

**UNITED NATIONS ENVIRONMENT PROGRAMME
GLOBAL ENVIRONMENT FACILITY
PROJECT DOCUMENT**

SECTION 1 - PROJECT IDENTIFICATION

- 1.1 Sub-Programme Title:** Biodiversity – 1: Arid Ecosystems and cuts across OP#2 and OP#3
- 1.2 Project Title:** Removing Barriers to Invasive Plant Management in Africa
- 1.3 Project Number:** GFL / 2328 – 2711 -
PMS: GF/ 1030 – 05 -
- 1.4 Geographical Scope:** Multi-country: Ethiopia, Ghana, Uganda, Zambia
- 1.5 Implementation:** Lead Agency - CAB International (CABI)
P.O. Box 633-00621,
Nairobi, Kenya.
Tel: +254 2 7224450 Fax: +254 2 7122150

Assisting Agency - World Conservation Union (IUCN)

National Executing Agencies:
Ethiopian Agricultural Research Organisation, Ethiopia
Council for Scientific and Industrial Research, Ghana
National Agricultural Research Organisation, Uganda
Environmental Council of Zambia, Zambia
- 1.6 Duration of the Project:** 48 months
Commencing: 1st September 2005
Completion: 31st August 2009
- 1.7 Cost of the Project:**

<u>Cost to the GEF Trust Fund:</u>	US\$	%
Project	5,000,000	
PDF-A&B	725,000	
Subtotal GEF	5,725,000	48.11

<u>Co-financing (Project):</u>			
	<u>In-kind</u>	<u>Cash</u>	<u>Total</u>
Implementing Agency			
CAB International:	375,000	375,000	750,000
IUCN:	125,000	125,000	250,000
Government			
Ethiopia:	510,223	500,000	1,010,223
Ghana:	637,318	500,000	1,137,318
Uganda:	596,031	500,000	1,096,031
Zambia:	649,408	500,000	1,149,408
Sub-total A:			5,392,980

<u>Co-financing (PDF-B):</u>			
CAB International:	50,000	180,000	230,000
IUCN:	50,000	40,000	90,000
Ethiopia:	95,000	-	95,000
Ghana:	95,000	-	95,000
Uganda:	95,000	-	95,000
Zambia:	95,000	-	95,000
<i>Sub-total B:</i>			700,000
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<u>Co-financing (PDF-A):</u>			
CABI:	8,000	-	8,000
IUCN:	3,000	-	3,000
Ethiopia:	2,900	-	2,900
Ghana:	2,900	-	2,900
Uganda:	2,900	-	2,900
Zambia:	2,900	-	2,900
PPRI:	2,400	-	2,400
US Dept of State:	-	50,000	50,000
Other:	6,000	-	6,000
<i>Sub-total C:</i>			81,000
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Sub-total Co-financing:		6,173,980	(51.89%)
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Total Project Cost		\$US 11,898,980	(100%)
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1.8 Project Summary:

Invasive alien species (IAS) are second only to habitat destruction as a cause of global biodiversity loss. Prevention and mitigation of the effects of IAS is particularly challenging in Africa, impeding sustainable development as well as threatening biodiversity. This project aims to reduce and possibly remove barriers to the management of IAS through effective implementation of CBD Article 8(h) in 4 pilot countries (Ethiopia, Ghana, Uganda, Zambia), using a multisectoral ecosystem approach. In each country an enabling policy environment will be promoted through the establishment of appropriate institutional arrangements to ensure that IAS strategies are mainstreamed; stakeholder awareness of IAS issues will be raised and access to necessary information provided; prevention and control programmes will be established, including ecosystem management at pilot sites where IAS threaten biodiversity; capacity for sustainable IAS management will be built. Lessons learned will be disseminated for replication in other countries in Africa.

Signatures

For CABI:

For UNEP:

D. Rangi, Director
CAB International, Africa
Nairobi.

D. Hastie, Chief,
Budget and Financial Management
Service, UNON.

Date: _____

Date: _____

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SECTION 2 - BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL SUB-PROGRAMME IMPLEMENTATION

BACKGROUND AND CONTEXT (BASELINE COURSE OF ACTION)

