forestry, livestock, have an important bearing on land management. These policies, however, have lacked harmony due to poor coordination among sectors.

The NEAP is one of the efforts being made to develop an integrated land use policy in the hope that it will make Uganda's economic development strategy more environmentally sustainable. Wetlands are a special concern of the GOU since wetlands occupy such a large proportion of the country. Overlooked in land management planning, wetlands are threatened by agricultural practices which drain and degrade them. While wetlands will be more fully treated under another task force, the agricultural uses of wetlands is also appropriately discussed by this task force.

2. Areas of Concern

- Declining soil quality/fertility and its main causes, e.g., erosion, over-grazing, indiscriminate burning, deforestation; effects of agro-chemicals on soil quality; effects of new technology on soil quality such as mechanization; sustainability of traditional farming practices; modern and traditional techniques for regenerating soil fertility.
- Land use planning, land/resource tenure and the attendant legislation.

- Grazing and related areas of nomadism, animal population vs. land carrying capacity, grazing competition with wildlife, and sustainable provision of water to high density cattle areas; EIA of water development/boreholes; pasture improvement; disease control and quarantine procedures; up-dating of livestock data.

- Development of wildlife ranching.

- Reclamation (drainage) of wetlands for agriculture and grazing.

- Use of pesticides and fertilizers in agricultural production and crop storage.

- Environmental hazards of swamp reclamation and use for agriculture. (These include possible downstream flooding, upstream drying up as a result of swamp drainage, soil acidification, loss of valuable natural habitat for various species of flora and fauna, possible building up of harmful biological species, groundwater pollution resulting from injudicious use of agricultural chemicals.)

- Loss of agricultural germ plasm.

3. Scope of Work

- Review existing literature on water resources, fisheries and wetlands potential for agricultural development.

- Review existing agricultural practices on wetlands and describe the socioeconomic characteristics of the main issues. Recommend the most environmentally appropriate use and ways to achieve these.

- Survey existing soil conservation programs and assess their impact.

- Survey pricing and policies that determine technology used and impact on soils.

- Collect and evaluate available data and studies including agricultural research - especially that conducted at Namulonge, Kawanda, and Serere Agricultural Research Stations over the years.

- Examine ways by which the capacity of small research centers, such as the district farm institutes throughout the country can be strengthened. (These work more closely with the rural farmers).

- Identify the main land management problems from the point of view of socioeconomic, regional and gender categories.
- Examine district bylaws for appropriateness and implementation.
- Determinants of crop/livestock mix and impact on environment.
- Examine policies, economics and environmental implications of wildlife ranching.
- Examine land/resource tenure policies and impact on the environment.
- Identify data gaps and explore ways of strengthening applied research which responds to the expressed needs of rural farmers.
- Examination of the present mapping capability/capacity of Surveys and Mapping.
- Examine need and cost/benefit of Land Information System (LIS) for the whole country, which complements an environmental information system.
- Propose a set of indicators for monitoring change in soil quality, vegetative cover and land use.
- Review existing legislation and land policies in the country. In the case of the latter, critical assessment of the effect of the five (5) year development plans since Independence in 1962 should be made.
- Review projects in the agricultural sector to include soil conservation and integrated pest management especially those included in the current Investment Program with reference to their environmental sustainability giving an indication as to what direction future investment programs should take.
- Review current institutional arrangements and their capability in facilitating policy implementation. Identify any constraints and suggest how they may be overcome.
- Research of swamp area crop rotation and other suitable soil conservation practices - comparable to those in upland areas. Likewise adequate attention to suitable crop choices for swampland would be needed.

- Research into potentially useful natural swampland vegetation and animal species with possible aim of their beneficial preservation in the ecosystem.

D. Task Force on Wetlands, Water Resources, Fisheries and Aquatic Biodiversity

1. Background

Uganda is well-endowed with water resources, with a high rainfall and some of the large lakes that feed the Nile River. Although landlocked, over 17 percent of the total area of the country is covered by lakes, rivers and swamps. These, however, are unevenly distributed. Government is mindful of the fact that the use of water for one purpose should not jeopardize the use for another especially when there has been rapid demand for water and its resources in agriculture, industry and urbanization; to mention but a few.

The rapid increase in demand for water contributes to the degradation of the water environment which is also made worse by the inadequate and unreliable data which is needed for proper Water Resources Management.

In view of the above, water management will be one of the priority areas to be addressed by the National Environment Action Plan (NEAP).

2. Areas of Concern

- Reduction of natural wetland vegetation (e.g., papyrus) for swamp drainage and farming projects and its impact on water table, lake ecology and fisheries production, as well as terrestrial and aquatic biodiversity.
- Population settlement on wetlands.
- Availability and quality of hydro-meteorological, hydro-geological data.
- Watershed protection and management programs including prevention and control of siltation.
- Overgrowth of water weeds (hyacinth) in watercourses and lakes especially Lakes Kyoga and Victoria.
- Lack of mechanisms for resolving multiple demands on use of water livestock, irrigated agriculture, fisheries and hydropower.

141

- Environmental impact of freshwater fisheries (e.g., over-fishing, exotic species introduction, loss of aquatic biodiversity, and fishing within National Parks).

- Environmental impact of lake regulation, dams, and irrigation systems as well as pollution from agricultural, urban, industrial, and transport development.

- Lack of trained water resources related technical specialists.

- Lack of effective and current wetland, and water legislation and water use policies.

- Management of Water resources for multi-purpose use - National Water resources development plan.

- Lack of water demand studies and forecasts.

3. Scope of Work

- Review existing projects with attention to distribution of benefits among socioeconomic categories of the population. Review current institutional arrangements in the sector;

- Review and formulate suitable policies for water resources, fisheries and wetland management;

- Provide an inventory of wetlands used which includes attention to issues of access and characteristics of the main direct beneficiaries. Specify possible environmental hazards arising there from and suggest remedies;

- Survey the existing structures/institutions for protecting wetlands and offer suggestions to strengthen them;

- Suggest a strategy for public awareness on wetland resources;

- Prepare plans for and inter-institutional coordination mechanisms. Define optimal programs for the water resources data acquisition and monitoring activities;

- Develop plans for upgrading water management planning tools like GIS and hydrological models for water resources management;

- Assess optimal design and programs for water quality monitoring and pollution control;

- Identify data gaps and national research needs;

142

- Identify water pollution technologies and propose potential programs;

- Compile project profiles to re-address gaps in available data and studies for integrated and sustainable water resources management, which address issues of access and distribution of benefits among different socioeconomic groups;

- Propose plans for environmentally sound wetland use e.g. improved papyrus husbandry, fisheries, judicious use for agriculture;

- Propose plans for use of water harvesting methods for agriculture and livestock.

E. Task Force on Forestry, Wildlife, Tourism and Terrestrial Biodiversity

1. Background

Recent evidence suggests that Uganda is one of the richest countries in Africa in terms of numbers of plant and animal species. Although the number of species is still unknown (with new species continually being discovered), Uganda's biodiversity should not only be conserved as a matter of principal but also as a matter of survival and economic benefit.

Most of Uganda's known biodiversity is found in its tropical high forests which are one of the most threatened ecosystems on the continent. Likewise, the wildlife association both in forest and other related ecosystems are diverse. The forests are also important in a number of ways, such as in the protection of water catchment areas, genetic pool resources, and provision of forest products.

Besides, there are other demands from agriculture and other development projects that are forcing the reserved forest estate and that outside reserves into regression. As a result there are a number of drastic steps that have to be addressed to maintain a properly managed forest environment.

The wildlife resources of Uganda are jointly managed by the Uganda National Parks and the Game Department. All wildlife within parks in under the jurisdiction of National Parks while wildlife outside of parks in administered by Game. The rehabilitation of Uganda offers renewed possibilities for the wildlife sector to contribute significantly to economic development of Uganda. In order to maximize the benefits from Uganda's

143

wildlife resources, a coherent policy for the management of wildlife needs to be developed throughout the country.

The common thread between national parks, game reserves and forest reserves is tourism. Once Uganda's number three earner of foreign exchange, tourism is viewed as a potential area of growth in the economy of Uganda. In order to integrate conservation and tourism on an environmentally sound basis, this task force will develop guidelines for nature tourism.

2. Areas of Concern

- Loss and preservation of biodiversity.
- Rate of deforestation and impact on economy.
- Conservation of genetic resources including the protection of representative samples of various ecosystems as gene pools with their species conserved both in and ex-situ.
- Coordination between management bodies for each of Uganda's protected areas.
- Inadequate funding and training for protected areas.
- Availability of firewood and timber sources outside existing reserves.
- Tree tenure rights and reforestation.
- Timber pricing policy.
- Building codes/standards and impact on forest use.
- Population pressure on forestry and wildlife resources.
- Lack of information pertaining to protected areas.
- Promotion of ecological research and collection of available research findings for dissemination to concerned institutions.
- Development of a National Tourism Plan; determination of priority infrastructure necessary to encourage nature tourism.
- Analysis of investment codes/licensing and approval process on nature tourism and private sector involvement.

- Finding ways to address community demands, equitably, and without diminishing the sustainable productivity of the resource.

- Assessment of development of policies in agriculture and in other sectors affecting forest wildlife lands.

3. Scope of Work

- Identify areas of biodiversity value in Uganda and determine appropriate protection status.

- Review existing and proposed draft legislation/policy for protected areas (e.g. forest parks)

- Examine enforcement practices and penalties for poaching and illegal (forestry, wildlife or biodiversity) activities within and outside protected areas.

- Determine independent funding sources (including retention schemes) for nature/wildlife conservation and management.

- Analyze role of NGOs in conservation of protected areas and in working with communities in adjacent areas to enlist their participation in conserving the protected areas.

- Determine the creation of forum for conflict resolutions over jurisdiction, authority and institutional mandates.

- Examine needs to assess the current status and trends in the quantity of natural resources in the country with a view to proposing proper management measures and rational utilization of these resources for fulfillment of increasing human demands.

- Evaluate the effectiveness of forest/wildlife management programs, game control and conservation both within and outside National Parks, Forest Reserves and Game Reserves.

- Inventory and compile complete data on land use for forest cover and use of forest resources.

- Analyze effective coordination in the large numbers of projects development programs and policies which influence forest land use.

- Examine cost/benefits of tourism in Uganda's protected areas, including attention to the cost/benefits to the population adjacent to these areas.

- Evaluate extent of forest and wildlife resources outside protected areas in order to bring them into proper management with people participation.

- Examine revenue sharing and income generation strategies for parks and protected areas, and communities adjacent to these areas.

- Determine the carrying capacities and enhancement possibilities of various ecological zones in order to ensure optimum and sustainable utilization of the resource base.

- Assess means to strengthen forest, parks and wildlife planning, including concession data.

- Examine ways of bringing areas adjacent to forest reserves under participatory local management.

- Develop curriculum for forestry/wildlife education and training at primary, secondary, professional, technical and higher levels.

- Develop programs for public awareness.

- Assess economic importance of wildlife species and potential for economic development and examine the possibility of initiating innovative wildlife utilization.

- Review and develop appropriate legislation dealing exclusively with the protection of forestry and wildlife resources.

F. Task Force on Population, Health and Human Settlements

1. Background

Population, health and human settlements are related components that have a bearing on the environment. Although people are the most valuable assets for any nation, their numbers in relation to natural resources availability do influence development and environmental management programs. In Uganda, as in many developing countries, the current rate of population growth exceeds 3 percent whereas economic growth rate is only minimal resulting in a negative effect on health and environment.

Human settlement is the built up environment in which most economic and social activities take place to sustain development. It is in this area that most activities are inter-related, therefore, require appropriate planning to avoid and minimize environmental hazards. Core activities here include

146

housing and related infrastructure and services, for instance, water supply, sanitation, drainage, roadwork, and buildings. Inevitably, all human development projects call for an integration of environmental management programs in order to provide for the required quality of life.

Health is the concern of all sectors of Government since it touches on the quality of life of the human population and other living things on which man derives survival. When human populations and settlements are properly planned and managed, health aspects are definitely catered for.

Uganda has experienced considerable unrest in the last two decades and this resulted in the mismanagement of human settlements and health services. The period has, therefore, been characterized by: increasing epidemics of preventable diseases; oral, faecal and water borne diseases; vector diseases; air droplet infections and malnutrition, just to name a few.

It is, therefore, necessary for the Government to review and update the existing policies, programs and strategies to bring population growth, health and human settlements in harmony with development planning and sound environmental management.

2. Areas of Concern

- Family planning and the demography of Uganda
- Integrate population issues in national development policies and planning.
- Incidence of water borne diseases;
- Lack of potable water in rural areas and urban centers and reliability of sources;

3. Scope of Work

- Formulate, review and evaluate human settlement goals, policies and strategies geared towards the improvement of quality of life in both urban and rural areas.
- Monitor and assess the inter-relationships between man-made and natural environment with a view to ensuring sustainable use of resources.
- Analyze the research and development of environmentally appropriate technology related to aspects of human settlement.

- Examine the coordination of relevant Ministries and departments, local authorities and other institutions in the planning and implementation of large scale housing projects and new townships to ensure the enhancement of environmental quality.

- Examine planning and building legislation to ensure environmentally sound human habitat.

- Collect and analyze data on human settlements and health as it relates to the environment, for use by Government and other institutions.

- Identify, prepare and implement innovative human settlements, programs and projects including the use of local building materials and indigenous knowledge and skills.

- Monitor and evaluate the sociological impact and health implications of rural and urban development and making proposals for preventive and remedial measures.

- Identify and promote the most appropriate refuse disposal technologies.

- Collect and analyze necessary demographic and land distribution data in order to understand their impact of distribution on human settlements and environment.

- Examine the possibility of starting and supporting community based programs on safe environment for human survival and development.

- Determine health institution improvements.

- Identify incentives for rural development projects to lessen pressure on urban areas.

G. Task Force on Mining, Industry, Hazardous Materials and Toxic Chemicals

1. Background

In Uganda, pollutants emitted from mining and industrial plants are just beginning to have a serious impact on the country's environmental quality. This trend will continue. Now, however,

148

is an opportune time to take appropriate management measures to limit the future impact of industrial processes on the environment and the health of local people. One thing above all is clear from experience of developing and developed countries alike -- environment quality management of industry is not a question of tradeoff between environment and development. Clearly sustainable industrial economic development depends on sound environmental management.

With respect to industry and mining, it will be recalled that in the past, the planning of industrial development in Uganda did not take into account the impact on the environment. Consequently, no adequate safeguards were put in place to protect the environment. Although a number of laws were enacted to regulate the discharge of industrial waste, these were not really exhaustive and encompassing. Besides, they were enacted at a time when environment considerations were almost non-issues. They now need updating to render them suitable to the new situation. Under the circumstance, the Government needs to take steps to develop and strengthen appropriate policies, institutions and legal instruments to safeguard against haphazard industrial development as regards the environment.

Agricultural chemicals, including fertilizer and pesticides, play a very critical role in the country's development sectors namely: agriculture, industry and public health. There is the need to take appropriate management measures for the storage, manufacture, use, transport, and disposal of these chemicals to avoid any possible environmental catastrophe. The Government needs to take steps to develop and strengthen appropriate policies, institutions and legal instruments as safeguards against hazards that may have arisen from mishandling the chemicals.

2. Areas of Concern

- Lack of information about industries and areas of most critical environmental impact.
- Lack of information about pollution standards, permissible levels of toxic waste in water, air and soil.
- Inadequate monitoring and enforcement capacity within government agencies.
- Lack of environmental impact assessment requirements, standards and practices.
- Inadequate understanding among industry owners and managers as to environmentally and economically sound plant processes.

- Inadequate public concern for negative environmental impacts of industrial and mining development.
- Inadequate information about the importation, distribution, handling and use of agricultural chemicals.
- Lack of training of agricultural application and safety procedures.
- Inadequate regulatory requirements for agricultural chemical application.
- Lack of information about the impact of agricultural chemical pollution and their impact on environment and human health.

3. Scope of Work

- Identify industrial waste being discharged into the environment by existing industries.
- Quantify the amount of industrial waste being discharged by each industry and indicate whether those quantities conform to safe level standards.
- Analyze the disposal as well as treatment methods used by each industry and advise on their effectiveness and appropriateness.
- Survey methods used elsewhere to treat such industrial waste and their safe levels before disposing into the environment.
- Recommend safe methods (modern technology) to treat industrial waste.
- Suggest policy measures to avoid dumping, disposal or discharge of industrial waste and encourage recycling and salvage.
- Recommend legislation to be used in governing industrial waste management.
- Identify possible institutional arrangements that could monitor industrial impact on environment and recommend measures for establishing them.
- Consider the process of monitoring, on a regular basis, the effluent discharges of industries to ensure compliance with the waste disposal regulations.

150

- Review and prepare a comprehensive list of the quantities, types and regularity of importation of chemicals that have been imported into Uganda since 1980 to date.
- Review existing legislation on chemicals and suggest improvements.
- Devise an effective method of labeling and advising on the most appropriate packaging of hazardous chemicals.
- Assess and categorize chemicals used in Uganda in the various hazard groups.
- Assess the chemical residue in foods and environment.
- Assess and document any poisoning so far experienced either through ignorance, carelessness, environmental accident, omission or commission in the country since 1980.
- Advise on the best ways of testing, storing and disposing of toxic or expired chemicals.

H. Task Force on Energy and Climate Change

1. Background

By 1984, Uganda was still solely dependent on petroleum, forest and woodlands products for its energy sources causing serious environmental problems from deforestation. Although electrification has expanded in urban areas, the most of Uganda's people lack alternatives to woodfuel due to faltering economic development and population expansion. This continues to have adverse effects on the environment. There is deforestation and its associated consequences on the other hand, while on the other there is the use of fossil fuels which contribute to the emission into the atmosphere of certain green-house gases responsible for atmospheric warming which subsequently leads to climate change. Energy conservation and efficient energy production are essential elements of Uganda's future development. Both are important to drive economic development and to reduce dependence and foreign exchange expenditures on imported oil. This must be accomplished with due regard for environmental quality.

In unison with the world community's concern and approach, and in order to save her environment, Uganda needs to strike a balance between the use of sources of energy with adverse effects on the environment and those which are environmentally safe.

Global climate change is blamed on the emission into the atmosphere of a host of greenhouse gases such as carbon dioxide, methane, nitrous oxides and CFCs. However, climate variables are well known to be strongly coupled with the land mass, oceans, cryosphere, and biosphere which together with the atmosphere form the climate system. What remains is the monitoring of weather and putting in place legal institutions responsible for the control of human activities which have meteorological implications. As part of the continual monitoring, it is important to appreciate the essential nature of climatological data processing in the determination of the "average weather" i.e. climate. Because climate change cannot be determined without first determining climate itself.

2. Areas of Concern

- Faltering programs in rural electrification, small scale hydroelectric power projects and the use of biomass.
- Inefficient power production capabilities.
- Inefficient use of fuelwood, conversion of wood to charcoal and lack of energy-efficient cookstoves.
- Lack of coherent legislation and national policy on energy resources and use.
- Inadequate information about and use of new and renewable sources of energy.
- Inadequate education on energy conservation among the public, including commercial users;
- Need for fossil energy exploration to lessen pressure on forests.
- Lack of environmental impact assessments for energy projects;
- Expansion of hydroelectric power in urban and industrial areas as well as the improvement of reliability on hydroelectric power as a source of energy.
- Lack of sufficient- quality and quality of hydrologic, meteorologic and climatic data.
- Inadequate meteorological data base management and evaluation of data availability and gaps.
- Inadequate understanding of Uganda's contribution to and potential negative effects arising from global climate change.

3. Scope of Work

- Review of existing sources of information on and assessment of current energy consumption patterns, efficiency and production modalities.
- Review of state-of-the-art for energy production and conservation.
- Review of the role of women in energy production and use (esp. fuelwood).
- Review of existing energy programs with a focus on increasing their efficiency, scope and effectiveness and lessons to be learned from these and similar project s in other countries.
- Planning for increasing energy conservation.
- Explore potential for introduction of alternative sources of energy (e.g., new and renewable energy, animal energy for small scale transportation).
- Review of existing energy related laws and policies and recommendations for their reform including a comprehensive national energy strategy.
- Inventory of currently available sources of energy;
- Preparation of recommendations for fossil fuel exploration using environmental sound methods.
- Preparation of EIA guidelines for energy production projects.
- Preparation of plans for public education program on energy conservation.
- Drawing up a proposal for the institutionalization of the Department of Meteorology fully reflecting its important role in the field of environmental protection.
- Review the current status of climatological data collection, processing and utilization.
- Identify and quantify the effects of human activities which degrade the environment and cause climate change.
- Develop a training research and education scheme for staff and farmers and other users of climatological data.

152

- Develop and recommend a suitable system of monitoring climate change - bearing in mind the impact of climate change on various socio-economic development activities.
- Address factors leading to the emission of greenhouse gases into the atmosphere.

V. Composition of the Task Forces

The eight Task Forces will be composed as follows:

1. National Environmental Policy, Legal Environmental Legislation, and Institutional arrangements

   a. Prime Minister's office

   b. Environment Protection

   c. Justice

   d. Agriculture

   e. Tourism and Wildlife

   f. Finance

   g. Planning and Economic Development

   h. Local Government

   i. Lands and Surveys

   j. NGO

2. Education, Research and Human Resource Development

   a. Education

   b. Makerere University

   c. Mbarara University for Science and Technology

   d. Uganda International Islamic University

   e. Planning and Economic Development

   f. Public Service Commission

   g. National Council on Science and Technology

154

h. National Curriculum Development Center

i. Information and Broadcasting

j. Institute of Teacher Education Kyamdogo

j. NGO

3. Task Force on Land Management: Agriculture, Livestock and Rangelands

a. Lands and Surveys

b. Agriculture

c. Animal Industries and Fisheries

d. Local Government

e. Karamoja Affairs

f. Environment Protection

g. NGO

4. Task Force on Wetlands, Water Resources, Fisheries and Aquatic Biodiversity

a. Environment Protection

b. Agriculture

c. Lands and Surveys

d. Animal Industries and Fisheries

e. Minerals and Water Development

f. Industry and Technology

g. UFRRO

h. Energy

i. NGO

5. Biodiversity, Forestry, Wildlife and Tourism

a. Environment Protection

b. Tourism and Wildlife

c. Agriculture

d. Makerere University, Forestry Department

e. Makerere University Institute of Environment and Natural Resources

f. Mbarara University Institute of Tropical Forest Conservation and Management

g. Local Government

h. NGO

6. Mining, Industry, Hazardous Materials, and Toxic Chemicals

a. Minerals and Water Development

b. Industry and Technology

c. Labor

d. Energy

e. Agriculture

f. Animal Industries and Fisheries

g. Commerce

h. Environment Protection

i. Ministry of Internal Affairs (Uganda Chemists)

j. Uganda Manufacturing Association

7. Population, Health and Human Settlements

a. Planning and Economic Development

b. Health

c. Housing and Urban Development

d. Local Government

e. Women in Development

156

f. Environment Protection

g. NGO

8. Energy and Climate

a. Energy

b. Women in Development

c. Environment Protection

d. Physics Department, Makerere University

e. Geography Department, Makerere University

f. Agriculture

g. Minerals and Water Development

h. NGO

ANNEX II C

MACROECONOMIC ANALYSIS

TABLE OF ACRONYMS

AID	Agency for International Development
AID/W	Agency for International Development/Washington
APE	Action Program for the Environment
AWF	African Wildlife Federation
BOU	Bank of Uganda
CPI	Consumer Price Index
DANIDA	Danish International Development Agency
DFF	Development Finance Fund (of Bank of Uganda)
DOF	Department of Forestry
EC	European Community
EEC	European Economic Commission
EIL	Experiment in International Living
ERP	Economic Recovery Program
ESAF	Extended Structural Adjustment Facility
FAO	Food and Agriculture Organization
FD	Forestry Department
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GNP	Gross National Product
GOU	Government of Uganda
IBRD	International Bank for Reconstruction and Development
ICA	International Coffee Agreement
ICI	Intermediate Credit Institution
ICO	International Coffee Organization
IEE	Initial Environmental Examination
ILO	International Labor Organization
IMF	International Monetary Fund
IRR	Internal Rate of Return
IUCN	International Union of Conservation and Nature
LTC	Land Tenure Center
MEMEP	Ministry of Energy, Minerals and Environmental Protection
MTWA	Ministry of Tourism, Wildlife and Antiquities
NEAP	National Environmental Action Plan
NGO	Non-Government Organization
NORAD	Norwegian Agency for International Development
NPA	Non Project Assistance
NPV	Net Present Value
NRM	Natural Resources Management
NRMP	Natural Resources Management Plan
NUSh	New Ugandan Shilling

ODA	Overseas Development Administration
PAAD	Program Assistance Approval Document
PAIP	Program Assistance Identification Paper
PASA	Participating Agency Service Agreement
PID	Project Implementation Document
PP	Project Paper
PVO	Private Voluntary Organization
RMS	Rwenzori Mountaineering Services
RPE	Rehabilitation of Productive Enterprises project
SAC	Structural Adjustment Credit
SAF	Structural Adjustment Facility
SDR	Special Drawing Rights
SIDA	Swedish International Development Agency
SIP	Special Import Program
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNP	Uganda National Parks
UNRM	Uganda Natural Resources Management program
USAID	U.S. Agency for International Development
USh	Ugandan Shillings
USNPS	U.S. National Park Service
UTA	Uganda Tourism Association
WCI	Wildlife Conservation International
WCU	Wildlife Clubs of Uganda
WFP	World Food Programme
WRI	World Resources Institute
WWF	World Wide Fund for Nature

TABLE OF CONTENTS

I. Introduction

II. Importance of the Natural Resources Sector to the Economy

Agriculture
Fisheries
Livestock
Tourism

III. Macroeconomic Performance Update

Balance of Payments and External Financing Requirements

TABLES

Table E.1. Agricultural Production
Table E.2. Average Yields under Current and Improved Technology
Table E.3. Tourism Sector & Infrastructure
Table E.4. Contributions of the Tourism Sector to National Economy
Table E.5. Macroeconomic Indicators
Table E.6. External Financing Requirements and Resources
Table E.7. Government of Uganda Budget

I. INTRODUCTION

The Program Assistance Identification Paper (PAIP) for the Action Program for the Environment (APE) included a section on Macroeconomic Analysis. This PAAD section will, therefore, start with an analysis of the importance of the natural resources sector to the national economy. The section shows the linkages between natural resources and the economy, and provides a rationale for interventions in the natural resources sector.

Section III of this annex is mostly a repetition of the macroeconomic analysis, as included in the PAIP. The analysis has been updated since the PAIP, mainly with additional data available for 1990.

II. IMPORTANCE OF THE NATURAL RESOURCES SECTOR TO THE ECONOMY

The macroeconomic framework (in the PAIP and in Section III) reveals the commitment of the Government of Uganda in laying a sound policy and regulatory framework. The competitiveness of Ugandan exporters in the international market has been enhanced and the incentive structure has been improved through measures like the 100% export retention scheme. Because of the importance of the natural resources sector -- agriculture, fisheries, livestock, biodiversity, tourism -- to the national economy, we will examine each of sector components in turn.

Before delving into each of the subsectors, it is important to point out the caveat that existing databases, especially in the natural resources sector, are very rudimentary. What data does exist has to be used with care, since different studies quote widely divergent figures. One of the most important outputs of the National Environmental Action Plan will be to formulate, systematize, and maintain a comprehensive database.

Agriculture

Agriculture is the mainstay of Uganda's economy. It contributes over 66% of the GDP, more than 95% of the country's merchandise exports and much of the country's foreign exchange revenues. (Please refer to Table E.1. for background data.) Over 90% of Ugandans depend upon agriculture for their livelihood. Even the small manufacturing and service sectors are mostly based upon agriculture.

162

TABLE E.1.

UGANDA ECONOMY: AGRICULTURAL PRODUCTION

	1970	1971	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
TOTAL TRADE														
EXPORTS FOB ($MM)							347.1	367.7	407.9	379.0	407.5	333.7	272.9	251.5
IMPORTS CIF ($MM)							422.0	428.1	342.2	264.0	476.1	634.5	626.1	659.1
COFFEE EXPORTS														
OFFICIAL EXPORTS (TONS)					110,100	128,300	174,700	144,300	133,200	151,500	140,800	148,153	144,254	176,453
VALUE OF EXPORTS ($MM)					341.3	243.8	349.4	346.3	359.6	348.5	394.2	307.5	265.3	262.8
AS % OF TOTAL EXPORT VALUE							100.66%	94.18%	88.16%	91.95%	96.74%	92.16%	97.21%	
COTTON EXPORTS														
OFFICIAL EXPORTS (TONS)					2,300	1,200	1,800	7,000	6,700	9,553	4,875	3,443	2,088	2,321
VALUE OF EXPORTS ($MM)					4.10	2.30	3.20	11.20	12.10	13.98	5.09	4.10	2.97	4.02
AS % OF TOTAL EXPORT VALUE							0.92%	3.05%	2.97%	3.69%	1.25%	1.23%	1.09%	1.60%
TEA EXPORTS														
OFFICIAL EXPORTS (TONS)					500	500	1,200	1,300	2,500	1,200	2,800	2,100	3,079	3,135
VALUE OF EXPORTS ($MM)					0.3	0.3	0.8	1.2	3.3	1	3.1	1.9	3.079	2.553
AS % OF TOTAL EXPORT VALUE							0.23%	0.33%	0.81%	0.26%	0.76%	0.57%	1.13%	1.02%
OUTPUT OF SELECTED CROPS ('000 TONS)														
COFFEE PRODUCTION					135.2	97.5	166.6	157.4	138.7	155.0	143.3	159.4	153.6	174.0
COTTON PRODUCTION	86.0				6.1	3.8	5.1	10.0	12.2	16.3	4.4	2.9	1.8	2.6
TEA PRODUCTION					1.5	1.7	2.4	3.1	5.2	5.6	3.2	3.5	3.5	4.6
TOBACCO PRODUCTION					0.4	0.1	0.0	0.7	0.7	0.3	0.0	0.0	0.0	0.5
SUGAR PRODUCTION					4.3	3.8	2.5	3.1	2.4	0.8	--	--	7.5	15.9
PLANTAINS PRODUCTION					5,699.0	5,900.0	6,596.0	6,487.0	6,250.0	6,468.0	6,565.0	7,039.0	7,293.0	7,469.0
CEREALS PRODUCTION					1,067.0	1,165.0	1,093.0	1,399.0	944.0	1,171.0	1,058.0	1,220.0	1,398.0	1,619.0
ROOT CROPS PRODUCTION					3,438.0	4,509.0	4,810.0	5,291.0	4,731.0	4,532.0	4,863.0	4,960.0	5,177.0	5,474.0
OUTPUT OF SELECTED FOREST PRODUCTS														
TOTAL LOGS (CU.M.)							70,000			83,000				
SAWN TIMBER (CU.M)	71,800						25,000			28,000				
PLYWOOD (LOG EQUIV.IN CU.M.	14,400						200,000			500,000				
MATCHES (LOG EQUIV. IN CU.M	16,800													
FUELWOOD (CU.M.)	10,560,000						220,000			250,000				
POLES (CU.M.)	713,400						30,000			30,000				
CHARCOAL (TONS)	13,400						32,000			100,000				
LIVESTOCK HEAD														

TABLE E.1.

UGANDA ECONOMY: AGRICULTURAL PRODUCTION

	1970	1971	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
CATTLE				5,200,000		4,745,400	4,821,100	4,871,300	4,993,100	5,000,000	5,200,000	3,905,200	4,259,800	4,183,700
SHEEP						1,384,300	1,453,500	1,036,000	1,602,000	1,674,000	1,680,000	683,000	690,000	644,100
GOATS				2,500,000		2,670,800	2,804,300	1,979,000	3,091,000	3,246,000	3,300,000	2,503,000	2,110,000	2,279,700
PIGS						195,900	205,700	233,000	227,000	238,000	250,000	470,000	452,000	552,900
POULTRY						176,200	324,400	1,000,000	1,200,000	3,000,000	5,000,000	8,330,000		
FISH PRODUCTION (TONS)						167,000	170,000	172,300	212,300	160,800	200,900	149,700	214,700	213,500

SOURCES: Ministry of Planning and Economic Development, Ministry of Finance, Bank of Uganda, USAID/Kampala, US Commerce Department, IMF, World Bank, International Coffee Organization, Business International, Background to the Budget, Forest Department, Lockwood Consultants, UNDP, WTO

Uganda is endowed with the climate and soil conditions that are optimal for agricultural production. Rainfall is plentiful and averages in excess of 1,000 mm a year in the south, with only the northern areas experiencing drier conditions during the months of December and January. Many parts of the country support continuous cultivation. Most of the nation's farming is smallholder based: there are approximately 2.2 million smallholders on farms averaging 2.5 hectares.

Prior to 1971, the country has traditionally been self-sufficient in food; where shortages occurred, it was primarily due to distribution or security problems. Between 1960 and 1970, agricultural GDP was growing at a rate of almost 5.5% per annum. Uganda also had a very diversified agricultural export base, which actually generated more income in real terms than today. For example, in the early 1950s cotton was the principal earner of foreign exchange, accounting for over 60% of the total.

In large part because of its natural endowments, Uganda has a comparative advantage in agricultural production. Also, because of the suppressed production in past years due to the security situation, transportation problems, unattractive producer prices, and general breakdown in infrastructure, the potential in the short-run for increased agricultural production, agro-based industries and exports seems substantial.

The years 1971-1986 were a big setback for the agriculture sector. During this period, agricultural GDP declined almost 20% in real terms, foodcrop production and yield declined by 20% and 12% respectively, coffee export volume declined by 30%, tea and cotton export volume declined by over 90%. In addition, the country lost almost all of its 400 dairy and beef farms.

Due to the increased political stability of recent years, enhanced security situation and rehabilitated transportation, agriculture is reemerging as the engine of growth for the national economy. During the period 1986-90, agricultural GDP increased by 4.8% per year. The production of food crops grew at an average rate of 5.5% over the same period, although cash crops grew only by a small increment.

Agriculture plays such a dominant role in the Ugandan economy that the country's economic growth will be driven by the performance of the agriculture sector. Effective natural resources (soil, water, vegetation) management is the foundation of a sustainable agricultural society. For example, forest management in Uganda's highlands will limit flooding and drought in the farmlands below; soil conservation is a <u>sine quo non</u> of soil fertility management; and agroforestry can provide much needed

wood, fodder, and soil amendment. Natural resource interventions also become important for the following reasons:

i. Rural/Equitable income generation

More than 90% of Uganda's population depends upon agriculture for their livelihood. Much of the production is smallholder based, subsistence farmers. Intervention in the agriculture sector will provide benefits to the most disadvantaged sector of the population. Also, much of the income generation will benefit the rural constituency.

ii. Maximum marginal impact and benefit

Uganda's favorable climate and soil have allowed the country to be self-sufficient in food during much of the post-independence period; where food shortages have occurred, the problem has been largely one of infrastructure degradation, transportation breakdown or civil strife.

During the 1970s and the first half of the 1980s, except for a few good years, agricultural production has actually fallen. This downturn has only recently, with the onset of the relative peace and stability of the Museveni government, started to turn around. Considering Uganda's rich natural resources base, previously restricted agricultural production, and its nascent manufacturing and service sectors, investments in the agricultural sector possibly will have the maximum marginal impact in terms of output per dollar invested. However, increasing the yields per hectare is essential if this investment is to succeed.

iii. Biodiversity and Tourism

Uganda is one of the richest nations in the world in terms of biodiversity. Interventions in the natural resources and biodiversity sectors will greatly improve the tourism potential of the country. Tourism can be an important source of foreign exchange, off-farm employment, rural income, and tourism-based industries. Positive interventions in the natural resources sector will have an impact on tourism; in order to avoid haphazard growth in this sector, it is essential to formulate viable strategies at the outset.

iv. Sustainable growth

While the productivity of the country's soil is generally very good, this tropical soil structure is also easily susceptible to nutrient loss and erosion. In order to conserve this resource base, interventions are needed to halt and reverse the pressures --

deforestation, soil erosion, population growth, policies that act as dis-incentives to sustainable management of the resources -- that are being felt by the agricultural sector.

One cannot, however, be complacent about the agriculture sector in Uganda. According to Uganda: Accelerated Food Crops Production Strategy, the recent gains in food crop production derive from expanded use of land and labor, as well as increased security conditions and availability of inputs, and not from technological or productivity improvements. Although food crop production has increased since 1985, it has only recently achieved production levels recorded in 1970 for staple crops including matooke, cassava, sweet potatoes, and maize. Thus, the gains are not sustainable in the long run and the report indicates that the limits for land and labor will be reached within the decade. Further gains in food crops may not be possible without technological and productivity improvements.

In the coming years, therefore, the emphasis should be upon improving the yields, rather than the area under cultivation. The same report cited above gives a comparison between average yields under current technology in Uganda versus that achievable with improved technology:

Table E.2.: Average Yields Under Current and Improved Technology (kilograms per hectare)

CROPS	Present Technology	Improved Technology
Bananas	5,000	12,000
Cassava	8,800	18,000
Sweet Potatoes	4,000	8,500
Maize	1,500	2,800
Sorghum	1,200	2,500
Millet	1,000	1,650
Beans	800	1,000
Groundnuts	550	1,123
Robust Coffee Kiboka	1,200	2,500
Seed Cotton	500	2,500

SOURCE: Uganda: Accelerated Food Production Strategy

In order to achieve and maintain increased yields, the country needs to ensure that the natural resources base is protected and enhanced.

167

Fisheries

Fish is very important to the Ugandan diet, providing over half of the population's daily intake of protein. The major lakes -- including Victoria, Albert, Kyoga, Edward, George -- are the primary sources of fish production. It was estimated in 1987 that approximately 2% of the population depended upon fisheries directly for their livelihood. Recent anecdotal evidence of heavy siltation of lakes and rivers as well as uncontrolled pollution of water sources point to a possible decline in fish production, if action is not taken to reverse the underlying environmental degradation.

Livestock

Livestock is an important agriculture sub-sector. UNDP has estimated that livestock accounted for 30% of agricultural production. Moreover, livestock represents an important element in the livelihood of the rural disadvantaged subsistence population since it is estimated that around 95% of cattle, for example, is owned by smallholders. The main constraints to the livestock industry has been the security situation, lack of veterinary facilities, uncontrolled animal diseases, and the high cost of drugs. Consequently, the number of livestock has declined even when comparing the post-Amin era to the present: cattle declined from approximately 5.2 million in 1979 to 4.2 million in 1988; goat numbers have declined from 2.5 million in 1979 to 2.1 million in 1988. In 1989, however, total livestock production increased by 2.4%. The above-mentioned constraints need to be removed for the livestock sub-sector to assume the importance it held upto the 1960s. At the same time, it is necessary to perform evaluations of the relative economic and financial attractiveness of livestock versus wildlife in different areas of the country.

Conclusion

With the passage of Uganda from the rehabilitation to the economic growth stage, agriculture has continued to play a major role in providing the impetus to growth. Between 1988 and 1989, monetary agriculture production grew by 7.2%, while the non-monetary sector grew by 4.5%. Cash crops grew by 10%, while food crops grew by 10.2% over the same period. Most crops had a bumper harvest in 1989.