THE GLOBAL THREAT OF INVASIVE ALIEN SPECIES

1. The 7th Conference of the Parties (COP7) to the Convention on Biological Diversity (CBD) issued the Kuala Lumpur Declaration in February 2004, expressing alarm that biological diversity is being lost at an unprecedented rate. Invasive Alien Species (IAS) are a major cause, and in some ecosystems, the most important cause of biodiversity loss. COP7 (Decision VII/20) thus invited the GEF and other funding institutions and development agencies to provide support to **developing countries** to assist with improved prevention, rapid response and management measures to address the threats of IAS. COP6 (Decision VI/17) had already requested GEF to provide financial resources **as a priority** for projects assisting with the development and implementation of the IAS strategies and action plans called for in decision V/8. This project responds directly to those identified needs and priorities.
2. IAS are defined by the CBD as species, subspecies or lower taxa, (including any part, gametes, seeds, eggs, or propagules of such species), introduced outside their natural past or present distribution and whose introduction and/or spread threaten biological diversity (see Invasives Glossary in Annex Gi). IAS are a global threat to the conservation of biodiversity through their proliferation and spread, displacing or killing native flora and fauna and affecting ecosystem services. In response to this threat, Article 8(h) of the CBD calls on parties to “prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats and species”, and decisions V/8, VI/23 and VII/13 have elaborated on the need for, and approaches to, the full implementation of Article 8(h).

INVASIVE ALIEN SPECIES IN AFRICA

3. Countries in sub-Saharan Africa have thus far done little to implement COP decisions on IAS. In most countries there is a weak policy and institutional environment, critical information is unavailable, there is inadequate implementation of prevention and control, and there is a lack of the necessary capacity. Nevertheless, IAS in Africa cause similar or worse problems to those in developed countries.
4. The Global Invasive Species Program (GISP) Synthesis Meeting (September 2000) identified management of IAS in Africa as a priority because IAS are adversely affecting local and globally significant biodiversity, and are also threatening agricultural production and food security (which continues to be the main priority for most African governments). Under current trends, the situation in Africa will deteriorate because on one hand the pathways through which IAS invade are becoming more numerous, and on the other there are a number of barriers that are constraining countries in Africa from addressing the problem effectively.
5. A UNEP/GEF MSP from 1998-2002 developed best practices and disseminated lessons learned for dealing with the global problem of IAS. The project evaluation noted that the MSP had particular impact in Africa, and that a number of developing countries are now requesting follow-up on the lessons learned and to apply the tools developed. However, as noted by COP and others, there are significant barriers hindering many countries from doing so. The current project will address these constraints in four pilot countries in Africa, selected to provide a range of situations and learning experiences that will maximise the potential for replicability in other countries of sub-Saharan Africa.

Focus countries

6. The four countries requesting this GEF intervention i.e. Ethiopia, Ghana, Uganda and Zambia were selected on the basis of four key criteria. First, they all recognise the threat of invasive species in their NBSAPs and/or other national plans, and have expressed a clear demand for interventions on IAS, through various regional and international fora and meetings (including the September 2000 GISP meeting in South Africa). Second, in each country there are IAS already causing severe damage to both globally significant biodiversity and economic development. Some of the IAS are common to more than one country, others are unique. Third, the countries provide representation of a range of ecosystems and of regional economic groupings (IGAD, ECOWAS, EAC and SADC). Fourth, the countries all possess the necessary infrastructure for project implementation and provide an effective hub for sub-regional communication and dissemination.
7. As a result of this combination of factors, these four countries provide the opportunity to implement a project that will maximise the potential for replication to other countries in the continent. There is thus a high likelihood that the project will be successful. The four pilot countries have all participated in the PDF-A and PDF-B phases of this project and are already serving as good examples to other countries in their respective sub-regions, facilitating the uptake and application of the lessons learned.
8. African countries participating in the GISP meeting identified invasive plants as the greatest current threat to biodiversity in the continent. Invasive plants were therefore considered to be the first priority in the development of management strategies for all IAS. (Hereafter the generic acronym IAS is taken to refer to invasive plants).

Barriers to effective IAS management

9. During the project development phases the barriers to addressing IAS issues in the four countries were analysed (See List of Project Outputs from PDF-B Phase in Annex Gii). Four categories of barriers were identified which form the basis for this intervention:
 - Weak policy and institutional environment
 - Critical information unavailable
 - Inadequate implementation of prevention and control
 - Capacity is lacking

These barriers are summarised below and in more detail in Annex I.

Weak policy and institutional environment

10. There are gaps, overlaps and inconsistencies in existing policies, regulations, strategies and institutional arrangements concerning IAS in the four project countries. All four countries give more prominence to IAS issues in their NBSAPs than in their national environmental action plans and policies.
11. Ethiopia, Ghana and Zambia have no body with overall responsibility for the coordination of IAS issues. In Uganda, the National Environment Management Authority (NEMA) has this responsibility but it currently lacks the means to effectively implement its mandate. Conflicting recommendations regarding IAS by different authorities are commonplace. This is exemplified by Ethiopia where *Prosopis* planting is recommended as a means of controlling desertification under the National Plan to Combat Desertification while being acknowledged as a threat to biodiversity resources under the Forestry Research Strategy.
12. While implementation of the CBD is generally a responsibility of the environmental sector, historically it has been the agricultural sector that has addressed IAS issues. However, the starting point for agriculturalists is that IAS cause economic damage to agriculture, with the environmental

damage they cause being of secondary concern. There is now increasing cross-sectoral, cooperation at the international level, such as between CBD and the International Plant Protection Convention (IPPC), but in all four project countries there is no institutional coordination mechanism for ensuring that IAS issues are addressed with the necessary broad, multisectoral ecosystem approach.

Critical information unavailable

13. The weak policy and institutional environment results in critical information for informed decision making being unavailable. Three categories of information and communication have been identified as lacking. First, there is inadequate sharing and exchange of information between the different stakeholders, including the different arms of government, the private sector, civil society and the general public. For example information about the invasive potential of *Mimosa pigra* existed in Zambia from the early 1980s but it is only in the last few years that this has become widely known by the relevant authorities. The recent introductions of water hyacinth to the feeder waters for Lake Mburo Uganda and to a pool at Adenta near Accra are further examples of a lack of awareness of the IAS issues.
14. Second, there is a shortage of information regarding the biodiversity of a country, and the status of alien species present. The most comprehensive species lists available are for mammals and birds. Plant lists exist for some key biodiversity areas in the four project countries but with a few exceptions, e.g. the Budongo Forest Reserve Uganda, these lists are not comprehensive and non-native species are often not included. Even in well studied areas such as Budongo the severity of the impact of invasive plants is poorly understood. Studies have been carried out on Paper Mulberry (*Broussonetia papyrifera*) in Budongo but not on *Senna spectabilis*, which following reconnaissance work undertaken during the PDF-B phase of the project is believed to be exerting relatively greater biodiversity impacts.
15. Third, globally there is an increasing body of relevant information, (for example on effective IAS control and management techniques), that national organisations need to access and contribute to, but the wherewithal to do this is lacking. In spite of the fact that all four NEAs have websites, none of them is linked to global information sources such as those of GISP and the IUCN ISSG. Problematic species for which there exists a considerable global body of knowledge that has been poorly accessed by relevant stakeholders in project countries to date include *Lantana*, *Mimosa* and *Prosopis*.

Inadequate implementation of prevention and control

16. Prevention of the introduction of IAS is practiced to some extent in all four countries through their plant quarantine organisations. The focus is primarily on the prevention of agricultural pests, and the countries implement basic risk analyses. However, capacity is limited, including in the assessment of environmental risks, which is now included in International Standards for Phytosanitary Measures No.11 on Pest Risk Analysis for Quarantine Pests.
17. When an alien invasive species breaches the defences and enters a country, rapid detection and response should provide an opportunity for eradication. None of the four countries has a mechanism for monitoring and detecting invasives except in agriculture, and none has rapid response plans to allow for eradication of new invasions.
18. Control programmes in some countries have been slow or inadequate, but there are some examples of successful control of invasive species, primarily through the use of classical biological control, in which another alien species is introduced that attacks the invasive. Properly executed this is a safe approach that has led to successful control of water hyacinth in several countries. However, control often takes a long time to be organised. Water hyacinth was first reported from Lake Victoria in 1989, but it was not until 1995 that available biological control agents were released. Ethiopia, on the other hand, has a water hyacinth problem but has never introduced the available biological control agents despite evidence that they have been effective and safe in other countries in Africa and beyond.

19. Many invasive species have been introduced because of anticipated benefits, and this can present a conflict when control is proposed. *Prosopis* has been and is still promoted as a beneficial tree and was introduced to Ethiopia in the 1970s. While it provides benefits to some, it is now highly invasive. It currently covers thousands of hectares in the Middle and Upper Awash Valley and Eastern Harerge with damaging impacts on local biodiversity and the potential for much further spread. Approaches for addressing such conflicting perceptions and objectives, including a regulatory framework and scientific methods for evaluating costs and benefits, are generally absent.