To ensure that agriculture continues to play its role as the engine for growth of the national economy, it is important to place

certain priorities:

- a comprehensive database needs to be established whereby effective planning is possible;
- the primary emphasis should be on introducing appropriate technologies, incentives, and support mechanisms that result in increased productivity and yields;
- the country should diversify its export base so as to get away from an over-dependence upon coffee.

Agriculture continued to fuel the national economy in 1990. Given the country's rich natural resources base and the stage of economic development, agriculture will continue to dominate Uganda's economy at least throughout the rest of this century.

Tourism

Given the significant implications of natural resource interventions upon the tourism sector and given the importance of tourism for this program, we will briefly review the tourism sector and its impact on the national economy.

During the 1960s, tourism was the third largest foreign exchange earner, after coffee and cotton. In 1971, for example, there were 88,630 tourists who brought in revenue of $20 million to the country. This figure dropped precipitously and by 1982, there were only 10,000 tourists who contributed a paltry $2.5 million to the national exchequer. (Table E.3.) By 1987, this figure had started to climb and was back to 37,715, but the Ministry of Tourism and Wildlife (MTW) classifies approximately 65% of these visitors as business people, rather than holiday tourists. The number of tourists has continued to climb in recent years, and the Department of Immigration reported 44,000 visitors in 1989 and 50,000 in 1990. Of the 1990 visitor arrivals, the Ministry of Tourism & Wildlife classifies 22% as "holiday tourists"; however, various tour operators and tourism experts put this figure at around 10% of the total.

In terms of tourism's contribution to the national accounts, the sector has actually been an impediment. The receipts and payments from/to the tourism sector are given below in Table E.4. in millions of current U.S. dollars:

Table E.4. Tourism Sector in Uganda's Balance of Payments (U.S. $millions)

	1986	1987	1988	1989	1990*
Receipts	3.3	4.5	7.6	8.7	9.9
Payments	9.0	12.6	11.4	9.5	8.0
Balance	-6.7	-8.1	-3.8	-0.8	1.9

* = projection
Source: Ministry of Planning and Economic Development

170

TABLE E.3.

UGANDA ECONOMY: TOURISM SECTOR & INFRASTRUCTURE

	1970	1971	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
TOURISM															
REVENUES (U.S.$MN)	19.0	20.0	4.0	--	--	--	--	--	--	--	3.3	4.5	7.6	8.7	9.9
VISITOR ARRIVALS, of which		88,630					10,000		21,278	27,039	32,790	37,715	38,748	44,000	50,000
HOLIDAY TOURISTS									7,649	8,646	10,804	13,127	11,035	9,240	11,000
TRANSPORT															
RAILWAYS															
PASSENGERS (MN PASSENGER KM)							342.2	337.6	245.8	234.8	195.4	211.8	117.6	69.0	
GOODS (MN TON KM)							67.0	72.5	79.0	59.2	70.7	77.2	82.8	90.4	
ROAD															
PRIVATE VEHICLES (#)							27,874	25,204	27,154	27,733	29,393	31,307	32,913	34,938	
PUBLIC VEHICLES (#)								2,109	2,304	2,120					
AIR: UGANDA AIRLINES															
PASSENGERS (MN PASSENGER KM)								143	172	79	180	194	130		
FREIGHT (MN TON KM)								25	16	18	24	21	16		
ENTEBBE TOTAL PASSENGERS		345,000										135,000			
ENTEBBE TRANSIT PASSENGERS		185,000										14,000			
COMMUNICATION															
TELEPHONE EXCHANGE CONNECTIONS					20,628							27,852			
ENERGY															
TOTAL ELECT'Y GENERATED (MN GWh)					634.3	516.3	559.8	515.5	614.4	626.5	637.2	611.2	567.4	660.9	
ELECTRICITY SALES TO KENYA, MN KWh								217.7	216.1	215.0	231.6	176.2	110.0		
ENERGY PRODUCTION (MN TOE)													2.9		
ENERGY IMPORTS (MN TOE)													0.1		
ENERGY EXPORTS (MN TOE)													0.1		

As the figures show, the tourism sector actually contributed to the balance of payments problem, since Ugandans travelling overseas spent more than foreigners visiting Uganda. It is only in 1990, which is a projection, that the balance turns positive.

The contribution of the tourism sector as a percentage of the national economy has also dropped precipitously. While tourism contributed $20 million in current U.S. dollars in 1971, the projected contribution in 1990 is only $9.9 million, around 4.5% of the total export value.

The factors that contributed primarily to the decline of the tourism sector since the 1960s include:

- Negative image and press: The civil strife and the different governments that came into power with the 1971 coup were primarily responsible for the negative image of Uganda to the international traveler; this image lingers today in the minds of most people.

- High incidence of AIDS: The high rate of HIV positive and AIDS cases cause potential tourists to be apprehensive of travel to Uganda. The latest government statistic reveals that on average 1 of every 8 adults is HIV-positive. (However, as information and education on AIDS transmission becomes more widespread, mis-perceptions and fears should be greatly reduced.)

- Expulsion of ethnic groups: The Amin government expelled various ethnic groups from Uganda in 1972. These groups played a very important role in the country's economy at that time, effectively controlling large sectors of the manufacturing, trading and service industries. This mass expulsion left the country without much of the critical skills and finance necessary for a dynamic private sector. The expulsion left gaps as well in terms of tourism infrastructure and services that are necessary to attract the international traveler. As an example, many of the hotels and lodges were subsequently closed down.

In more recent times, there have been some added constraints that have prevented the private sector from taking off. These constraints include:

- numerous rules and regulations that make it very

172

difficult to open up and operate businesses;

- the credit crunch, which has prevented private sector businesses, especially the smaller and medium-scale ones, from getting credit for their investments.

A 1990 World Bank study Uganda: Financial Sector Review has pointed out several deep-rooted problems in the financial sector that impinge on the tourism industry. These include:

- the low savings rate and the lack of depth in the financial system. The monetary savings rate, estimated at 2-4% in 1990, translates into a serious shortage of domestic financing available. The ratio of broad money (M2) outstanding to GDP, a measure of financial depth, stood at 6.8% in FY89, well below even the average for sub-Saharan Africa, which was 22.3% over the same period.

- the state of distress in the local commercial banking sector. The two largest domestic banks have been classified as technically insolvent.

In a survey by the World Bank of 30 private sector firms, most of which were small-scale and locally owned, 27% identified working capital as the primary constraint, 30% foreign exchange, 37% insufficient collateral. These firms relied primarily upon their own funds for financial requirements, thus inhibiting the rate of investment even in financially viable enterprises. Of interest, the smaller firms were most vocal in their complaints about the lack of credit from banks and other credit institutions.

For the tourism sector to take-off and become a productive sector of the economy, several priorities must be pursued:

- any remaining security problem should be removed;

- the government should start a concerted long-term campaign to improve Uganda's image. This could involve participation by Ugandan mission overseas, invitation to international tour operators, inclusion of Uganda as a tour destination by adventure tour operators;

- tourist facilities must be rehabilitated. Tourists were quick to point out the dearth of good tourist services, especially outside Kampala. Hotels, lodges, roads, airports, airport terminals should be rehabilitated and properly maintained;

- the tourism sector should be privatized to the maximum extent possible. Much-needed credit should be made available to the tourism industry. Private sector investment, both local and foreign, should be encouraged and the process facilitated. It is only through private sector efforts that tourism will take off in the long-run;

- a good training school for tour operators, nature guides, hotel service personnel is urgently needed. The service standard in Uganda is nowhere near the standards that an international tourist has come to expect.

The relative political stability since 1986, a better understanding of AIDS, and the initiation of the process to return appropriated businesses to their former owners has contributed to a better image of Uganda in terms of both tourism and business. It is necessary to instil confidence among both tourists and investors in the tourist industry. Despite the constraints discussed above, Uganda's rich tourism resource, biodiversity, and existing infrastructure (to be rehabilitated) facilitates the comeback of tourism as a source of foreign exchange, employment, income, and tourism-based industries.

The Ministry of Tourism, Wildlife and Antiquities projects a figure of over 114,000 tourists annually by 1995, generating over $100 million in foreign exchange revenues to the country. This would place tourism as the second largest source of foreign exchange, after coffee exports (which stood at $262.8 million as of 1989). Although the projected volume growth rates of 18% per annum as well as the average spending per tourist (an unexplainable jump of 139% between 1992 and 1993) seems extremely high by international as well as East African standards, even a more realistic growth of around 10% per annum would place tourism as a major industry and a viable source of foreign exchange earnings for the country.

III. MACROECONOMIC PERFORMANCE UPDATE

Over the years, Uganda's economic situation has closely followed the country's political fortunes. Table E.5. demonstrates the country's economic status over time. Upon independence in 1962, Uganda was widely regarded as the crown jewel of the colonial legacy; the education system was superior to that of other African countries, the transportation system was fairly extensive and functioning, the country was self-sufficient in food production and a net exporter of agriculture products.

The resurgent rebel movement and the 1971 coup set forth the economic decline of the country. As an indication of Uganda's economic fortune, real GDP in the 1970s declined by 20%. Moves to stabilize the economy were undertaken by the Obote government in the early 1980s; these attempts, however, proved unsuccessful primarily due to the onset of civil war. Between 1983 and early 1986 when Museveni was sworn in as President, the country suffered from weak management, both political and economic.

Since President Museveni took over as President in 1986, serious attempts have been made to put Uganda on a sound economic footing. IMF, which had broken off relations with the previous Obote regime, is once again closely involved in setting up the economic policy infrastructure. The World Bank has initiated a number of programs, including the ongoing Structural Adjustment Credit facility, to provide the necessary base for further development.

In May 1987, the GOU announced an Economic Reform Program (ERP) to stabilize the economy. The Ugandan shilling was devalued by 77%; a new currency was introduced (the New Ugandan Shilling); a 30% conversion tax was established on all currency conversions; producer prices for cotton, coffee, tobacco were increased; civil service salaries were also increased. Shortly after the ERP was announced, the Government in June 1987 signed a SDR 46.8 million structural adjustment facility (SAF) agreement with the IMF.

The Economic Reform Program has continued in earnest with the Government announcing new economic measures in July 1988, December 1988, and March 1989. The GOU began implementation of the 1988/89 program in July 1988 with a 60% devaluation of the Ugandan shilling; adjustments to producer prices and administered retail prices; a 10% increase in interest rates; and a reformed budget that sought to increase revenues while containing government expenditures.

TABLE E.5.
UGANDA ECONOMY: MACROECONOMIC INDICATORS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
DOMESTIC ECONOMY										
GDP (US $ Mil)				5900					4842	
Real Growth in GDP (%)	-3.4%	-3.9%	8.2%	4.3%	-5.4%	-1.1%	0.3%	6.4%	7.2%	6.6%
INFLATION RATE %		22.0%	32.0%	183.0%	182.0%	161.0%	191.0%	189.0%	106.0%	54.0%
CPI MIDDLE INCOME CHANGE %					40.5%	125.2%	181.5%	238.1%	183.7%	
CPI LOW INCOME CHANGE %					41.30%	167.30%	150.20%	198.20%	193.10%	
OFFICIAL EXCHANGE (1US$)				1.54	3.60	6.72	14.00	42.84	106.14	267.50
POPULATION (mil)	12.6			13.9	14.3	15.7		15.9	16	16.4
BALANCE OF PAYMENTS ($MM)										
MERCHANDISE EXPORTS,fob			347.1	367.7	407.9	379.0	407.5	333.7	272.9	251.6
MERCHANDISE IMPORTS,cif			-422.0	-428.1	-342.2	-264.0	-476.1	-634.5	-627.4	-669.1
BALANCE			-74.9	-60.4	65.7	115.0	-68.6	-300.8	-354.5	-407.5
SERVICES (net)			-102.3	-115.4	-44.0	-98.9	-133.2	-113.6	-126.9	-131.6
UNREQUITED TRANSFER,net			107.3	103.5	85.4	61.0	208.7	244.6	287.3	332.0
CURRENT ACCOUNT BALANCE			-69.9	-72.3	107.1	77.1	6.9	-169.8	-194.1	-207.1
OFFICIAL INFLOWS			96.8	163.7	120.8	85.6	104.4	239.7	239.1	390.5
OFFICIAL OUTFLOWS			-70.6	-139.8	-88.7	-71.0	-39.8	-104.4	-60.1	-152.7
SHORT-TERM CAPITAL, net			-11.6	3.8	-120.4	-42.0	11.3	7.0	-124.3	5.6
CAPITAL ACCOUNT BALANCE			14.6	27.7	-88.3	-27.4	75.9	142.3	54.7	243.4
CHANGE IN ARREARS			22.4	8.3	-77.3	17.3	44.3	19.1	142.0	-41.5
OVERALL BALANCE			-32.9	-36.3	-58.5	67.0	127.1	-8.4	2.6	-5.2
INTERNATIONAL LIQUIDITY ($MM)										
FOREIGN EXCHANGE				101.9	64.3	23.4	24.9	54.6	49.3	
TOTAL RESERVES EXCL GOLD				106.5	68.0	27.3	29.2	54.6	49.3	14.1

SOURCES: Ministry of Planning and Economic Development, Ministry of Finance, Bank of Uganda, USAID/Kampala, US Commerce Department, IMF, World Bank, International Coffee Organization, Business International, Background to the Budget, Forest Department, Lockwood Consultants, UNDP, WTO

TABLE E.5.
MACROECONOMIC INDICATORS

	UNIT	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
GROWTH							
REAL GDP	ANNUAL CHANGE (%)	-3.3%	1.2%	3.3%	6.6%	6.9%	6.3%
PRICES							
CHANGE IN CONSUMER PRICES	ANNUAL AVERAGE	105.6	120.3	258.2	189.7	141.1	57.5
CHANGE IN CONSUMER PRICES	END OF PERIOD	156.5	153.1	233.2	243.1	86.2	28.7
MONETARY							
BROAD MONEY	ANNUAL CHANGE (%)	139.5	148.4	90.3	211.9	124.3	49.6
NET DOMESTIC CREDIT	ANNUAL CHANGE (%)	129.4	76.4	138.4	195.4	182.7	8.1
NET CREDIT TO GOVERNMENT	ANNUAL CHANGE (%)	131.0	58.8	166.2	190.9	121.4	-67.1
NET CREDIT TO PRIVATE SECTOR	ANNUAL CHANGE (%)	127.9	93.9	115.8	199.9	242.1	55.3
FISCAL							
BUDGETARY REVENUES	% OF GDPmp	9.9	7.4	5	7.1	5.6	5.9
(OF WHICH COFFEE)	% OF GDPmp	5.8	4.9	1.7	1.6	0.6	0.9
BUDGETARY EXPENDITURES	% OF GDPmp	14.7	12.2	9.4	12	10.1	11.6
BUDGET DEFICIT (EXCL GRANTS)	% OF GDPmp	-4.7	-4.9	-4.4	-4.9	-4.5	-5.7
INCENTIVE INDICATORS							
NOMINAL EXCHANGE RATE (AVERAGE)	U Sh/US $	5.1	10.9	19.8	60	170.4	319.5
RATIO OF OFFICIAL TO PARALLEL MARKET EXCHANGE RATES	PERIOD AVERAGE %	55.4%	39.2%	19.4%	25.2%	36.2%	48.8%
NOMINAL INTEREST RATES: DEPOSIT	%	22.0%	35.0%	22.0%	32.0%	37.0%	33.0%
NOMINAL INTEREST RATES: LENDING	%	25.0%	40.0%	30.0%	40.0%	50.0%	45.0%
EXTERNAL TRADE							
VOLUME OF COFFEE EXPORTS	MN OF 60KG BAGS	2.128	2.552	2.245	2.569	2.702	2.7
UNIT VALUE OF COFFEE EXPORTS	US$/KG	2.57	2.59	2.44	1.85	1.74	1.03
ANNUAL CHANGE	%	42.8%	0.8%	-5.8%	-24.2%	-5.9%	-40.8%
TERMS OF TRADE INDEX	1987/88 = 100	173	148.7	127.7	100	79.9	46.2
ANNUAL CHANGE	%	1.5%	-14.0%	-14.1%	-21.7%	-20.1%	-42.2%

SOURCE: World Bank, 1991

TABLE E.6.: EXTERNAL FINANCING REQUIREMENTS AND RESOURCES
(U.S.$MILLIONS)

	1989/90	1990/91	1991/92	1992/93
I. REQUIREMENTS				
IMPORTS	706	717	776	819
SCHEDULED DEBT SERVICE	195	187	158	141
SETTLEMENT, EXTERNAL ARREARS	19	0	20	20
RESERVES BUILD-UP	-11	12	12	12
OTHER ITEMS	-12	0	10	9
SUBTOTAL	897	916	976	1001
II. RESOURCES				
EXPORTS	222	201	268	328
PRIVATE TRANSFERS	99	106	115	124
IMF PURCHASES	42	71	66	0
SHORT TERM, NET	11	19	18	17
OTHER ITEMS, NET	4	2	0	0
SUBTOTAL	378	399	467	469
III.FINANCING GAP (II - I)	-519	-517	-509	-532
DEBT RESCHEDULING/CANCELLATION	43	30	32	33
PROJECT AID (COMMITMENTS)	238	210	143	95
IMPORT SUPPORT (COMMITMENTS)	239	85	20	0
	520	325	195	128
IV. RESIDUAL FINANCING GAP	1	-192	-314	-404

SOURCE: World Bank, 1991

In December 1988, further measures were announced, including: a 9.1% devaluation of the Ugandan shilling; increased duty on petroleum products; increase in foreign exchange availability through the Special Import Program (SIP).

The 1988 economic measures were intended to produce three results: (i) bring about internal stability and lower the inflation rate; (ii) reduce the imbalances in the external accounts; (iii) promote economic rehabilitation and growth. The results of the program were mixed:

- Inflation continued at a high pace: the middle income CPI in 1987 showed a 238.1% increase over the previous year; in 1988 the increase was 183.7%. Similarly, the 1987 CPI low income index showed a 198.2% increase over 1986; in 1988 the increase was 192.1%.

- Both the trade balance and the current account balance showed sharp deterioration in 1987 and 1988. At the end of 1987, the arrears increased by $19.1 million; this was further increased by $142.1 million towards the end of 1988.

- On the other hand, the program had real effects on economic rehabilitation and growth. Real GDP grew at 7.6% during 1987/88, according to World Bank estimates. Internal security and transportation system improved considerably. Foreign exchange was much more available, and production increased.

The mixed results can be attributed to both exogenous and endogenous factors. Sliding international coffee prices seriously affected an economy that was overwhelmingly dependent upon coffee exports for trade and foreign exchange. The pace of release of funds by donors was slower than anticipated. Internally, the Government showed reluctance in monitoring and containing the economy. In some instances, the Government did not take timely measures even when the situation could have been brought under control: real interest rates turned negative with the increase in inflation, money supply grew by 230% against a target of 40%, real effective exchange rates appreciated by 217%, crop financing requirements more than tripled.

In spite of GOU monetary policy reform measures, however, inflation continued to be a nagging problem, as indicated above. Primarily to contain inflation, and to continue the programs implemented in 1988, the Government announced in March 1989 several more measures, including: (i) a 17.5% devaluation of the Ugandan

shilling (ii) extension of the 100% export retention scheme to include all non-coffee exports (iii) increase in the maximum commercial banking rate from 40% to 50% (iv) a 5% increase in the minimum commercial bank deposit rates (v) increases in the duties and pump prices of petroleum products. The IMF showed its support of Uganda's recovery program by replacing the SAF in April 1989 with an extended SAF (ESAF) worth SDR 179 million.

The government continues to show a strong resolve in getting a firm grip on the country's economy and guiding it toward stable growth. In 1989, for example, the GDP grew at a 6.6% rate, with per capita GDP increasing at 3.6%. The government repaid all its outstanding debt to the Bank of Uganda. In October 1989, the GOU devalued the currency by 41% to restore the real effective rate; subsequently, monthly devaluations were made to retain the real effective rate. Agriculture continues to fuel the growth of the national economy: in 1988 and 1989, food crops (monetized portion) grew by 11.8% and 10.2%. In the industrial sector, growth in value added was 18.5% in 1989; in March 1990, the industrial production index was near its historical high, some 57% greater than the average production for 1987. However, inflation, although controlled from its previous levels, remained at a high rate of 86% by year-end against a target of 55%. The July 1989 collapse of the International Coffee Agreement (ICA) put further downward pressure on international coffee prices.

The available data for 1990 indicates mixed results for the economy. The increase in the industrial production index for 1990 was 6.3%. However, the Ugandan economy's dependence upon coffee is a source of great concern as international coffee prices have been falling ever since they peaked in 1986, and the future of prices remains highly uncertain. The value of coffee exports was significantly less in 1990 in comparison with even 1989; since the economy has traditionally relied upon coffee exports for over 95% of foreign exchange earnings, this trend necessitates immediate action to diversify the sources of foreign exchange. The recent Gulf Crisis and the increase in fuel prices during the latter half of 1990 have worsened the balance of payments situation. While the future of oil prices is uncertain (oil analysts differ sharply over the future trends in prices), it is safe to assume that foreign exchange requirements for oil will remain high and may well increase. The government has achieved considerable success in controlling domestic inflation, which had been brought down to 25.1% by December 1990; in comparison, inflation for December 1989 and December 1988 was running at 67% and 160%, respectively. Thus, while the Government of Uganda continues to enjoy considerable success in managing the domestic economy, unfavorable external factors beyond the control of the GOU have placed severe burdens on the national economy.

Balance of Payments and External Financing Requirements

The economy is almost totally reliant on coffee exports for its foreign exchange needs. The prices of coffee has been on the wane in international markets for some years now; the collapse of the International Coffee Organization (ICO) in July 1989 seems to confirm the belief that coffee prices will remain low for at least the short-term. Despite Uganda's increased production of coffee during the last several years, total revenues continues to decrease. Merchandise balance of payments has, thus, suffered considerable damage. The twin trends of declining international prices for coffee and increasing fuel prices (especially during the second half of 1990) have put a severe burden on the economy. Despite positive net transfers, the negative balance of merchandise and services has resulted in negative current account balances.

The GOU has continued to make regular exchange rate adjustments and other policy/ regulatory measures to increase the competitiveness of the country's exporters and to improve the incentive structure. Between May 1987 to November 1990, the Ugandan shilling has been devalued from USh 14 to the U.S. dollar to USh 510. In foreign currency terms, this amounts to a nominal depreciation of 97% and a real effective depreciation of over 40%. At the end of May 1991, the Shilling had been further devalued against the U.S. dollar to 630. These adjustments have narrowed the ratio between the official exchange rate to the parallel market rates from 10% in May 1987 to 70% in November 1990 to 72% in May 1991. The government is firm in achieving a unified market-clearing exchange rate by the end of 1991. To enhance the incentive structure, the GOU has granted a 100% export retention scheme to all non-traditional exporters and, later, to all exports except coffee. In July 1990, the parallel foreign exchange market was legalized.

Foreign exchange reserves continues to be negatively impacted due to the shortfall in coffee revenues. This has prevented the import of even essential items, like spare parts for machinery or capital equipment. In order to encourage the far-reaching economic steps already taken by the GOU, donors have stepped in with assistance programs (like USAID's Rehabilitation of Productive Enterprises project) to enable the import of essential machinery and inputs.

Both total external debt and public debt continue to worsen, creating a crisis in confidence from the domestic and international private sector. The debt service ratio as a percentage of exports was around 59% in 1987, and was estimated at 65% in 1988. ("Foreign Economic Trends....", American Embassy Kampala) The Ministry of Finance statistics show the debt service ratio as a percentage of

exports increasing sharply for 1989/90 and 1990/91 to 88% and 93% respectively. The Ministry's projections for 1991/92 and 1992/93 finally show a decreasing trend to 59% and 43% respectively.

Having only recently emerged from the rehabilitation stage, the financial requirements of the government remain large. The government's macroeconomic objectives over the next three years, from FY90/91 to FY 92/93, is to achieve a 5% real growth rate in the GDP and to reduce the rate of inflation from 29% as of FY 89/90 to below 10% by FY 92/93. Taking the goal of a 5% real growth in GDP, the World Bank calculates the government's financial requirements for FY 90/91 at US$870 million and for FY92/93 at more than $1 billion. For more detailed figures, please refer to Table E.6. This table also gives the large financing gap for the country as well as the residual financing gap, after taking into account all debt rescheduling/ cancellations, committed project aid and import support. The residual financing gap for 1990/91, 1991/92, 1992/93 is US$192 million, $315 million, $404 million respectively. It is apparent that the government, faced with such large financing deficits, will be unable to adequately fund even some critical programs and projects.

Government of Uganda Budgets

As Table E.7. shows, the GOU has been running a budget deficit for some years now. The rehabilitation efforts have put a severe drain on the country's revenue base. International conditions, including sliding coffee prices and increasing fuel prices, have worsened the fiscal situation. For example, the 1988/89 shortfall between revenue and expenditure was 31.5 billion New Uganda Shillings; this shortfall had increased to 58.5 billion New Uganda Shillings in 1989/90. In the GOU budget for 1990/91, the projections for expenditure were 320.18 billion shillings and revenue 206.97 billion shillings, giving a deficit of 113.21 billion shillings.

Despite all the GOU's good intentions, various pressing constraints have meant that the natural resources sector has not received the level of attention in terms of financial resources. Thus, in the 1989/90 budget, the Ministry of Environment accounted for only 0.30% of the recurrent expenditure by ministry; the ministries of Tourism & Wildlife, Agriculture, Animal Industry accounted for 0.24%, 1.13%, 0.84% respectively. Similarly, the Ministries of Environment, Tourism & Wildlife, Agriculture, Animal Industry accounted for 0.23%, 0.10%, 2.90%, 0.52% respectively of the 1989/90 development budget by ministry. (See Table E.7.)

Table E.7.
GOU BUDGET

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
	(million of New Uganda Shillings)								
Total Revenue	400	500	900	1,700	3,200	5,800	27,900	56,700	111,000
Total Expenditure	1,200	500	6,800	2,100	4,800	10,300	43,300	88,200	169,000
Surplus (Deficit)	(800)	0	(5,900)	(400)	(1,600)	(4,500)	(15,400)	(31,500)	(58,000)
GOU Recurrent Revenue		522	903	1,621	2,844	5,005	22,262	49,719	86,459
GOU Recurrent Expenditure			603	1,771	4,133	8,027	27,204	58,351	105,523
Surplus (Deficit)			300	(150)	(1,290)	(3,022)	(4,942)	(8,632)	(19,064)
	(percentage of recurrent expenditure by Ministry)								
Ministry of Environment			1.29%	0.69%	2.31%	0.10%	0.35%	0.58%	0.30%
Ministry of Tourism & Wildlife			0.28%	0.19%	0.12%	0.38%	0.21%	0.30%	0.24%
Ministry of Agriculture			2.25%	1.69%	0.96%	2.10%	1.63%	1.65%	1.13%
Ministry of Animal Industry			1.18%	1.31%	0.87%	1.64%	0.95%	1.23%	0.84%
	(percentage of development budget by Ministry)								
Ministry of Environment			-	-	-	0.42%	0.13%	0.61%	0.23%
Ministry of Tourism & Wildlife			0.72%	0.39%	0.16%	0.40%	0.05%	0.20%	0.10%
Ministry of Agriculture			2.35%	2.40%	9.74%	7.45%	1.61%	3.33%	2.90%
Ministry of Animal Industry			3.77%	5.82%	5.49%	4.04%	3.55%	5.00%	0.52%

The Ministry of Finance, in their most recent projections for the fiscal year 1990/91, calculated the budget deficit for the period January-June 1991 at U.S. $55 million. The most recent World Bank estimates show that while Uganda's anticipated foreign exchange revenues for the 1990/91 fiscal year are around $399 million, the actual requirements amounts to $916 million. Even after accounting for the debt rescheduling and cancellations, committed project aid and import support, the residual financing gap remains at a large $325 million. Table E.2. gives the external financing requirements and resources for several fiscal years. It is apparent that, faced with such huge deficits in financing requirements, the government will be unable to carry out many of its programs.

REFERENCES

Bank of Uganda. Quarterly Economic Report. Volume 2, 1990. 61 pp. (excl. Appendices)

Business International. Uganda: Country Profile 1989-90. 33pp.

Hamilton, A.C. Deforestation In Uganda. Oxford University Press, 1988. 92 pp.

International Resources Group. "Uganda Natural Resources Action Program". August 1989. USAID Project No. AFR-0467-C-00-8054-00. 72pp.

International Union for Conservation of Nature (IUCN). "Proposal For A National Conservation Strategy For Uganda". July 1983. 22 pp.

Land Tenure Center. "Settlement in Forest Reserves, Game Reserves and National Parks in Uganda". July 1989. 64 pp.

Kramer, John Michael, et al. "Uganda Natural Resources Action Plan". August 1989. 75 pp.

Makerere Institute of Social Research. Land Tenure and Agricultural Development in Uganda. Jan 1989. 210 pp.

Makerere Institute of Social Research. A Study of Social, Economic and Tenure Factors Affecting Land Use and Deforestation. November 1988. 87 pp.

Ministry of Planning and Economic Development. Background to the Budget, 1990-1991. July 1990. 212 pp.

Ministry of Tourism and Wildlife. A Perspective Plan for Uganda Tourism Development. September 1990.
Struhsaker, Thomas T. "Forestry Issues and Conservation in Uganda" in Biological Conservation 39 (1987) 209--234.

United Nations Development Programme (UNDP). Uganda: Development Cooperation. July 1988. 26 pp (excl tables).

United Nations Environment Programme (UNEP). "Uganda Natural Resources Datasets: A Preliminary Review". December 1986. 73 pp.

United Nations Environment Programme. Strategic Resources Planning in Uganda: Forests. 92 pp.

World Bank internal documents.

ANNEX II D

ECONOMIC AND FINANCIAL FEASIBILITY

A. INTRODUCTION

The Uganda Action Program for the Environment (APE) complements USAID/Kampala's efforts in the natural resources area in three principal ways:

- strengthen Uganda's legal, policy, institutional system that is necessary for effective and sustainable use of its natural resource base;
- reverse the degradation of the natural resource base in order to increase rural incomes for the target population;
- protect the country's rich biodiversity.

APE includes both a program and a project component. Under the program component, USAID will be the lead donor in the development of the National Environmental Action Plan (NEAP). Considering the enormous financial pressures being felt by Government of Uganda (GOU), USAID will channel program funds to the government to carry out the NEAP. The program component has a three-year life.

The state of natural resource degradation in parts of the country and the threat to biodiversity mandates immediate action. Thus, APE's project component will reverse the natural resource degradation in the target areas in order to increase rural incomes for the target population. This will be accomplished through sub-grants for a diverse set of natural resources activities; an umbrella organization will manage these sub-grants.

A.1. The Basic Economic Premise

This analysis is based upon some fundamental economic premises:

- that effective legal, policy, institutional systems are a <u>necessary</u> condition for economic development;
- that investments in the natural resources sector will have to <u>take the long-term view</u>, if they are to be financially viable;
- that natural resource interventions need to be <u>financially attractive</u> to the target population for the activities to be successful;
- that environmental sustainability is interdependent with economic sustainability;
- that, in the case of Uganda, sustainability has to

187

exist at three levels -- government budget operations, macro benefits, micro benefits to the resource managers -- for the program to be successful.

A.2. Objectives and Limitations of the Analysis

The objective of our analysis is twofold:

- o to demonstrate the linkages between natural resources management and economic development;
- o to analyze sustainability at three levels: country operational budget, macroeconomic benefits, micro benefits to the resource managers.

At the outset, we need to point out some of the constraints that appear throughout the analyses:

i. Uganda lacks much of the baseline data necessary to do a rigorous economic/financial analysis. This is a constraint not only for our analysis but also for developing policies and strategies at the national level in the natural resources sector; developing this database will be one of the key NEAP activities.

ii. Due to the various non-monetary costs and benefits involved, the traditional economic analyses are not possible. Issues such as biodiversity pose an additional dilemma: while we try to save animal and plant species for the unknown (or non-economic) values they possess for the future, we need to calculate their (unknown) value now in order to show that the investment is economically or financially viable. One of the aspects of biodiversity that could be quantified is the effect upon tourism revenues.

iii. The relation between cause and effect is difficult to establish. Developing and implementing a rational economic policy for a country's natural resources may be <u>the</u> impetus necessary for economic growth, but it is not easy to prove that one results from the other. This is true for project assistance as well, although the connection is not as loose.

B. ECONOMIC ISSUES FOR SUSTAINABILITY OF NATURAL RESOURCES

Sustainability can be analyzed at three levels and must exist at all three levels for the viability of this program:

a. national and departmental budget resources
b. macro benefits and costs
c. micro benefits and costs to potential resource managers

B.1. Sustainable National and Departmental Budget Resources

Finite resources require prioritization of spending areas. In most developing countries, the infrastructure, health, population, education, defence sectors all command immediate attention. This tendency is bolstered by the usually vocal urban population, resulting in the phenomenon of urban bias. Agriculture, despite contributing the major share to GDP, government finance, trade, and other economic indicators, frequently is overlooked.

In Uganda's case, the long wars and civil strife have exacerbated the situation; consequently, the country is only now about to get beyond the rehabilitation stage. The continuing civil disturbances in some areas of the country and external border conflicts with Kenya and Rwanda has made further dents in the national budget.

The Ministry of Energy, Minerals and Environment Protection and its Forest Department are severely hampered by the lack of resources to deal with the large problem of resource degradation. As detailed in prior sections, the problems of deforestation, soil conservation, loss of biodiversity have not even begun to be solved. As an indication of the state of institutional capacity, Uganda lacks many of the vital data that is needed to even make a preliminary assessment of the scope of the problem, let alone formulate informed strategies to control and reverse the degradation.

Uganda's public resource constraint has been severely affected both by the shortfalls in revenue from coffee exports and increased obligations on its debt and rehabilitation measures. Total external debt climbed from $1.0 billion in 1982 to $1.7 billion in 1987, a 66% increase. Foreign debt was lower at the end of 1989 at $1.2 billion, and arrears on the payment of interest and principal decreased from $255 million in 1988 to $214 million in 1989; however, the lower figures were due to rescheduling of the loan payments. Revenue has been falling due to sliding international coffee prices, and coffee has consistently provided anywhere from

90% to 96% of Uganda's annual foreign exchange. The country's foreign exchange reserves (excluding gold) consequently decreased from $106.5 million in 1983 to $14.1 million in 1989; which amounts to only eight days of imports.

It is apparent that Uganda cannot allocate the level of expenditures needed to combat natural resources degradation and to conserve biodiversity. Donor assistance will have to include substantial funds for institutional expenditures, including salary and wages, vehicles, number of personnel, training, and so forth. This is a strong argument favoring program assistance, as opposed to project assistance, since with program assistance there is the flexibility of allocating funds to pay for salary and wages.

B.1.1. Current GOU Budgets

As Table E.7. shows, the GOU has been running a budget deficit for some years now. The rehabilitation efforts have put a severe drain on the country's revenue base. International conditions, including sliding coffee prices and increasing fuel prices, have worsened the fiscal situation. For example, the 1988/89 shortfall between revenue and expenditure was 31.5 billion New Uganda Shillings; this shortfall had increased to 58.5 billion New Uganda Shillings in 1989/90. In the GOU budget for 1990/91, the projections for expenditure were 320.18 billion shillings and revenue 206.97 billion shillings, giving a deficit of 113.21 billion shillings.

Despite all the GOU's good intentions, various pressing constraints have meant that the natural resources sector has not received the level of attention in terms of financial resources. Thus, in the 1989/90 budget, the Ministry of Environment accounted for only 0.30% of the recurrent expenditure by ministry; the ministries of Tourism & Wildlife, Agriculture, Animal Industry accounted for 0.24%, 1.13%, 0.84% respectively. Similarly, the Ministries of Environment, Tourism & Wildlife, Agriculture, Animal Industry accounted for 0.23%, 0.10%, 2.90%, 0.52% respectively of the 1989/90 development budget by ministry. (See Table E.7.)

B.1.2. Constraints on Budget

The decreasing revenue base and the increased foreign exchange obligations are the most pressing constraints on the budget. Since coffee has traditionally earned around 95% of the country's foreign exchange revenues, and international prices have been falling since the third quarter of 1986, the revenue base is under severe strain. The country urgently needs a more diversified export base. During

Table E.7.
GOU BUDGET

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
(million of New Uganda Shillings)									
Total Revenue	400	500	900	1,700	3,200	5,800	27,900	56,700	111,000
Total Expenditure	1,200	500	6,800	2,100	4,800	10,300	43,300	88,200	169,000
Surplus (Deficit)	(800)	0	(5,900)	(400)	(1,600)	(4,500)	(15,400)	(31,500)	(58,000)
GOU Recurrent Revenue		522	903	1,621	2,844	5,005	22,262	49,719	86,459
GOU Recurrent Expenditure			603	1,771	4,133	8,027	27,204	58,351	105,523
Surplus (Deficit)			300	(150)	(1,290)	(3,022)	(4,942)	(8,632)	(19,064)
(percentage of recurrent expenditure by Ministry)									
Ministry of Environment		1.29%	0.69%	2.31%	0.10%	0.35%	0.58%	0.30%	
Ministry of Tourism & Wildlife		0.28%	0.19%	0.12%	0.38%	0.21%	0.30%	0.24%	
Ministry of Agriculture		2.25%	1.69%	0.96%	2.10%	1.63%	1.65%	1.13%	
Ministry of Animal Industry		1.18%	1.31%	0.87%	1.64%	0.95%	1.23%	0.84%	
(percentage of development budget by Ministry)									
Ministry of Environment		-	-	-	0.42%	0.13%	0.61%	0.23%	
Ministry of Tourism & Wildlife		0.72%	0.39%	0.16%	0.40%	0.05%	0.20%	0.10%	
Ministry of Agriculture		2.35%	2.40%	9.76%	7.45%	1.61%	3.33%	2.90%	
Ministry of Animal Industry			- 82%	5.49%	4.04%	3.55%	5.00%	0.52%	

1990, the reduction in capital inflows was the major cause of the decline in foreign exchange receipts; between the first and second quarters of 1990, for example, capital inflows declined by 71.2%.

The recent Gulf Crisis and the resultant increase in oil prices (during the second half of 1990) is likely to cause a further drain on foreign exchange payments.

The legacy of political instability in the country, although much of it brought under control now, continues to burden the national budget. Defence spending was the largest component (39%) of total recurrent expenditure, and the second largest (18%) of development expenditure. Reflecting the continued need for rehabilitation of infrastructure, the largest component (18%) of the development budget went to the Ministry of Works.

B.1.3. Potential Budget Needs

The Ministry of Finance, in their most recent projections for the fiscal year 1990/91, calculated the budget deficit for the period January-June 1991 at U.S. $55 million. The most recent World Bank estimates show that while Uganda's anticipated foreign exchange revenues for the 1990/91 fiscal year are around $399 million, the actual requirements amounts to $916 million. Even after accounting for the debt rescheduling and cancellations, committed project aid and import support, the residual financing gap remains at a large $325 million. Table E.2. gives the external financing requirements and resources for several fiscal years. It is apparent that, faced with such huge deficits in financing requirements, the government will be unable to carry out many of its programs.

B.1.4. Revenues and Potential Revenues

Below, we have listed some possible dedicated sources of revenue for the natural resources sector. The concerned government department needs to look at the resource base more closely, determine the utilization rate, and perform economic and financial analyses to arrive at the revenue maximizing figures. This issue will be looked at more closely during the NEAP; the NEAP process will come up with actual recommendations on utilization of the resource base and the rate of exploitation feasible for sustained economic growth.

a. Stumpage Fees. The Forest Department could be more financially viable if it rigorously collected the stumpage fees from tree harvesters.

b. Royalty and license charges. Commercial millers in Uganda disregard the forest resource base by using unsustainable practices. This is perpetuated by possibly the lowest royalty and license charges anywhere in the world. Increasing these charges will make it uneconomical to use outmoded and destructive practices.

c. Sale/export of timber.

d. Sale of fuelwood/charcoal.

e. Forest Products.
Food: fruits, honey, fodder
Medicines
Trees and Timber: housing, furniture, etc.
Fuelwood and charcoal
Processed products: plywood, matches, textiles, paper, pesticides, alcohol, animal feeds

f. Boat Licensing. Commercial fishing boats should be licensed for a fee. This will provide a source of revenue as well as a way to manage the fishery resources of the country.

g. Park Fees. Fees should be imposed on an "ability to pay" basis on tourists, researchers, film crews. As an example from neighboring Rwanda, the Parc National des Volcanes earns more than $200,000 a year through park entrance fees alone. (Weber & Vedder, 1984) The main attraction at the park is mountain gorillas; Uganda has more than 50% of the world's mountain gorilla population.

B.2. Sustainable Macro Benefits

Natural resources are usually disregarded in national income accounting. There is now some serious work underway involving natural resources accounting. The basic idea is that a lot of the GNP component depends upon land, regarded as one of the three (land, labor and capital) basic input factors in the economy. However, while labor and capital are closely tracked, little consideration is given to land. This implies that land is a limitless commodity that will be there for eternity, to be used as the country desires. This thinking is challenged by scientific evidence of resource degradation -- including deforestation, soil erosion, biodiversity loss -- that impinge on economic development. Thus, the current thesis goes, the benefits and costs of current resource use practices need to be taken into account. For example, soil erosion directly and permanently affects agricultural productivity; this soil loss needs to be factored into national income accounts as a loss. Taking this approach is deemed necessary if only to alter the thinking that a country's natural resources is a permanent legacy; factoring resource degradation into national income accounts will give a truer picture of the country's sustainable natural resources and will allow planners to make the best use of the resources.

The macro benefits to Uganda of natural resources management are obvious, although difficult to quantify. Agriculture contributes the vast majority of the country's GNP, its foreign exchange, and offers livelihood to over 90% of the population. The need to conserve such an important natural resource base in order to provide future benefits is obvious. While it is possible to quantify the loss to Uganda from deforestation and soil erosion, the lack of data in the case of Uganda makes the exercise difficult and questionable even if one were to attempt a quantification. We will possibly have to rely for now on experience of other countries and the obvious degradation of Uganda's natural resources to justify investments in the natural resources sector.

Since much of Uganda's agricultural production is smallholder subsistence farmer based, a traditional benefits cost approach for the country will be difficult. This is because much of the agriculture sector does not even enter the monetary sector, which would make it possible to accurately quantify it. This problem is compounded when we analyze biodiversity: the anomaly here is that we are trying to conserve biodiversity for the unknown value they may hold, but we need to put a value to the perceived future benefits in order to justify current investments.

194

B.2.1. Potential Benefits of Sustainable Natural Resources

Below, we briefly touch on some of the major benefits of interventions to sustain natural resources:

1. Halt and reverse the large losses due to deforestation and soil erosion.

The deforestation and soil erosion that have been going on represents a heavy economic loss to the country; a loss of these resources is comparable to borrowing from a bank to increase consumption, instead of generating more revenues than necessary to pay back principal with interest. As in the analogy, the country can only go so long with resource degradation without suffering irreparable damage to the economy.

2. Increased agricultural productivity due to better resources and practices.

Interventions to halt and reverse soil erosion and deforestation, as well as introducing better land use practices (e.g. agroforestry, watershed management) will result in maintaining the high quality of land prevalent in most parts of the country. The country's traditional strength in agriculture and its comparative advantage in international agricultural trade is only due to its underlying resource base; it is also only by maintaining the <u>quality</u> of this resource base that continued or higher agricultural productivity can be achieved.

3. Increased tourism revenues due to preservation of biodiversity.

Uganda's main attraction as a tourism destination is its rich biodiversity. In 1971, Uganda had 88,630 visitors, who contributed approx. $20 million to the national economy. This revenue flow virtually halted with the onset of a regime that was economically irresponsible. Since 1980, tourism has slowly increased, but is nowhere near the levels achieved even in the pre-1971 days. The number of tourists in 1982 numbered 10,000 and the country generated $2.5 million in revenues; this number climbed to 37,715 in 1987, but it is believed that nearly 90% are on business, and not holiday tourists. The number of visitors has continued to climb, with 44,000 and 50,000 visitors in 1989 and 1990, respectively. The potential of the tourism sector in Uganda is high, given the biodiversity and natural beauty of the country. As a comparison, Uganda at one time was earning more tourist dollars per capita than its neighbor Kenya. Even going back to the level of tourism in 1971 would contribute substantial revenues in current dollars to the national economy. The Ministry of Tourism and

Wildlife, for example, projects annual tourist arrivals at 100,000 by 1995, bringing in revenues of approximately $50 million.

4. Increased use of forest products to generate revenues.

If managed well, Uganda's forests can be an important source of revenues to the national economy. The potential sources of revenues has already been identified under Section B.1.4.

B.2.2. ECONOMIC FEASIBILITY

1. Costs/Benefits of Conversion of Forest Reserves to National Parks

a. Costs

a.1. Administrative

The very process of conversion of the forest reserves -- Bwindi, Mgahinga, and Rwenzori -- into national parks would need several managerial and support staff. Two managerial staff, one secretary, and one administrative aide have been budgeted to carry out this process.

With the conversion to national parks, the UNP would require additional park rangers and forest guards to supervise and protect the areas. Since these forest reserves already have the required personnel, the budget calls for only an additional park ranger and a forest guard in each of the parks.

To cater to the tourists, the parks require guides. However, Uganda has recently shown a strong commitment to privatization of her tourist industry and it would be a positive step to let the private sector perform this task. This would also result in the creation of stakeholder groups in the surrounding areas in favor of preservation. The UNP or the Uganda Tourism Association (UTA) would license the guides, in order to ensure that they have the required qualifications, experience, and sense of service.

For various administrative support and technical assistance to the ministries, departments and parastatals concerned with managing the country's natural resources, we have budgeted an amount of $4 million.

a.2. Infrastructural additions

To attract tourists into these parks, various infrastructural additions are required. In some cases, existing infrastructure

196

merely need to be rehabilitated, while in other cases completely new structures need to be set up. Such infrastructural requirements include:

- o park fencing;
- o tourist lodges;
- o roads, both within and to the parks;
- o interpretation centers;
- o various tourist infrastructure, including running water, waste dumps, possible provision of electricity;
- o quarters for the tourist service people.

Almost $200,000 per year has been budgeted for infrastructural additions in and around the parks.

In addition, the APE program will set up a tourism credit fund. This fund will be managed by the Bank of Uganda through its Development Finance Fund mechanism. The approximately $3.0 million fund will provide credit to small and medium-scale private businesses to fund tourism sector projects.

a.3. Dislocation of present settlers

Settlers have occupied and are involved in small-scale farming activities within some of the protected areas, namely Bwindi. Conversion of forest reserves into national parks would require more forceful efforts to relocate the settlers, who are there illegally. Although this would entail some cost, such action would be required whether these areas are forest reserves or national parks. Thus, we have decided to exclude this cost as one pertaining directly to the conversion of forest reserves to national parks.

a.4. Lost agriculture production from park-based farms

Evicting settlers from Bwindi would entail a cost to the national economy in terms of lost production. However, with a good resettlement program, we can presume that the settlers would resume farming activities somewhere outside the parks, and the lost agricultural production would be only transitory. We have calculated lost agricultural production due to relocation for a period of two years.

b. Benefits

b.1. Park entrance fees

Once the forest reserves are declared as national parks, the

UNP can charge park entrance fees to tourists. Here, we assume an annual tourist figure for Bwindi, Mgahinga and Rwenzori at 3240, 720, and 756 respectively. Conservative figures have been used to project increases in both number of tourists and the tourist revenues. (See Table E.8.)

b.2. Other tourist revenues

Tourists will bring in additional revenues in the form of sales of handicrafts, food, supplies, lodging revenues, employment generation. Taking current Ugandan prices into account, we simply assume that a tourist will spend per visit an average of 50% of total spending on various tourism enterprises.

b.3. Organizational savings

With the proposed consolidation of the Game Department and the UNP, quite a number of positions can be consolidated. This will result in a leaner and, hopefully, more efficient organization. One result will also be the savings in terms of staff salaries, rental and maintenance of buildings, office supplies.

b.4. Stumpage fees

An ongoing debate within forestry circles is whether to allow a modest tree clearing effort. This would result in revenues in the form of stumpage fees to the government, as well as needed raw material for the wood industry. Since this debate is not as yet resolved, we will not account for any such revenues.

b.5. Forest Products

We assume that minor forest products, such as medicinal herbs and firewood for the surrounding community, will continue to be taken from the parks, as is happening now. As such, there is no incremental benefit with the passage from forest reserves to national parks.

The assumptions and the cash flow analysis are provided in Tables E.8. and E.9. As the analysis shows, even using very conservative numbers for tourists and tourist revenues, and spending substantial amounts on administration and technical assistance, the benefits from the parks far outweigh the costs involved. The net present value is strongly positive, and the internal rate of return is high in comparison with investments in alternate sectors of the economy. Also, we have only accounted for a 10-year horizon, while the benefits from tourism would flow for a much longer time period.

TABLE E.8.: ASSUMPTIONS BEHIND FINANCIAL ANALYSIS

Lost agriculture output from resettlement is costed for only 2 years

# of Tourists to Bwindi/year: 3240 (STARTING YEAR 2)
(Doubles in Year 3, then need to stabilize due to carrying capacity)
# of Tourists to Mgahinga/year: 720
(Doubles in Year 2, then stabilizes)
# of Tourists to Ruenzori/year: 756
(Increase at 10% per year)
Tourists spend an average of $25/day on all expenses, except lodging
Tourist Revenues per Visit per Visitor for Bwindi: $75/visit and annual 5% increase
Tourist Revenues per Visit per Visitor for Mgahinga: $60/visit and annual 5% increase
Tourist Revenues per Visit per Visitor for Ruenzori: $97/visit and annual 20% increase
Tourists will spend an additional 50% per visit on various Tourism Enterprises
Organizational Savings from institutional reform will result in savings that increase after Year 2 at 10% per year

TABLE E.9.: COST/BENEFITS OF CONVERSION OF RESERVES TO PARKS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
I. COSTS										
ADMINISTRATIVE/TA	4,000,000									
INFRASTRUCTURE	172,000	172,000	172,000	172,000	172,000					
PARK FENCING										
TOURIST LODGES										
ROADS										
INTERPRETATION CENTERS										
WATER & SANITATION										
SERVICE PERSONNEL QUARTERS										
LOST AG PRODUCTION	30,000	35,000								
TOTAL COSTS	4,202,000	207,000	172,000	172,000	172,000	0	0	0	0	0
II. BENEFITS										
TOURIST REVENUES	116,547	430,539	733,356	854,540	942,815	1,050,079	1,297,730	1,467,376	1,679,027	1,945,510
VISITORS: BWINDI		3,240	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480
VISITORS: MGAHINGA	720	1,440	1,440	2,160	2,160	2,160	3,600	3,600	3,600	3,600
VISITORS: RWENZORI	756	831	914	1,006	1,106	1,217	1,339	1,473	1,620	1,782
FEES/VISIT: BWINDI		75	79	83	87	91	96	101	106	111
FEES/VISIT: MGAHINGA	60	63	66	69	73	77	80	84	89	93
FEES/VISIT: RWENZORI	97	116	140	168	201	242	290	348	417	501
TOURIST ENTERPRISE REVENUES	58,274	215,269	366,678	427,270	471,407	787,559	973,298	1,100,532	1,259,270	1,459,133
ORGANIZATIONAL SAVINGS	10,000	30,000	33,000	36,300	39,930	43,923	48,315	53,147	58,462	64,308
TOTAL BENEFITS	184,821	675,808	1,133,035	1,318,110	1,454,152	1,881,561	2,319,343	2,621,055	2,996,758	3,468,951
BENEFITS MINUS COSTS	(4,017,179)	468,808	961,035	1,146,110	1,282,152	1,881,561	2,319,343	2,621,055	2,996,758	3,468,951

NPV = (810% DISCOUNT RATE) 5,119,799

IRR = 29.88%

2. Costs and Benefits of natural resource interventions on an illustrative 2.5 hectare farm

Uganda is an agriculture based economy; most of the nation's farming is smallholder based: there are approximately 2.2 million smallholders on farms averaging 2.5 hectares.

Uganda: Accelerated Foodcrop Production Strategy points out that 80% of the monetary and non-monetary value of agriculture is based on foodcrops. Foodcrops account for 90% of the land under cultivation, while the rest is cash crops like coffee, cocoa, tea, tobacco, sugar. Also, smallholders (defined in the USAID study as 10 hectares or less) account for 90% of foodcrop output. Thus, when we analyze average farms of 2.5 hectares, they are mostly involved in growing foodcrops.

In order to get a sense of the economic implications of this project's natural resource interventions in the buffer zone areas, we have chosen to analyze a typical 2.5 hectare farm. We have collected (from secondary sources) data on crops produced, border prices, current yields, and projected yields from improved technology. With this data, we perform several sensitivity analyses, analyzing the value lost to the agriculture sector due to natural resources degradation. We calculate loss to the national economy, based upon a 10% annual degradation, a 0% or neutral scenario, and one in which successful interventions under this program are able to increase yields by 10%. Here, the major assumption is that a 10% improvement in the soil base, usage of techniques like agroforestry, and other simple techniques for enhancement of the quality of the land base will lead directly to a 10% increase in yield. We will also perform sensitivity analysis, assuming yield losses from current practices at 5% and yield increases brought about by program interventions at 5%.

Although the following analysis is a "quick and dirty" method to quantify the scope of economic loss due to natural resource degradation, its usefulness is in providing a distinct picture of the importance of sustainable natural resources as it impacts the national economy.

Because of information availability from various USAID agricultural studies, we have only looked at eight foodcrops: banana, cassava, sweet potatoes, maize, sorghum, millet, beans, and groundnuts. We have statistics for the present yields, border prices, and total hectares planted for each of the crops in 1988. Assuming that the present farming practices are leading to an annual yield loss of 10%, we come up with a total 10-year value of the eight foodcrops of U.S. $4.4 billion. If we were able to

stabilize the yield by controlling the natural resources degradation, the 10-year economic value would be increased by U.S. $2.55 billion. Assuming that our project is able to introduce appropriate technology and techniques for sustainable farming practices, thereby increasing yield by an annual factor of 10%, the 10-year economic value of the eight foodcrops would be increased by U.S. $7.19 billion.

Assuming a present rate of yield degradation at 5% annually, the sensitivity analysis shows that stabilizing the yield increases economic value by around U.S.$1.46 billion. Similarly, were the program to increase yields by 5% per annum, the economic value of the benefits would be U.S.$3.44 billion.

Obviously, the APE program's scale of benefits would be smaller, since our analysis takes the whole country's foodcrop production into account. However, even very conservative assumptions of the area impacted by the APE program gives very high level of economic benefits from the natural resources interventions. For example, even if the APE program, through its policy and project components, were able to impact only 10% of the total farming area in the country, the benefit from stabilizing yields from an assumed 5% annually decreasing yield base would be of the order of U.S.$146 million. This example is the most conservative of the scenarios we have analyzed.

Again, it is important to keep in mind the "quick and dirty" method of this economic analysis, necessitated by a lack of comprehensive data. However, the purpose of the analysis was to show the scale of benefits from natural resources interventions, which is amply demonstrated.

TABLE E.10.: CROPS, YIELDS, PRICES

CROPS	PRESENT TECHNOLOGY (KG/Ha)	IMPROVED TECHNOLOG (KG/Ha)	1990 BORDER PRICES USh/KG	1995 BORDER PRICES USh/KG	2000 BORDER PRICES USh/KG	AREA PLANTED '000 HA
1 BANANA	5,000	12,000	30	30	29	1,396
2 CASSAVA	8,800	18,000	15	15	16	361
3 SWEET POTATOES	4,000	8,500	30	29	28	417
4 MAIZE	1,500	2,800	116	110	124	393
5 SORGHUM	1,200	2,500	93	89	100	257
6 MILLET	1,000	1,650	96	92	103	372
7 BEANS	800	1,000	183	170	164	445
8 GROUNDNUTS	550	1,123	250	241	202	270
9 ROBUSTA COFFEE	1,200	2,500	140	221	261	
10 SEED COTTON	500	2,500	165	143	123	

SOURCE: Uganda: Accelerated Foodcrops Production Strategy

TABLE E.11.: SENSITIVITY ANALYSIS OF NR DEGRADATION ON ECONOMY

SCENARIO 1: 10% DECLINING YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MM
1 BANANA	5000	4500	4050	3645	3281	2952	2657	2391	2152	1937	1743	34309	30	1029	1396	1,436,881
2 CASSAVA	8800	7920	7128	6415	5774	5196	4677	4209	3788	3409	3068	60385	15	906	361	326,983
3 SWEET POTATOES	4000	3600	3240	2916	2624	2362	2126	1913	1722	1550	1395	27448	30	823	417	343,369
4 MAIZE	1500	1350	1215	1094	984	886	797	717	646	581	523	10293	116	1194	393	469,230
5 SORGHUM	1200	1080	972	875	787	709	638	574	517	465	418	8234	93	766	257	196,807
6 MILLET	1000	900	810	729	656	590	531	478	430	387	349	6862	96	659	372	245,052
7 BEANS	800	720	648	583	525	472	425	383	344	310	279	5490	183	1005	445	447,039
8 GROUNDNUTS	550	495	446	401	361	325	292	263	237	213	192	3774	250	944	270	254,748
9 ROBUSTA COFFEE	1200	1080	972	875	787	709	638	574	517	465	418	8234	140	1153		0
10 SEED COTTON	500	450	405	365	328	295	266	239	215	194	174	3431	165	566		0
														9044		3,720,109

SCENARIO 2: STABLE YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MM
1 BANANA	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	55000	30	1650	1396	2,303,400
2 CASSAVA	8800	8800	8800	8800	8800	8800	8800	8800	8800	8800	8800	96800	15	1452	361	524,172
3 SWEET POTATOES	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	44000	30	1320	417	550,440
4 MAIZE	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	16500	116	1914	393	752,202
5 SORGHUM	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	13200	93	1228	257	315,493
6 MILLET	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	11000	96	1056	372	392,832
7 BEANS	800	800	800	800	800	800	800	800	800	800	800	8800	183	1610	445	716,628
8 GROUNDNUTS	550	550	550	550	550	550	550	550	550	550	550	6050	250	1513	270	400,375
9 ROBUSTA COFFEE	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	13200	140	1848		0
10 SEED COTTON	500	500	500	500	500	500	500	500	500	500	500	5500	165	908		0
														14498		5,963,542

SCENARIO 3: 10% INCREASING YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MN
1 BANANA	5000	5500	6050	6655	7321	8053	8858	9744	10718	11790	12969	92656	30	2780	1396	3,880,426
2 CASSAVA	8800	9680	10648	11713	12884	14172	15590	17149	18864	20750	22825	163074	15	2446	361	883,047
3 SWEET POTATOES	4000	4400	4840	5324	5856	6442	7086	7795	8574	9432	10375	74125	30	2224	417	927,300
4 MAIZE	1500	1650	1815	1997	2196	2416	2657	2923	3215	3537	3891	27797	116	3224	393	1,267,198
5 SORGHUM	1200	1320	1452	1597	1757	1933	2126	2338	2572	2830	3112	22237	93	2068	257	531,496
6 MILLET	1000	1100	1210	1331	1464	1611	1772	1949	2144	2358	2594	18531	96	1779	372	661,785
7 BEANS	800	880	968	1065	1171	1288	1417	1559	1715	1886	2075	14825	183	2713	445	1,207,268
8 GROUNDNUTS	550	605	666	732	805	886	974	1072	1179	1297	1427	10192	250	2548	270	687,970
9 ROBUSTA COFFEE	1200	1320	1452	1597	1757	1933	2126	2338	2572	2830	3112	22237	140	3113		0
10 SEED COTTON	500	550	605	666	732	805	886	974	1072	1179	1297	9266	165	1529		0
														24424		10,046,491

	USh MILLION	US$
VALUE OF STABILIZING YIELD:	2,243,434	2,549,356,356
VALUE OF NR INTERVENTIONS:10% INCREASE YIELD	6,326,382	7,189,070,466

TABLE E.11.: SENSITIVITY ANALYSIS OF NR DEGRADATION ON ECONOMY

SCENARIO 4: 5% DECLINING YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MM
1 BANANA	5000	4750	4513	4287	4073	3869	3675	3492	3317	3151	2994	43120	30	1294	1396	1,805,865
2 CASSAVA	8800	8360	7942	7545	7168	6809	6469	6145	5838	5546	5269	75891	15	1138	361	410,951
3 SWEET POTATOES	4000	3800	3610	3430	3258	3095	2940	2793	2654	2521	2395	34496	30	1035	417	431,545
4 MAIZE	1500	1425	1354	1286	1222	1161	1103	1048	995	945	898	12936	116	1501	393	589,726
5 SORGHUM	1200	1140	1083	1029	977	929	882	838	796	756	718	10349	93	962	257	247,347
6 MILLET	1000	950	903	857	815	774	735	698	663	630	599	8624	96	828	372	307,980
7 BEANS	800	760	722	686	652	619	588	559	531	504	479	6899	183	1263	445	561,836
8 GROUNDNUTS	550	523	496	472	448	426	404	384	365	347	329	4743	250	1186	270	320,166
9 ROBUSTA COFFEE	1200	1140	1083	1029	977	929	882	838	796	756	718	10349	140	1449		0
10 SEED COTTON	500	475	451	429	407	387	368	349	332	315	299	4312	165	711		0
														11366		4,675,416

SCENARIO 5: STABLE YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MM
1 BANANA	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	55000	30	1650	1396	2,303,400
2 CASSAVA	8800	8800	8800	8800	8800	8800	8800	8800	8800	8800	8800	96800	15	1452	361	524,172
3 SWEET POTATOES	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	44000	30	1320	417	550,440
4 MAIZE	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	16500	116	1914	393	752,202
5 SORGHUM	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	13200	93	1228	257	315,493
6 MILLET	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	11000	96	1056	372	392,832
7 BEANS	800	800	800	800	800	800	800	800	800	800	800	8800	183	1610	445	716,628
8 GROUNDNUTS	550	550	550	550	550	550	550	550	550	550	550	6050	250	1513	270	408,375
9 ROBUSTA COFFEE	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	13200	140	1848		0
10 SEED COTTON	500	500	500	500	500	500	500	500	500	500	500	5500	165	908		0
														14498		5,963,542

ANNEX II.D.

TABLE OF CONTENTS

A. Introduction

The Basic Economic Premise
Objectives and Limitations of Analysis

B. Economic Issues for Sustainability

Sustainable National and Departmental Budget Resources
Sustainable Macro Benefits
Sustainable Micro Benefits

TABLES

Table E.7. GOU Budget
Table E.8. Assumptions behind Cost/Benefit Analysis
Table E.9. Costs/Benefits of Conversion of Reserves to Parks
Table E.10. Crops: Yields, Prices
Table E.11. Sensitivity Analyses of Effect of NR Degradation
Table E.12. National Information Center for the Environment (NICE) financial analysis
Table E.13. Rwenzori Mountaineering Service Proposal Cash Flow
Table E.14. Kibale Tourism Project Analysis

207

ANNEX II.D.

TABLE OF ACRONYMS

AID	Agency for International Development
AID/W	Agency for International Development/Washington
APE	Action Program for the Environment
AWF	African Wildlife Federation
BOU	Bank of Uganda
CPI	Consumer Price Index
DANIDA	Danish International Development Agency
DFF	Development Finance Fund (of Bank of Uganda)
DOF	Department of Forestry
EC	European Community
EEC	European Economic Commission
EIL	Experiment in International Living
ERP	Economic Recovery Program
ESAF	Extended Structural Adjustment Facility
FAO	Food and Agriculture Organization
FD	Forestry Department
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GNP	Gross National Product
GOU	Government of Uganda
IBRD	International Bank for Reconstruction and Development
ICA	International Coffee Agreement
ICI	Intermediate Credit Institution
ICO	International Coffee Organization
IEE	Initial Environmental Examination
ILO	International Labor Organization
IMF	International Monetary Fund
IRR	Internal Rate of Return
IUCN	International Union of Conservation and Nature
LTC	Land Tenure Center
MEMEP	Ministry of Energy, Minerals and Environment Protection
MTWA	Ministry of Tourism, Wildlife and Antiquities
NEAP	National Environmental Action Plan
NGO	Non-Government Organization
NORAD	Norwegian Agency for International Development
NPA	Non Project Assistance
NPV	Net Present Value
NRM	Natural Resources Management
NRMP	Natural Resources Management Plan
NUSh	New Ugandan Shilling

ODA	Overseas Development Administration
PAAD	Program Assistance Approval Document
PAIP	Program Assistance Identification Paper
PASA	Participating Agency Service Agreement
PID	Project Implementation Document
PP	Project Paper
PVO	Private Voluntary Organization
RMS	Rwenzori Mountaineering Services
RPE	Rehabilitation of Productive Enterprises project
SAC	Structural Adjustment Credit
SAF	Structural Adjustment Facility
SDR	Special Drawing Rights
SIDA	Swedish International Development Agency
SIP	Special Import Program
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNP	Uganda National Parks
UNRM	Uganda Natural Resources Management program
USAID	U.S. Agency for International Development
USh	Ugandan Shillings
USNPS	U.S. National Park Service
UTA	Uganda Tourism Association
WCI	Wildlife Conservation International
WCU	Wildlife Clubs of Uganda
WFP	World Food Programme
WRI	World Resources Institute
WWF	World Wide Fund for Nature

SCENARIO 6: 5% INCREASING YIELD

CROPS	PRESENT TECHNOLOG (KG/Ha)	1991 YIELD (KG/Ha)	1992 YIELD (KG/Ha)	1993 YIELD (KG/Ha)	1994 YIELD (KG/Ha)	1995 YIELD (KG/Ha)	1996 YIELD (KG/Ha)	1997 YIELD (KG/Ha)	1998 YIELD (KG/Ha)	1999 YIELD (KG/Ha)	2000 YIELD (KG/Ha)	TOTAL 10-YEAR YIELD (KG/Ha)	1990 BORDER PRICES USh/KG	10-YEAR VALUE '000 USh	AREA PLANTED '000 HA	TOTAL 10-YEAR VALUE USh MM
1 BANANA	5000	5250	5513	5788	6078	6381	6700	7036	7387	7757	8144	71034	30	2131	1396	2,974,901
2 CASSAVA	8800	9240	9702	10187	10696	11231	11793	12382	13002	13652	14334	125020	15	1875	361	676,982
3 SWEET POTATOES	4000	4200	4410	4631	4862	5105	5360	5628	5910	6205	6516	56827	30	1705	417	710,908
4 MAIZE	1500	1575	1654	1736	1823	1914	2010	2111	2216	2327	2443	21310	116	2472	393	971,489
5 SORGHUM	1200	1260	1323	1389	1459	1532	1608	1689	1773	1862	1955	17048	93	1585	257	407,468
6 MILLET	1000	1050	1103	1158	1216	1276	1340	1407	1477	1551	1629	14207	96	1364	372	507,353
7 BEANS	800	840	882	926	972	1021	1072	1126	1182	1241	1303	11365	183	2080	445	925,544
8 GROUNDNUTS	550	578	606	637	669	702	737	774	813	853	896	7814	250	1953	270	527,427
9 ROBUSTA COFFEE	1200	1260	1323	1389	1459	1532	1608	1689	1773	1862	1955	17048	140	2387		0
10 SEED COTTON	500	525	551	579	608	638	670	704	739	776	814	7103	165	1172		0
														18725		7,702,070

	USh MILLION	US$
VALUE OF STABILIZING YIELD:	1,288,126	1,463,779,677
VALUE OF NR INTERVENTIONS:5% INCREASED YIELD:	3,026,654	3,439,379,942

B.3. Sustainable Micro Benefits

Any of the natural resources or tourism interventions will be successful only if the resource managers and the local communities see a direct benefit. A farmer will try new or different agricultural practices only if it increases the yield both in the short-term as well as long-term; the short-term will be even more critical to the subsistence farmer. Similarly, the local community will assist the tourism sector by helping preserve biodiversity and manage prudently the forests and natural resources base only if they realize direct financial benefits. In simple financial terms, the benefits to the local community from tourism should be greater than the benefits they currently derive (whether legal or illegal) from the use of forest resources, like firewood, logs, timber, animal meat, agricultural products.

A simple exercise that we conducted was asking ourselves how much benefit would need to accrue to the target population to make the $30 million investment under the APE program viable, on an economic and financial basis. This is essentially the fundamentals of a break-even analysis. We used a discount rate of 10%, which is the standard shadow rate assumed in the absence of better data. Various sensitivity analyses can be performed even on such a simplistic model.

Assuming approx. 50,000 beneficiaries, our intervention should increase annual per capita income by an incremental $70 over the life of the program to make the investment financially attractive. If we assume 100,000 beneficiaries, the increase needs to be only $35 over life of project.

Even looking at only the gains from the tourism sector, this return seems to be definitely achievable. In 1970, tourism revenues had reached $19 million; this figure continued to fall sharply during the 1970s and early 1980s and provided only $2.5 million in revenues for the year 1982. In volume terms, the number of tourists declined from 88,630 in 1970 to 10,000 in 1982. Assuming that each tourist spends 5 nights per visit (which is half of the average 9.7 nights in 1971), and only $50 per day, an increase of 14,000 tourists per year would provide the necessary $3.5 million per year to make the USAID intervention financially attractive. This is of course assuming that all the revenue increase is due to interventions under the APE program and that all of it accrues to the beneficiaries we are targeting, which is probably not feasible.

We should take into account the gains in agricultural productivity, which will probably be the major revenue component to

the rural disadvantaged population. If we are able to halt and reverse the resource degradation process, and get the benefits of tourism, then a sustainable increase in per capita income by $35 over the life of the project (assuming 100,000 beneficiaries) seems to be a conservative estimate. This is corroborated by our analysis of the impact of natural resource interventions in the Economic Section. (See Section B.2. and Tables E.10. and E.11.)

B.3.1. FINANCIAL FEASIBILITY

There is presently in Uganda a shortage of liquidity; borrowers from banks are hard-pressed to find loans and the interest rate is around 52%. It is important that each proposal under this sub-grant be analyzed for financial viability to determine the best projects for funding. Below, we examine several illustrative proposals to determine their financial viability.

1. National Information Center on the Environment (NICE)

The NEAP process will involve gathering, analyzing, and storing a diverse set of data on natural resources. Any policy and planning exercise requires a solid information base. In order to systematize the collection, dissemination, and storage of natural resources data, APE will establish a National Information Center for the Environment (NICE). Annex II.K. describes NICE.

NICE core staff will include a Director, bibliographic data specialist, GIS and remote sensing specialists, research associates, financial and administrative support staff. Anticipated hardware and software needs include additional computing capacity, improved output capacity, desktop publishing, scanners and digitizers, and office equipment.

One of the primary goals of NICE is to be a self-sustaining center. NICE will make available on a cost reimbursable basis its information resources and processing capabilities to government agencies, NGOs, donors, and the private sector. USAID funding for NICE will, thus, stop upon completion of the APE program.

The following pages include a financial analysis of NICE and the assumptions used.

212

TABLE E.12.
NATIONAL INFORMATION CENTER FOR THE ENVIRONMENT (NICE)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
I. EXPENSES										
1 SALARIES & ADMINISTRATIVE EXPENSES	43,000	43,000	43,000	43,000	43,000	47,300	52,030	57,233	62,956	69,252
DIRECTOR										
BIBLIOGRAPHIC DATA SPECIALISTS										
GIS/REMOST SENSING SPECIALISTS										
RESEARCH ASSOCIATES										
SUPPORT STAFF										
2 SOFTWARE AND HARDWARE	100,000	100,000	100,000	100,000	100,000					
3 MAINTENANCE & OTHER EXPENSES						2,000	4,000	6,000	8,000	10,000
TOTAL EXPENSES	143,000	143,000	143,000	143,000	143,000	49,300	56,030	63,233	70,956	79,252
II. REVENUES										
1 INFORMATION RESOURCES	77,000	77,000	87,000	90,000	93,900	21,970	28,561	37,129	48,268	62,749
2 PROCESSING SERVICES	0	0	5,000	6,500	8,450	10,985	14,281	18,565	24,134	31,374
3 LIBRARY USER FEES	0	750	900	1,000	1,296	1,555	1,866	2,239	2,687	3,225
4 RESEARCH GRANTS	0	0	7,600	9,500	11,875	14,844	18,555	23,193	28,992	36,240
TOTAL REVENUES	77,000	77,750	100,500	107,000	115,521	49,354	63,262	81,127	104,081	133,587
GROSS EARNINGS	(66,000)	(65,250)	(42,500)	(35,920)	(27,479)	54	7,232	17,894	33,125	54,335

2. Rwenzori Mountaineering Services (RMS) Proposal

RMS is a Ugandan NGO that was set up in 1987 to preserve the environment in and around the Rwenzori Mountain and to promote tourism activities. The organization's guiding principle is to generate income so as to reinvest it in socioeconomic activities around the Rwenzori region.

Perhaps as a sign of the success enjoyed by RMS, tourist arrivals in Mount Rwenzori has been increasing every year. The figures for the number of visitors are as given below:

	1988	1989	1990
Visitors	370	500	687
% Increase		35%	37%

The Ministry of Tourism, Wildlife and Antiquities has granted RMS an exclusive license to operate tourist facilities in the forest reserve.

USAID has been funding the "Construction and Improvement of Tourist Facilities on Mount Rwenzori" project since 1988, and will have contributed U Sh.376,962,000 by June 1991. The funding has enabled the construction of seven camps, with the associated water and sanitary facilities. The project has also funded a bridge over the Mubuku/ Bujuku rivers' confluence, a 1 1/2 km planked path over the Bigo Bog, improvements to various dangerous climbing spots, buildings, road improvements, Rwenzori High School, and various capital equipment.

In March 1991, RMS submitted a new proposal to USAID to fund various activities in and around Mount Rwenzori. Such proposed activities include:

- electricity generation and installation in tourist camps
- communication equipment
- completion of Bog bridging
- tourist houses
- transport and road improvement
- proper completion of Rwenzori High School
- administration, including operating expenses, training and travel, purchase of capital equipment, tourism promotion activities.

In conversations with the project sponsors, it was apparent

214

that the idea of micro-hydro generators has not been well thought out. Uganda does not have any manufacturing or maintenance capability in micro-hydro, and the project sponsors themselves were quick to point out the difficult problems with an existing hydro site at Kilembe Mines.

However, the idea of having alternative energy generating facilities rather than using wood as a source of fuel is a sound one. Uganda may look into the option, as some other countries have already mandated, of requiring tourist groups to use fuel other than fuelwood, usually kerosene. Although this contributes to more fuel imports, this cost can easily be passed on to the tourists, who pay in foreign currency. This requirement will reduce environmental degradation due to clearing of trees for fuelwood.

Although communication equipment has not been budgeted for because it requires foreign exchange, a battery operated radio system would be a very good idea to facilitate the operation of RMS. This would hopefully result in increased efficiency in service to the tourists. Thus, it is recommended that USAID look into purchase of such radio systems for the use of RMS.

Although RMS has been in existence since only 1987 and became legally registered as an NGO in 1991, USAID should plan for the time when RMS can stand on its own. In 1990, RMS had 687 visitors, who contributed approx. U Sh.72.5 million. While the forest reserve needs much more facilities in order to enable tourists to enjoy their stay at the sites and the organization does not have the necessary resources to set up these facilities, RMS should start becoming self-sufficient for at least its recurring expenses. Contribution from USAID for administrative expenses should be reevaluated based upon this suggestion.

Table E.12. includes a project cash flow for the proposed USAID investment for RMS. The expenses includes all the proposed facilities, except the hydro-electric generator and the radio equipment.

We have made projections for the incremental number of tourists that would be attracted and could be served by RMS due to the enhanced facilities. As the NPV of 35.4 million USh and the IRR of 12.03% shows, the investment is financially viable.

One option that RMS may consider is to spin-off its local development foundation from the business operations. This new organizational structure will have to pay taxes and perform like a business unit. A certain percentage of profits can be channelled into the foundation for local development work.

215

TABLE E.13.: RMS CASH FLOW
(UGANDAN SHILLINGS)

	1991/92	1992/93	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
I. EXPENSES										
1 BOG/SWAMP BRIDGING	50,000,000	50,000,000								
2 TOURIST HOUSES	85,000,000	85,000,000								
3 KICHUCHU/MUBUKU BRIDGE	12,500,000	12,500,000								
4 TRANSPORT/ROAD IMPROVEMENT	17,500,000	17,500,000								
5 RWENZORI HIGH SCHOOL	7,500,000	7,500,000								
6 ADMINISTRATION	30,000,000	30,000,000								
TOTAL EXPENSES	202,500,000	202,500,000								
II. REVENUES										
INCREMENTAL # OF VISITORS	65	95	130	170	215	265	265	265	265	265
SPENDING PER VISITOR	165,600	190,440	219,006	251,857	289,635	333,081	383,043	440,499	506,574	582,560
TOTAL INCREMENTAL REVENUES	10,764,000	18,091,000	28,470,780	42,815,673	62,271,619	88,266,399	101,506,359	116,732,312	134,242,159	154,378,483
BALANCE	(191,736,000)	(184,408,200)	28,470,780	42,815,673	62,271,619	88,266,399	101,506,359	116,732,312	134,242,159	154,378,483

NPV @ 10%	35,411,796
IRR	12.03%

ANNEX II D

3. Kibale Tourism Development

Makerere University Biological Field Station (MUBFS) has submitted a proposal to start tourism development activities in the Kibale Forest Reserve.

There is already a lot of interest in Kibale Forest's animal population, including chimpanzees, colobus monkeys, elephants, mangabeys. On some days, upto 15 vehicles a day arrive at the Field Station for tourism purposes. Because the Reserve is not equipped to handle tourists at present, they have to be turned away.

MUBFS would like to start tourist activities, including nature tours and chimpanzee viewing. Tourism development activities consist of a number of tourist cabins, a camp ground, staff buildings, and trail systems.