Capacity is lacking

20. Institutional, human and physical resources to address IAS problems are inadequate in all four countries. Ghana, for example has 48 official national entry points most of which are inadequately staffed to prevent unwanted introductions. The national plant protection organisations of the project countries have received some capacity building support but this needs to be enhanced. In Ethiopia the Ministry of Agriculture and Rural Development (MoARD) has been given extensive powers to control imports and exports, disposal, inspection and survey and treatment of land with regard to imported plants and plant products (under the Plant Quarantine Council of Ministers Regulation No. 4/1992). However, it lacks the means to implement the Regulation.
21. All the national plant protection organisations of the project countries apart from Ghana have received some capacity building as technical cooperation projects through FAO. While such efforts are starting to be translated into procedures such as risk analysis in the crop pest sector, such procedures have yet to be adopted for potential IAS.
22. There are examples of potentially effective control efforts that have so far failed to be translated to the field scale. In Uganda current approaches to the management of *Cymbopogon* in infested rangelands cost approximately \$175 per hectare. Integrated control, conducted on a small scale, could reduce these costs to ca. \$25 per hectare. However, adoption of such approaches has been poor due to a lack of capacity for follow up trials and information dissemination.
23. There also exists some capacity in biological control. Uganda, Ghana and Zambia have implemented a number of national and regional biological control strategies. Some efforts such as water hyacinth biological control on Lake Victoria have been very successful, while others such as *Chromolaena* control in Ghana have been less so. Some capacity in biological control of floating water weeds has been built in Zambia. However, this has never been translated into a systematic investigation into the possibilities for biological control on IAS affecting terrestrial ecosystems (e.g. *Lantana*) and floodplain ecosystems (e.g. *Mimosa*). Ethiopia has never implemented biological control.

PROGRAMMING CONTEXT

GEF Programming Context

24. The proposed intervention is consistent with the criteria under the Biological Diversity focal area of the GEF Operational Strategy. IAS can affect all ecosystems, but the project pilot sites are in semi-arid, freshwater and forest ecosystems. Thus the project covers Operational Program 1 (Arid and Semi-Arid Zone Ecosystems), Operational Program 2 (Coastal, Marine and Freshwater Ecosystems) and Operational Program 3 (Forest Ecosystems). In each of the three Operational Programs the objective is the conservation and sustainable use of biological resources in the specific ecosystems, so this project will contribute to the objective by removal of threats to ecosystem structure and function, including in protected and conservation areas.
25. The expected successful outcome in the three programs is the conservation and sustainable use of globally important biodiversity. The globally significant biodiversity that will be protected through the project is described in paragraphs 66 to 69 and in Annex Giii, but a specific monitoring outcome identified in the programs is measures of the population of key alien, invasive species. At each pilot site such measures are included (see Annex B). Intended outcomes in the programs include the removal of threats to biodiversity (IAS are a key threat), and the strengthening of institutions to

address these issues, both of which will be achieved by this project. Typical conservation activities listed in the programs include remedial actions in areas under threat, with the control of alien, invasive species specifically identified. It should also be noted however that in accordance with COP decisions, the project also places emphasis on prevention of IAS.

26. The intervention will contribute directly to achieving the biodiversity focal area strategic priorities numbers 2 (BD-2 Mainstreaming Biodiversity in Productive Landscapes and Sectors) and 4 (BD-4 Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues). In relation to BD-2 the intervention will develop institutional and organisational capacity to build cross-sectoral partnerships within government and with other stakeholders including, 'non-biodiversity conservation' agencies such as Ministries of Agriculture, Trade, Home Affairs etc, local communities and the private sector. It is also anticipated that the project will have high replication value. In relation to BD-4 the intervention will provide opportunity for the analysis and dissemination of good practice in addressing IAS (see also the next section), including the multisectoral and ecosystem approaches. The intervention also explicitly promotes information exchange through national, regional and global knowledge networks.

UNEP Programming Context

27. UNEP has been an active participant and supporter of the Global Invasive Species Programme since its inception and also served as the GEF Implementing Agency for the Medium Size Project "Development of Best Practices and Dissemination of Lessons Learned for Dealing with the Global Problem of Alien Species that Threaten Biological Diversity". During the MSP project executing agencies produced a number of best practice guidelines including: Assessment of Best Management Practices, Economics of Invasives, Education, Legal and Institutional Frameworks, Risk Assessment, Pathways/Vectors of Invasives, Climate Change & Invasives, and Early Warning Systems. Sections of these products and other information were subsequently integrated into the Toolkit for Best Prevention and Management Practices of Invasive Alien Species which is an invaluable tool in development and implementation of IAS management strategies.
28. The generic tools developed during the MSP provide a good foundation on which this proposed GEF intervention can build once barriers to the management of IAS in Africa have been addressed. The toolkit for Best Prevention and Management Practices of Invasive Alien Species recognises that although IAS are a global issue, each country or region may have specific priorities or issues which require specific solutions, and these will be investigated during the proposed intervention. The toolkit also identifies the need for pilot projects in individual or small groups of neighbouring countries with common invasive species problems and management challenges to adapt, expand and regionalise the toolkit to strengthen its effectiveness. The proposed project will, therefore, build on the tools developed during the MSP by utilising and validating the toolkit, specifically for the African situation, which in some cases will be replicable in other developing countries.