As the financial analysis (see following page) shows, the project is clearly financially viable. Even using conservative numbers for the number of tourists expected and their ability/ willingness to pay, the project starts making a profit from the third year. The NPV of U.S.$288,715 and the IRR of 94.04% clearly indicate a very attractive project.

However, the Mission should review the proposal not for its economic and financial viability, which clearly is there, but on whether a research station should have the mandate or is best suited to carry out tourism activities. We would like to suggest that this activity, if approved, be conditioned on the MUBFS working closely with the private sector in designing and managing the tourism activities. The major portion of tourism activities should be conducted by the private sector, with the MUBFS facilitating this process by training the nature guides, and setting guidelines about acceptable tourist behavior and the carrying capacity of the Reserve.

4. Kibale Fish Project

Makerere University Biological Field Station (MUBFS) and the Museum of Comparative Zoology and Peabody Museum at Harvard have submitted a proposal to provide maintenance funding to continue both the crater lakes research and studies on papyrus swamps as well as to start a small ecotourism project for Crater Lake Nkuruba.

While we will not attempt to financially evaluate the repercussions of the research projects, we have included a financial analysis of the ecotourism project (see following page).

Again, for the APE program, the questions are the same as the ones for the Kibale Tourism Development project, i.e. what should be the role of a research station, and how can the private sector play a major role so that the tourism activities are profitable and sustainable.

For the ecotourism project, we recommend that the Church, which owns the land with the lake, be the major initiator of a program that includes a tourism component, to be managed by a private sector business, and a research component, to be carried out by the MUBFS. Various options can be analyzed, including:

- the church retaining ownership but giving the management responsibilities to a business organization;
- leasing out the lake and the surrounding areas, with the stipulation that certain research activities be allowed and guidelines from research findings (e.g. suggestions on limits to fishing, carrying capacity, environmental considerations) be followed;
- selling the lake and surrounding area to a private organization with the same stipulations as under the second option.

REFERENCES

Bank of Uganda. Quarterly Economic Report. Volume 2, 1990. 61 pp. (excl. Appendices)

Business International. Uganda: Country Profile 1989-90. 33pp.

Hamilton, A.C. Deforestation In Uganda. Oxford University Press, 1988. 92 pp.

International Resources Group. "Uganda Natural Resources Action Program". August 1989. USAID Project No. AFR-0467-C-00-8054-00. 72pp.

International Union for Conservation of Nature (IUCN). "Proposal For A National Conservation Strategy For Uganda". July 1983. 22 pp.

Land Tenure Center. "Settlement in Forest Reserves, Game Reserves and National Parks in Uganda". July 1989. 64 pp.

Kramer, John Michael, et al. "Uganda Natural Resources Action Plan". August 1989. 75 pp.

Makerere Institute of Social Research. Land Tenure and Agricultural Development in Uganda. Jan 1989. 210 pp.

Makerere Institute of Social Research. A Study of Social, Economic and Tenure Factors Affecting Land Use and Deforestation. November 1988. 87 pp.

Ministry of Planning and Economic Development. Background to the Budget, 1990-1991. July 1990. 212 pp.

Ministry of Tourism and Wildlife. A Perspective Plan for Uganda Tourism Development. September 1990.
Struhsaker, Thomas T. "Forestry Issues and Conservation in Uganda" in Biological Conservation 39 (1987) 209--234.

United Nations Development Programme (UNDP). Uganda: Development Cooperation. July 1988. 26 pp (excl tables).

United Nations Environment Programme (UNEP). "Uganda Natural Resources Datasets: A Preliminary Review". December 1986. 73 pp.

United Nations Environment Programme. Strategic Resources Planning in Uganda: Forests. 92 pp.

World Bank internal documents.

219

ANNEX II E

SOCIAL ANALYSIS

Introduction

The APE addresses problems and constraints to sustained maintenance of the natural resource base, especially its biodiversity, through assisting Ugandan institutions to more effectively and sustainably manage its natural resource base. Thus, the population at large are the intended ultimate beneficiaries.

In addition, men and women in buffer zones in western and southern Uganda are targeted as beneficiaries of a major program component. People in buffer zones, that is areas adjacent to parks and protected areas, are a specific focus of the program for the following reasons: a) some of them suffer losses due to damage caused by wildlife outside park/forest boundaries, b) the cooperation and support of local people is essential for conserving the wildlife, parks and forests, but this will only be forthcoming if they benefit, and c) they may be negatively affected by enactment of the policies supported under the NPA component of this program, thus, special attention is given to mitigate against the extent and degree of deleterious impacts.

I. Identification of Targeted Population Groups

A. Organization

Ugandans are linked through a network of extended kinship relationships, but these may not necessarily be supportive. The extent to which kinship permeates a local community and serves as a focal point for organization varies by ethnic group and locale (UNICEF 1989 and Harmsworth 1986). The institution of the family has been under stress as a result of war and violence, hyperinflation, urbanization,and commercialization (Harmsworth 1986). The AIDS epidemic is also having a negative impact upon the organization and role of the family.

There are some 2.29 million households in Uganda, 87% of these are located in rural areas (Min of Plan 1991). Households average 5.45 people: the average number of people is higher in rural households (5.59) than in urban households (4.5).

There are various registered Ugandan NGOs which operate at the community level and in some areas women's groups are common. The most wide-spread organizational structure which reaches through to every household, however, is the resistance council (RC).

The RC structure instituted in 1987 facilitates communication of local concerns through a hierarchy of committees. It also

provides a means to communicate government concerns to the people as well as to mobilize people for development efforts. While the system has defects such as not adequately representing the interests of women, the elderly and traditionalists, it still remains an impressive representational structure which seems to work. However, it demands a great deal of time from the RC committee members who do not receive monetary compensation.

The RC structure appears to be a viable means for two-way communication on topics important to the success of the APE. However, attention should be given to gaining greater participation of women. (A study of women in some areas revealed that only 37% had attended any meeting in the previous 6 months (UNICEF 1989))

The APE program places heavy emphasis on the need of natural resources programs to benefit local communities. First, the program will elicit the active participation of local communities in the NEAP planning process. Second, some of the funds from tourist activities will be allocated for the benefit of local communities. The lower levels of the RC structure provides a means of eliciting the views of local communities on how the funds should be used/ distributed. Experience from national wildlife reserves in Kenya, which are under county councils, should prove instructive. The funds are usually not allocated for the benefit of the communities adjacent to the protected areas and the source of these funds is not publicly acknowledged as having been derived from tourism and the protected areas. The local population adjacent to the protected areas thus do not perceive any benefit from the national reserve even in those cases where funds derived from the reserves are spent on development activities and infrastructure.

B. Household Economy

Eighty percent of the economically active household population is engaged in agriculture. Regionally, the percentage of agricultural population ranges from 71% in Central to 87% in Eastern Uganda. Men are more likely than women to be employed, that is self-employed, an employer or an employee. Women are more likely to be classified as engaged in household enterprises. The salaries, especially of government workers, is extremely low. For example, teachers, and enrolled nurses (grade U7) receive only about USh 2,000, and academic staff (grade U3) receive only about USh 4,000 per month. In comparison, 40 chicken eggs cost about USh 2,000 and a buffet breakfast at the Sheraton Hotel in Kampala costs USh 6,700 (1991 prices).

Sixty four percent of the rural household expenditures compared with 53 % of urban households expenditures are on food.

Regionally, Eastern Uganda had the largest proportion of its population in the lowest expenditure category:

Percentage distributions of households by monthly household expenditure groups by region

	Monthly Household Expenditure Groups ('000)		
	0-25	25-50	over 50
Central	44.5	28.8	26.7
Eastern	61.3	28.9	9.8
Western	44.2	34.8	21.0
Northern	68.2	25.5	6.3
Uganda	50.6	30.3	18.6

Source: Statistics Dept, Ministry of Planning and Economic Development, Report on the Uganda National Household Budget Survey (1989 - 90), Feb. 1991.

When asked the single greatest constraint to agricultural production, women provided the following responses:

Constraints to Agricultural Production
(% of responses)

Lack of labour	32%
Lack of Tools/drugs	25%
Lack of land	17%
Poor soil/bad weather	16%
Pests/Vermin	4%

Source: ACFODE, Survey on Women's Problems and Needs 1989.

The ownership of farm implements still seems to be a problem, although in the aftermath of the civil war donors assisted Uganda in making farm implements more available. Currently this constraint is probably caused by insufficient incomes rather than availability. The low level of farm implements can be used as an indicator of the low purchasing power of households. Ownership of several tools, however, was higher in Kigezi District (southwestern Uganda), than in others for which data were available in 1984 and 1988 (UNICEF 1989). Lack of labor is often a result of poor health, but it also indicates the value placed on having several children.

222

C. Land Tenure

Some case studies have been conducted the past few years on the effects of the land tenure system on natural resource management. While more research data are needed, available information indicates the impact on land use. A rapid appraisal in Luwero and Masaka districts revealed:

- type of tenure/land security was not associated with level of investment on land, ie the more secure tenure forms were not related to higher levels of investment;

- progressive farming is not necessarily associated with the size of land holding, or mode of tenure but depended upon access to capital by virtue of the social and professional position of the holder;

- a land market provides progressive farmers greater access to land;

- population pressure on customary land is more acute than on land under other forms of tenure (Kisamba-Mugerwa 1989).

Encroachment on public lands, including forest reserves and game parks, has also received some attention but the relationship between encroachment and land tenure in the buffer zones needs to be scientifically investigated. Informally the causes of encroachment have been identified:

- in a number of areas of Uganda there are severe population pressures on the available land;

- land already utilized by people often has lower fertility;

- politicians encouraging people to encroach in an effort to get votes;

- district administration facilitating encroachment by local interests;

- local staff on these lands often give away parcels/parts and they themselves utilize the lands illegally (Ag Task Force 1987).

There are four principal types of land tenure: customary, freehold, milo, and leasehold. Customary tenure is a system regulated by laws or customs which are limited in their operation

to a particular description or class of persons. The two principal categories are:

communal/tribal tenure whereby ownership of the land occupied by the community or tribe is vested in the paramount tribal leader as owner who usually holds it in trust for the entire community or tribe, and

clan/family tenure whereby the land is vested in the head of the group as owner or trustee for the entire group.

An estimated 65 -75% of all land is under customary tenure.

Freehold tenure, outside Buganda consists of three types. This includes native freeholds of Toro based on agreements at the beginning of the century. The chiefs that signed were given property. Later the Toro Landlord and Tenant Law curtailed powers and rights of the freeholder against any tenants on his land. Also, freehold titles were given to Africans in accordance with the Crown lands (Adjudication) Rules of 1958. These rules began to be applied in Ankole, Kigezi and Bugisu districts. Through a committee it was possible to establish the true owner of any piece of land, if he wanted to be registered as the proprietor and hence receive a title certificate (Ag Task Force 1987) .

Milo tenure is unique to Buganda. It resulted in milo owners and tenants. But it established a type of freehold system and the concept of private ownership of land (see MISR and LTC 1989). Lease estates are the fourth type of tenure (Ag Task Force 1987).

Fragmentation means that a holding consists of a number of separate, small parcels which are not adjacent to each other. This originally occurred when a person or family acquired land in different micro-environments, e.g valley bottoms and hillsides.

With polygamy and through inheritance laws whereby each male is entitled to a portion of his mother's land (upon marriage) or through time as land is divided among sons with each getting a portion of each type of land. Fragmentation is not necessarily bad, since it permits farmers a range of soil types and land at different altitudes. For example, in Kigezi where the incidence of hailstorms is high, separate fields lower the risk of crop damage. However, it becomes inefficient when the parcels become extremely small and are relatively far from one another. Fragmentation is particularly prevalent in Kigezi, where there is excessive fragmentation, almost all land is devoted to food crop production, and yields are relatively low, and there is little land for grazing animals (and hence no manure being fed into the soil).

The land pressure in Kigezi has led to some resettlement schemes since 1945. The Mubuku Irrigation Settlement Scheme of the 1960s, located near the base of the Rwenzori Mountains, aimed at relieving population pressure among the Bakonjo. Resettlement or migration are influenced by existing customary land claims, infestation of tsetse fly, and poor distribution of land.

There are cultural factors also which place a stress on land resources. First, in most parts of Uganda (supposedly Buganda is an exception) ethnic affiliation hinders migration. Thus, one is more apt to sell land to a member of ones own ethnic group. However, there are more subtle ways such as marrying into another ethnic group. Second, the cultural value of land is also related to the attitude that everyone has a right to "own" land, that is particularly every man, but even every women is considered "incomplete" without access to crop land. Even those who do not reside on farms and do not work as farmers retain their claims to agricultural land and may enhance their status through further accumulation of land. Other cultural factors associated with rights to land ownership occur among some ethnic groups such as the right of villagers to graze certain areas communally, to cut fuelwood and to take timber for making agricultural implements (Ag Task Force 1987).

Some people like to claim that the peasant farmers are irrational in their use of natural resources and ignorance accounts for lack of adoption of improved technologies. However, farming is a risky occupation, a gamble against weather, pests and diseases. Environmental management in order that the natural resources are used on a sustainable basis assumes prior knowledge about the rate/degree of sustainable use. Farmers also are pressed to meet their immediate needs and in Uganda the situation is grave. The entrepreneurs are interested in obtaining land for exploitation with a quick profit in mind (this is implied in the report of the Ag Task Force 1987) and without regard to equity issues. Furthermore, leaders with responsible public positions are often more inclined to favor irresponsible natural resource use in order to win votes and favors rather than to be interested in a longer term perspective (Ag Task Force 1987).

D. Population in Buffer Zones

Conceptually the buffer zone is the outer area of reserve and park boundaries, where the activities of local residents have a direct influence on resource conservation in the protected area, and the material benefits of protecting the area are most fully realized by local people. The extent of this zone of influence varies. For example, many people engaged in fishing inside the boundary of Queen Elizabeth Park actually have permanent homesteads miles away in the hilly region (Reynolds, interview). In

comparison, people some 15 miles away from Euchua Forest and Bwindi Forest rarely have direct contact with the forest nearest them (interviews).

The Rwenzori area is home to the Bakonjo people, who cultivate land and keep a few domestic stock below the forest reserve boundary. They have traditionally hunted in the Rwenzori Mountains and are one of the four tribes in Uganda that hunted primates (Howard, 1990). Currently the Bakonzo use the Rwenzori forest for obtaining bamboo, sand, firewood, honey, building poles, natural fibers and so forth for the ever increasing population in the hills. There is no vehicular access to the reserve, and little or no commercial exploitation of renewable resource within it (Howard 1990). When the Forest Reserve was gazetted in 1941 the Forestry Department policy permitted unreserved access to forest produce such as firewood, bamboo, specified types of timber and so on, to be extracted from the zone near the boundary to meet domestic requirements up to environmentally acceptable limits (Yeoman 1990).

The vast majority of people in the buffer zones are not dependent on the forests and national parks (except for the fishing communities in Queen Elizabeth) for their livelihood. Nevertheless, in times of drought the forests provide important source of food (such as wild yams/sweet potatoes). Other times, the forest provide important products such as medicinal plants, vines for making baskets, mats and ropes, and fuelwood from collecting dead branches. Also it provides a source of bamboo which is used in several ways, including stakes for plants. The protected areas normally have a road passing through them which serve as a route for foot-traffic as well as vehicular traffic.

There are two primary ethnic groups near the Impenetrable Forest: about 90 percent are Bakiga and most of the others are Banyarwanda. Batwa pygmies probably account for far less than one-half of one percent. The major concentration of the Batwa around Bwindi is at Buhoma and Rubuguli. No Batwa are believed to live within the reserve boundary. In total there are 30 - 50 Batwa families, with an average family size of about 7. Many Batwa retain a semi-feudal dependence on specific Bakiga patrons but most are reported to be relatively independent. The present Batwa community is diverse in its economic activities: hunting, serving as guides, gold diggers, pit sawyers, porters, builders, farmers, craftsmen and gatherers of forest produce, particularly honey. The Batwa are generally recognized as being the source of virtually all knowledge about the forest (Butynski, 1984).

II. Feasibility of Program in Relation to Constraints and Incentives of Targeted Population Groups

A. Policy Changes: Protected Areas

1. Overview

The APE advocates the following policy changes:

- gazetting of all of Rwenzori Forest as a national park
- gazetting the Bwindi Forest as a national park
- elevating the conservation status of 10 forest reserves

These policy changes are advocated since the new status would provide greater legal restrictions against unsustainable use of these valuable resources. The current status of these areas permits use, following application and receipt of permits for specific use actions; however, in many forests permits are not secured to obtain minor products. Furthermore, forests are generally regarded as important sources of timber and in some cases unsustainable exploitation has occurred.

National park status conveys much greater restrictions on use. In regard to elevating the conservation status of forest reserves, the Department of Forestry has been discussing forest parks, whereby 50 percent would be protected, 30 percent would be designated as buffer or use zones, and 20 percent allocated for timber extraction. As discussed elsewhere in the PAAD, APE advocates the designation of zones based on an assessment of the situation of each forest.

APE in supporting these policy changes makes the following assumptions about behavior:

a) current users who are exploiting specific resources on an unsustainable basis will discontinue pursuit of activities deemed illegal and this will be enforced through stricter monitoring and regulations

b) potential users of these areas will be discouraged from engaging in illegal activities as a result of the new status of the areas and stricter enforcement of regulations and laws

c) the Board of Trustees for each park will permit local people to use designated areas in the forests for specified minor products

A "law and order" or "policing" approach is considered feasible and necessary in order to prevent illegal pit-sawing, timber operations, mining and poaching of animals. At the same time, sustainable use of minor products is expected to be permitted in designated areas and for specified products.

To help maintain the integrity of the parks and elevated forest reserves, the cooperation of the local people, especially those living adjacent to the protected areas, is necessary. To encourage and reward this cooperation, APE provides grants for activities targeted at the people in these areas who will be affected by the policy changes. The funds provided under the small grants and NGO/PVO components are based on three guiding principles: a) education will help people to better understand the need to preserve these natural resources, b) the people of the areas must receive social and economic benefits related to the protected areas in order to secure their cooperation and to compensate for losses currently experienced due to animals roaming outside of the park/reserve boundaries, and c) to compensate for any deleterious effects of the policy changes and from tourism. The cooperation and support of local people is essential in maintaining the integrity of gazetted parks and protected areas. For these same reasons, the financial assistance for tourist development, and for parks shall also stipulate that local people directly benefit through employment, revenue sharing, and joint enterprises.

Prior to designation of Bwindi and Rwenzori forests as national parks, APE will fund a study which will focus on the current uses of each for minor forest products. Information on the current uses, the magnitude of these uses, the average number of users disaggregated by sex, the main use zones for each product, and the impact of each use and of the combined use upon the forest.

The results of the study to be carried out by a ecologist and a sociologist will be used to determine if certain uses should be permitted in specific designated areas, and if so then a plan of implementing the marking of boundaries, monitoring use etc. would be proposed. The study is also expected to identify activities which might be transferred to land outside the park boundaries and other mitigating measures. The results of the study are expected to inform and guide the actions of the Board of Trustees of each park in terms of access and sustainable use by local inhabitants.

2. People Living Within Protected Areas

During the years of unrest and turmoil, the boundaries of reserves and parks were not respected and people moved into them. Currently, however, only about 20% of the squatters remain. In the past few years under the mandate of the president, several people

228

have been evicted from forest reserves and parks. Some people were evicted from the Rwenzori reserve in late 1989/1990 (Yeoman 1990). Also, some people from Mpungu area are reported to have been evicted from Bwindi Forest (Hamilton 1990). No people are currently reported to be living illegally inside the Bwindi forest boundaries.

Presently people are illegally residing is within the Kibale Forest/Game Reserve. An estimated 3,000 to 3,500 persons currently reside in the southern portion of the reserve primarily on grasslands which is to serve as a corridor for elephants between Queen Elizabeth National Park and Kibale Forest (interviews). Since early 1972 government officials have attempted to evict the encroachers. In the mid 1970s those appealing eviction orders argued that the forest reserve boundary was not clearly demarcated and thus it was unfair to evict persons who may have settled there out of ignorance. As a result, the Forest Department redrew the forest boundary to place most encroachers outside of the forest reserve. Since then further attempts have been made to evict persons residing inside the forest reserve, but to no avail. (See Aluma et al 1989 for further details.)

Settlement in the forest reserve is limited to an area along the western boundary with the game corridor. The people are Bakiga who moved from Kigezi District (now Kabale and Rukungiri) as a result of severe land shortage. Due to difficulties in securing land elsewhere, they moved inside the forest boundary. Agriculture and brewing are the principal sources of income. Some 55 percent have planted fruit trees and fallowing is practiced. The housing materials indicate both the unwillingness or inability to invest in more permanent structure: only 30% of the walls were constructed of mud, while 45% were made from grass and 20% of the houses were small A-frame structures of banana leaves (Aluma et al 1989). It is alleged that many or most of these people actually have land elsewhere but this has not been adequately investigated.

It is unclear at this stage if enhancing the conservation status of Kibale Forest would have any impact on the squatters in the forest. Current discussion within the Department of Forests has the squatter area within the zone for timber extraction.

It has been the policy of government not to compensate those evicted. While this seems harsh, given the extent of poverty and near landlessness in Uganda, any action by the GOU to compensate illegal squatters in forests and game parks would only serve as a possible sign of weakness on the part of the GOU in defending the boundaries and integrity of these protected areas It has been recommended elsewhere that a resettlement program for these people should not be embarked upon for the following reasons: a) high cost of resettlement, b) more urgent resettlement needs of persons

229

displaced by civil strife, and c) failure of past resettlement schemes to meet their intended goals (Aluma et al 1989). While some people recommend that cash be given to assist those evicted to settle elsewhere, this raises the risk of the entire family not benefiting if the person receiving the cash (most likely the male head of household) misuses the cash received. Also, it is alleged that the people were encouraged by politicians to settle illegally with the intent of gaining benefits when evicted (interview).

If it appears that eviction will occur as a result of the policy advocated by APE, AID will have the option of taking an active role in helping to mitigate the impact upon landless families. This would be facilitated by taking an role in encouraging an NGO to work with the evicted landless families. At this stage however it seems unlikely that eviction will be called for in the enhancement plan for Kibale Forest.

.3. Populations Adjacent to Protected Areas

The changing of Rwenzori and Bwindi forests to national parks would have a negative impact on people in the adjacent communities, unless the Board of Trustees of each permits use for obtaining specific minor products in designated zones. The changing of forests reserves to an enhanced conservation status is not expected to have any significant negative consequences.
The enhanced status may result in people having to walk further to obtain minor forest products, depending on their location vis a vis designated use zones.

The Batwa: Special care needs to be given to ensure that the traditional use of the Rwenzori and Semliki forests by the Batwa/Efe pygmies will not be eliminated. The situation of Batwa is of a very different nature than that of others effected by the policy changes and hence requires a specific strategy.

There are at least two pygmy villages - Mpulya and Krumya- with approximately 60 people who primarily use the Semliki - Ituri Forest, coming off of the northwestern slopes of the Rwenzori Mountains. These people use bows and arrows to hunt for monkey, bird, antelope and pigs, and use thrusting spears for larger animals (DeGeorge 1990).

The Batwa are reported to live mostly by selling a few items to tourists (e.g. pipes, bows and arrows, as well as game trophies) and begging for money. The females may have a more burdensome life. Those who have encountered these people report their pitiful condition; they appear to be more deprived morally and socially than the pygmies found in Zaire.

235

While interest has been expressed by the Rwenzori Mountaineering Services and the Batwa in a joint (tourist) venture, this needs further investigation. Currently the Batwa serve as objects to be photographed and the men seem to be dependent upon marihuana. A culturally sensitive strategy needs to be defined through observations and discussions with Batwa and those who are informed supporters (e.g. a local Anglican minister who has been working with them for about five years) (see DeGeorge 1990). This will be the focus of one of the studies to be contracted by USAID.

Batwa are also found around Bwindi Forest. These Batwa, who number only some 350, submitted an oral petition requesting that some land be given to them for farming and settlement. They state that their traditional way of life is no longer viable and that their future depends on having permanent title to agricultural land" (Hamilton 1990). The study, on uses and users of Bwindi forest, will include special attention to the legitimacy and feasibility of the oral request made at the public commission. If deemed advisable, USAID will take a proactive role in encouraging an NGO to work with settling the Batwa from the Bwindi area.

Rwenzori Forest: The Bakonjo people live on the slopes of the Rwenzori Mountains. A public inquiry held to discuss reactions to making the Rwenzori Central Forest Reserve into a National Park provides evidence of the opinions of local people to making the entire area a national park.

The points of concern raised in the public inquiries centered on the following:

- fears about the Park extending its boundaries into areas currently inhabited by the people; examples of land being taken away from the local people in the past for government supported schemes

- bad reputation of the national park staff, e.g. harassment of local people; current national parks, e.g Queen Elizabeth exemplify local inhabitants not receiving benefits from national parks, e.g. employment; concern that park status implies the introduction of wild animals which will roam outside the park boundaries

- fear about total exclusion and loss of traditional rights to harvest forest products and to use paths across the mountains

No data have been systematically and scientifically gathered to identify who (and approximately how many people) are using the forest in a destructive manner. Extreme care should be taken not to penalize the local public for actions caused by a small number

of people. Prior to gazetting the forest as a park a study shall be contracted by AID focused on current uses in order to provide information to the Board of Trustees which has the authority to permit uses (see Appendix).

Bwindi Forest: Bwindi forest is used by local inhabitants to collect deadwood, medicinal plants, vines for making ropes, special plants for making mats and so forth. Recently the forest Department has become stricter in overseeing use; permits must be obtained (interviews). The most significant illegal activities centers on setting of snares since these catch animals indiscriminately and hence are a high risk to the gorilla population, estimated to number some 300 and thus composing almost half of the world's forest gorillas. Pit-sawers are suspected/charged with being responsible for most of these snares. In addition, the practice of burning areas to obtain honey from beehives threatens the habitation of these gorillas. The burning of vegetation to obtain honey also threatens the loss of important vegetation and watersheds.

Many local people apparently abide by current forest department regulations and fear being caught in the Bwindi forest without the appropriate permit (except for use of the roadway passing through the forest) (personal observations and interviews). The following concerns were expressed by the public at during a public enquiry into establishment of Bwindi (Impenetrable) Forest national Park:

- regardless of status the people do not want to be deprived of forest resources

- they fear dangerous or destructive species of animals will be introduced if the area becomes a park

- they voice skepticism over the benefits which might be derived from change in status to a park (e.g. new jobs, roads, clinics) but if a park is created local people should have a substantial part of any revenues generated and jobs created

APE will covenant that no dangerous wildlife species will be introduced into Bwindi National Park. The area is too small and the current wildlife often roam outside the forest boundaries, causing harm to adjacent farms. Furthermore, a study will be carried out prior to designating Bwindi a park with the intent of recommending what use rights should be permitted local inhabitants.

B. NEAP

1. Participation in the Planning Process: Why

The APE supports the development of the NEAP. Only through adequate attention to participation of different interest groups in development of the environmental action plan can the plan hope to achieve its desired results. Participation is a means of expressing one's point of view and of sharing one's knowledge. Moreover the act of participation also entails a learning process which usually/often leads to commitment.

Participation, however, should occur within a clearly stated framework so that expectations are focused on the intended outcome. For example, task force and subgroup members ought to be familiar with the format and objectives of a national environmental action plan, and the need to identify and focus on priority problems and issues. Moreover, participation must be based on an understanding of the different stages of the process and what benefits each party will receive or may receive through the process. A warning has been made that "Participation without tangible results may create more damage than good" (World Bank 1990). However, each participant cannot hope to receive tangible results; rather, each must know that their participation has been factored into the final results. This will become apparent in the process as well as the final product. To assist in directing the participation into a meaningful input, the NEAP secretariat will be responsible for developing an orientation workshop (2 days for each) which will be held for task force members and some members of the subgroups.

Much experience has been gained from other African countries in carrying out the NEAP planning process and Uganda should benefit from the lessons learned (World Bank 1990). It has been found that donors should play a participatory role at the beginning of the process. "They can provide international experience, ensure inter-country cross-fertilization of information, and assist governments in financing both the NEAP preparation and implementation" (World Bank 1990).

In fact AID and the AID-financed experts ought to take care to ensure multi-donor cooperation, discussion and involvement so that other donors will become committed to financing some of the actions recommended in the NEAP. The terms of reference for the NEAP include establishment of an advisory subcommittee composed of all members of the donor community, with two elected from this committee plus one person from USAID to serve on the NEAP Advisory Committee which will total seven persons.

2. Participation: Who

Task Force and Subgroups:

In other countries the NEAP planning process has been based on involvement of various segments of the population, with particular attention given to including NGOs and experts in the private sector and in varying degrees urban and rural people as well as bureaucrats and technocrats in government ministries and high level politicians (ie ministers). The terms of reference for the Uganda NEAP also take into account other significant or potentially significant differences in the population. The following are also important distinguishing factors which are likely to influence one's perspective:

a) sex
b) regional/ethnic affiliation
c) religious affiliation and
d) political affiliation.

Thus, it will be incumbent upon the NEA Secretariat to ensure an adequate balance in representation of different segments of the population on task forces and subgroups, and among special consultants hired.

Participation on the task forces and subgroups will be supported through reasonable payment for time spent. This is considered important since salaries are so low that most people have to be engaged in more than one type of employment. Additionally, actual cost will be incurred for transportation and in some cases payment for childcare. While it will be difficult to base payment on the quality of the input, to the extent possible it should be based on products e.g. report completed. If the level of payment is not in accordance with similar tasks but is higher, then the credibility and sincerity of the entire effort will be placed in jeopardy especially since communities and individuals at the grass roots are expected to contribute without any remuneration.

Local Level Participation:

The task forces are charged with actively involving a number of important community groups: local male and female resource users, elected representatives on Resistance Councils, local NGOs and community organizations such as church groups and women's groups. The RCs offer the opportunity to obtain local inputs through an organized structure. However, care will be taken to not exploit the hard working and conscientious RC members. Another observer has cautioned that over-reliance on the RC system has the inherent dangers of bringing a certain level of political bias and

234

of local participation collapsing if there is a change in government (Talbott 1990).

A study of viable options to enlisting local participation in the NEAP planning process is supposed to be undertaken by the Institute of Environment and Natural Resources of Makerere University under the direction of the World Resources Institute.

Each task force is expected to involve interviews, meetings etc with local communities to:

- define the priority environmental problems and issues
- recommend solutions to these problems and issues, and
- review the findings and recommendations of the task forces.

Thus it is incumbent upon the NEAP secretariat to help coordinate these to avoid duplication and to ensure adequate involvement of all segments of the population. This task along with guidance and oversight will be the responsibility of a fulltime sociologist with experience in use of participatory methods and known for her/his expertise in use of these methods. The sociologist will be in charge of organizing the review of findings and recommendations of the task forces by local communities, which might be done through district and regional conferences.

3. Participation: Scopes of Work of Task Forces

The scopes of work have been reviewed by the PAAD social scientist to help to ensure that they reflect a human dimension and focus on key use issues, including who is using what and why. A major but all too common fault is to assume that the people are ignorant and education will change their behaviors. This approach ignores a) indigenous knowledge and practices related to use and management of natural resources, b) the underlying causes of the unsustainable use of natural resources, such as population pressure and financial benefits gained (often without any alternative options to use), and c) the poor majority are not always the main destructive user but rather people who have power due to their position or connections.

For these reasons the following are expected to be incorporated into the terms of reference:

- attention will be given to assessment of the environmental impact of key private sector enterprises as well as government projects and programs;

235

- attention to the distribution of benefits by socioeconomic category of the population and by sex of beneficiary in the reviews of existing projects, programs and enterprises and in the development of recommendations

- attention to access to resources, and use rights and obligations

- attention to "buffer zones" or populations adjacent to protected areas and parks, focusing on existing uses of protected area, ways of enlisting/gaining local support in the conservation of the protected area including feasible ways to increase the social and economic benefits of the poor majority of males and females living in these areas

- identification of indigenous knowledge and practices related to use and management of natural resources noting those which should be enhanced and incorporated into environmental education programs (e.g. effective herbal medicines)

- consideration of the impact of the distribution of land among the population on unsustainable use of natural resources, and the effect of property rights, obligations and uses upon unsustainable use of natural resources with particular attention to populations around protected areas

- lessons to be learned from existing programs and projects in Uganda and from those in other countries, for effective and efficient ways to address various issues/problems

Inclusion of a human perspective into the scopes of work of the task forces will permit better a more comprehensive understanding of environmental issues and feasible ways to address these.

C. Natural Resources Grants

1. Objectives

APE provides for mini, micro and macro level grants to NGOs/PVOs, Ugandan parastatals, and to a limited degree, individuals. Priority will be given to southern and western areas of Uganda, particularly the people who live adjacent to the Parks and protected areas in this region. Grants will finance buffer zone projects, tourist development which provides direct economic

benefits to a number of local inhabitants, and conservation education.

The grant mechanism is to be established based on the premise that the local inhabitants must receive direct economic and social benefits in order to gain their active cooperation in the conservation of Parks and forests, and that this conservation will occur in part from improving land use patterns in areas adjacent to Parks and forests. Therefore, the NGOs/PVOs will be required to incorporate a strategy which relates the activities funded through APE as a benefit from conservation of the nearby park or forest. This requirement will be written into the grant agreement particularly for buffer zone project grants.

As stated above, if the people are expected to be partners in conservation of parks and forests then they must directly receive some of the benefits. The greatest benefits will come from ownership/partnership in revenue generating facilities. Loans will be made available through one component of the APE project. NGOs/PVOs working in relevant areas will be in a position to assist the local people to negotiate with the commercial private sector. For example, rather than selling land to entrepreneurs for a tourist enterprise, the land owners could lease the land and gain an annual fee or could become part of a joint venture. Moreover, local people might form to open their own campgrounds. (For example, the crater lakes south of Kibale forest would make lovely camping sites to add to the tourist circuit.) Assistance could be given to linking these people with tour operators and for publicity materials. Many examples abound in neighboring Kenya and more will emerge under the AID-Kenya COBRA Project. All grants requests for tourist development will be required to specify ways in which men and women from the local communities will directly benefit and the number who will benefit. Also the grant proposals will identify who will receive the profits and if appropriate the method to be used to distribute them.

2. Participation and Distribution of Benefits

The criteria for selection and general guidelines for the administering PVO/NGO incorporate attention to feasibility issues from the standpoint of the intended target population. The following criteria will apply to all mini and macro grantees and must be satisfied before a proposal will be considered for competitive selection:

Documentation and demonstration of the extent to which targeted men and women have been involved in identifying the activities to be undertaken. Or, evidence that this will be a first step prior to development of a work plan specifying

the activities to be undertaken. (For the latter the report should be a condition for release of further funds.)

Specification of ways and at what stages local men and women will participate in project implementation, with specific attention to the decision-making process.

Specification of the targeted number of male and female participants and beneficiaries and the nature of those benefits. Monitoring and evaluation to document the actual number of participants and beneficiaries and the benefits received.

3. Technical Assistance

Evidence from existing and proposed NGO/PVO natural resource related projects reveal weakness in terms of a) technical competence, b) the active participation of local people in determining the activities to be undertaken, c) linkages between activities inside and outside of parks and protected areas, and d) documentation of participation and the distribution of benefits. For these reasons, the Grant Management Umbrella will provide short term technical assistance to be contracted locally and internationally to review macro grant proposals and carry out midterm evaluation of such grants. The Grant Management Umbrella is expected to call upon the services of REDSO/ESA specialists to write the terms of reference for the requisite short term technical assistants.

III. Program Impacts

A. Nature of Planned Impacts

An indicator of achievement of project purpose will be: Changes in attitudes and behaviors related to natural resource conservation. This is expected especially in communities adjacent to parks and reserves which directly benefit from the grants component. It is also expected to occur as an indirect result of involvement in the NEAP planning process. Measurement of the following will indicate existence of such changes: increased awareness of the reasons for conserving parks and forests, b) better land use management practices on household lands adjacent to protected areas and parks, and c) positive view of parks and protected areas as a result of the potential for economic benefits.

At the output level, the non-policy components are expected to result in: an increase in economic/social benefits from environmentally sound activities in targeted areas. This will be measured by: the extent to which men and women, adjacent to parks and protected areas in southern and western Uganda, a) undertake

improved land use practices on their homestead land, b) are engaged in jobs and income earning enterprises as a result of park maintenance and tourism, c) directly or indirectly benefit from revenue -sharing, i.e. the use of a portion of the revenues generated from tourism in parks and protected areas, and d) other activities identified by the local people.

B. Anticipated Impacts of Program Elements

1. Policy Changes

NEAP: The NEAP planning process is expected to result in a workable, viable action plan which will identify major, critical measures needed to be undertaken for the benefit of the nation. The NEAP is expected to have a long term impact, be gender neutral (i.e.not to be biased in favor of men nor of women), and not to be biased in terms of ethnicity/regions. It is expected to focus more on rural than urban populations since 87% of the Ugandan population is rural and because agriculture is the main economic activity.

The NEAP is designed to have a positive impact on the population in general. Undoubtedly there will be some negative consequences as a result of requiring greater attention to the environmental impact of existing and proposed projects and private sector enterprises. It is anticipated that the private sector will pay the cost of EIAs and will enact mitigating measures to help ensure the environmental soundness of their enterprises.

Protected Areas: The gazetting of Bwindi and the Rwenzori forests as national parks is expected to have a positive, long term, indirect impact on those within the watersheds. There will be a negative impact on those currently earning income as loggers and miners but the loss of this employment will be compensated through the creation of jobs for local people in Parks and tourism. Those who may experience the main loss of income would be the "big men" who are engaged in the commissioning and marketing of timber from these forests;. it is estimated that less than five people will have this lucrative source of income denied them (interviews). At the same time, the Forest Department is considering shifting the logging to the abundant soft wood plantations so an alternative would exist for ~~such~~ people.

If the Board of Trustees do not permit limited use in specified zones for gathering of minor products then these policy changes will have a much greater negative impact by affecting households who directly and indirectly rely on the forests for certain products. To help to guard against undue hardships APE will fund a study to document the pre-policy change uses (the extent to which minor forest products are being used, the number of people directly dependent on access to each of the products and the

measures to mitigate against unsustainable use), and will then periodically monitor the impact of the policy change on key groups of users.

The changing of Kibale and other forest reserves into forest parks is expected to have a very limited negative impact. The forest parks are expected to have a portion of them in which traditional uses for minor products are permitted on a sustainable basis. APE will provide assistance to the forestry department in helping to delineate the boundaries of use zones within the forest as well as the off-limits zones. This assistance will combine sound technical advise together with data on current uses (similar to above). The current commissioners and marketers of timber are the main group which will probably be negatively effected.

Furthermore, those forestry department staff currently cooperating with illegal users of the forest will also be negatively effected from the anticipated improved oversight of honoring the new designated boundaries. However, hopefully the forest park plans will also permit limited cultivation (e.g. one acre) per each employee residing within the forest park. Currently it is illegal for anyone to cultivate and hence the households of forest department employees must do so illegally or not at all. This benefit should be conditioned on employment by the forest department to guard against a) treating the land as an asset to be inherited by offspring, and b) regarding the land/house as a place where the employee can retire.