International Strategic and Policy Context

29. The intervention explicitly addresses Article 8(h) of the CBD, so contributes to the implementation of the CBD. Decision V/8 called on parties to develop national strategies and action plans, elaborated in Decision VI/23. Decision VI/23 also contained a set of guiding principles for the implementation of Article 8(h), with which this intervention is fully consistent. Decision VII/13 emphasised the multisectoral nature of the problem of IAS, particularly in relation to trade, and encouraged the use of risk analysis.
30. The WTO Agreement on Sanitary and Phytosanitary (SPS) Measures is a legally binding agreement aimed at protecting human, animal and plant life from four specific groups of hazards, each of which includes IAS. SPS measures include laws, decrees, regulations, requirements and procedures. Key principles of the agreement are the application of scientific methods, transparency, harmonisation, sovereignty and equivalence of measures. Ghana, Uganda and Zambia are WTO members, while Ethiopia is an observer having requested accession in 2003.

31. The Global Invasive Species Programme (GISP) was established in 1997 by CABI, IUCN and the Scientific Committee of problems of the Environment (SCOPE). GISP's mission is, 'To conserve biodiversity and sustain human livelihoods by managing the spread and impact of invasive alien species.' Phase I was supported by a GEF MSP, and under Phase II a secretariat has been constituted in South Africa.
32. A Memorandum of Cooperation (MOC) was signed between the Secretariat of the CBD (SCBD) and GISP on 8 June 2001. The purpose of this MOC is to assist the SCBD to develop a pilot initiative on invasive alien species within the work programme of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). In addition, GISP will act as an international thematic focal point under the Clearing-House Mechanism. Specific activities under the MOC include: (i) dissemination of information on invasive alien species to Parties, governments and the general public; (ii) collaboration in the elaboration and development of programs pertaining to the prevention, elimination and management of invasive alien species; and (iii) participation in GISP activities, particularly those of the GISP Information Management Group. The proposed project specifically addresses activities under (i) and (ii).
33. Under its mandate of Phase I, GISP published the Global Strategy on Invasive Alien Species (2001), containing ten strategic responses to address the problem of invasive alien species. The proposed project feeds into Element 1, Build management capacity; Element 3, Sharing of information; Element 4, Develop economic policies and tools; Element 5, Strengthen national, regional and international legal and institutional frameworks; Element 7, Build public awareness and engagement; and Element 8, Prepare national strategies and plans.
34. NEPAD (New Partnership for Africa's Development) has developed a Framework Action Plan for the Environment, with the support of an MSP from the GEF. IAS was identified as a Programme Area for the Action Plan along with Desertification, Poverty and Environment, Forests, Marine and Coastal Environment including Freshwater, Health and Environment, Climate Change and Wetlands. According to the programme of work adopted by the steering committee of the MSP and at the kind invitation of the Government of South Africa, a thematic workshop on invasive alien species, attended by 17 Technical Experts from Africa, was held in Pretoria, South Africa on 23-24 January 2003. In collaboration with the Government of South Africa, UNEP produced a background document on IAS for consideration at the meeting and facilitated the identification and preparation of 14 concept notes to support project interventions on IAS. During the course of the meeting the PDF-B of the present proposed project was presented as an ongoing initiative that would support the goals of the IAS programme, which is to "To minimise the impact of IAS on the African continent's people, economies and ecological systems". The experts expressed their support of the initiative as an example of how the issue of IAS could be addressed in Africa through the application of best practice. The proposed UNEP/GEF project on 'Removing barriers to invasive plant management in Africa' was also endorsed by NEPAD recently during an International Stakeholders Workshop held in Nairobi (PDF-B).
35. The African Convention on the Conservation of Nature and Natural Resources, originally drafted in 1968 (The Algiers Convention), was revised and adopted by the African Union in 2003. The emphasis is now on 'Conservation of Biodiversity' rather than 'Protection of Nature,' and parties undertake to take 'concrete steps' to control invasive species. The Phytosanitary Convention for Africa (1967) concerns preventing the introduction and spread of pests of plants regionally, in line with the objectives of the International Plant Protection Convention (IPPC).

RELATED INITIATIVES

36. While there are few projects directly concerned with IAS management, there are many projects dealing with biodiversity conservation, and to which this project therefore relates. The specific threats being addressed by those projects could jeopardise the success of management efforts under this project, while IAS could constrain the success of other projects. There is thus considerable scope and need for linkages with these projects at the national and pilot site level and in terms of regional and global replication and dissemination. Annex Giv summarises GEF and other related interventions.