2. Grants

The grants are aimed at PVOs/NGOs, parastatals and individuals. The grants focus on assistance to people and activities in southern and western Uganda because of the important national parks and forests in these areas.

Institutional Feasibility
Action Program for the Environment

I. Background

The institutional capacity and commitment to undertake the Action Program for the Environment (APE) reform program in Uganda varies with respect to a) the different components of the reform program, and, b) implementing institutions. Certain general features, however, hold true for all public sector organizations in the country.

A. Status of National Infrastructure

The political events of the past twenty years represent a common denominator for the government institutions and the indigenous structures which play a role in the management of the country's natural resource base. The infrastructure of capital goods and of human resources was largely destroyed during that period. Since 1986, great progress has been made in rehabilitating the capital infrastructure as well as the human resource base, although the latter represents a longer process. In the foreseeable future, rehabilitation will remain a priority of the GOU, with investments for growth and development a second priority. While the NPA reform program will require a stable and secure civil situation, it will support the rehabilitation efforts necessary for sustainable environmental management in Uganda.

B. Civil Service Renumeration

The current purchasing power of a civil service salary is estimated to equal less than 1% of that offered at the time of independence. Present renumeration is insufficient to support even a small household. While certain benefits (housing allowance, food allowance) paid in kind to civil servants, seek to redress the balance, employees are forced to supplement their meager salaries. Potential means include a) defrauding the government institution of the product it manages (illegal exploitation of timber resources), b) defrauding the government institutions through the salary structure (ghost employees), or, c) seeking a second employment (thus failing to perform assigned civil service duties). All three detract from the GOU capacity to pursue fiscally sound operations. Career advancement parallels seniority rather than quality of performance, therefore depressing professional motivation. Donor organizations and NGOs, by offering renumeration at a higher levels, hire away the more talented and competitive individuals from the public sector. Thus, low managerial and professional capacities within government are perpetuated. Implementation of the NPA reform program will, through provision of training,

technical assistance, and material support, provide greater motivation for employees in the public sector.

C. Coordination of Donor Assistance Resources

In light of the significant political and economic steps taken by the National Resistance Movement (NRM) government in recent years, increasing amounts of donor assistance are flowing into Uganda. An important proportion of these are targeted at the natural resources sector. Problems have arisen over the lack donor coordination and communication in programming these funds. Overlap, and even direct conflict, among the objectives of various projects have occurred. Presently, the GOU has requested donor assistance in the preparation of a National Environmental Action Plan (NEAP), a National Conservation Strategy, a Tropical Forestry Action Plan (TFAP), and a variety of bilateral programs, epitomizing this potential redundancy. The NEAP, however, represents an unique opportunity to draw together the myriad institutions, both within and outside of government, which have a stake in natural resource programs in Uganda. The NEAP process, as well as its product, will establish a comprehensive, long term framework for communication, coordination, and cooperation among stakeholders.

II. Action Program for the Environment (APE)

A number of institutions, both within and outside of the government structure, will implement the reform program and projectized component of the APE. An unique feature of this NPA activity is that a new institution, the NEAP Secretariat, will be created through, and responsible for oversight of, the NEAP process.

III. The NEAP Secretariat

A. Operational Capacity

The Government of Uganda requested the World Bank to assist it in formulating an National Environmental Action Plan. Thus, the political will necessary for a successful undertaking has been a catalyst from the start. Preliminary discussions in 1990 and 1991 have involved the participation of over a dozen relevant Ministries. Topic areas have been identified which will be addressed by Task Forces under the NEAP. The Terms of Reference for these Task Forces are being refined, and will be finalized at an initial workshop for Task Force members. Consensus has been reached among GOU Ministries on the modalities of secondment of employees to the Task Forces. Office space for the NEAP Secretariat has been located. A tentative budget for the NEAP Secretariat, and Time Table of Activities, has been developed.

B. Additional Needs

To date, much of the actual planning for the role and specific activities for the NEAP Secretariat has been carried out by the Acting Interim Coordinator. This individual is a staff member of the Department of Environment. The Secretariat will eventually physically disassociate itself from MEMEP, and take up residence in its own independent offices. Technical assistance and material support will be provided through APE to aid the Secretariat to meet its mandate.

IV. Ministry of Energy, Minerals and Environment Protection

The MEMEP was created by Presidential Pronouncement (not by legislative action) in February 1986, in response to political and institutional concerns. Its function is "...to co-ordinate and regulate national efforts in the wise management of the life supporting natural resources so as to ensure their availability for sustainable development and the preservation of the human environment" (Proposals For Improving Performance of the Ministry of Environment Protection, M. Kintu, Sept 1989). While MEMEP enjoys solid political support, it has yet to assume all aspects of its mandated role. The different Departments of MEMEP are evolving in response to changing environmental priorities, and attracting support from donor organizations to do so, yet the Ministry has not developed its guidance, coordination, and monitoring responsibilities.

Contradictory internal policies, conflicts with other agencies, inadequate institutional resources, low salaries, lack of coordination within the donor community, and the difficulty of simultaneously performing as a line organization have prevented MEP from assuming its function of centralized coordination.

A. Policies

A comprehensive environmental policy, with attendant legislation, has not been formulated for Uganda by MEMEP. Nevertheless, the International Union for the Conservation of Nature (IUCN-WCU) supported the preparation of a National Conservation Strategy, the Forest Department revised its forest policy in 1988, the EEC is leading a review of the Forest Act (which regulates forest reserves but not National Parks) and providing technical assistance to examine policy questions, FAO and UNEP are assisting the GOU to prepare a national soil policy, UNEP funded background studies and the preparation of a strategic plan for natural resources, and the Government of Uganda is initiating a multi donor Environmental Action Program. In addition, various other GOU ministries have also produced policy guidelines on issues of environmental significance.

It is evident, that even with sufficient technical, material, and human resources, MEMEP will be unable to take the lead on environmental management until it prepares a comprehensive national policy. Preliminary Terms of Reference for one of the Task Forces of the National Environmental Action Plan (NEAP) include drafting both comprehensive Environmental Legislation and guidelines on a National Environmental Policy. Such a policy must provide clarity and balance for the resource managers in the different institutions involved in the sector. Production of such a policy must be undertaken very carefully, primarily due to the regional variability within the nation. Ecological, economic, social, political, and cultural situations are different by region, and policies which promote sound resource use in one area may prove environmentally and economically debilitating in another.

B. Forest Department

The Forest Department (FD) in Uganda maintained a reputation through the mid-1970's for high standards in its forest management capabilities. Management systems for natural forests evolved, based on experience generated through operations and research. Silvicultural practices were developed to generate regular yields of quality timber, and effective regeneration methods were refined. Unmarketable slash was sold to charcoal producers following harvest, thus facilitating regeneration of desirable species, and supplying valuable wood energy from otherwise underutilized biomass. In addition, softwood plantations were established in the 1940's, to meet the nation's projected timber requirements. Finally, during the 1950's and 1960's, there was a recognition within the Forest Department that tree planting on public and private lands by local populations was the only way to meet biomass needs sustainably into the future.

Since 1948, when the protective role of forests as emphasized in the 1929 Nicholson Report was downgraded in favor of an economically productive one, the Forest Department sought to optimize monetary returns from the forest estate. Senior professionals in the Department were trained for the most part in the UK, where the science focuses on traditional timber production. While the faculty at Makerere University is knowledgeable about and sensitive to the important conservation issues within the discipline, the curriculum in the University's Forestry Department was for a long time primarily production oriented.

During the late 1970's and 1980's, the capacity to carry out operations at a comparable scale dissolved. The recurrent and development (investment) budgets of the Department declined to less than one-third of the levels of the mid-70's. At the same time, staff numbers increased significantly. The result was a plethora

of professionals, who lacked the means by which to carry out their work, and who in fact never had the opportunity to develop valid field experience.

The historical proclivity to maximize timber production is at odds with the inefficient pricing structure established for wood products. Stumpage costs do not reflect the value of the different products, and do not create incentives to modify consumption and demand patterns. Furthermore, the FD collection system is not effective. A rigorous economic analysis and subsequent revision, of the permit and licensing structure, would result in greater revenue generation for the Department at lower levels of timber extraction.

Equally important, current extraction procedures are careless and destructive. The extent of the biophysical resource base is unknown. Commercial concessions are leased regardless of actual stocking levels. Scientific data on regeneration rates of different forest types are weak, and the rates of exploitation which are or are not sustainable have not been investigated sufficiently, much less established conclusively.

Some of the major constraints to effective resource management include a lack of department staff training in social or community forestry and subsequent neglect in addressing the critical needs of rural men and women. This problem is particularly severe in regard to rural women who are the primary fuelwood gatherers and consumers. There is currently one professional research specialist in the Forest Products Division who is investigating improved cookstoves and patterns of energy consumption. But she unfortunately spends the majority of her time in research and no time in introducing improved technologies to interested groups in need of assistance. This problem is explained by the department policy that allows very little time for travel among research staff. Funds for transportation are very limited. Women's groups and schools frequently make requests for technical assitance.

The Senior nature Conservation Officer in the Forestry Dept. also noted a large number of requests for assistance from women's organizations. Many of these groups are writing proposals for assistance in a "spontaneous response to recent awareness of the environmental crisis". The secretariat travels to meet the women's groups.

It was recommended by Forestry Dept. staff that a seperate desk should be designated to handle these requests. Because most of the requests for assistance are currently coming from women's groups, it was recommended that this desk should be a "Women's Desk".

Forestry dept. staff also suggested that seminars or workshops need to be held to with both male and female participants to create awareness among the rural population concerning current problems in fuelwood shortages and the need for tree planting programs. A gender awareness seminar was advised for the Forestry Department as a whole, as well as for rural population groups. This seminar could address the weakness in social forestry education simultaneously.

Lack of communication, and even direct conflict, between organizations was also noted as a constraint which exacerbates the differing orientations of departments. The Forest Department is responsible for Forest Reserves. These are frequently surrounded by, or overlap with, protected game or wildlife areas. Management guidelines for the two are very different, yet there is little effort to ensure a continuity of sound management when moving from one type of area designation to another. The Forest Department is not required to submit management plans for the Forest Reserves to Wildlife staff for review, prior to leasing commercial contracts for exploitation. The possible negative impacts on habitat management plans are evident.

In the recent past, significant changes have been evident in the FD approach to forest management. The revision of the Forest Policy in 1988 restored the balance between production and protection in the Department's mandate. The Nature Conservation and Farm Forestry components of the Forest Rehabilitation Project (FRP) have contributed to a broader awareness throughout the Department of the environmental values of the country's forest reserves. This awareness has been reinforced by conditionalities of the FRP requiring designation of 20% of all gazetted forests as nature conservation areas, and an additional 30% as buffer zones of limited exploitation. Research, planning, and training in the area of forest conservation will continue throughout the FRP. A first In-Service training for Regional and District Forest Officers on Nature Conservation was recently held, and the response was encouraging. Progress in targets areas of the Farm Forestry component includes an enhanced extension role for FD staff, involvement of private individuals in economic production of wood products, and decreased pressure on gazetted areas. Reforms are underway within the Forest Department, which, if consolidated, could result in more sustainable management systems for natural resources.

At present, the Forest Department staff includes 189 professional staff (degree holders), 200 Foresters (diploma holders), and 260 Forest Rangers (certificate holders). Of these employees there are 6 female degreee holders and 10 female rangers with certificates. None of the diploma holders are women. Of the 600 forest guards employed none are female.

The Commissioner estimates that only 6% of these are based at headquarters. An additional 10-15% have research and administrative functions, with the remainder assigned to field positions. UNDP has conducted a Training Needs Assessment, and FAO a Manpower Study; general conclusions indicate that (given Uganda's current economic situation) there is less of a need to increase overall staffing as there is to increase skills in certain areas. There is reportedly a high turnover rate among forestry employees which is largely attributed to low salaries and irregular payment of salaries.

The vast amounts of financial assistance directed to the Forest Department in recent years have granted it an importance which far exceeds that of other structures within MEP. It would seem that smaller levels of funding, linked to specific activities, could be more effectively utilized. Limitations to absorptive capacity, compounded by convoluted procurement procedures of the GOU's central tender board, argue in favor of long term assistance programs with more modest financial support. The inability of the Department to obligate funds at levels remotely resembling targets under the first two years of the World Bank Forest Rehabilitation Project reinforces this concern.

The Forest Department is actively improving its capacity to manage and conserve the resource base for which it is responsible, in keeping with the overall goals and objectives of APE. A four year Nature Conservation Workplan has been developed under the EEC project, which includes placement of field based Nature Conservation Officers. Nevertheless, additional support and assistance is necessary (administration and management, extension, forest conservation, and conversion to utilization of softwoods are illustrative areas), and will be for some time. If such support is coordinated, dialogue with other Ministries fostered, and management on forest lands outside gazetted areas addressed, the Forest Department can have a positive impact on the future of Uganda's natural resource base, while contributing to rural economic growth. The NEAP will provide a forum for coordination of long term needs assessment, and development and implementation of support mechanisms.

1. Additional Needs

a. Technical Assistance

To complement on-going and planned technical assistance to the Forest Department, and lead to effective achievement of the APE goals and objectives, USAID should consider providing short term technical assistance in the following areas. All costs are rough estimates.

Economic Analysis/Natural Resource Accounting: To date, cost/benefit analyses of forestry activities have quantified the financial value of timber products harvested, without determining the foregone values of watershed protection and soil productivity, or the potential market value of minor forest products which are of a non-consumptive character with respect to the forest estate. A more accurate system for quantifying these so-called secondary forest products would demonstrate the economic importance of conservation to Department staff. This in turn could lead to development of a fiscal and economic policy for revenue generation from the natural resource sector.
Recommendation: Technical assistance to develop a system for accurate economic analysis of management activities, and develop guidelines and training materials for the field application of such a system by Forest Department staff. Beneficiaries would include the Forest Management section at headquarters, as well as a representative number of RFOs and DFOs who would be involved in field studies and applications to develop valuation equations and analytical guidelines.
Duration and cost: 3 person months.....US$ 60,000

Conservation Management Plans: Management plans were developed for forest reserves decades ago. These are expired. The EC component of the Forest Rehabilitation Project, and certain PVOs, are active in the development of such plans. However, in most situations District Forest Officers receive little guidance or assistance in the preparation of new management plans. A methodology has not been standardized across all forest reserves, and will not be applied to forest lands outside gazetted areas for many years. In some situations, the lack of valid management plans will result in unsustainable exploitation.
Recommendation: Technical assistance to develop operational guidelines, in close cooperation with the staff of the Forest Conservation and Management component of the FRP. The guidelines would then be field tested in two Forest Reserves/Parks, with the assistance of several DFOs from the area, for the preparation of conservation management plans.
Duration and cost: 3 person months.....US$ 60,000

Tourism Planning: The Forest Department forsees the potential for tourism to generate significant revenues, as a sustainable alternative to logging in forest reserves (and planned Forest Parks). Fundamental planning and preparation will be necessary, to preclude adverse impacts and consequences of increased visitor levels to these areas.
Recommendation: Technical assistance for the design of basic infrastructure and planning prerequisites for forest-based tourism in two Forest Reserves/Parks. Establishment of carrying capacity,

fee structures for visitors, and communications and booking systems.
Duration and cost: 2 person months.....US$ 40,000

b. Training

Community Forestry/Land Use Planning: Development and implementation of land use plans to meet resource management and social goals and objective of communities. Two participants from Bwindi and Kibale areas, selected in conjunction with ongoing project activities, per year for 4 years @ US$ 10,000 each.
Total cost.....US$ 80,000

Agroforestry Extension: To expand on the training already provided through CARE, instruction in specific techniques beyond nursery production and tree planting. Topics to include soil conservation techniques, management of on-farm trees, and direct seeding. In-country regional workshops, to include Forest Department and Agriculture Department field agents. Four workshops in-country over LOP, at US$ 20,000 each. It is essential that these workshops be designed to include equal numbers of male and female participants and that they address gender specific problems in promoting the implementation of agroforestry methodology. (2 person weeks preparation, approximately 20 participants)
Total cost.....US$ 80,000

Workshop on the Collection of Socio-economic Baseline Info for Planning Natural Resource Management: Techniques in Rapid Rural Appraisal and Participatory Rural Appraisal for forestry extension agents. Organized and conducted in Uganda using in-country resources and possible international assistance (PVO-NGO/NRMS Project staff, MISR staff), by region, 4 over LOP. These workshops should emphasize the need to disaggrgate socio-economic data by gender in order to identify specific male and female roles in NRM and appropriate types of problem solving for both men and women.
Total cost..... US$ 80,000

Forest Administration and Management: Institutional administration and resource management for senior Forest Department staff. One participant per year @ US$ 10,000 each. (possible USFS funding).
Total cost.....US$ 50,000

Forest Conservation Ecology: Principles and systems for the conservation and sustainable management of biologically rich forest ecosystems. Provision through study tours to US National Forests and National Parks, or selected forest/park areas in Africa, Latin America, and Asia, and possible LT training for recent BSc candidate, selected by Forest Dept.

241

(NB: The Forest Conservation component of the FRP anticipates addressing this area. Cooperative training and financing arrangements should be investigated).
Cost (Study Tour-5 participants at US$ 10,000 @)..US$ 50,000
Cost (One LT grad program).....US$ 40,000

C. Department of Environment

The Department of Environment, within MEMEP, is divided into four divisions: Natural Resource Management, Environmental Education, Monitoring and Control, and Information and Research. The Department was established in recognition of the insufficiency of sectoral approaches; to ensure environmentally sustainable growth and development in Uganda, an integrated, comprehensive perspective was necessary. At least one attempt has been made to assume this role: The Department convened an Interministerial Committee on a situation which concerned several ministries, designated a working group to address the issue in question, outlined a strategy, and then handed over responsibility for implementation to the relevant sector Ministry, while retaining monitoring responsibility itself. Some difficulties were encountered with the system: the Interministerial Committee was at too high a level; various Ministers and Permanent Secretaries have other priorities which come before the working group, yet their designated technical representatives were reluctant to take action prior to high level political endorsement.

As the youngest Department within MEMEP, the Department of Environment faces some unique problems. There are acute shortages of manpower, technical capacity, precise environmental information by region, specific solutions which respond to specific problems and are developed through a developed planning process, and a national tendency to equate environmental concern with tree planting. An Environmental Sciences program was initiated in the Makerere University Department of Geography recently, but relevant training opportunities in-country are limited.

The Department has no staff in the field, with the exception of personnel at several project sites. Efforts to recruit 22 new Environmental Officers are underway, with the intent to post them in the field, beginning with the Regional level. Given the novel subject matter, none can be expected to have appropriate education or experience. It will also be difficult for the Government to provide the infrastructural and equipment requirements for such an increase in personnel.

To date, the Department has not benefited from the magnitude of donor assistance received by the Forest Department. Recently,

250

funding was granted by NORAD to implement the Forest Conservation Project (activities focussed primarily around Mt Elgon). As this is a essentially a forest management activity there is some sentiment in the Forest Department that the Project should fall within its own mandate. Similar conflicts could arise over forestry extension and conservation education activities.

1. Potential Technical Assistance

Curriculum Development: While the NEAP will address the formulation of guidelines for monitoring and environmental impact assessment, there are no current plans to strengthen training or environmental opportunities within Ugandan educational institutions.
Recommendation: Technical Assistance to the Education division of the Department to integrate core subject areas for environmental studies and management into the appropriate Faculties and Departments of Makerere University and technical training schools.
Duration and cost: One person month .....US$ 20,000

Disaster Preparedness Training: The Environment Department has no in-house capacity to develop plans for disaster response and planning. Events have demonstrated the need to establish such mechanisms immediately.
Recommendation: USAID request support through the USFS Disaster Assistance Support Program (DASP),for provision of technical assistance to work with the Environment Dept in formulating plans for action.
Duration and cost: One person month (tvl, in-country) US$ 7,500

2. Training

Preparation of EIA/EIS: Monitoring and control of environmental impacts, industrial emissions, water quality standards, waste disposal and air pollution. Five participants to receive standard baseline training and then individual specialization by topic (suggested subject areas: pollution abatement, envi legislation, envi econ/planning) in the first two years of the program, @ US$ 15,000 each.
Total cost:.....US$ 75,000

V. Ministry of Tourism, Wildlife and Antiquities

The Ministry of Tourism and Wildlife (MTW) is composed of the Commission for Tourism, the Commission for Wildlife, and the parastatal, Uganda National Parks.
The current organizational structure is a difficult one; in effect one branch is focussed on the marketing of a product, while other branches are only beginning to develop that product into marketable form. A very real concern is that, given the economic condition of

the country, central planners may seek to market the product before it is ready. At the present time, no system of balance has been developed. This inherent conflict is compounded, as legislation which governs Park and Game areas, and in particular that which prohibits any human activity in protected areas, is at variance with the realities in the field. This serves to undermine the credibility of the MTW.

Managerial responsibility for areas on which national parks and forest reserves overlap has never been clearly determined. Parks policy calls for strict conservation, Forest Department policy may call for extractive activities, and Game policies conflict with both in overlapping or contiguous areas.

The Ministry is committed to the intent of APE, yet its implementation capacity is paralysed by a lack of resources (qualified personnel, salaries, vehicles, and equipment), a lack of tourism infrastructure, an inadequate basis (information about, and integrity of, the gazetted areas), the absence of any planning mechanism, and problems of encroachment within and around protected areas.

A. Commission for Tourism

To date, examination of tourism issues, resulting in the formulation and implementation of clear policy, has been insufficient. While UNDP/FAO is providing support to the development of the tourism sector, no comprehensive policy has been prepared for the country. Economic analyses of the sector, including the costs and benefits of establishing an operational tourism infrastructure, have yet to be conducted. The complementary issues of carrying capacity for ecotourism, and the international perceptions of the country as an attractive travel destination, must also be researched.

B. Commission for Wildlife

The Game Department, under the Commission for Wildlife, was originally created for control and management of hunting. It is legally responsible for all activities related to wildlife conservation outside of National Parks. Designated Game Reserves comprise 9000 square kilometers, or approximately 4% of Uganda's total area. Original policies and legislation of the Game Department, which date to 1959, focussed on larger mammals and sport hunting. Hunting has since been prohibited, wildlife populations reduced, and activities now focus almost exclusively on the protection of game reserves. The institutional organization was never designed for this role.

Current Game Department staff includes 22 professional (degree holders), 10 Sub-professionals (Diploma holders) and 7 Technicians (Certificate holders). UNDP has funded training for game guards, yet the program focus has been largely on paramilitary training, rather than instruction in wildlife management. Annual budget allocations from the GOU total about USh60 million, which only covers the staff salary obligations, and preclude support to operations or investment expenditures.

The Chief Game Warden, under the Commissioner for Wildlife, is limited in his role, largely because much of the land area for which he is responsible has been lost, to encroachment, de-gazetting, and other changes in land use planning. In addition, the logistical and human resource base on which he can draw is limited. At present, there is absolutely no information on the extent of wildlife populations in Uganda (excluding one or two species on which specific research has been conducted). Destruction of populations was extensive during the years of civil unrest; since that time no data has been generated on reestablishment of wildlife populations either within or outside gazetted areas. The utilization and consumption of "bush" meat by local populations is unknown. This also is true for its economic and nutritional significance, at a local and national level.

FAO is supporting the review of Wildlife and Parks policies and Acts. The current Public Service Commission, investigating the reorganization of government ministries, is said to be considering a consolidation of the Department with Uganda National Parks. In any event, the Department must begin to play a role in the management of wildlife resources outside of gazetted areas, and to expand that role to encompass the range of biological diversity. It will require baseline information on the extent of wildlife resources throughout the country, before areas can be prioritized for management and conservation activities. It will need to assume greater extension and education functions, and establish pilot mechanisms for utilization and control of wildlife resources by local communities.

1. Potential Technical Assistance

Inventory: The extent of wildlife (animal) resources must be determined. Surveys have been conducted in a limited number of areas, yet comprehensive data is lacking.
Recommendation: Technical assistance be provided to catalyze multi-donor support, to develop planning, establish standards for inventory, and design pilot surveys.
Duration and cost: one month.....US$ 20,000

Buffer Zone Conservation and Utilization: The Department has recognized the need to investigate management of wildlife on

25

private land. Such management could improve nutritional intake of rural households, present a source of income through sale to growing urban markets, and reduce pressure on existing wildlife. The institutional capacity to pursue this interest does not exist. **Recommendation:** Technical assistance be provided by a wildlife utilization specialist, to provide guidance and on-the-job training in developing wildlife utilization possibilities. Several pilot activities for game ranching or sport hunting be designed and implemented.
Duration and cost: Three person months.....US$ 60,000

2. Training

Conservation Education: Training in non-formal education techniques, identification of objectives, design of extension aids and methodologies for personnel at the Entebbe Zoo, and selected include game guards designated as having some "conservation ed" responsibilities. This could contribute to the development of a small training center at the Zoo. Negotiations should be initiated with the Peace Corps to ascertain possible Volunteer placements.
Total cost (for PC In-Service Training).....US$ 15,000

Study Tours: Study and observation tours for Game Department and Uganda National Parks staff, and community leaders to ongoing programs in selected Southern African countries to observe successful community or private game utilization activities. Two tours during LOP.
Total cost:.....US$ 70,000

C. Uganda National Parks

The Uganda National Parks (UNP) is organized as a parastatal, and thus enjoys certain advantages over normal GOU agencies. These include greater flexibility than a completely public sector agency, representation on its managing board from within the private and academic sectors, and the authority to establish different personnel regulations than a government agency. However, UNP actually does not function entirely as a parastatal should, as it is primarily dependent upon the government for financial support. If 80% of its funding comes from the Ministry, it is not in fact a semi-autonomous body, and it becomes subservient to the Ministry. Furthermore, the total funding which UNP does receive is insufficient to pursue its mandate properly. Equally important, recommendations made by the Board of Trustees have been overturned in the past by the Minister.

Professional capacity within UNP is currently very weak; the most senior employee has only been in the organization for 12 years, individuals holding senior positions are recent graduates, and the position of Deputy Director is currently vacant. As of May 1,

1991, only ten positions in the existing National Parks were allotted for resource management or education functions, and only four of those were actually filled. This to manage 7198 square kilometers. Since that date two additional Parks have been established. Park management in Uganda until the present time consists of protection of Park area from encroachment and infrastructure development (road construction, camp placement). The capacity, or even intent, to manage the natural resource base, to increase vegetation/wildlife stocking, manage habitats, plan for tourism, or provide educational/interpretive services, is negligible.

UNP activities are targeted exclusively within the boundaries of National Parks. As many of these conflict with human land use in the areas, a strong anti-conservation sentiment exists among rural populations. They do not perceive any benefit to their livelihoods from the existence of the Parks. If communities are opposed to the presence of Parks, there is little the undermanned staff can do to prevent activities which deplete the resources.

UNP is unique in that it retains revenues generated by the Parks. However, accountability for fee collection and disbursement of the monies is not established. At present, Queen Elisabeth National Park is the only Park to generate any revenue, amounting to 500-600,000 USh per month. While these should be used for activities in the Park, those revenues which are in hard currency (approximately 75%) are turned over to the national offices. A disproportionate amount of resources allocated to the organization is utilized by the main administrative offices.

Among the four National Parks in Uganda, only the Queen Elizabeth Park can be called operational in any sense of the word. The remaining three lack basic infrastructure and facilities to carry out management operations and accommodate visitors.

The Uganda Institute of Ecology represents the scientific and research arm of UNP. Its responsibilities include research, training and education, and conservation education as coordinated with the Wildlife Clubs of Uganda. Low levels of support to UIE have prevented it from taking a dynamic role in any of these areas. In fact, the position of Director of UIE has remained vacant for the past two years, in part due to the woefully low salary.

1. Additional Needs

Uganda National Parks will require significant levels of support to fulfill its current role; as additional National Parks are established these levels will increase accordingly. The Policy and Act which govern UNP do little more than describe the procedure for designation of Parks. Creation of Parks to date has not been based

on the character of the natural resources; there are no planning or management mechanisms; there is no stated purpose for UNP; revenue collection and distribution is poorly defined and inappropriate; and the role and importance of wildlife are unclear. Penalties for infractions predate inflation and devaluation of the Uganda shilling, and maximum fines are less than US$ 10.

2. Technical Assistance

Human Resources Development Plan: Given the expanded role of UNP into new Parks, growing tourism, a changing role, and new needs, the organization is in desperate need of defining its role, and how it intends to perform it. Improvement of skills, and the application thereof, are a primary step.
Recommendation: Technical assistance to develop a long term Staff Development Plan in response to the changing nature of UNP.
Duration and cost: Two person months.....US$ 40,000

Conservation Education: UNP will need to provide interpretive services within the newly established Parks to tourists, and conservation education/extension (along with Game Department) to persons residing around the Parks.
Recommendation: Assistance be provided, perhaps simultaneously to Game Department staff, to design conservation education programs and mechanisms for their implementation around new Parks.
Duration and cost: Two person months.....US$ 40,000

Environmentally Sensitive Tourism Infrastructure Design and Planning: National Parks include a range of fragile habitats, including areas recently declared new National Parks. Assistance will be necessary to determine how to exploit tourism potential while maintaining the quality of those habitats.
Recommendation: Technical assistance to plan tourism in delicate habitat areas to minimize adverse impacts.
Duration and cost: Two person months.....US$ 40,000

3. Training

Resource Management: Based on the recommendations of the Staff Development Plan, USAID should consider supporting one long term training opportunity per year to augment skills of Park Wardens. Conversely, the appointment of long term PASA staff, to provide technical assistance to Chief Park Wardens could be considered.
Total cost
(PASA for three years).....US$ 600,000

Monitoring: UNP institutional capacity to track tourism levels and the consequences thereof to Park resources does not exist. Training in the design and implementation of systems to regulate tourism impacts in National Parks. Participants to include

256

headquarters staff as well as wardens from all National Parks. One training, with international trainer.
Total cost:.....US$ 35,000

VI. Ministry of Agriculture, Animal Industry and Fisheries

The history of agricultural research, extension, and training institutions in Uganda resembles that of the Forest Department. During the 1950's and 1960's, institutions were technically strong and, for the most part, operationally effective. The civil instability destroyed the capital infrastructure and tools necessary to pursue work, and the present salary scales are insufficient to motivate most civil servants.

If the Ministry was historically less strong in any area, it would have been that of sociological and economic background analyses, to accompany its strong research arm.

Agriculture in Uganda accounts for two thirds of the Gross Domestic Product (GDP), represents 80% of all employment in the country, and generates 99% of all export earnings. It is entirely dependent, and has direct impacts, on the natural resource base of the country. Agricultural clearing, along with fuelwood collection, represents the primary cause of deforestation.

The responsibility for farm forestry is one of the many grey areas among GOU rural development institutions today. Given that all agricultural production is produced on small holdings, and that food crops predominate on 90% of arable land, the agricultural extension agencies are those best placed to work with producers to improve on-farm resource management.

Reductions in post-harvest losses, currently estimated at 30%, could improve agricultural productivity significantly without requiring intensification of costly inputs or extension onto more marginal lands.

The Ministry of Agriculture has the most pervasive extension network in the field, with plans to post degreed staff all the way down to the Parish level. The operational capacity of this network is weak however, given infrastructural needs and low extension skills. The World Bank, along with UNDP/FAO, have conducted an Agricultural Extension Strengthening Study, and recommendations developed for improving institutional capacity. Future improvements in on-farm productivity will reduce pressures on protected areas, and decrease expansion of cultivation on marginal lands. Every opportunity should be made to foster cooperation between forestry and agriculture extension personnel, through combined training and planning at the District level.

231

VI. Ministry of Planning and Economic Development

MPED is responsible for coordination of national development planning and of bilateral and multilateral assistance. The Ministry contains Desk Units which review programs and represent interests of the different sectoral ministries. Recently, a Desk Officer was appointed to man the Environment Desk. Unlike other sectoral Desk Officers, who are professionals or technicians in the relevant sector, the current Environment Desk is not staffed by an individual with a background in natural resources.

Accurate natural resource accounting methods have not been incorporated into the multi-year GOU development plans. As a result, the actual cost of environmental degradation (through foregone agricultural production, health status of people and livestock, and future costs to offset current degradation) is not recognized.

The present Five Year Plan, recognizing the limitations which confront the government, focuses on decentralization. This strategy calls for enabling local structures to assume increasing responsibility for economic development and resource management.

VII. The Ministry of Women in Development, Culture and Youth

The Ministry of WID was recently introduced through legislation in 1988 and is still developing and expanding their organizational plan. The Ministry consists of a Minister and a Permanaent Secretary with two Departments including Finance and Administration and a WID Department with several divisions. These divisions include: 1) Planning and Projects Implementation, 2) Division of Research, 3) Legal Division and 4) Education and Training Division.

There are currently no specialists in Natural Resource Mangement within the Ministry itself but they have established "focal point officers" in line ministries who look at women's concerns in their sectors and bring issues to the Ministry of WID for discussion. One of the WID officers noted that there is a need to recruit profesionals who can link the WID Ministry with important ongoing activities in the other ministries.

VIII. Makerere University

Makerere Institute for Environment & Natural Resources (MIENR)

The Institute is a young one; it began operations in 1986. At present, it has a small full-time staff of six, and its facilities are extremely limited. Office space is cramped, there are no funds for research or field work, and links with line Departments of the

University are still on an informal basis. MIENR works exclusively with graduate students at present.

The Institute has performed work on a contractual basis (environmental impact assessments, case studies) for national and international institutions, and intends to expand activities of this nature as its institutional capacity allows. Plans exist to establish a natural resources database for Uganda within MIENR, accessible to all organizations within and outside of government.

Current priority needs for strengthening of the Institute include construction of buildings, which is outside the scope of the APE program. Technical assistance to the Department of Environment in Curriculum Development should include examination of MIENR and its role in the overall strategy for environmental management. Assistance for the establishment of a natural resource database will be examined in greater detail in other sections of this document.

Makerere Institute for Social Research (MISR)

The Institute was founded in 1948, and has established a reputation for itself over the years. It is staffed by a) resident research staff, affiliated full-time with MISR and paid by the University; b) associate research staff, housed within the Faculties of Arts, Social Sciences etc, representing a research arm for the various faculties, and a resource for different projects undertaken by MISR, but not full-time employees of MISR; and, c) international research colleagues who are invited or ask to conduct research at MISR. The Institute undertakes independent and collaborative research in the areas of agrarian questions, urban development, land tenure, refugee issues, and the informal sector. MISR represents a strong in-country resource for social analyses and studies which relate to natural resource issues.

Current research at MISR includes studies being conducted byt the Land tenure Center of Wisconsin with USAID suuport. A throuogh understanding of existing land tenrue systems in Uganda and their impact on farmer incentives for improved agriculture and natural resource management is critical to the successful development of the APE program. While important socio-economic data is currently being collected by LTC, gender specific information investigating women's use, ownership and inheritance rights to land in various regions have been neglected. It is strongly advised that further land tenure information is needed to delineate current restrctions on women's control of land and the impact this may have on women's involvement in tree planting, soil conservation or agroforestry programs.

251

MISR is currently receiving assistance through USAID and the World Bank to rehabilitate its physical plant and expand its library facilities.

Makerere University Department of Forestry

The Department was established in 1970 with assistance from the Norwegian Government, to offer a three-year professional education and training in forestry for the entire east and central Africa region. Political instability led to the termination of external support in 1973, and the withdrawal of foreign students. During the 1970's, support from UNDP/FAO provided for three staff positions, some equipment, and vehicles.

Current fulltime staff, who number 12, are all Ugandan. In 1989, the Department changed to a four-year curriculum, to elevate the technical and professional qualifications of graduates, and to expand into subject areas beyond the historical orientation towards timber production.

It has been noted by both members of the Forestry faculty as well as staff from the Forestry Dept. that the current university syllabus inadequately prepares forestry graduates for practical field work such as extension and social or community forestry. Short courses on extension methodology are recommended for recent graduates.

With assistance of the USAID Manpower for Agricultural Development (MFAD) Project, a Five-Year Development Plan has been prepared for the Department of Forestry. Apart from a couple of short term training opportunities, no other assistance to the Department has been forthcoming through MFAD (although international long term training has been provided for several dozen individuals through the Faculty of Agriculture). Given the importance of the natural resource base in driving agricultural development, this is unfortunate.

IX. Non-Governmental Organizations And Local Structures

The non-governmental organization (NGOs) operating in Uganda are numerous and complex. Their experience throughout the country, under a variety of circumstances, has been recognized by the Government as a valuable complement to its own limited infrastructure and agencies. In recent years, NGOs have demonstrated improved capabilities to work in the area of natural resource management. The technical skills of NGOs are increasing through training opportunities and relevant experience. Attractive salaries and better equipped working conditions continue to draw talented civil servants away from the public sector.

The GOU has been very receptive to NGO programs. This is partly due to its current economic situation, which, through lack of staff, money, or materials, precludes it from implementing activities in the field.

Nevertheless, regional differences and parochial interests, to say nothing of actions taking in isolation, preclude the achievement of the most effective results. Registration of NGOs is through the NGO Board, housed within the Ministry of Internal Affairs, and coordinated through the Prime Minister's office. Registration is a long and complicated process, and beyond the means of the many small community based organizations.

NGO activities are coordinated by the Prime Minister's office. In addition, UNDP, through the regional Africa 2000 network, is supporting the creation of a national network to increase resources available to NGOs. A consortium of Ugandan NGOs, DENIVA (the Developmental Network of Indigenous Voluntary Associations), with a membership of about fifty, has been formed. The A.I.D. funded PVO-NGO/NRMS Project has provided technical and management skills training in the area of natural resource management, and is currently funding 10 NGO sub-grants.

IX.A.1. Operational Capacity

A number of PVO/NGOs with current programs in Uganda demonstrate the institutional capacity to manage the NGO Sub-Grant Project component of APE. This will be further investigated in the NGO section of this document.

IX.A.2. Training

Mechanisms to provide continuing training to NGOS should be examined in the NGO Sub-Grant project component. Areas of particular importance include financial management, project planning and design, and monitoring and evaluation.

IX.B. Local Structures

The National Resistance Movement Resistance Council infrastructure is assuming increasing responsibility for administration and development activities throughout the country. The central government has fully endorsed decentralization. Two fundamental obstacles remain: 1) Financial autonomy, as revenues and budget allocations for local investment are slim to none. 2)Planning autonomy, as central plans continue to dictate operation priorities, often based largely on political, social, and religious criteria.

A thorough examination of the opportunities presented by local institutions, conducted by the World Resources Institute, documents this subject area. While national policies provide the framework for rural development, it is these structures whose actions impact the rural decision-maker directly. They include:

:Traditional institutions-Local chiefs, granted authority under the Local Administration Act of 1967, largely to regulate and oversee the implementation of GOU policies. The abuse of this traditional hierarchy during the Amin administration has resulted in differing evaluations of these institutions.