37. At national level linkages will be made through involvement of key personnel and related agencies, and some such links have already been established. The manager of the water hyacinth biological control project in Uganda (under the GEF funded *Lake Victoria Environmental Management Programme - LVEMP*) participated in the 2003 regional stakeholders' workshop, and has been actively involved in implementing project activities during the PDF-B phase of the project. The project will also establish linkages with the design team of the UNEP/FAO/GEF OP15 PDF B on *Transboundary Agro-ecosystem Management Programme for the Lower Kagera River Basin* in Uganda. National Executing Agencies (NEAs) in the proposed project are also executing agencies or partners in a number of the related projects. We have also established links with another GEF-funded project in East Africa entitled, UNDP- '*Reducing Biodiversity Loss at Cross Border Sites in East Africa.*' National coordinators of related projects will be invited to relevant meetings and workshops, and workplans will be exchanged and coordinated where necessary, including undertaking joint activities such as training and information dissemination. Links at international level will be made by the intended project coordinator in a similar fashion.
38. In Ethiopia during the PDF-B links were established with several projects and organisations, which will result in synergies at the full project implementation state. FARM-Africa is implementing a project to sustainably manage pastoral lands in the Afar Regional State. This project includes a component on *Prosopis* management. Close contact will be maintained with the project to ensure that *Prosopis* management efforts are coordinated. Links have also been established with CARE Ethiopia who are implementing the 'Awash Conservation and Development Project'. A large part of that project is concerned with establishing sustainable livelihoods for pastoralists. The management of invasives in the area, notably *Prosopis* and *Parthenium* will be critical to the success of those efforts.
39. Water hyacinth control efforts initiated by the Volta River Authority (VRA) in Ghana have, so far prevented the weed from becoming established in the main Volta Lake. The project will establish linkages with the ongoing UNEP/GEF International Waters project *Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area for the Lake Volta Basin* in amongst others Ghana. Control efforts under the proposed project will enhance this programme by intensifying control efforts on water hyacinth source areas. The development of holistic management systems including community management methods and early warning and rapid response systems will feed into the five-year, African Development Fund regional project for the integrated management of invasive aquatic weeds in West Africa, scheduled to start in 2004 . This project will be of great value for regional replication and dissemination of project findings.
40. One of the 10 components of LVEMP concerns water hyacinth control. The project has reported 80% reduction in the area of hyacinth on the lake, achieved largely through biological control with the involvement of lakeshore communities. The capacity and expertise developed in Uganda during that work will be drawn on in this project to assist the other countries. The project as a whole had a poor start, but particularly in Uganda and Tanzania rapid improvements were made and it is now seen as highly successful. This was attributed to the Governments acquiring full ownership of the project, specifically the Government scientists and managers, some of whom are already directly involved in the current project. These linkages will result in lessons learned from LVEMP being applied not only to specific water hyacinth management activities under the proposed project but to IAS management as a whole.
41. UNDP's Southern Africa Biodiversity Support Programme (SABSP), in which Zambia is a participant is supporting a range of activities aimed at managing alien invasive species. This includes, *inter alia*, the development of regional information systems, and technical guidelines and other reference materials to inform management efforts at the regional and country levels. The project is providing funding for training to boost individual capacities within the region to confront IAS management problems.
42. The proposed GISP project, 'Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management' is currently in the pipeline entry stage. This UNEP GEF project will be global in scope and will be implemented through GISP via regional networks of individuals/organisations involved in IAS management. The regional approach (together with some

national level activities) allied to intensive activities in proposed pilot countries (which in Africa are Senegal and Tanzania) as detailed for the proposed project will provide a synergistic mechanism for achieving the aim of establishing sustainable IAS management frameworks on a continental scale. Close collaboration between GISP, CABI and IUCN, who are both founding members and partners in GISP, will ensure that the projects are complementary.

43. Linkages will also be established between the project and national policy and planning frameworks in fields such as agriculture, poverty alleviation, resource management and environmental protection. These include linkages to NEPAD and the invasives chapter in EAP, to UNEP ROA and DEWA including their publication African Environment Outlook that lists IAS as important, and to Target Ten of the Global Plant Conservation Strategy.