:GOU Resistance Committee structures-A recent creation, the RCs are well-established, active, and apparently well-received by the rural population. Their purpose is more to mobilize and initiate activities in response to national directives.

:NGOs-Several hundred, both indigenous and international, with different agendas and capabilities.

ANNEX II G

FIELD OBSERVATIONS: BWINDI

The history of Bwindi and its surrounding communities exemplifies the extremes of the natural resource problems, constraints and opportunities facing Uganda. The degradation of Bwindi, a 320 square kilometer forest reserve in Southwest Uganda, is striking. At the urging of local forest officers, over 11 square kilometers of the forest east of the Mbwa River were denuded by small-scale farmers in an Oklahoma-style land rush between July 1989 and January 1990. Mountain gorillas and the afromontane forest that thrived on these steep slopes were replaced with vegetables, corn, and bananas. The status of ownership rights for this 11 square kilometers is unknown; no one is quite certain as to who was authorized to give this land away and what tenure rights went with it. Another small area of Bwindi in the North Sector of the Reserve was cleared in 1989 through the World Bank Forest Project so that people could fell trees and cultivate the forest with "enrichment planting."

Snares and traps are set, usually within some proximity to the camps of pit-sawers and prospectors. Bee-keepers and honey gatherers fell trees to produce honey boxes and to obtain honey. Poachers set fires to help with a hunt and honey gatherers set fires to avoid bee stings when collecting honey. On several occasions, these fires have spread out of control, destroying several parts of the forest.

Bwindi Forest is a major water catchment area. It gives rise to several major rivers, which flow to the drier country in the north and west, and to the densely populated agricultural areas in the south. Bwindi is a primary source of water for several lakes and rivers, including the Nile. The removal of forested area up to and inside Bwindi has contributed to the soil runoff.

The Bwindi Game Guards have a frustrating job. Inside Bwindi, pit-sawers have removed all the grand old growth stands of mahogany, Podocarpus, and Newtonia. At one time, up to 80 percent of all the cut trees were estimated to have been taken illegally. The Guards have traditionally seen individuals they have arrested released by the judicial system without prosecution. In three of the last eight months, the Game Guards did not receive their salaries, approximately $8.00 per month. They were told that it was due to a mix-up at the central office. They were still waiting for the mix up to be resolved when this was drafted.

While mining has been prohibited in Bwindi, prospecting is not. Prospectors have been altering Bwindi's natural drainage patterns for the last 20 years in search of a pay-load. They have never reported finding marketable minerals, but have kept on returning with prospecting licenses.

263

The three sub-counties in which Bwindi is located maintain one of the highest population densities in Africa. The residents, primarily from two main ethnic groups, are predominately small-scale farmers since inheritance divisions have reduced their average land-holding once too often. Because of the population pressure, migration out of the area is common. Resettlement to other agricultural areas is difficult, though, because of traditional land tenure differences.

Bwindi is considered to be the most biologically diverse forest in Eastern Africa. It is home to over half the world's population of the endangered mountain gorilla (approximately 320). Recent forest inventories have revealed several new species of amphibians and probably reptiles. International wildlife experts, cognizant of the political instability of neighboring countries, see an opportunity to capture part of the lucrative world market for gorilla viewing. Yet, Bwindi has the problem of being remote with poor access roads, no hotels, no restaurants, and no trained staff.

Indeed, at Bwindi one can chronicle: laws and policies that create conflicting mandates for different agencies responsible for its natural resource management; incentives and population pressure that skew resource use towards short-term interests of selected groups; soil erosion on steep slopes that reduce agricultural productivity and add to downstream siltation; a series of administrative, financial, and information constraints limiting effective management of forests; and a nature-based tourism potential hampered by local perceptions of wildlife and tourism and by the missing physical and human infrastructure to support it. The resources of Bwindi, like the resources of Uganda, have suffered and prospered because of environmental policy, laws and institutions, and the economic practices that conflict with the conservation and long-term use of this protected area.

ANNEX II H

FOREST RESERVES: BACKGROUND ON PRIORITY AREAS

The Semliki Forest Reserve (219 km2) is one of Uganda's most valuable natural areas and should receive the level of protection that corresponds with that of Bwindi and Kibale. As part of the forest reserve system, Semliki is unique in that it is the only reserve in Uganda which represents the lower altitude ranges (670-760 meters). The reserve is contiguous with Zaire's Virunga National Park and with the North Rwenzori Forest Reserve, however, the flora and fauna of Semliki show a strong relationship with the forests of the Congo basin. The fauna of the reserve is particularly rich and it includes 216 species of forest birds which represents 66% of the country's total. The forest has little value as a source of timber. This reserve holds considerable potential for tourism based on: The large number of bird and primate species; Its location is relation to other reserves; Its close proximity to hot springs and navigable rivers which meander through wilderness forest, and the cultural traditions of the local people.

The Budongo Forest Reserve (793 km2) is the single most commercially valuable forest in Uganda. This middle altitude (700-1300 meters) forest has been repeatedly cut since the turn of the century. Despite this pressure, Budongo is still considered Uganda's most important forest in terms of tree species; 246 of which have been recorded to date (56% of the country's total). It is also Uganda's most important timber forest. The single greatest threat to this forest is, in fact, from the two operational sawmills. Budongo's fauna list is relatively rich which, taken together with the fact that it is contiguous with Murchison Falls National Park, leaves it open to tourism possibilities. Since Budongo contains the greatest number of differing forest communities within one reserve found in Uganda, a significant portion of this forest (30-40%) should be set aside as restricted nature reserve.

The Maramagambo and Kalinzu Forest Reserves (580 km2 in total) are especially valuable due to their richness in flora and fauna as well as their location in relation to other natural areas in the region. These reserves are middle altitude forests that form a large transitional network which connects other protected areas which include Zaire's Virunga~~s~~ National Park, Rwanda's Volcanoes National Park, Rwenzori Forest reserve, Semliki Forest Reserve and the Kibale Forest Reserve. The reserves contain a large number of tree species that are important for timber, making it comparable to Budongo in that respect. A majority of the Maramagambo reserve (299 km2) lies within the boundary of the Queen Elizabeth National Park where it is relatively well protected. Outside the park, however, a considerable amount of commercial exploitation is still taking place. Given that the forest covers an exceptional altitude range (915-1,845 meters) and that much of it is found in Queen

Elizabeth National Park, there is great tourism potential. Furthermore, since it is a key forest connecting many of the regions natural areas, these reserves represent one of Uganda's best opportunities to protect a complete and extensive forest system. Therefore, most of the areas outside of the National Park should be designated nature reserve and receive the necessary protection.

The Bugoma Forest Reserve is 365 km2 of middle altitude forest, 65 km2 of which is grasslands. As opposed to the Maramagambo/ Kalinzu reserves, Bugoma is isolated by agricultural encroachment. The reserve has been periodically harvested during the past 40 years. Despite the logging, this reserve represents the most extensive tract of undisturbed forest at this altitude remaining in Uganda. It also supports four species of animals considered to be globally threatened. Currently, only 6.1 km2 of the reserve is set up as nature reserve which is insufficient. This should be considerably expanded to include a wide cross section of the forest types which are still intact.

The Kasyoha-Kitome Forest Reserve (399 km2) is unique in that it is the most extensive tract of middle - high altitude forest left in Uganda (975-2,136 meters). It is very rich in tree species and contains a wide range of forest types. It is also unique in that 18% of the reserve consists of grasslands, swamps and open water communities. The existing fauna of this reserve is still largely unknown, but is believed to be extremely rich due to the altitude range that this reserve represents. The single greatest threat to the integrity of this reserve comes from the extensive timber concession recently granted by the Department of Forest to a nearby sawmill. The concession effectively covers the entire reserve. For the sake of sustainable management, the size of the sawmilling concession should be significantly reduced. Moreover, at least 20% of the reserve should be classified as nature reserve.

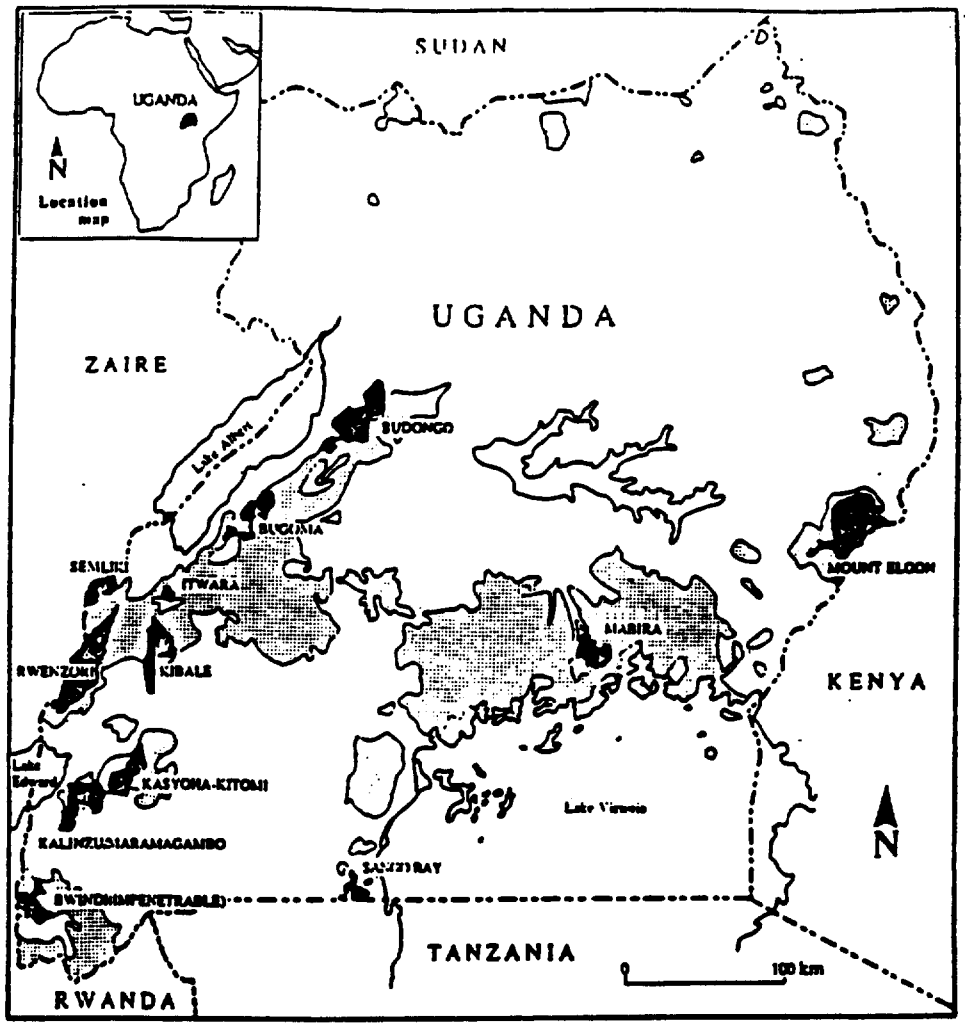
The Sango Bay Reserve (151 km2) deserves increased protection classification for several reasons. First, this is the only extensive "swamp forest" found in Uganda. It is located on the shores of Lake Victoria and represents a unique community of flora and fauna species, many of which are clearly on the edge of their range. This is particularly true of several tree species normally associated with high altitude forests. This reserve merits a high level of protection since it is an area where intensive research on forest ecology and community succession should take place.

The Mabira Forest Reserve (306 km2) is the only extensive block of middle altitude central Ugandan forest left in the country. This forest has been affected by human activity for as long as records have been kept. The most threatening current activity, however, comes from agricultural encroachment. The list

266

of fauna is relatively poor considering the size and composition of the forest, however, there are well over 150 species of birds and several species of primates. The paucity in biodiversity is due to high levels of poaching which has continued until present time. Despite the historic degradation, the Mabira Forest Reserve warrants special consideration and classification for several reasons. First, it is located between Uganda's two largest urban areas, Kampala and Njinja. It is a mere 30 minutes from Kampala by automobile. This in itself makes it well suited for tourism development. Secondly, and perhaps more importantly, Mabira's close proximity to the educational institutions of these urban areas makes it ideal as a center for environmental education. Thirdly, Mabira would be a good area for research on community succession, harvesting intensities and regeneration. Given a minimum level of protection, Mabira could also become a prime site to study population dynamics of certain mammal species in relation to human pressure. In summary, because of it's location, Mabira's classification should emphasize it's potential to be set up as an education and research reserve.

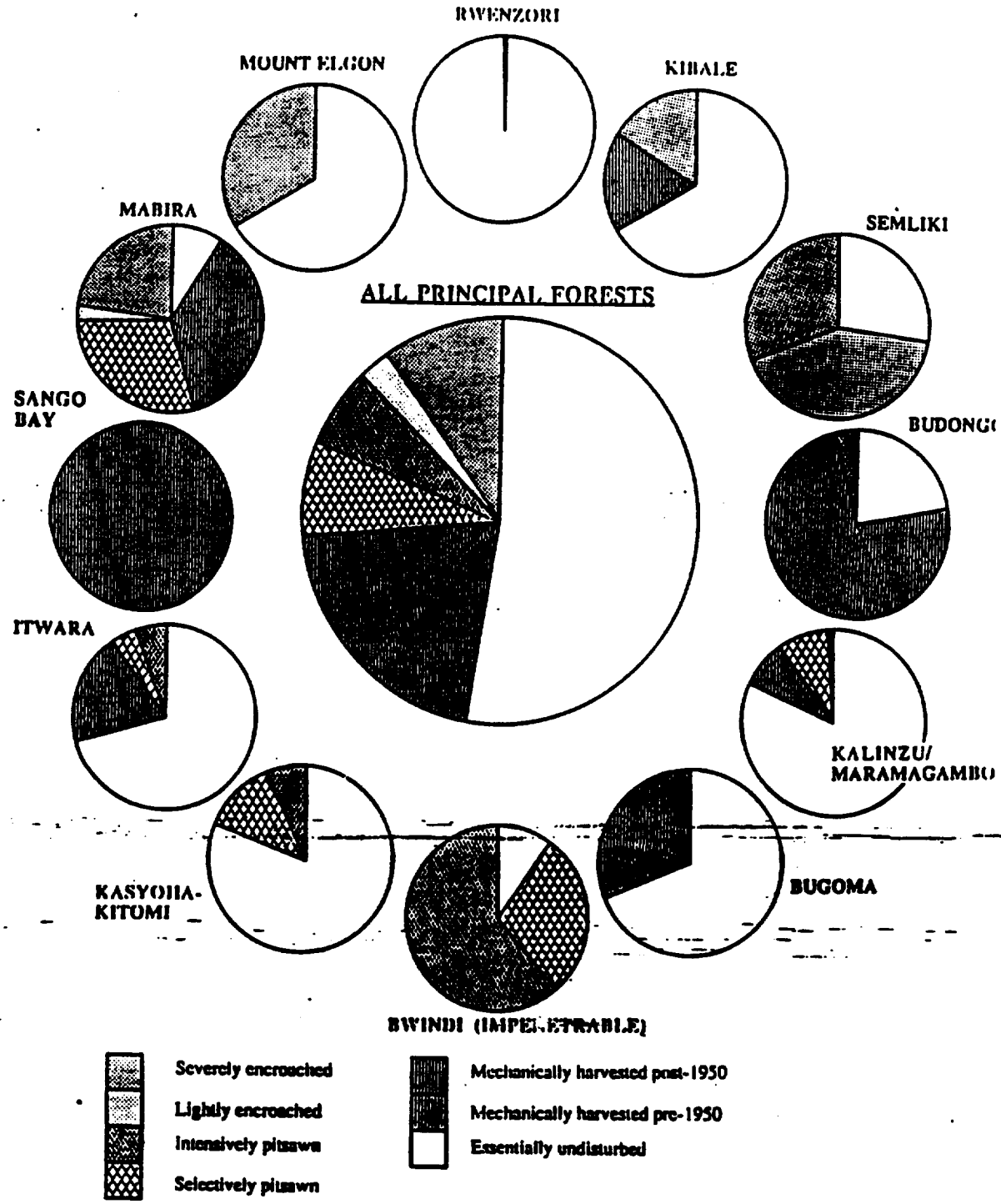
The Mt. Elgon Forest Reserve is an extremely important part of Uganda's natural areas for a number of reasons. Perhaps it's greatest importance rests with it's water catchment qualities for the surrounding region. Other aspects include the wide range of biodiversity found within varying ecotypes and it's tourism potential. The reserve is an extension of an extinct volcano which has one of the largest craters in the world, 8 km across. The reserve varies in elevation from 1,460-4,320 meters and contains at least four broad classes of vegetation. The current threat to the integrity of the reserve comes from agricultural encroachment on the lower forested slopes. In addition to Forest Park status, Mt. Elgon should receive the highest level of protection afforded forest reserves, particularly in light of it's watershed value.



Map of Uganda showing the locations of the principal forest reserves (black), and areas of the country where relict forest occurs (stippled), which were presumably once forested.

Uganda has a diverse climate, influenced by the country's latitudinal position between 1°S and 4°N, and by altitude and topography. Seasonal movements of the Inter-Tropical Convergence Zone (ITCZ) determine the general pattern of rainfall, with rainy seasons during April-May and October-November around the equator, and a weakly bimodal rainfall pattern in the north with a rather prolonged dry season between December and February. Much of the country receives 1,000-1,500 mm of rain per annum, the driest parts being in the north-east where Karamoja receives less than 750 mm, and the wettest parts being in the high mountains of Rwenzori and Elgon and the islands of Lake Victoria,

268



Notes:

Much of the undisturbed forest occupies steep mountainous terrain that is unsuitable for timber harvesting activities.

Pitsawing activity was not assessed in the Kibale and Budongo forests, but is thought to be widespread, at least in Kibale (J.Kasenene, pers. comm.).

267

Representation of different altitudinal zones in the principal forests, and derived scores for ecological community conservation importance. + denotes forest reserve includes more than 1 km^2 of forested land at the altitude indicated. - denotes that it includes no forest at this altitude, or not more than 1 km^2. For derivation of scores, see text.

ALTITUDINAL ZONE (m)	Kibale	Semliki	Budongo	Kalinzu/ Maramagambo	Bugoma	Impenetrable (Bwindi)	Kasyoha-Kitomi	Itwara	Sango Bay	Mabira	Mount Elgon	Rwenzori	Mean score per forest unit
601-700	-	+	-	-	-	-	-	-	-	-	-	-	1.00
701-800	-	+	-	-	-	-	-	-	-	-	-	-	1.00
801-900	-	-	+	-	-	-	-	-	-	-	-	-	1.00
901-1000	-	-	+	+	+	-	-	-	-	-	-	-	0.33
1001-1100	-	-	+	+	+	-	+	-	-	+	-	-	0.20
1101-1200	+	-	+	+	+	-	+	-	+	+	-	-	0.14
1201-1300	+	-	-	+	-	+	+	+	-	+	-	-	0.17
1301-1400	+	-	-	+	-	+	+	+	-	-	-	-	0.20
1401-1500	+	-	-	+	-	+	+	+	-	-	-	-	0.20
1501-1600	+	-	-	+	-	+	+	-	-	-	+	-	0.17
1601-1700	-	-	-	+	-	+	+	-	-	-	+	-	0.25
1701-1800	-	-	-	+	-	+	+	-	-	-	+	+	0.20
1801-1900	-	-	-	-	-	+	-	-	-	-	+	+	0.33
1901-2000	-	-	-	-	-	+	-	-	-	-	+	+	0.33
2001-2100	-	-	-	-	-	+	-	-	-	-	+	+	0.33
2101-2200	-	-	-	-	-	+	-	-	-	-	+	+	0.33
2201-2300	-	-	-	-	-	+	-	-	-	-	+	+	0.33
2301-2400	-	-	-	-	-	+	-	-	-	-	+	+	0.33
2401-2500	-	-	-	-	-	+	-	-	-	-	+	+	0.33
Initial Importance score (A)	0.88	2.00	1.67	1.86	0.67	3.50	1.53	0.57	0.14	0.51	2.93	2.51	
Final Importance score (B)	2.5	5.7	4.8	3.8	1.9	10.0	4.4	1.6	0.4	1.5	8.4	7.2	

Potential for non-consumptive multiple-use of the principal forests, based on ten relevant criteria.

Non-consumptive multiple-use criterion	FOREST RESERVE											
	Kibale	Semliki	Budongo	Kalinzu/ Maramagambo	Bugoma	Impenetrable (Bwindi)	Kasyoha-Kitomi	Itwara	Sango Bay	Mabira	Mount Elgon	Rwenzori
GENERAL ISSUES												
1. Vehicular access to within 1 km of undisturbed forest	+	+	+	+	-	-	-	-	-	-	-	-
2. High human population (> 200/km^2) in areas surrounding reserve	-	+	-	+	-	-	+	-	-	+	+	+
3. Visitor facilities (e.g. trails, campsites) exist	+	-	+	+	-	+	-	-	-	+	-	+
RECREATION AND TOURISM POTENTIAL												
4. Forest adjoins National Park/lies on 'tourist circuit'	+	-	+	+	-	-	+	+	-	+	+	+
5. Within 1 hr of major town with hotel facilities	+	-	+	-	-	-	-	+	-	+	+	+
6. Special attractions exist (e.g. gorillas, chimps, exceptional scenery)	+	+	+	+	+	+	+	+	-	-	+	+
RESEARCH HISTORY/POTENTIAL												
7. More than 10 person-years of ecological research completed	+	-	-	-	-	-	-	-	-	-	-	-
8. Ecological research underway and expected to continue	+	-	-	-	-	+	-	-	-	+	-	-
EDUCATIONAL VALUE												
9. Educational institution long established	+	-	+	-	-	-	-	-	-	-	-	-
10. Local environmental education programme underway	+	-	-	+	-	+	-	-	-	+	-	-
TOTAL SCORE FOR MULTIPLE-USE POTENTIAL	9	3	6	6	1	4	3	3	0	6	4	5

ANNEX II H

Summary of scores for various parameters contributing to the overall importance of each of the principal forests for protected area establishment and, derived from these scores, the suggested percentage of each forest that should be upgraded if a figure of 20% overall is used

PARAMETER	FOREST RESERVE									
	Kibale	Semliki	Budongo	Kalinzu/ Maramagambo	Bugoma	Impenetrable (Bwindi)	Kasyoha-Kitomi	Itwara	Sango Bay	Mabira
A. Importance for species conservation	7.5	9.8	7.9	7.8	5.2	10.0	5.5	4.0	7.2	6.1
B. Importance for threatened animal conservation	8.7	4.4	5.0	5.6	3.1	10.0	3.7	3.7	1.2	1.9
C. Importance for ecological community conservation	2.5	5.7	4.8	3.8	1.9	10.0	4.4	1.6	0.4	1.5
D. OVERALL IMPORTANCE FOR BIOLOGICAL CONSERVATION (A+B+C)	18.7	19.9	17.7	17.2	10.2	30.0	13.6	9.3	8.8	9.5
E. Multiple-use potential	10.0	3.3	6.7	6.7	1.1	4.4	3.3	3.3	0.0	6.7
F. Suitability of area for commercial forestry	3.4	0.4	10.0	4.3	2.9	0.8	1.4	2.4	1.1	1.9
G. OVERALL IMPORTANCE FOR PROTECTED AREA ESTABLISHMENT (D+E-F)	25.3	22.8	14.4	19.6	7.3	33.6	15.5	10.2	7.7	14.3
H. PERCENTAGE OF FOREST RESERVE TO BE UPGRADED ASSUMING 20% OVERALL*	29.6	26.7	16.8	22.9	8.5	39.3	18.1	11.9	9.0	16.7

* Derived as: $\frac{\text{Overall importance score for forest X}}{\text{mean overall importance score for all forests}} \times 20$ (overall percentage of forest land to be designated as Nature Reserve)

GENDER ANALYSIS

Introduction

The promotion of better natural resource management is imperative for the agrarian based economy of Uganda. Approximately 90% of the population resides in rural areas (one of the highest rural populations in the world) and depends on agriculture for their survival. Dependence on the natural resource base is particularly critical for women who perform 60-80% of agricultural labor and contribute 60% of domestic food production. The impact of soil erosion, deforestation and inadequate water supplies are most severe for women who are the fuel and water collectors.

The APE will assist Ugandan institutions to implement more sustainable natural resource management programs and will direct specific attention to rural populations in areas adjacent to parks and protected areas. Sustainable management of natural resources is directly linked to the social and economic development of rural communities.

Because of women's dominant role in agriculture and natural resource management, the APE will identify particular problems that may have an impact on women's participation in improved natural resource management practices. The most critical problems identified through interviews and literature reviews are: 1) Inadequate gender disaggregated data collection, 2) Underemployment of women in parks and forest reserves 3) Poorly funded and disorganized institutional support for the development of women's programs, 4) Lack of access to education and training (including extension services) for girls and women, 5) Traditional land tenure systems that restrict women's ownership of land.

Data Collection

Collection of socio-economic data disaggregated by gender is essential to the effective implementation of development programs and projects. One of the major obstacles confronting efforts to more adequately address women's concerns in natural resource management is a lack of gender disaggregated data.

The importance of understanding gender specific problems when approaching the question os rural development has been realized and addressed in African research and donor assistance efforts since the 1970's. Unfortunately, Uganda has suffered from political turmoil and economic hardship during the past two decades which has created setbacks in adequate data collection. There is a critical

shortage of data disaggregated by gender. This shortage is apparent in a literature review of recent socio-economic studies that have relevance for natural resource management planning. These include; 1) Buffer zone studies,[1] 2) Studies of resettlement and relocation of populations from protected areas,[2] 3) Household studies [3] and 4) Land tenure research.[4] This lack of data creates difficulties in planning and designing natural resource management programs to most effectively address women's problems.

---

[1]. Recent work including a workshop conducted by EIL on residents of buffer zones has not distinguished different problems confronting male or female residents of these zones.

[2]. In a document prepared by the Agricultural Policy Committee of the Ministry of Planning concerning Land Tenure, Resource management and Conservation, the issue of Settlement in Forest reserves and relocation and resettlement of illegal squatters was addressed. Unfortunately the research did not specify the specific problems faced by men and women in relocating. Literature on resettlement in other regions of Africa (i.e. Zimbabwe, Zambia and Bourkina Fasso) has emphasized that women suffer disproportional hardships because they are more dependent on land for survival than are their male counterparts who have greater access to off-farm employment. Existing literature in Uganda provides little evaluation of gender specific problems in resettlement.

[3] The "Uganda Social and Institutional Profile" produced in 1984 by the Experiment in International Living presents a lengthy (331 page) study. Unfortunately "the household" is used as the unit of analysis without specific reference to male or female rights and responsibilities. This creates distortions and misrepresentation of information. For example, the study states that: "In Uganda the majority of people own land" (EIL 1984:95), when in fact 93% of women, (who constitute 53% of the population) do <u>not</u> own land.

[4]. A document produced by the Agricultural Policy Committee of the Ministry of Planning on Land Tenure, resource Management and Conservation (1989) describes three major land problems in Uganda as: 1) Competition between crops and animals 2) Increasing landlessness, 3) Fragmentation of holdings and 4) Poorly utilized land. The study addresses the problem of how land tenure can affect agricultural development, but completely neglects land tenure problems facing women who constitute the majority of farmers in the country.

Women's Employment in Parks and Forest Reserves

In spite of their critical roles in natural resource management, most of the economic benefits derived from forestry and the development of tourism in national parks have accrued to men. Men participate in commercial timber production and sales while women rely on subsistence forest activities which involve gathering forest products and using them for home consumption. Government employment within the forest reserves is limited to ranger and guard positions that are almost exclusively filled by males.

The APE targets regions in southern and western Uganda that are designated as forest reserves or national parks, as well as the surrounding populated areas referred to as "buffer zones". In order to understand the farming systems and socio-economic needs of these populations, interviews were conducted with rural men and women in Kabale, Kigezi, Ibanda and Kabarole. Interviews were designed to ascertain rural people's perceptions of the forest and the potential positive or negative consequences of the creation of national parks in their region.

Kabale

Land pressure is extreme in the area around Kabale (estimated at 620 persons per square kilometer). Land scarcity has resulted in reduced periods of fallow, decreasing soil fertility and land fragmentation, with individual farmers cultivating up to 20 small dispersed plots. Farmer households control an average of 2.5 acres of land. The majority of men and women in this area work as casual agricultural laborers on other people's farms to supplement their inadequate incomes. An estimated 75% of farm women sell their labor to other farmers. This reduces their labor time available to work their own land. Labor and time are recognized by women farmers in Uganda as their major constraints to improved productivity.

The AFRENA project which operates in the Kabale area recognizes the need to understand socio-economic constraints to the implementation of agroforestry techniques. AFRENA has employed qualitative on-farm research and observation techniques with male and female farmers, and specifically with local women's groups. Results from an initial survey showed that "Women's groups are keen on tree planting but are often restricted by male dominated ownership. Although many women were given trees, they often had to seek their husband's permission to plant them and were restricted to sites selected by the men. In some cases, these sites were not the most suitable because of high water table, low soil fertility and lack of security" (AFRENA Report 1991).

275

Women in Kabale complained that the problem of insecure land tenure for women was very severe, particularly for widows. This is attributed to the patrilineal system of kinship predominant in Uganda, where women are "outsiders" marrying into their husband's clan. A woman whose husband (a Bakiga) died said that she was chased off her land by her in-laws and had to raise her three children on her own. This is more common in areas of high population pressure, and is an increasing problem in areas of southwestern Uganda. Women reported that it was more likely for them to be "chased" off their land if they are left widowed with less than four children or if they have no male children.

Bwindi Forest

The area adjacent to Bwindi Forest is a densely populated region with cultivation on steep slopes. The major crops planted are beans, potatoes, and maize. Land scarcity, declining soil fertility and soil erosion are all recognized agricultural problems in the region. Agroforestry techniques and soil conservation methods have recently been introduced by Community Extension Agents (CEA's) working with the CARE Development Through Conservation (DTC) project. The extension service through the Ministry of Agriculture is largely ineffective (less than 5% of women are serviced by government extension) thus PVO/NGOs must provide supplementary extension services in order to meet the farmers' needs.

Women interviewed in areas adjacent to Bwindi Forest saw no employment opportunities within the forest for females. In fact the idea of being employed in the forest was absurd to them, even laughable. Women felt that the only was that they might benefit from the creation of the Park was through the employment of their husbands. Guard and ranger positions were perceived as "men's jobs" and even if positions were opened for females, (and their husbands gave them permission to work), women interviewed claimed they were too busy cultivating to seek outside employment.

Bwindi currently employs 40 casual laborers who are responsible for maintenance of the grounds, construction and collection of firewood. There are 36 forest guards at Bwindi and 14 guards at Mgahinga. All of these employees are male with the exception of one female radio operator.

Kibale Forest

Farmers interviewed in areas adjacent to the Kibale Forest reserve (Kabarole District) recognize the importance of tree planting, largely as a result of the Kibale Forest conservation education program operated by field staff residing at the Makerere Biological

Field Station. While it is apparent that the publicity from the tree planting campaign is successful, women farmers interviewed complained that growing food was still more important than planting trees, and that they would prefer assistance in food production rather than in developing tree nurseries. Women are the primary cultivators in the area and make the most profit from beans, potatoes, cassava, millet and groundnuts. Many women also earn a substantial income from selling banana beer. The beer is traditionally brewed by men and then purchased by the women who sell it in hastily erected mud and thatch shelters near the road. Women admitted that beer selling was far more profitable than farming, but that a woman must endure substantial abuse from drunken men or those who drank beer and subsequently refused to pay for it.

Women identified one of their major problems as male drunkenness. Men who were interviewed in the area confirmed that drunkenness among men was a severe social and economic problem in the area. Men's drunkenness has increased women's labor burdens and decreases household incomes.

Within Kibale Forest the Makarere Biological research Station employs 56 construction workers, 28 field assistants and 16 various casual laborers. Six of those construction workers are female, and it was noted by one of the project administrators that the men were very unhappy about the hiring of these few women. None of the field assistants are female although a few women are employed by the expatriate community of scientists as domestic workers.

The project would like to promote more employment of women, but has discovered many restrictions. For example, field assistants are required to ride bicycles. Most women claim they cannot ride bicycles and it is culturally not accepted for women to ride bicycles. The other major obstacle to women's employment in parks, recognized near Bwindi and Kibale, is that women simply do not have the time. Because they are responsible for food cultivation they do not have the option to seek outside employment.

A Ugandan technical assistant working with the conservation education program at Kibale noted that women's biggest problems was a lack of awareness of her own capabilities, hindering her possible advancement. He also noted that a lack of decision making authority was a major limiting factor in her participation in income generating schemes or any other educational or employment opportunity.

<u>The Rwenzori Mountaineering Service</u> also offers employment opportunities for local populations as porters and guides. None of these positions are currently being filled by women. It was noted

by RMS staff that traditional cultural beliefs involving the presence of a "goddess of childbirth" in the mountains restricted women from climbing the mountains for fear that they would miscarry. Although it was noted that younger women did not adhere to these traditional superstitions and some had expressed interest in becoming guides or porters, there was no indication of any female employment by RMS in the immediate future.
Required qualifications for guides included adequate knowledge of English, because of their lower levels of literacy, this could further restrict women's employment.

Although women are not directly benefitting from employment opportunities within RMS, construction of a local clinic by RMS was assisting the general population. Health clinics are recognized as one of the major concerns of rural women. Several local women are currently employed at the clinic. RMS is also contributing to primary school construction and local infrastructure including feeder roads and bridges. Road construction specifically benefits women in their access to markets. Women are primarily responsible for transporting and selling produce in the markets.

It was noted that 80 of the 400 RMS members are female. Most of the members are actually porters and guides but women have apparently become members because of their interest in the RMS community development activities.

Women may also benefit from the development of the Rwenzori National park through their sale of local produce (primarily cassava flour) to mountain climbers and their porters. RMS buys food directly from local women and maintains a provision store for climbers at the base camp station.

Lake Mburo

Lake Mburo is a marginal area with very low rainfall, and thus requires cautious utilization. The area of land is very small which means less flexibility in terms of land use. The park is important because of biodiversity, it is the only place in Uganda where impala exist as well as other rare species..

When ~~the~~ park was created squatters were forced out, but over 200 families are currently living within the park. A fishing village near the park campgrounds includes "temporary" residents (primarily males without their familes) who catch and smoke fish near the lake shore.

One hundred square miles were left for national park after 1986. Some settlers were allowed to return to their land but boundaries were unclear. Refugees from Luwero triangle were recently

resettled near the park, increasing population pressure near park boundaries. Bananas are now planted extensively in the area.

Banyankole and Bahima populations near the park are primarily pastoralists. A small number of Hutu who live in the area are cultivators. Among these pastoral populations men are primarily responsible for care of the cattle while women process milk products, including the production of ghee, which is the most lucrative economic activity for local women. Women typically do not cultivate, especially among the Bahima. Among the Banyankole women grow peas and beans. Men are primarily responsible for the cultivation of bananas. It was noted that "behind a good banana plantation is a man".

There is currently a campaign to encourage pastoralists to become cultivators. President Museveni, who is Banyankole, has encouraged a shift to agriculture. Security of tenure is established through cultivation of land. It was evident from interviews conducted with local residents adjacent to the park that cultivation has increased and thus labor patterns, and the sexual division of labor is also changing. Further research needs to be conducted to understand how the shift towards cultivation may change residents relation to the park and changes in land use management.

There are currently problems with cattle grazers and herders, further anticipated problems include adjacent land use planning. Park animals grazing on private agricultural lands has created conflicts. There is a need to create a corridor to lake Mburo for cattle grazers.

Those interviewed expressed a strong resentment to the creation of Lake Mburo as a National Park, and saw only negative consequences for local populations. There is currently no incentive for people to resect the park boundaries, a policy of revenue sharing needs to be introduced to alter this attitude along with socio-economic programs such as environmental and conservation education.

Unfortunately the Park staff does not currently have the authority to work outside with local communities, (this is the duty of the Ministry of Lands), to increase their understanding of the park's purpose and potential benefits for the local population from development of tourism.

Park staff interviewed at Mburo suggested that a potential role for women in national parks is that of extension agents or environmental educators. It is less likely that women would become rangers.

Education

Women's lack of access to education is frequently cited one of the major constraints confronting women's mobility within society. Lack of education also constrains women's role as a natural resource manager.

Female school enrollment has improved during the past decades, but continues to lag behind that of males, particularly in secondary and tertiary levels. In 1986 45% of primary enrollment was female, 33% of secondary enrollment was female and only 23% of tertiary enrollment was female. Male literacy is estimated at 64% while female literacy is only 36%. High fees constrain overall enrollment and have a particularly negative impact on girls. In a recent USAID report on education in Uganda it was noted that "Factors affecting the enrollment of girls at the primary and higher levels, include the patrilineal recognition of boys as potential workers and therefore productive supporters of clan based families. Consequently girls, as ultimate dependents of non-clan members following marriage, have less claim to family resources such as land, headship of inheritance, education, and therefore status".

Women's lack of education inhibits her authority in decision making processes, and limits her awareness of her rights to property and income. These problems were frequently cited in interviews with professionals involved in conservation education and technical training programs as major constraints in assisting women to become better resource managers.

Land Tenure

The Majority of land in Uganda is controlled by customary tenure, although land ownership and inheritance varies by region and ethnic group.[5] Although 97% of women have access to land for cultivation, only 7% of women actually own land. The Baganda are the only ethnic group whose women own land in substantial numbers.

---

[5]. Recent research conducted in Uganda describes customary tenure as: "an individual's rights to land which derives from their mmembership in the ethnic group. For instance, when a young man marries and establishes a household, he would be entitled under customary tenure to a free allocation of land within the group's territory, assuming land were available. Attempts by outsiders to purchase land or otherwise secure land would often be resisted, as this would contribute to a reduction in the patrimony of land available for eventual use by the group's children" (Alkuma et al 1989:17).

This has serious implications for the promotion of improved natural resource management, it also means that most women would not be eligible for any loans which require land titles as collateral.

Tree Tenure

In interviews conducted in buffer zone regions of southwestern Uganda, women noted that not only did they not own land, they did not own any of the trees on the land, even when they themselves planted and nurtured the trees.

One of the major constraints facing tree planting efforts in rural areas is that while women may be interested in planting trees for fuelwood, they may have to convince their husbands that they should be able to plant trees. Traditionally, men have been the tree planters, while women have been responsible for less permanent crops. It appears that this is changing in recent agroforestry promotion efforts where women are expressing a keen interest in tree planting.

There were some cases reported in Kabale where men uprooted trees planted by their wives for fear that women would assume rights to land because of their control of permanent tree crops. Women also admitted that even though they planted trees, and were responsible for their maintenance, their husband had the right at any time to cut the tree and use it or sell it for his own benefit. It was noted that even when a man cut his wife's trees for poles or timber, the women was left for the branches for firewood.

Apart from interference/objections by her husband, another major constraint to women's tree planting efforts are lack of land suitable for woodlots. Women prefer to plant trees near their homes, and are often limited to planting trees on boundaries due to fragmentation of land holdings and small plots.

The Muchaki Women's group in Kabale obtained land from a local church for tree planting. They used the plot for the demonstration of seedling plating to train women to transfer techniques to their own land. They plan to eventually use the land for a nursery where women will take seedlings to their own land.