RATIONALE AND OBJECTIVES

GLOBAL ENVIRONMENTAL AND DEVELOPMENT OBJECTIVES

44. The development objective of the intervention is to conserve ecosystem, species and genetic diversity in Africa by protecting it from the threat of invasive alien species. Appropriate indicators for such an objective are the subject of ongoing debate, so the indicators used are based on the provisional goals, targets and indicators discussed at COP7, contained in document UNEP/CBD/COP/7/20/Add.3 “Implementation of the strategic plan: evaluation of progress towards the 2010 biodiversity target: development of specific targets, indicators and a reporting framework” and adopted in Decision VII/13. The first indicator is the maintenance of biodiversity indices for protected areas. At the pilot sites in the proposed intervention biodiversity indices will be collected during the project, but at a national level biodiversity indices will be required for all protected areas, and over a longer period of time than this intervention, as provided in reports to the CBD and Global Biodiversity Assessment reports. The second indicator of biodiversity conservation is improvement in the status of threatened species. Again these improvements will be seen beyond the life of this project, and in areas beyond the pilot sites. Status of endangered species is available in IUCN Red Lists.
45. The immediate objective of the project is to remove barriers to the management of IAS through effective implementation of CBD Article 8(h) in four representative African countries. Again indicators are based on those discussed at COP7. The first indicator is a reduction in the number of alien invasions in the four countries. This is not easy to measure, as it requires an evaluation of what the invasion rate would have been without the intervention. Second, the intervention does not seek to eliminate all alien species introductions, but only those with the risk of becoming invasive. For species that have been documented elsewhere as invasive, the rate of intentional introduction should be reduced almost to zero. For other species it is not always immediately apparent that they are invasive, as it may take 50 years or more for the invasiveness to develop as, e.g., in eucalypts in Africa. Indicators to show that introductions of such species have reduced are not possible in the time span of the intervention. The second indicator is a reduction in socio-economic cost of existing invasions. For the pilot sites where significant invasion has already occurred, reduction in socio-economic cost will be demonstrated. Where a known invader is present but not yet causing loss, the indicator will be no increase in socio-economic loss.
46. The four sets of barriers to effective IAS management described above were each analysed in the four countries during the PDF-B. These were used as the basis for developing the project outputs and activities. The outputs and the activities under each are described below and in the logical framework (Annex B). Successful implementation of all four components in a country will deliver the immediate objective as above.
47. Additional domestic benefits generated over the baseline case will be as a result of reduced impact of invasives on economic activity. The project does not target invasives primarily of agricultural ecosystems (although some do impinge on agricultural activity), but by establishing the enabling environment, information systems and capacity, invasives of agricultural importance will also be more effectively addressed, including existing problems and future ones that are likely to arise. Similarly, although this project focuses on plants because they are currently the greatest threat to biodiversity in

Africa, the outputs of this project will have application in dealing with other invasive species including vertebrates, invertebrates and micro-organisms, also with impact not only on biodiversity but on a range of economic activities.

PROJECT COMPONENT OUTCOMES, ACTIVITIES AND EXPECTED RESULTS

48. Details of the project are in the logical framework (Annex B) as well as the Work Plan (Annex B1). As described above, four categories of barriers to IAS management have been identified, so there will be four components of the project, each addressing one set of barriers:

- Strengthening the enabling policy environment for IAS management
- Provision and exchange of critical information amongst key stakeholders in IAS management
- Implementation of IAS control and prevention programmes
- Building capacity for sustainable IAS management.

They are presented separately here, but will be executed in an integrated manner with strong linkages between each component, facilitated by the structure outlined in the Project Implementation Arrangements (see Annex F). Each component has been developed based on extensive stakeholder consultation and studies in the four pilot countries during the PDF phases. This process is summarised in Annex I.

COMPONENT 1: STRENGTHENING THE ENABLING POLICY ENVIRONMENT

49. The Global Invasive Species Programme and the UNEP MSP have made considerable progress in developing generic action plans, strategies and legal frameworks, and Decision VI/23 of the CBD contains guiding principles. The activities under this objective will build on this work, applying, adapting and implementing as necessary in the four countries. An Invasive Species Strategy and Action Plan (ISSAP) will be developed in each country, and used to guide further activities, which will include a revision, if necessary and as far as possible, of other policies, plans, laws and regulations.

50. It may not be possible to change legislation during the time span of the intervention. However, necessary changes will be facilitated by maximising ‘buy-in’ from legislators through targeted and extensive stakeholder consultations, meetings and workshops i.e. awareness-raising as an essential first step towards reaching consensus on IAS management approaches. Targeted lobbying of policy-makers will raise IAS issues on the political agenda. Economic cost considerations (Component 3) will provide further support to the case for the allocation of scarce resources to the management of IAS. These activities will also facilitate the adoption of measures that are currently in draft form such as the proclamation on the importation of biological control agents in Ethiopia. IAS policy guidelines will be developed during the project.

51. Institutional arrangements for managing IAS will also be reviewed and a coordinating mechanism developed, both within government and with the private sector and local communities. An IAS apex body will be established in each country. This will be hosted by the NEA, at least initially.