In general, women prefer fruit trees over other species because they are responsible for providing food for home consumption. Other species preferred by women include black wattle, because it is good for firewood. It was noted that men generally prefer eucalyptus because it is better for timber, building poles and construction.

It was noted by male agricultural officers from Kabale that Women cannot and do not plant trees. But it was evident from interviews with women's groups in the area that women are planning nurseries and are very eager to become involved in the tree planting movement. One women's group leader noted that "We are starting a revolution".

Use of Forest Products

It is generally accepted that males have traditionally made more use of major forest products (such as timber and wild game) more than women. Both men and women gather reeds, vines and bamboo for making mats and baskets. Men also gather honey, while women are primarily responsible for gathering herbs. In interviews conducted among buffer zone populations it was evident that both men and women are concerned with restricted access to forest products. Interviewees were reluctant to admit how often they continue to enter the forest, and for what purpose, for fear of prosecution by forest guards. More research is needed to understand local community uses and needs for forest products.

In rural areas 95-100% of households rely on fuelwood for energy. Charcoal, paraffin or cow dung is used rarely. In many areas such as Mbarara fuelwood is becoming more scarce and many families are forced to buy firewood from those who have brought it from outside the area. Those who cannot afford to buy fuelwood are reportedly using cow dung, or reducing the number of meals cooked per day. People are also deciding not to cook some nutritious foods such as beans because of the time it takes to cook them.

Soil Conservation

The impact of environmental degradation is most severe for women who are the primary cultivators and depend on agriculture to support their families. Soil conservation work is primarily done by women. Although the promotion of tree planting and agroforesty efforts have reported fairly high success rates, the introduction of soil conservation techniques is far less successful. Al Agar of USAID feels that this is largely a problem of lack of awareness. There is a misconception among farmers that Uganda has fertile soils. He suggests that soil conservation should be an integral component of all projects.

Grassroots Political Participation and Decision Making by Women

One of the key elements of the APE program is the promotion of local community participation in the development of the National Environmental Action Plan (NEAP). The local community capacity for involvement in NEAP has been strengthened through the development

The Experiment in International Living

An EIL representative noted that the major constraint in introducing improved NRM techniques to women is that they need technical strengthening and that their illiteracy rate is high. She also noted that when EIL has requested people to be sent for a training workshop mostly men will be sent. Women's groups tend to favor one or two women with a higher level of education who will be sent repeatedly for training courses.

PVO/NRMS (under EIL) has funded four women's groups. According to the EIL project director, NRMS affects women more than men. She noted that crop yields have been deteriorating as a result of decreasing soil fertility. The sub-grants that have been provided to women include agroforestry, nurseries.

The Ugandan Women's Tree Planting Association

The UWTPA was established in 1985 by Ruth Mabira, a nurse concerned with nutritional problems among rural women and children. She observed that fuelwood shortages had led to inadequate meal preparation. The program operates nationwide and reportedly has 12,000 members. UWTP is officially registered as an NGO with the National Council of women and uses their district officers to select trainees. Through UWTP women can learn about agroforesty in short courses, and can reportedly realize profits from tree planing within 3-5 years.

In 1989 UWTP organized a workshop on Community Forestry funded by UNDP, and a workshop entitled "Green Future for Uganda" funded by UNEP. Although women have responded positively to UWTP efforts major constraints that limit their participation in the program (identified by Mabira) include low levels of literacy and lack of land or secure land tenure.

GOU has given forestry reserve land to UWTP (5 ha in each district) for the establishment of woodlots.

The major constraints faced by UWTP according to Mabira are a lack of trained technical staff and lack of transportation. She currently has three part time staff who are paid for training when they travel outside Kampala. Currently she has no office and this restricts the capacity of her organization to effectively communicate with interested groups and individuals.

Save Mothers and Children Association (SMACA)

Save Mothers and Children Association was established in 1975 by Tarcilla Byarahunga, a Professor of Forestry at makerere

University. The organizations' objectives "to minimize the suffering of the poorest of the poor, who are mostly women and children" were formed by the hardships suffered by widows and orphans during the war. After 1986, when civil strife ended, SMACA began to focus on other concerns affecting women, including environmental degradation and agroforestry and conservation education. SMACA participants include an impressive list of trained professionals, largely from Makerere University, who have devised a program to train rural women in addressing rural natural resource management problems. The Ministry of Environmental Protection and the National Council of Women is also actively involved in developing the training program. Women who are trained by SMACA will subsequently become trainers of rural women within their districts.

INSTITUTIONS

Ministry of Energy, Minerals and Environment Protection

This Ministry contains several departments, among which include the Department of Forestry and the Department of meteorology. According to the Principal Environment Officer, the Department of Meteorology has no female employees and is the least successful in addressing gender concerns. Meteorology is traditionally a male dominated profession. Forestry has also been a traditionally male dominated field but has been changing its approach in recent years and is currently being sensitized to many women's issues.

The Department of Environment is a recent addition to the Ministry (1986) and has recently hired a number of female professional among their staff and is currently conducting field research that directly addresses gender specific problem in environment and natural resource management. The Department consists of a Commissioner (male), Two Chief Environmental Officers, (one female), two principal environmental officers - (one female), and 22 Environmental Officers (six females).

Rural women are primarily targeted by the Department of Environment through the RC's. Dorothy Etoori, the Principal Environment Officer noted that the effectiveness of the RC system in reaching women varies considerably by region. In some cases local church groups may be more effective than RC representatives to reach women.

A recently initiated Wetlands Management Program has established field level research with three staff including a female researcher who is responsible for understanding socio-cultural values including gender awareness. The Department anticipates further

284

research efforts with an emphasis on field level socio-cultural awareness.

Department of Forestry

The Department of Forestry is the largest department within the Ministry of Environment and has historically followed the "traditional" pattern of forestry, emphasizing timber production for commercial purposes, neglecting social or community forestry problems. As a result, women's concerns have not been addressed in department programs, and their major involvement in forestry is through NGO's or as private individuals rather than directly through the Department.

Some of the major constraints to effective resource management include a lack of department staff training in social or community forestry and subsequent neglect in addressing the critical needs of rural men and women. This problem is particularly severe in regard to rural women who are the primary fuelwood gatherers and consumers. There is currently one professional research specialist in the Forest Products Division who is investigating improved cookstoves and patterns of energy consumption. But she unfortunately spends the majority of her time in research and no time in introducing improved technologies to interested groups in need of assistance. The Forest dept. has an extension staff to work directly with local communities, but it is currently very weak. Currently nearly all the women who are employed in the Forestry Department are based in Kampala conducting research rather than in the field doing extension. This further weakens the extension system in its ability to address gender specific needs. This problem is partly explained by the department policy that allows very little time for travel among research staff. Funds for transportation are very limited.

The Senior Nature Conservation Officer in the Forestry Department noted a large number of requests for assistance from women's organizations and schools. Many of these groups are writing proposals for assistance in a "spontaneous response to recent awareness of the environmental crisis". The secretariat travels to meet the women's groups.

It was recommended by Forestry Department staff that a separate desk should be designated to handle these requests. Because most of the requests for assistance are currently coming from women's groups, it was recommended that this desk should be a "Women's Desk".

Forestry Department staff also suggested that seminars or workshops need to be held with both male and female participants to create

awareness among the rural population concerning current problems in fuelwood shortages and the need for tree planting programs. It was noted that "if men were sensitized to women's problems they might not be so stingy in allowing women to plant more trees." A gender awareness seminar was advised for the Forestry Department as a whole, as well as for rural population groups. This seminar could address the weakness in social forestry education and awareness of gender specific issues simultaneously.

Forestry Department Personnel includes: 202 forest officers (degree holders) 6 female, 215 forest officers (diploma holders) 0 female, 315 rangers (certificate) 10 female, and 600 forest guards 0 female.

Minsitry of Agriculture, Animal Industry, and Fisheries

The Ministry of Agriculture is currently conducting research under the MFAD program that specifically addresses the role of female extension agents within the Ministry. Margaret Najjingo who is currently conducting this research for MFAD noted that the only program within the Ministry which specifically addresses women's needs is Home Economics. The Home Economics Department trains women in cooking, sewing, nutrition and handicrafts. A heifer project was also recently introduced in peri-urban areas near Kampala. The Department is severely under-funded.

Most of the female extension personnel represent the Home Economics Department. Although other extension services theoretically address the needs of both male and female farmers, she finds that men are more responsive. Her explanation for this is that women are too busy to participate. She also feels that no one has tried to find out the female farmers' perceptions of their own needs and that this contributes to women's lack of interest in the type of extension that is offered.

The Ministry does occasionally address natural resource management issues such as soil conservation, but Najjingo complained that these efforts are sporadic and typically fall under one particular donor funded project and are then discontinued. Extension agents are assigned to these various projects temporarily, further hampering the continuity of extension efforts.

Ministry of Women in Development

The Ministry of WID was recently introduced through legislation in 1988 and is still developing and expanding their organizational plan. The Ministry consists of a Minister and a Permanent Secretary with two Departments including Finance and Administration

and a WID Department with several divisions. These divisions include: 1) Planning and Projects Implementation, 2) Division of Research, 3) Legal Division and 4) Education and Training Division.

There are currently no specialists in Natural Resource Management within the Ministry itself but they have established "focal point officers" in line ministries who look at women's concerns in their sectors and bring issues to the Ministry of WID for discussion. One of the WID officers noted that there is a need to recruit professionals who can link the WID Ministry with important ongoing activities in the other ministries.

Ministry of Tourism, Wildlife and Antiquities

The MTWA recognizes the lack of females employed in National parks and Forest Reserves. A group of 150 rangers are currently being trained at Mweya Lodge. Of these trainees only 5% are female. This is an increase over typical trainee groups that have had no women. Wardens are usually trained in Tanzania, no female wardens are currently being trained. David Aburah, the Head of the Development Planning Department within the Ministry, complained that when wardens are recruited among recent Makerere graduates in the natural sciences, there is very little response from females. He suggested that a recruiting campaign to target female candidates for ranger and warden positions needs to be conducted to attract more female employees.

The situation for female employment in the hotel and travel agent sector is significantly better than that of park employment. The Fairway currently has a hotel training program and aims for 50% female students. A recent graduating class included over 30% females. A recent ILO report on the tourist industry in Uganda presents a thorough evaluation of employment within the hotel and travel agent sector, although it neglects analysis of professional positions within the parks.

Makerere Institute for Social Research (MISR)

Through USAID and World Bank support the Land Tenure Center of the University of Wisconsin is currently conducting important research on land tenure and proposed changes in land legislation and registry policies in Uganda in collaboration with MISR. The majority of land in Uganda is currently controlled through customary tenure. Although a 1975 land reform decree effectively nationalized all land, this decree was never formally adhered to by landholders. The current government is proposing to formally abolish the 1975 decree and proceed with freehold tenure. There is currently no assessment of how the implementation of freehold tenure will impact on women's ownership, or use rights to land.

Land tenure has a critical impact on natural resource management and the introduction of tree planting campaigns and agroforestry methods in improving agricultural production.[6]

MISR has the potential to contribute significantly to a better understanding of men's and women's traditional rights to land ownership and usage. It is imperative that current research efforts target specific attention to the question of proposed changes in land inheritance, ownership and registration with data disaggregated by gender.

Conclusion

The APE program proposes to address some of the problems described above in several ways. These include: 1) The collection of socio-economic data collection disaggregated by gender to better understand the specific needs of both men and women in buffer zones and any other areas targeted by the program. 2) A policy study on women and land/tree tenure. This study will provide recommendations on how to improve women's access to land, thus promoting their participation in agroforestry and tree planting. 2) Equitable training programs that create opportunities for both men and women to be employed in National Parks and Forest Reserves and in the tourist industry, including a campaign to recruit more women professionals into Forestry and Wildlife Management positions. 3) Strengthening of institutions through personnel training, including a specific workshop proposed for the Forestry Department on gender awareness in forestry problems, and the development of a women's desk in the Forestry Department to respond to requests from rural women's groups for assistance in NRM activities. 4) Participation of women representatives (including the Ministry of WID and the National Council of Women) to address women's needs in the NEAP task force. 5) Monitoring and evaluation for the APE program will specifically assess the program's impact on both men and women in local communities (the number of males and females trained in conservation education and

---

6. The neglect of gender issues in land tenure research is evident in a recent document entitled "Land Tenure and Agricultural Development in Uganda" prepared by MISR in 1989. This extensive (266 page) review of land tenure in Uganda provides very little attention to women, and did not disaggregate data by gender in questionnaires. For example, sections on security of tenure (where farmers were asked whether they were worried about losing land) do not indicate whether females were interviewed or how many females were interviewed to indicate different male/female attitudes towards insecurity of tenure.

agroforestry techniques and the number of male and female farmers adapting improved NRM practices). 6) The provision of funds for small grants will be available to groups such as SMACA to address the needs of rural women involved in conservation, tree planting, environmental education and any other NRM activities.

POLICY STUDY ON WOMEN AND LAND TENURE IN UGANDA

The Land Tenure Center (LTC) of the University of Wisconsin at Madison is currently conducting four studies in collaboration with Makerere Institute of Social Research (MISR). These include: 1) Identification and analysis of land markets in Uganda. 2) The question of common property among pastoralist populations and 3) Land tenure issues in buffer zones including conservation areas, forest reserves and game parks, and 4) Land disputes, including issues raised within the three other ongoing studies. None of their current research efforts has focused on gender issues, but important discoveries regarding women's access to and control of land were made within the other studies. LTC staff members recognize the need to conduct a specific policy study to investigate gender and land tenure patterns in Uganda and their impact on women's roles in natural resource management.

While it is generally accepted that very few Ugandan women actually own land (estimated 7%) there is evidence from interviews conducted by LTC and during the development of the USAID Action Program for the Environment (APE) that this may be changing. In interviews conducted among landholders, it was acknowledged that more and more women are not getting married. Fathers have begun to realize that they may have to provide land for unmarried daughters. It was also noted that women may be perceived as more reliable than men in controlling family land. Men can and do "drink the land" (sell off land for purchasing alcohol). It is accepted that women are more responsible in holding onto family property.

Ownership of land by women varies considerably by region. Women appeared to be most frustrated in their efforts to gain access to land in and around Kabale. This is most likely linked to the extreme land pressure in this region. In interviews conducted in this area one man claimed that he could find no reason to give land to his daughter because "She will leave and get married or else she will become a prostitute". In either case he could not see that his daughter was deserving of land.

By contrast, several women interviewed near Kibale Forest did own land. Women had 1) inherited land from their fathers because there were no male heirs alive, or 2) their father took pity on their poverty through widowhood and lack of access to land through their deceased husband's family, or 3) women purchased land themselves through wages earned as domestic laborers. It is important to note that all of these women interviewed who owned land were engaged in tree planting programs through the Kibale forest program. The interviews revealed that there are many different ways for women to

own land, even though traditional tenure typically excludes women from inheritance and ownership.

The Ugandan government is currently proposing changes in the land tenure system that will promote freehold tenure and thus encourage private investment. It is critical that any study on gender and land tenure should link directly to this proposed change in land registration policy to determine the impact of freehold tenure on women's access to land.

Members of the LTC staff and the gender analyst for the USAID APE design team concurred that the study will require a long term research commitment of at least 12 months in order to adequately address the complexity of the problem of women and land tenure. A PHD candidate in the Social Sciences with survey research experience and field experience in Africa (at least two years) was recommended for the position. The researcher should have expertise in gender analysis and problems of rural and agricultural development. The researcher should be affiliated with a university and be remunerated according to current guidelines for the Fulbright dissertation reseach monthly stipends. Current rates for Kampala are approximately $1,000 per month. Additional funds would be required for local hire research assistants/interpreters and travel expenses.

It was also suggested that Ugandan professionals currently employed by MISR and involved with research on gender or land issues could be hired as short term technical assistants during the course of the research to assist in preparing reports, specifically addressing the issues of women's legal rights to land. This should also include a workshop(s) for rural women that helps women to better understand their rights to land and how they should protect and defend those rights.

BUDGET
Technical Assistant (one year):
$20,000 living expenses for twelve months.
$20,000 transportation costs for twelve months.

The APE PAAD has budgeted $40,000 for this study. It was also suggested ~~that~~ the study could be funded through a buy-in with the Clark University ECOGEN project and the Land Tenure Center. The budget provided above outlines the basic immediate expenses but does not allow for possible technical assistance from Ugandan professionals or other materials and equipment that might be required during the course of the project (including workshops for example). Ideally the project should be designed to obtain in-depth qualitative and quantitative data through the personal commitment of a researcher willing to spend long periods of time

travelling and living at selected field research sites in order to obtain the most accurate and reliable data.

Proposed Scope of Work for
A Policy Study on Women and Land Tenure in Uganda:

Research qualifications. A Master's degree in a relevant social science including anthropology, economics, geography, or sociology. Minimum two years field experience in Africa. Expertise in gender analysis. Survey research experience.
Basic training in or experience with agriculture and rural development problems in Africa.

It is expected that the technical assistant will spend two months preparing a questionnaire, including field testing of the questionnaire. Extensive literature reviews and interviews with relevant Ugandan and expatriate professionals within kampala will facilitate the development of the questionnaire along with initial field trips.

Following the development of the appropriate survey questions the TA will spend 6 months implementing the survey with field assistants. She/he will also be expected to monitor the field assistants' implementation of the survey. An additional 4 months of data analysis should follow the completion of the survey. Specific issues that need to be addressed during the course of the research project include.

1) Explore how patterns of land ownership and inheritance by women vary by region and ethnic group.

2) Determine the percentage of women who are landholders.

2) Interview women landholders to ascertain: a. How they obtained their land (what are the processes involved), b. What are the attitudes towards women landholders and c. What expectations do these women have of who will inherit/control the land after their death.

3) For women who are not landowners, explore women's land use rights. What are the restrictions on ~~what~~ she is allowed to plant (i.e. cash or subsistence crops). Is she allowed to sell or rent land that she does not own? Can she obtain credit using land as collateral or does she need her husband's permission to borrow money.

4) Examine patterns of land inheritance, how was the previous generation's land divided?

of the National Resistance Movement Resistance Council infrastructure, which is assuming increasing responsibility for administration and development activities throughout the country. The National Resistance Movement Government is recognized as committed to improving the conditions of children and women in Uganda. The creation of the RC system of local government is also recognized as a positive step for women, a recent UNICEF report notes that "Resistance Committee Members encourage women to speak out". In the RC committee one of the seats is reserved for a woman to speak on behalf of the women in the village. While participation in local women's organizations may isolate and marginalize women's needs to an all female group, participation in the RCs allows women a voice in local communities that reaches a wider audience.

Women's Groups

Although women's groups are frequently targeted for tree planting promotion and introduction of various agroforestry or other agricultural techniques, women's groups are in fact weak in Uganda compared to many other regions of the continent. Only 18% of women actually belong to groups. Representatives from CARE and the National Council of women noted that women prefer to work as individuals and do not want to invest time in community woodlots. In interviews conducted near the Kibale forest reserve, lack of cooperation among rural women and reluctance to organize was recognized by the women themselves as one of their major obstacles to self- improvement.

It is obvious that rural women must be recognized as a special target group as women's activities are critical to subsistence food production and the health care and education of children. But it is also important that the support of village men be acquired along with village women before development programs can be successfully initiated. Men can and have resisted activities that are directed exclusively to women's groups without their consultation. Seeking the cooperation of men first is culturally more acceptable and will produce more positive results in project implementation.

National Council of Women

The Council serves as a voice for women's groups throughout the country, leaders are elected Democratically. The National Council of women was put in place by an act of Parliament in 1977. Parliament may repeal the decree establishing the council because of the recent creation of the WID Ministry in 1988. The two legislated bodies that serve women appear to be in conflict. This repeal may create a void in rural representation of women. The Ministry of Culture and Community Development formerly included the

29

national Council of Women but it is now being subsumed under the Ministry of Women in Development.

The National Council of women has recently become concerned with environment and natural resource issues. Their primary activities with women's groups have focused on income generating activities including poultry and piggery projects.

Non-Governmental Organizations and Private Voluntary Organizations

CARE and the Development Through Conservation (DTC) Project

DTC has made a concerted effort to benefit local women in their conservation education program. They currently have a team of 49 Community Extension Agents (CEAs) in Kigezi District, of whom nearly 50% are female. DTC has emphasized the need for male and female agents in each parish to deliver gender specific messages. There is a problem with CEAs who do not have enough time to donate because they are already overburdened with labor demands. They are not paid enough to hire someone else to take care of their farms. It was suggested that female CEAs should become full time and be paid enough to hire farm labor. It was noted that female CEAs are also restricted in their movements because most of them do not ride bicycles.

They hire mostly primary teachers who are paid 5,00 sh per month.. The agents teach soil conservation, agroforestry, family planning and environmental education part time. DTCs primary objective is to help communities around the forest to improve farming and productivity to reduce pressure from the creation of forest reserves. Forest education and conservation is an important component of promoting community awareness. At present they are trying to track down the relationship of people to the forest.

DTC includes a domestic energy utilization and conservation component. Women will be the main group to work with because of their direct involvement in these activities.

DTC recently conducted a baseline survey in the Kigezi area which was administered by the CEAs in 26 parishes. The total numbers of farmers interviewed was 385. The survey included questions concerning migration, soil fertility, soil conservation practices used and types of energy consumption. The questionnaire did specify the gender of respondent but unfortunately the data was never adequately analyzed, nor was it disaggregated by gender, thus limiting the utility of the data collected.

5) What are traditional and evolving attitudes towards tree tenure? How does tree planting change the planters' relationship to the land?

295

References

Abidi, Syed, editor.
1990 Ugandan Women in Development. Foundation for African Development. African Development Series No. 1, Kampala.

Aluma, John et al
1989 "Settlement in Forest reserves, Game Reserves and National Parks in Uganda". Land Tenure Center UW, Madison July 1989.

EIL
1984 The Uganda Social and Institutional Profile. Prepared for USAID by the Experiment in International Living. Kampala, August 1984.

Kakwenzire, Joan
1990 "Women and Change Under National Resistance Movement Government: Focus on Discriminatory Laws of Uganda" Minary Center Dartmouth College 7-8 April 1990.

Ministry of Planning and Economic Development
1989 "Proceedings and Recommendations of the Workshop on Land Tenure, Resource Management and Conservation Studies" Jinja: 18-19 May 1989.

MISR
1989 Land Tenure and Agricultural Development in Uganda. MISR and the Land Tenure Center UW. Kampala January 1989.

Nalwanga-Sebina, Abby and Edith Natukunda
1988 Uganda Women's Needs Assessment Survey. Makerere University, Kampala 1988.

Peden, Dan, editor.
1991 "Agroforestry Research in Uganda: Progress Report for the Period 1 January Through 28 February 1991". AFRENA, Kabale.

UNICEF
1989 Children and Women in Uganda; A Situation Analysis. Kampala 1989.

UNICEF and MISR
1986 Beyond Crisis: Social Development in Uganda. Proceedings of The Seminar. Mweya Lodge 1-16 April 1986. Kampala.

USAID
1990 Uganda Education Sector Review; Issues and Options for USAID. Kampala March 1990.

ANNEX II I

Wiebe, Paul and Cole Dodge, editors.
1990 Beyond Crisis; Development Issues in Uganda. MISR Kampala.

ANNEX III

297

List of Persons Contacted

Ugandan Government Representatives

David Aburah	Ministry of Tourism and Wildlife
Dorothy Etoori	Principal Environemtnal Officer Ministry of Environemtnal Protection
Elizabeth Kyaswinie	Ministry of Women in Development
Rachel Musoke	Department of Forestry
Margaret Najjingo	Ministry of Agriculture
Florence Nekyou	National Council of Women

NGO/PVO Representatives

Susan Muballa	Country Coordinator Experiment in International Living
Ruth Mubira	Chairperson Uganda Women's Tree Planting
Christine Sempebwe	Project Officer, CARE
Rob Wilde	Project Officer, CARE

Makerere University

Abby Nalwanga-Sebina	Makerere University Institute for Social Research
Mark Marquart	Makerere University and The Land Tenure Center, Madison
John Bruce	The Land Tenure Center, Madison
Tarcilla Byarahunga	Professor of Forestyr Makarere University

AFRENA Project

John Okovio

Dan Peden

Steven Byenka

Alex Nshimye

Kabale Farmers

Jolly Aharampisa

Aline Mary Kemerwa

Kigezi-Development Through Conservation Project

Fred Byamukama	Sub-County Chief Ikumba-Kabale
Maahe Kanango	Extension manager
Celestine Magezi	RC V Councillor
John Ndyomugyeni	Administrative Assistant, DTC

Bwindi Forest Researchers

Tom Butinsky

Kibale Farmers

Margaret Kavagenye

Kiiza Amooti

Beatrice Kavahuchya

Hadija Akora

Grace Kabagonza Atwaki

Kibale Forest Station Researchers

Andy Johns

Richard Rangham

299

ANNEX II I

Loren Chapman

Colin Chapman

Kiiza Wandira

John Kasenene

ANNEX III

300

ANNEX II J

BACKGROUND ON NATIONAL INFORMATION CENTER ON THE ENVIRONMENT

The policy analysis and planning components of a successful NEAP require a solid information base. Generally, NEAPs have been supported by information systems, such as the proposed National Information Center for the Environment (NICE). The core system of NICE will be a Geographic Information System (GIS), a computer based system designed to store, process, and present data referenced by their geographical location. A broader Environmental Information System (EIS) incorporates both a GIS containing environmental data sets (e.g., species frequency and distribution, population, road systems, water ways, elevation differences, and climatic data) and, more broadly, any organized system for environmental data management (e.g., documentary information, analytical reports, specimen collections such as herbaria, maps, and photographs).

NORAD with additional support from the World Bank and UNEP has been funding since September, 1990 a small project called "Improved land and natural resource management through the development of Geographical Information System in Uganda" which is administered by a unit within the MEMEP called the National Environmental Information Center. The Center's inception was in 1987 with the donation of a computer and ARCINFO software under the UNEP/GEMS/GRID program and some training under the UNEP/UNITAR program. The project is organized and supported within the context of the multi-donor World Bank organized Program on Environmental Systems in Sub-Saharan Africa of which USAID is a participant.

The Center is funded to March, 1992 to 1) establish an national inter-ministerial policy steering committee and an inter-ministerial technical working group, 2) Conduct four case studies a) Iganga District Environmental Profile, b) Rural Electrification and Biomass study, c) Establishment of Environmental Data Sets for Lake Mburo National Park and d) Cadastre Survey of Entebbe Municipality. The purpose of the case studies was 1) to put to use available personnel and equipment, 2) test approaches and methodologies while assessing user needs at different levels in various sectors, and 3) train personnel. The Center has over 100 UNEP developed environmental data sets, a IBM PS/2 310Mb computer, a computer for word processing, a dot matrix printer, and a desk top photocopy machine. Lacking output devices, products are produced in Nairobi or Norway.

With the designation of a NEAP Coordinator and establishment of the NEAP Secretariat including offices, staff and equipment, the existing NEIC will be subsumed in the NICE with it's mandate broadened from demonstration of GIS technology to a full EIS Center with a primary function of service to the NEAP task forces. NICE will procure, process, and publish information

flowing to and from the task forces.

NICE will make available on a cost reimbursable basis it's information resources and processing capabilities to other government agencies, non-governmental organizations, and the private sector. The project obligations of NEIC will be able to be completed while the NICE becomes operational. With core support from the NEAP process, NICE is expected to grow or shrink from that level based on demand for it's services and products. NICE will provide user needs assessment services and work with users in the procurement of raw data for subsequent processing.

NICE activities will include 1) identification, collection, organization, duplication, and distribution of bibliographic information, 2) facilitating the inventory of programs, projects, activities for each Task Force, 3) referencing data sets into the national GIS and suggesting manipulations of data so that task force members might better visualize situation, problem and solution, and coordinating and harmonizing sector specific networks, and 5) assisting in the establishment of new information networks.

NICE core staff will include a Director, bibliographic data specialist, GIS and remote sensing specialists, research associates and financial and administrative support staff. Anticipated hardware and software needs include additional computing capacity, improved output capacity including color printers, pen plotters and color photocopy machine, desk top publishing and graphic capacity, scanners and digitizers, and office equipment.

NICE will establish working relationship with other centers of excellence to avoid duplication of effort. In addition to the site specific species inventory conducted by a number of government, donor and NGO agencies, NICE will establish relationship specifically with the Makerere University Institute of Environment and Natural Resources (MUIENR) and the Institute of Social Research (MISR) both of which have and propose to collect environmental and social data useful to the NEAP process. Other potential entities of collaboration include the World Resources Institute, Clark University, ~~GEMS~~/GRID, Sahara Sahel Observatory (OSS), and the Regional Center for Services in Surveying, Mapping and Remote Sensing (RCSSMRS).

A reference library will be established to ensure that the major environmental literature for Uganda is available to the task forces and the NEAP Secretariat. Arrangements are being made with Duke University in the USA and the International Institute for Environment and Development (IIED) to support the preparation by identifying and obtaining documentary materials. An

early priority for NICE will be to augment these (e.g., from IUCN, UNEP, Makerere University, the Oxford Forestry Institute, the British Council and the donors who have been active in environmental issues in the country).

A great deal of description and analysis of environmental issues in Uganda has been performed by UNEP through its strategic resources plan for the country's environmental sector. Additional efforts may be initiated through the proposed IUCN National Conservation Strategy and the Tropical Forestry Action Plan for Uganda. The NICE effort should take full account of, build on, complement and extend this existing work.

Although the NEAP will primarily rely on available data, there are specialized studies that will be necessary to complement the process. It has already been realized in the UNEP work that revision of the legislative framework is required. The Mission understands that a consultant will be made available soon for this work which will need to be incorporated in the NEAP process. Other areas already identified are institutional arrangements for implementation of agreed actions, training programs and environmental economics.

ANNEX III A - ILLUSTRATIVE BUDGET

ACTION PROGRAM FOR THE ENVIRONMENT
PROJECT NO: 617-0123/617-0124

ACTIVITY	A.I.D. NPA FX	A.I.D. PROJECT FX	GOU LC	PVO COUNTERPART	TOTAL A.I.D. PROGRAM
A. POLICY COMPONENT					
1. NEAP	5,000,000	100,000	700,000	-	5,800,000
2. TECHNICAL ASST.	-	2,820,000	230,000	-	3,050,000
3. PROTECTED AREAS	5,000,000	-	-	-	5,000,000
4. SUBTOTAL	10,000,000	2,920,000	930,000	-	13,850,000
B. REHABILITATION AND RESOURCE CONSERVATION COMPONENT					
1. GMU	-	11,820,000	6,385,000	2,315,000	20,520,000
2. PARKS AND RESERVES	-	740,000	2,220,000	-	2,960,000
3. NICE	-	390,000	570,000	-	960,000
4. ENVIRONMENTAL IMPACT ASSESSMENT	-	-	290,000	-	290,000
5. SUBTOTAL		12,950,000	9,465,000	2,315,000	24,730,000
C. USAID/KAMPALA MISSION MGT.					
1. NATURAL RESOURCE TECHNICAL ADVISOR	-	540,000	-	-	540,000
2. SHORT-TERM T.A.	-	250,000	-	-	250,000
3. SPECIAL STUDIES		80,000	-	-	80,000
4. EVALUATION AND AUDIT	-	260,000	-	-	260,000
5. CONTINGENCIES AND INFLATION	-	3,000,000	-	-	3,000,000
6. A.I.D. OPERATING EXPENSES	-	-	600,000	-	600,000
7. SUBTOTAL		4,130,000	600,000	-	4,730,000
TOTAL	10,000,000	20,000,000	10,995,000	2,315,000	43,310,000

ANNEX III.B. IMPLEMENTATION PLAN

DATE	ACTIVITY
APR 1991	APE PAIP approved in AID/W
JUN 1991	APE PAAD Finalized and Approved
JUL 1991	Draft Grant Agreement Prepared by USAID
AUG 1991	GRANT AGREEMENT Signed by GOU AND USAID
MAR 1993	USAID renews PSC for PROJECT MANAGER
MAR 1994	Mid-Term Evaluation of APE
APR 1996	Final Evaluation of APE
AUG 1996	PACD

I. NON PROJECT ASSISTANCE COMPONENT

OCT 1991	RFP Issued for TA and Training contract
DEC 1991	FIRMS submit proposals for TA and Training
DEC 1991	GOU formally names and staffs NEAP SECRETARIAT
JAN 1992	USAID disburses NEAP TRANCHE 1: $2 MILLION
JAN 1992	USAID establishes PASA with NATIONAL PARK SERVICE
FEB 1992	USAID signs CONTRACT with FIRM for TA and TRAINING
MAR 1992	CONTRACTOR Team Arrives In-Country
APR 1992	PASA Arrives In-Country
MAY 1992	Submission to NRC of BWINDI/RWENZORI as NATIONAL PARKS Submission to NRC for ELEVATED CONSERVATION of KIBALE, SEMLIKI, and MT.ELGON
JUN 1992	USAID disburses PROTECTED AREAS TRANCHE 1: $4 MILLION
JUN 1992	USAID Contracts for Bwindi study
OCT 1992	BWINDI FOREST study re: Effects on the BATWA
JAN 1993	REORGANIZATION AND/OR CONSOLIDATION of NR INSTITUTIONS
FEB 1993	USAID Disburses INSTITUTIONAL TRANCHE 1: $3 MILLION
JUL 1994	FINAL NEAP Submitted to NATIONAL RESISTANCE COUNCIL
AUG 1994	USAID Disburses NEAP TRANCHE 2: $1 MILLION

II. PVO/NGO NATURAL RESOURCES COMPONENT

OCT 1991	RFP ISSUED for PVO/NGO UMBRELLA ORGANIZATION
DEC 1991	PVOs Submit PROPOSALS for NR COMPONENT
FEB 1992	USAID Signs CONTRACT with PVO to MANAGE NR COMPONENT
MAR 1992	PVO TEAM arrives In-Country

The most critical events in the implementation of the Program are the fulfillment of the conditionalities. Once the conditionalities are met, the GOU is required to make a deposits of local currency counterpart into a special account. The counterpart is an important contribution to APE. If a conditionality is not met, it will compromise the counterpart deposit and adversely affect other activities in the Program. If this worst case scenario were to happen, the Mission and the GOU would have to revise and redesign the Program. The probablility of this occurring is low.

The Mission and GOU can manage unexpected delays in all other Program events.

PROCUREMENT AND CONTRACTING PLAN:

A. Procurement Agency:

The organization responsible for procurement of commodities is the PVO awarded a Cooperative Agreement for management of the subgrants and management of local currency counterpart funded activities. The selected PVO will develop specifications required to initiate procurement and sign PILs or other obligating/earmarking documentation to authorize the expenditure of project funds, acknowledge receipt of project-funded commodities.

USAID and an institutional contractor will be responsible for the technical assistance contracting. USAID will obtain most of the technical services for the Program through a contract with a consulting firm. USAID will supplement this technical assistance with a buy-in under the Environmental Planning and Management Project, an Indefinite Quantity Contract (IQC) with Coverdale, a PASA with the National Park Service, and direct contracts for special studies and some short term technical assistance. USAID reserves the right to enter into other PASAs as needed with organizations such as the USDA and USGS.

B. Authorized Source/Origin:

All goods and services, the costs of which are to be reimbursed under this Grant and which shall be financed with U.S. dollars, shall be purchased in and shipped from only "special free world" countries (i.e., A.I.D. Geographic Code 935) in accordance with the following order of preference:

(1) The United States (A.I.D. Geographic Code 000)
(2) The Cooperating Country
(3) "Selected Free World" Countries (A.I.D. Geographic Code 941)
(4) "Special Free World" Countries (A.I.D. Geographic Code 935)

In adherence to the policy direction of the Administrator of AID, every effort has been made during the planning of this project to maximize procurement of commodities from the United States. All data processing equipment will be purchased in the United States However, certain office furnishings and office equipment will be purchased locally and will have their origins outside the U.S. Also, because of the absence of Code 000 right hand drive vehicles, A.I.D.-funded vehicles will be from Code 935.

ACTION PROGRAM FOR THE ENVIRONMENT
UGANDA
PROJECT NO: 617-0123

PROCUREMENT PLAN

POLICY COMPONENT	TOTAL	FY 91	FY 92	FY 93	PROBABLE SOURCE/ORIG	PROC AGENT
NEAP						
PC W/ PRINTER (15)	75,000		75,000		US	CONS FIRM
FILING CABINETS (5)	3,500		3,500		LOCAL	CONS FIRM
SOFTWARE/TRAINING/SET UP	10,200		10,200		LOCAL/US	CONS FIRM
OTHER	11,300		5,650	5,650	LOCAL	CONS FIRM
PARK REHAB						
FAX	1,100		1,100		US/935	GMU
HQ PHOTOCOPIER	1,500		1,500		US/935	GMU
P.C.s WITH PRINTERS	21,000		21,000		US	GMU
SOFTWARE/TRAINING/SET-UP	14,000		14,000		LOCAL/US	GMU
VEHICLES	100,000		100,000		LOCAL/935	GMU
NICE						
OFFICE COMPUTERS/PRINTERS	38,250		38,250		US	GMU
OFFICE PHOTOCOPY	5,525		5,525		US/935	GMU
FACSIMILE MACHINE	1,020		1,020		US/935	GMU
VEHICLES	68,000		68,000		LOCAL/935	GMU
OFFICE EQUIPMENT LC	12,240		12,240		LOCAL	GMU
COMPUTERS	22,950		22,950		US	GMU
SCANNER	1,445		1,445		US/935	GMU
DIGITIZER	3,613		3,613		US/935	GMU
COLOR PRINTER	1,530		1,530		US/935	GMU
PEN PLOTTER	15,000		15,000		US/935	GMU
ERDAS IMAGE PROCESSOR	3,400		3,400		US/935	GMU
COLOR PHOTOCOPY MACHINE	4,675		4,675		US/935	GMU
LIGHT TABLE	510		510		US/935	GMU
CAMERA	340		340		US/935	GMU
LANDSAT/SPOT DATA	14,450		14,450		US/935	GMU
AERIAL PHOTOGRAPHS	3,400		3,400		US/935	GMU
SOFTWARE	3,400		3,400		LOCAL/US	GMU
VIDEO EQUIPMENT	2,652		2,652		US/935	GMU
TOTAL COMMODITIES COSTS	440,000	0	434,350	5,650		

ACTION PROGRAM FOR THE ENVIRONMENT
UGANDA
PROJECT NO: 617-0123

CONTRACT PLAN	AMOUNT	CONTRACT AGENT	FY 91	FY 92	FY93
NEAP/INSTITUTIONAL REFORM					
BUY-IN THROUGH ENVIRONMENTAL PLANNING AND MANAGEMENT	140,000	USAID	140,000		
BUY-IN THROUGH IQC WITH COVERDALE	140,000	USAID		140,000	
CONTRACT WITH WOMAN/MINORITY FIRM	2,640,000	USAID		2,640,000	
CONTRACT FOR BWINDI STUDY	40,000	USAID		40,000	
CONTRACT FOR WOMENT/LAND TENURE STUDY	40,000	USAID		40,000	
CONTRACT FOR PROJECT MANAGER	750,000	USAID	750,000		
COOPERATIVE GRANT AGREEMENT WITH PVO/INC PROCUREMENT	12,390,000	USAID		12,390,000	
PASA WITH NATIONAL PARK SERVICE	600,000	USAID.		600,000	
AUDITS/EVALUATIONS	260,000	USAID			260,000
TOTAL CONTRACTS/COOPERATIVE AGREEMENTS	17,000,000		890,000	15,850,000	260,000
CONTINGENCY/INFLATION	3,000,000				
A.I.D. PROJECT TOTAL	20,000,000				

308

V. D - MONITORING AND EVALUATION PLAN SUMMARY

APE will support the monitoring and evaluation of component activities as well as the overall program. The emphasis, as mandated under the DFA, will be in monitoring impacts at the people level (including farmers, rural households, and vulnerable groups).

Rather than emphasizing the evaluation of the provision of inputs and funding obligations, monitoring and evaluation programs under DFA-funded NPA programs must be more comprehensive and integrated into the fabric of program activities than has often been the case with donor projects. For that reason resources will be provided to ensure that sufficient data collection and analysis is undertaken during the life of the program, and that results of this analysis directly feed back to implementation.

As discussed in Annex III D, the monitoring and evaluation system for APE will be related to the impact indicators for the Mission's CPSP. The NPA component will require additional monitoring and evaluation of activities beyond the indicators identified for the CPSP, so as to judge their compliance to the terms of the conditionality. For instance, while the CPSP indicator identifies the approval of an NEAP as an indicator, for the conditionality to be met under the APE, the GOU will need to demonstrate that the approved NEAP meets the criteria in terms of substance and process as outlined in Annex B.

In addition to the monitoring required to track program impacts of APE activities per se, the Program will be assisting in the establishment of a monitoring and evaluation mechanism, through the NICE, which will ensure the continued long term monitoring of impacts on the environment, which will provide the needed analytic foundation required to justify future large scale interventions in the sector by AID and other donors.

The PVO/NGO component will include a detailed monitoring and evaluation system to assist in the evaluation of proposals, to ensure that baseline information is gathered by NGOs, and that sufficient effort is taken under each grant to continue monitoring grant impact. Perhaps most important, this component will be responsible to ensure that information and lessons learned from the subgrant activities are fed back to the larger monitoring and evaluation of the APE program in general. This feedback mechanism will be especially important if APE, and the Mission's CPSP, is to adequately measure people-level impact.

APE will have two external evaluations, a midterm evaluation and a final evaluation. Outlines for these evaluations are found in Annex III D.

Annex III D - MONITORING AND EVALUATION PLAN

1. The Role of Monitoring and Evaluation under the DFA

Monitoring and evaluation of programs is given considerable emphasis under the Development Fund for Africa (DFA). Under the DFA, the primary focus is not on the monitoring of inputs and obligations but rather on final impact. In terms of nonproject assistance, there must be a clear understanding of what impact means, how it is to be measured, and by whom. The DFA defines NPA impact predominantly in terms of household/farmer level impacts; any M&E Plan must therefore outline how those types of impacts are to be monitored and the necessary data collected.

All components of APE (grants, technical assistance and NPA) will need to be monitored and evaluated in terms of people level impacts, and in terms of the overall objective of the program.

In addition to evaluating the impact of the APE program directly, APE is setting the stage for the EAP process and as such a major component of the EAP will be to develop, institutionalize and implement a nationwide information and monitoring system. Therefore, the M&E Plan for APE is both a method for identifying impact from AID's initial investment as well as part of a longer term system which will be used to monitor and evaluate future GOU, NGO and donor impacts.

The Team has concluded that these two approaches should be combined, ie. that the monitoring and evaluation system needed to track impact from APE should be part of the larger M&E system to be put in place for the EAP. This linkage will reduce duplication in technical assistance and training, in commodity procurement and in data collection and analysis. It is also most appropriate, since the DFA focus on people level impact is highly relevant to the long term objectives of a realistic and viable EAP.

2. Impact Indicators and the CPSP Process

The APE Program is consistent with, and supportive of the overall USAID DFA Program. As part of the definition of the USAID Program the Mission is in the process of developing a new CPSP. The CPSP organizes and combines all Mission programs into coherent hierarchy of actions, grouped around a series of Goals, Objectives and Sub-objectives.

While these targets and their underlying Sub-Objective may evolve prior to the final approval of the Mission's CPSP, it is clear that APE, as one of the Mission's major programs, will be an important tool in the implementation and monitoring of progress in

meeting the NRM components of the CPSP.

APE is USAID's initial nationwide bilateral program in natural resources and the environment, and as such will be laying the foundation for the long term measurement of program impact in natural resources. While APE's M&E system will be developed to assist the NEAP in general, the Program will give particular emphasis to monitoring progress in meeting Targets 4.1 through 4.7.

In some instances, the targets as now identified in the draft CPSP will be met directly under APE only through the grants component; other impacts will occur once the NEAP itself is initiated.

As discussed in Section 4 below, impact indicators related to improved natural resources management take considerable effort to develop; they require the collection of both country-wide information as well as detailed village, farmer or park-level data, as well as longitudinal information so as to evaluate change over time. A key task will be to identify those factors which appear to be conducive to long term improvements in the natural resource base, so as to guide projects and programs in order to improve the opportunities for such changes. This will require more than the collation of biophysical data but rather an improved understanding of the causalities, ie. why do some farmers practice better land management while others do not.

For instance, collecting information about population densities, soil types, and the distribution of endemic flora and fauna only partially explain changes in resource use; land tenure constraints, local governance of resources, the perception of stewardship on the part of people in buffer zones are factors which also must be evaluated, and incorporated into the monitoring scheme.

In terms of the monitoring of APE impacts, the Team has developed a series of impact indicators for the Program based upon existing information; however, given the complexity of such indicators it is expected that these will be refined over the course of the Program, especially those related to resource conservation and rehabilitation. By the end of APE, a comprehensive monitoring system should have evolved, linking the evaluation and monitoring systems of all grants, the studies being undertaken for the NEAP.

One key indicator of impact for the APE overall, therefore, will be the refinement of other indicators, and the setting up of a more comprehensive M&E system. Those indicators which APE will be evaluated against at the end of the program are listed as final indicators and are shown in bold face, while those which are to be

used during the first year of APE are marked as intermediate indicators.

Those final indicators marked with an asterisk (*)are to be developed during the implementation of APE. The Program requires these indicators to be refined, based on studies initiated over the first year, no later than the beginning of the first year of activities.

USAID PROGRAM INDICATORS AND THEIR RELATIONSHIP TO APE

Objective/Target	Intermediate (1st Year) Indicators	Illustrative Final Indicators	PAAD Linkage	Data Source
Strategic Objective: Improved practices for sustained productivity of natural resource base used in target areas and policy climate improved.	1. Practices leading to sustained NRM use are evaluated and impact indicator framework developed for key areas around park areas. (To be expanded to country over NEAP)	1*. _____ farmers in target areas adopt and use defined practices on _____ hectares in base year; ____ farmers on _____ hectares in year 3; and, _____ farmers on _____ hectares in year 5.	Related to PAAD Rehab. and Resource Conservation (RRC) Component Objectives	1. NICE
				2. GNU, drawing on PVO baseline studies and reports
				3. Other GOU and USAID-financed reports on soil conservation. in areas outside of PAAD interests
		2*. (a) Habitat quality measures change from _____ in 1991 to _____ in 1995. (one measure for each targeted park)	a. Rehab. and Resource Conservation (RRC) Component Objectives	1. NICE
				2. GNU, drawing on PVO baseline studies and reports
				3. UWP and MEP reports
			b. Policy Component - Parks and institutions cond.	1. NICE
				2. UWP/MEP reports on Bwindi and other areas
				3. GNU, PVO reports

312

	2. Species diversity measures developed and field tested in one site.	2.* Species diversity measure changes from _____ in 1991 to _____ in 1995. (one measure for each targeted park)	Same as above	Same as above
	3. a. Task Forces are multidisciplinary and represent diversity of GOU, NGO and other agencies. b. Secretariat is fully operational.	3. National Environmental Action Plan recommended policies adopted by 1995 and in force for conservation and optimal natural resource use by 1994.	Policy Component	National Gazette NEAP Reports
Target 4-1: Legal status of target parks/reserves changed to ensure protection by 1992.	1. Bwindi, Rwenzori, and Mgahinga forests made National Parks by 1992.	1. Bwindi, Rwenzori, and Mgahinga forests made National Parks by 1992.	Policy Component, Condit.	1. National Gazette.
	2. Kibali forest increased to nature reserve status-- highest level of protective status possible within Dept. of Forest system.	2. Kibali forest increased to nature reserve status-- highest level of protective status possible within Dept. of Forest system.	Policy Component, Condit.	2. National Gazette.
Target 4-2: Land tenure effects on sustainability of protected and productive areas studied and policy reform agenda developed.	1. Study SOW developed and approved.	1. Study of land tenure effects on sustainability of protected areas completed by 1993 in selected buffer zone areas.	Policy Component, t.a., as well as Access II buy-in	1. Annual report of Makerere Institute of Social Research (MISR) and Wisconsin Land Tenure Center (LTC).

	2. No intermediate indicator.	2. Policy reform agenda for improved land security recommended by NISR/LTC and endorsed by National Environmental Action Plan (NEAP) by 1994.	Policy Component, t.a.	2. Annual reports of NISR/LTC. Land Tenure Task Group report of NEAP.
Target 4-3 : Completion and GOU endorsement of the National Environmental Action Plan (NEAP) by 1995.	1. No intermediate Indicator.	1. Cabinet approval of the NEAP by 1995.	Policy Component	1. National Gazette. 2. Evaluation report by USAID/GOU on meeting of conditionality
Target 4-4 : Park/Reserve operations improved at Bwindi, Rwenzori, Kibale, and Lake Mburo.	1. a. Training plan approved. b. Candidates for training selected. c. Training programs selected and improved as necessary d. Impact indicators developed and tested.	1.* Trained male and female professional staff increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		1. UWP annual reports.
	2. Impact indicators developed and tested.	2.* Funding for park/reserve operations increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		2. UWP annual reports.

314

	3. Impact indicators developes and tested.	3.* Number of tourist visits increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		3. UMP annual reports.
Target 4-5: Retention and reinvestment of natural resource and tourist revenues in local conservation activities expanded.	1. Impact indicators developed and tested.	1.* Annual park/reserve collection of tourist and other user fees increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		1. UMP annual reports.
	2. No interim indicators	2. Policy reform recommendations to increase percentage of park/reserve user fees locally retained and reinvested in conservation endorsed by NEAP and approved by GOU by 1994.		2. NEAP report. National Gazette

315

Target 4-6: Identification and extension of natural resource management technologies for soil conservation and fertility expanded in target areas.	1. Impact indicators developed and tested.	1.* Improved soil conservation and agroforestry practices developed and tested by AFREMA and NGOs in target villages near parks/reserves at Bwindi, Kigali, Rwenzori, and Lake Mburo: -- 10 practices by 1992; -- 20 practices by 1994.		1. AFREMA annual reports. NGO annual reports.
	2. Impact indicators developed and tested	2.* Tested practices extended to farmers in buffer zone areas through community extension programs of NGOs, relevant agencies, and schools to: -- 10% of farm households by 1992; -- 30% of farm households by 1994; -- 50% of farm households by 1996.		2. NGO baseline and follow-on surveys & project annual reports. Gov't agency annual reports.
Target 4-7: Employment and income for men and women from natural resources and tourism activities increased.	1. Impact indicators developed and tested.	1.* No. of men and women from local communities employed in parks/reserves increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		1. UWP annual financial reports.

310

	2. Impact indicators developed and tested.	2.* Number of households with more than 10% of income derived from activities related to conservation and tourism increased: -- at Bwindi from ___ to ___ by (date); -- at Rwenzori from ___ to ___ by (date); -- at Kibale from ___ to ___ by (date); -- at Lake Mburo from ___ to ___ by (date).		2. NGO baseline and follow-up household surveys in buffer zones.

3. Definition of Impact for APE components

a. NPA

NPA Programs are to be monitored so as to link program impacts with institutional and structural reform supported through conditionalities and provision of local currency resources. In the case of APE, the primary purpose of the NPA is to initiate and develop a viable EAP. The links to people level impacts, therefore, will be somewhat indirect, in that two of the four conditionalities refer to prospects for future impacts. The APE NPA therefore will emphasize the potential impact on people from the plans, policies and interventions to be supported under the EAP in future years.

Equally important, the NPA will be evaluated on the extent to which people level impacts are taken into account in the M&E system within the EAP itself, since the potential for long term, positive impacts once the EAP is initiated in FY 94 will depend in large part on the existence of tested and reliable monitoring systems within the EAP framework which track people level impacts.

AID/W guidance also requires that the NEAP process must follow the approach outlined above in Annex IIB, as well as cover those priority issues noted in the PAAD. As part of the negotiation process for the PAAD, USAID has ensured that all key topics considered by USAID to be critical to Uganda are now included within the Task Force structure.

b. Monitoring of Conditionalities

There are two aspects of monitoring related to conditionalities. The first refers to the monitoring of the GOU's meeting of the conditionality itself. This will be the joint responsibility of the GOU through the NEAP Secretariat and USAID. The findings of compliance with the relevant conditionality will then be referred to the RLA for review and approval prior to the development of the amendment to the Grant Agreement authorizing the next funding tranche.

The second aspect of monitoring refers to the monitoring of impact of the conditionality, and the relative impact this conditionality will have in terms of the overall APE Program, ie., what impact did the conditionality have, and did that impact make the type and level of difference initially planned? This monitoring function is most critical in that it permits USAID and the GOU to refine and revise subsequent conditionalities.

The program and impact indicators for each of the conditionalities are summarized below in Table __.

TABLE --: MONITORING OF IMPACT OF THE NPA/NEAP COMPONENT OF APE

	Program Indicators	Impact Indicators
1. Conditionalities: a. Steering Committee staffed; Task Forces formed	NEAP is initiated and follows approved process and substantive focus in terms of reference.	1. GOU agencies selected to be represented by Task Forces participate in meetings. 2. NEAP process is considered by the GOU, PVOs and donors to be valid and legitimate method for environmental policy development
b. GOU Approves NEAP	GOU, donor and PVO policy and program development is unified and coordinated.	All future donor, GOU and PVO programs are supportive of, and restricted to priority concerns identified by the NEAP.
c. Submission of Reserves for Park status	Bwindi and Rwenzori Reserves obtyain higher protection status leading to sustined biodiversity in areas.	Legal tree cutting is eliminated or reduced to ecologically justifiable sustainable limits. Illegal tree cutting and clearing controlled and effectively eliminated.
d. Reorganization of GOU agencies	Institutional responsibilities rationalized in the NRM sector	NRM programs are more effectively designed and implemented.

318

2. Other Impacts		
a. Improved understanding of natural resources increases the quality and impact of programs	1. Studies for the NEAP completed and incorporated into data base	1-3. Users of data base even relate information to sectoral policy and implementation issues.
	2. NICE system incorporates data from PVO activities and NEAP studies	
	3. NICE is incorporated as integral part of NEAP process	
	4. NICE is incorporated as integral part of USAID's CPSP monitoring process	4. Mission NRM programs reflect DFA objectives, and are able to demonstrate impact.

c. Monitoring of the NEAP Secretariat

Monitoring and evaluation for the NEAP will be the responsibility of the NEAP Secretariat. They will receive quarterly monitoring reports based on workplans prepared by each task force and an overall workplan prepared by the NEAP coordinator. Quarterly progress review session of the NEAP Steering Committee will draw on these reports to recommend corrective actions and coordinate the inputs of the agencies involved.

Annual evaluations will be the responsibility of the NEAP Steering Committee. They will be led by the Chairperson of the NEAP Secretariat. Annual evaluation will review the progress for the year and present the following years plans for the approval of the Steering Committee. Mid-course corrections will be suggested by both the Secretariat and the Steering Committee and discussed and approved by the Steering Committee. Specific areas that will be examined include:

o **Effectiveness of interministerial and interagency coordination** on the team as measured by participation on the task force working groups, resolution of specific issues formulation of specific recommendations for improving coordination of the activities of agencies with different vested interests in environmental matters.

o **Quality and quantity of the work performed.** This will include a review of progress towards specific output targets (e.g., collection of data and information, analyses conducted, recommendations produced, policy/legal reform proposed).

o **Quality of public participation in the NEAP.** The evaluation

will examine the nature of the public participation to ensure that it is representative (including gender disaggregated input, representation of various levels of the RC system, input from NGOs and private sector agencies, geographically well distributed), focused on important issues, and securing the types of input expected from the public review process.

c. Monitoring of the Rehabilitation/Resource Conservation (RRC) Component

The GMU will develop a unified framework for the collection of baseline information and ongoing data; all subgrants will be required to incorporate aspects of this framework into their proposals. Evaluations of all subgrants will be based in part on the ability of the subgrant to collect relevant baseline information, and to monitor program impacts. A primary function of the GMU will be to assist grantees in improving their monitoring systems, to summarize grant impact over the course of APE, and to interact with the NEAP Secretariat and NICE to ensure this information is available for the monitoring of Program-wide impact.

The GMU will be responsible for the monitoring of impact for all subgrants. The GMU will assist the NEAP Secretariat in the monitoring of GOU rehabilitation activities.

The GMU will be held accountable for ensuring that subgrantees have appropriate technical, managerial and administrative competence, however, they will not be evaluated per se on the success implementation of subgrants except where adequate implementation competence was not present and should have corrected before a subgrant was made.

The monitoring and evaluation of the Grant Management Unit will be aimed tracking their progress and determining their effectiveness three areas:

- Disbursement of grant funds to field agencies;
- Ability to administer and track grant funds; and
- Support for grantees with technical assistance, training and field oversight in programmatic, administrative and managerial areas.

The quarterly monitoring of the GMU will be presented to the USAID Project Officer and the Ministries of Environment Protection and Tourism and Wildlife (or their successors). These reports will provide information on the number, types (purposes) and amount of subgrants made, the training and technical assistance provided and the progress being made by the subgrantees. Constraints

320

encountered in the period will be discussed and recommendations will be provided for remedying these. Plans for the upcoming quarter will be discussed and approved.

Annual GMU evaluations will be conducted to review in qualitative as well as quantitative terms the progress of the GMU subgrant program. This will specifically consider:

o Disbursement of funds to the field. Were disbursements made on time, how close were the actual and expected disbursement rates, and were successful grants adequately supported by proposals that met the selection criteria, were disbursements made in the expected proportions to the three subgrant categories and was there adequate representation of women and women's organizations among the grant recipients.

o Administration of grant funds. Were grants properly tranched, did subgrantees properly support their grants and requests for replenishment with receipts with new funding, were disallowable costs discovered and funds recovered, were expenditures properly reported to USAID and accounted for. Were subgrantees properly monitored for both input and outputs to determine problems in implementation and were corrective actions taken.

o Provision of technical assistance and training. Were the subgrantees provided the necessary training and technical assistance to fill any gaps they may have had before receiving the subgrant in capabilities related to technical, managerial or administrative requirements. Were the training events judged to be relevant and effective by the participants. Did any major implementation problems occur that should have been predicted and dealt with beforehand.

4. M&E Methodology and Approach

a. Institutional Setting

NICE will be the primary organization responsible for developing and implementing APE's monitoring plan, under the guidance of the NEAP Secretariat and in conjunction with the GMU. It is expected that the NICE will work closely with and/or contract with MISR and other Ugandan research institutions, and with AID-funded research activities by organizations such as the Land Tenure Center and World Resources Institute.

b. The Africa Bureau-Approved NRM Impact Indicator Framework

In order to monitor program impacts related to natural resource interactions, the Africa Bureau of AID has developed an impact indicators framework (described in more detail below in Section

321

8). This framework has been approved by the Bureau as the method to be used in measuring natural resource impacts of relevance to the DFA.

Long term change in NRM is far beyond the time scale of APE, nor can it be easily measured solely through the evaluation of biophysical indicators. AID's impact indicator framework can be a useful tool by identifying those intermediate factors (improved land tenure, access to credit, access to improved agricultural technologies) which, based on rapid appraisal surveys appear to have positive effects. This framework, based upon an understanding of the variables which lead to improved natural resource management practices, has a significant advantage in permitting the evaluation of impact of PVO field activities through the counting of surrogate indicators.

However, the Bureau framework will need to be modified and localized data collected before it can be of relevance to both APE and to the Mission's CPSP. The Africa Bureau has been working with WRI in the testing and modification of this framework; APE will be assisted by WRI through Bureau funds and a buy-in to the EPM Project to develop within the first six months of the Program a revised impact indicator framework.

c. Spatial Analysis of Impact

The policy component of the APE Program is nation-wide is scale, while the RRC component covers a large area of the country. Spatially-based analysis, such as geographic information systems (GIS) can be most useful in order to understand the potential for replication of impacts. NICE will be developing a GIS as an integral part of the NEAP; USAID will work with the NICE so as to use this system, coupled with the other analyses and subgrant evaluations, to help in the monitoring of the impact of APE.

The Mission will monitor NICE itself in terms of impact through assistance from the Africa Bureau Consultative Groups, discussed below.

d. Longitudinal Analysis of Impact

In addition to spatial analysis, NICE, in conjunction with research institutions such as MISR, are to set up a series of longitudinal sample surveys, in order to study program impacts over time. A minimum of ten villages in the regions surrounding priority parks and reserves are to be included in the survey. REDSO will be requested to assist in the design of this component with NICE during the first six months of the Program.

322

e. Gender-Specific and Vulnerable Groups Impacts

The DFA requires that particular care be taken to ensure that adverse impacts to vulnerable groups (such as women, children, landless groups, and minorities) cause by AID-funded NPA programs are identified, and strategies for their amelioration developed and implemented. To do this will require careful monitoring of such groups. For Uganda, those most at risk in terms of vulnerable groups appear at this time to include women and children (in particular widows and orphans), and small ethnic groups dependent on forest land.

APE, through NICe, will pay particular attention to these groups, and will alert AID if adverse impacts from DFA-funded activities are identified.

5. Evaluation of Program Inputs

Program inputs, including technical assistance, the GMU, and training, will be evaluated both in terms of impact as well as in terms of traditional evaluation criteria related to performance, timeliness and responsiveness.

Quarterly monitoring reports will be prepared by the NEAP Technical Advisor and the Chief of Party of technical assistance team for the UNP and MEP. These reports, based on the workplans for each major activity conducted during the period, will be reviewed by the USAID/Kampala Project Officer and representatives of the respective ministries.

Annual evaluation reviews will be conducted by the same parties to judge the effectiveness of the technical assistance provided. This will be include quantitative analysis of progress reports (were outputs targets met, if not why not; were technical assistance and training inputs provided on a timely basis and were specifications met) and qualitative assessments (did the technical assistance and training result in the expected changes, were the products up to generally accepted standards). Specifically the annual evaluation will assess:

- Effectiveness of training programs will be judged by training evaluations that will be conducted by the trainees at the end of each training event.

- Technical analyses will be judged in terms of their clarity, appropriateness, accuracy and responsiveness to specific terms of reference for the analyses. For short-term technical assistance

a brief evaluation form will be filled out by the recipient agency representative and the Chief of Party or NEAP Technical Advisor.

o The ability of the technical advisors to provide leadership and satisfactorily meet their terms of reference will be judged in annual appraisals by their supervisors in consultation with the APE Project Officer and the agency representatives.

6. External Evaluations

a. Midterm Evaluation

i. NEAP Secretariat

The external evaluation of the NEAP process will be evaluated on two separate occasions. The first will be conducted shortly after the draft Action Plan had been prepared but before it has finalized and adopted. The purpose of this evaluation will be to validate the findings of the NEAP process. Evaluation findings may suggest that additional work needs to be done, that the process was satisfactory and the plan should be adopted or the evaluators may make specific suggestions for minor revisions in the draft Action Plan. This evaluation will:

o assess the quality of the data/information collection, assessments and analyses conducted.

o Validate that the participatory process has been conducted in a representative fashion.

o Judge the validity and appropriateness of key policy, institutional and legal reform recommendations.

o Assess the feasibility of the suggested environmental action projects and follow-on plans.

ii. RRC Component

The mid-term evaluation will review the reports of the annual evaluations and assess their objectivity and appropriateness of the findings. The evaluation will also conduct interviews with subgrantees and visits to subgrantee project sites to determine how effectively the GMU was in reaching them with training and TA in technical, administration and managerial areas. The evaluation will review the following and make recommendations as to mid-course corrections that are needed to improve the effectiveness of the subgrant component.

324

o Subgrant selection process. Were the subgrants fairly selected and representative of geographic, subject areas, and diversity of potential subgrantee population. Were selection criteria adhered to or were exceptions made properly justified.

o Progress toward program goal and purpose. The evaluation will assess the extent to which the GMU has helped move the overall program toward its goals. This will focus on the process that the GMU has developed for supporting subgrantee activities rather than the impact of the grants per se. In particular the evaluation will assess if the Umbrella Grant is a cost effective means of reaching a large number of grant recipients and if quality control of program output can be maintained while allowing grantees the freedom and flexibility to conduct innovative programs with reasonable assurances of fiscal accountability.

o Managerial and administrative responsibility. This will assess the degree to which the GMU lived up to its responsibilities to effectively manage USAID resources. It will examine the processes established by the GMU for monitoring and evaluation of the subgrants and spot check several of the subgrants to assure that the GMU provided appropriate monitoring and evaluation services. This will include review of administrative systems for: handling of subgrant disbursements, receiving and processing financial and progress reports from the field, and for reporting to USAID. It will also examine the procedures developed by the GMU for monitoring and evaluating program quality and output and making mid-course adjustments in their own activities and those of the subgrantees.

iii. Technical Assistance and Training

The mid-term evaluation and the final evaluation will assess the effectiveness of the technical assistance and training program by:

o Examining the annual evaluations of technical assistance and training support to ascertain their accuracy and validity.

o Reviewing the products of the training events and technical assistance to determine if they met the planned terms of reference and expected outputs and acceptable levels of quality.

o Conducting a general assessment of the effectiveness of the technical assessment and training programs in supporting APE purposes. Should this assessment find that the component did not achieve its intended objective the evaluators will determine if this was the result of unsatisfactory compliance with their terms of reference or if the APE did not adequately plan TA and

training needs or if their were unanticipated externalities that caused the outcome.

o The mid-term evaluation will also assess if changes in the level and nature of the TA and training component are needed to meet APE needs.

b. Final Evaluation

i. NPA Component

The second external evaluation will conducted in the fifth project year. This purpose of this evaluation will be to judge the impact of the policy, legal and institutional reforms initiates under the NEAP as well as the APE conditionalities related to the NPA component. The task forces initial review work intended primarily as a basis for their analyses will also serve as a baseline analysis for this evaluation. This initial work will include a review of current policies and laws and an assessment of the social, economic and environmental impact of them. The impact evaluation will include:

o A review of the adoption process of the NEAP (e.g., what actions have been taken, the level and nature of pluralistic participation in these decisions (including the involvement of women and other minority groups), the translation of broad policies and laws into regulations and action).

o A field review of impact at specific areas where policies, legal and institutional reforms are expected to be felt (e.g., in forest reserves, National Parks and their buffer zones; in industrial and urban areas; on small farms and wetlands).

o A review of institutional restructuring to examine the effectiveness of the new agencies involved, both a unified Ministry for natural resources management and a high-level environmental protection authority. This will include an assessment of the ability of the new agencies to carry out their mandate, the quality of their management and field staff, the quality of and process used to prepare their operational plans and the level of cooperation between agencies in the field such as joint area management planning, combined operations in training and environmental enforcement.

ii. RRC Component

The final evaluation will review the success of the GMU in meeting the purpose of the APE. This will require close coordination between the evaluation of the subgrants themselves and

326

the GMU. It will focus on the overall output of the Umbrella Grant program assessing in particular its contribution to the objectives of APE. In addition the final evaluation will make recommendations as to the effectiveness of this Umbrella Grant approach resolving the problems addressed by APE. Specific areas that will be addressed include:

o Synergism of subgrants. The evaluation will examine the degree to which the subgrants worked in a coordinated fashion toward common purposes established the APE. Issues include: were the subgrants properly networked minimizing duplication of effort; were appropriate steps taken to ensure that data collected and lessons learned were shared among the appropriate parties; and did later subgrants build on the experience and foundation laid by earlier grants. Finally the evaluation will document the extent to which the subgrant program was coordinated with the NEAP and TA/training components of the APE.

o Impact of subgrants. The representative sample of subgrants (at least 10 percent of the subgrants and all of the largest subgrants) will be evaluated during the final evaluation to determine their impact on the local environment and people. These will be evaluated in terms of their own plans and expectations. The appropriateness of the grants in meeting overall APE objectives will be assessed on the basis of this sample.

o Managerial and administrative responsibility. The final evaluation will repeat the mid-term assessment of the GMU's fulfillment of its managerial and fiduciary responsibilities.

7. Provision of Services for M&E

a. Role of NICE and the Secretariat Contractor

NICE will the primary monitoring unit within the NEAP, and as such shall be the lead agency, under guidance of the Secretariat, to monitor APE program impact. The NICE will also develop an environmental information system, including a GIS, wherein baseline data and implementation information, data from longitudinal surveys and other activities will be incorporated.

While the NICE will assist USAID in the collection and preparation of background material for the external evaluations, the preparation of these evaluations will be the responsibility of USAID.

327

NICE will also be the lead counterpart agency in refining the NRM Impact Indicator Framework for use in Uganda.

b. Role of the GMU

The GMU will be responsible for monitoring and evaluating individual grantees, in preparing unified sampling techniques and other methodologies to assist in ensuring the comparability of data. The GMU will develop with NICE and the Secretariat a methodology for transferring baseline and implementation information to NICE on a regular, intermittent basis.

c. Role of Africa Bureau Consultative Groups in M&E

i. Background and Overview

With the expansion of natural resource programs in Africa over the last few years, there has been a dramatic rise in the use of information systems, especially spatially based systems. In addition, the Development Fund for Africa (DFA) has promoted the use of NPA programs as a means for resolving underlying policy constraints affecting key sector of interest to AID.

In both subjects, a multi-disciplinary approach is required, and both are susceptible to a narrow focus on technical or single-discipline bias. It has proven difficult for Missions and the Africa Bureau to sort through the complexity and conflicting perspectives. For that reason, The Bureau has commissioned WRI to develop two Consultative Groups who will work exclusively with the Africa Bureau and USAID Missions in Africa. These Groups will undertake three types of activities:

a. Respond to specific, ad hoc requests, review SOWs, evaluate reports and participate in ad hoc reviews at the request of Missions and the Bureau;

b. Undertake specific studies and activities, primarily of regional importance;

c. In partnership with Missions participate over the LOP of NRM policy and/or information systems programs, providing the Missions with technical oversight and advise on a long term, intermittent basis.

The primary rationale behind the setting up of Groups rather than drawing upon existing contractors is to promote the development of group of specialists who will be able to learn from activities in the field, to expand upon their own disciplinary background and country experience, and to assist in transferring experience and approaches between countries.

328

These groups will normally be advisory only; the actual implementation of programs would normally be the responsibility of other contracting mechanisms. The Groups, however, would provide USAID and the Bureau with an internal AID-focused advisory and review mechanism on topics where there may not be sufficient Direct Hire expertise.

AID/W through the Natural Resources Management Support Project (NRMS) is funding the initiation of both Groups through a buy-in to the S&T Bureau's Environmental Planning and Management Project (EPM). Africa Bureau funding will continue the core costs of WRI to act as the Groups' Secretariat, and most costs for the studies component of their activities. Ad hoc advisory services will be funded either by the Bureau or through co-funding with missions to cover any TDY costs. The third component, country programs, is expected to be covered primarily through mission buy-ins to EPM, although Bureau funds can be used during the initial design phase of any country programs, as well as any activities which are specifically regional in nature.

8. The Africa Bureau NRM Impact Indicator Framework

The Africa Bureau of AID is in the process of developing a Framework of Impact Indicators related to natural resource management. This Framework is rewquired to ensure the Bureau's ability to evaluate the impact of programs through Africa in meeting the Strategic Objective (SO) 3.1 of the Development Fund for Africa (DFA):

<u>To achieve sustainable increases in productivity through better management of natural resources</u>.

The general structure of this Framework has been approved by the Bureau; additional testing and refinement is needed, in part to evaluate the ability of the Framework to reflect experiences throughout Africa. In addition, the Framework generically can be an important tool for use by Missions, other donors, and PVOS in program planning, impact monitoring, and the organization and collection of information on sustainable NRM.

--- Level V, <u>sustainable increases in income and productivity through better management of natural resources.</u>

--- Level IV, biophysical changes

--- Level III, "adoption of practices"

--- Level II Conditions affecting the adoption of practices

329

(availability of credit, tenure rights, access to technology, etc.)

--- Level I, Underlying conditions (institutions, policies, pricing incentives, etc,.)

9. **Detailed Description of the Subgrants Monitoring and Evaluation Plan**

The quarterly monitoring reports of the subgrants will be presented to the GMU and the Ministries of Environment Protection and Tourism and Wildlife (or their successors). These reports will provide information on the accomplishments of the subgrantee in accordance with their approved workplan. The monitoring reports will include an input tracking section enumerating funds expended, technical assistance provided, and materials and equipment purchased/received. The report will also include an update on activities including among others:

o Training (e.g., number of training events and number of people trained (disaggregated by sex), training/education documents produced, extension agent/farmer contacts);

o Infrastructure established (e.g., tree nurseries, training centers, tourist cabins);

o Field activities (e.g., trees planted, area of land treated with soil conservation, inventories completed, hectares logged, and community discussion, ie number of meetings held with local people, topics discussed, and number of men and women present); and

o Participation (meeting held with local officials/community leaders, number of local farmers (gender disaggregated) adopting new techniques, tourist visits, activities of subgrant counciling bodies).

Constraints encountered in the period will be discussed and recommendations will be provided for remedying these. Plans for the upcoming quarter will be discussed and approved.

The overall principles for subgrant evaluation is presented below. As mentioned above the subgrants will evaluated separately from the evaluation of the GMU. Following presentation of the generic evaluation principles special evaluation criteria for each of the three types of subgrants are presented.

o Subgrantees will conduct internal annual reviews in concert with their counterpart agencies.

o Local community participation (including gender disaggregated viewpoints) in evaluations will be fostered by special treatment of this innovative approach in training programs conducted by the GMU.

o All subgrants will be evaluated by the GMU on the following schedule: at least once every 30 months or upon the end of a funding cycle.

o Subgrants that are expected to receive continued funding will have formative mid-term evaluations while subgrants that are terminating will receive final evaluations.

o With the exception of the spot checks conducted under the mid-term and final evaluations the conduct of subgrant external evaluations will be the responsibility of the GMU.

o Large or highly specialized (e.g. ecological research) grants will be evaluated with external short-term technical assistance while the smaller grants will be evaluated by the GMU team.

o On-the-ground development and conservation subgrant evaluations will emphasize accomplishments in establishing effective local managed development processes for conducting the subgrant activities with less emphasis on output per se (although output will be an important indicator of effective process).

o The emphasis of the inventory/research and education/training subgrant evaluations will be the products of these activities although the processes used and, more importantly, left in place will be important considerations.

1. On-the-Ground Subgrants

As the subgrants will serve several objectives (impact, increasing capacity of local communities and GOU agencies, developing innovative approaches, providing input into and testing policy reform) the evaluation will be geared to assessing success in supporting these objectives. Specifically the evaluation will include:

o Environmental impact: Subgrants will be assessed in terms of their effectiveness in correcting environmental problems. This will include an examination of the appropriateness of the techniques used to solve the target problem as well as the occurrence of any unintended (particularly negative) impact. Indicators may include: increased agricultural production, reduction of loss/degradation of forest lands, increased tourism revenues, etc. The quality of a priori environmental reviews will be assessed in the light of actual impacts.

331

o Social impact: The social impact of the subgrants will be assessed in terms of change in key indicators in the socio-economic status of participating groups. Indicators may include: nutrition, increased income, and improved knowledge and skills. Of particular concern will be the change in the status of special groups (e.g., women, buffer zone farmers and herders).

o Cost effectiveness: Subgrants will be assessed as to whether the cost of their accomplishments was reasonable and justified.

o Recurrent costs: The recurrent cost requirements for subgrant activities will be examined as to the likelihood of sources of support other than USAID of meeting the ongoing maintenance of desired post subgrant activities.

o Policy and planning: Subgrants will be assessed as the utility of the lessons learned during their implementation as to the impact of policy on resource management decision making and practices. In particular were their findings made available to appropriate agencies in a useful manner and form.

o Replicability: All subgrants will be assessed in terms of the feasibility of replication of at least certain components of the activity (e.g., extension approach, technical solutions, training curricula).

2. Inventory and Research Subgrants

The inventory and applied research program are intended to support the information and data needs of the NEAP and resource managers both GOU and non-governmental agencies. As such these activities will be strongly evaluated on whether they have served the needs of the user groups. Factors that will be examined include:

o Methods and standards: Subgrants will be reviewed as to whether they have followed generally accepted methods and standards for data collection and research and if the presentation of results met standards of clarity and quality.

o Training of national researchers: Subgrants under this component will be assessed as to the quantity and quality of preparation of training national scientist and technicians to carry on the work. This will apply equally to Ugandan subgrantees as well as expatriate.

o Disposition of results: Subgrantees will be assessed as to the final disposition of results: were they placed into the hands of appropriate users groups in a form they could use, was the data

fed into the National Environmental Information Center, were copies of any reports and publications provided to the many repositories for such data.

o Utility of results: Did the results answer the priority questions and provide guidance needed for resource managers, policy makers and other decision makers.

3. Training and Education Subgrants

The training and education subgrants have two basic objectives: (1) to create cadres of qualified personnel to carry out the major APE activities; (2) to foster public support for environment and natural resources conservation in Uganda. As such the evaluation of these subgrants will focus on the success of subgrantees in change in the knowledge, attitude and practices of the trainees. Standard methods for evaluating training and education programs will be used to determine:

o Quality of activities: Training/education programs and events will be assessed, primarily from the perspective of the participants, as to the quality of the instruction given or materials produced. This will include relevance of the presentation to their problems and needs, clarity of presentations, value of documentation provided to trainees and follow-up provided to trainees, and sensitivity to special concerns such as women's issues, ecological/social soundness.

o Relevance to APE objectives: The fit of subgrants to the program objectives will be assessed in terms such as: were the subgrants activities based on a sound needs assessment conducted among APE targeted trainee groups, was curricula based on the needs assessment, was the activity fitted into other similar efforts, were activities conducted in the appropriate geographic region.

o Sustainability of training: Training/education subgrants will generally not be funded for single event and they should be able to be continued in the absence of APE funding. They will be evaluated for their ability to cover recurring costs through other sources including tuition payments, sales of educational materials, fitting into GOU/NGO ongoing programs or adoption by the Ministry of Education or one of the country's institutions of higher education.