52. In Ethiopia and Ghana sub-national coordination bodies will be established. In Ethiopia, the largest of the project countries, domestic quarantine arrangements will be established close to pilot sites. Uganda and Zambia will also implement more intensive activities to strengthen the enabling environment close to pilot sites by measures such as support for the process of IAS-related bylaw formation and enforcement.

53. A key activity will be to develop and implement cost-recovery mechanisms to ensure sustainability of IAS management, particularly those that generate revenue from the private sector and reduce reliance on central government funding.

COMPONENT 2: PROVISION, EXCHANGE AND UTILISATION OF INFORMATION AMONGST KEY STAKEHOLDERS IN IAS MANAGEMENT

54. Accessing and sharing information on IAS will be critical to the success of this initiative. Information and data currently residing in global databases and websites such as ISSG and GISP will be accessed and downloaded. The content will be adapted to suit local conditions and stakeholders, and repackaged for local dissemination.
55. Appreciation of the IAS problem is still poor in most African countries, so raising the general awareness and understanding of the issues will be essential. Different stakeholders will be targeted through different components of awareness campaigns developed during the PDF-B. These campaigns will address the different routes through which IAS may enter, as well as promoting the need for co-ordinated action to manage those IAS already present.
56. Information raising materials will be produced in a variety of media and languages as appropriate for national and pilot site target audiences. Awareness campaigns will be particularly intense around pilot sites. Successful approaches to IAS control and eradication will be promoted involving dissemination of best practices. This latter activity feeds into Biodiversity Strategic Priority No 4 which is gaining increasing attention by GEF within the framework of CBD. Regionally, emphasis will be placed on focal species as examples of generic IAS issues, the need for a pathways approach to IAS management with prevention being the key, and the formulation of ecosystem level goals.
57. All four NEAs will establish an IAS section on their websites. Relevant project outputs will be posted on the websites and links will be established with global IAS resources such as the ISSG and GISP websites and the GISP global interactive map. IAS data will be disseminated through GISP's Global Invasive Species Information Network (GISIN). Links will also be established with websites of regional organisations.
58. Appropriate channels for information flow will be a function, in part, of the institutional arrangements developed under Component 1, and communication procedures will be established to utilise these channels. Results of pilot site activities will be disseminated nationally. External communication and information flow will also be addressed, particularly with international and regional organisations that serve as nodes in global information flow.
59. Dissemination of the lessons learned will adopt a proactive approach, to promote replication in other project and non-project countries in Africa. As well as the usual print and electronic dissemination materials, opportunities for face-to-face dissemination and promotion to other African countries will be created. These would include short term attachments to the nascent 'IAS units' for officers from neighbouring countries; road shows in which officers from the participating countries travel to other countries to present their experiences; study tours to ongoing control operations for officers from both within and outside the country. Some of these activities will be undertaken in collaboration with the proposed GISP IAS capacity building and awareness project.

COMPONENT 3: IMPLEMENTATION OF IAS CONTROL AND PREVENTION PROGRAMMES

60. Prevention is a key component of IAS management, so a number of activities will aim to reduce the probability of invasives entering the countries. Pest risk analyses have not previously addressed environmental risks, but the IPPC has recently adopted a supplement to ISPM 11 (Pest Risk Analysis for Quarantine Pests) covering environmental risk. Pest Risk Analysis including environmental risk assessment will therefore be implemented. Monitoring and reporting systems for early detection of invasives will be developed and implemented, focusing on ecosystems that are most vulnerable to invasion, and most likely to suffer damage. Early detection allows the possibility of eradication, requiring a rapid response capability that will be established as part of Component 4.
61. The status and impact of IAS already present in each country will be documented through surveys addressing biological, social and economic impacts, building on the base-line information provided by the PDF-B phase of the project. Information, including indigenous knowledge, will be compiled in a

database which is easily accessible by stakeholders and procedures will be instigated to ensure the information can be regularly updated.

62. Control programmes will adopt participatory approaches where appropriate, to allow resolution of potential conflicts, to improve sustainability and to contribute to awareness- raising. Monitoring and documenting the impact of control operations will be undertaken to allow improvement to procedures in the future, and to provide evidence of the value of IAS control.
63. The immediate impact of control operations can be measured as the reduction of the number of invasive species in an area and their abundance. For example, for water hyacinth the area of mats of the weed can be monitored, or the percentage of a water body covered by the plant. The ecological outcome of such a reduction can be measured using various indices of diversity, while the socio-economic outcome can be assessed using participatory and investigative approaches of the social sciences (See Annex I).
64. The pilot sites for practical control operations on existing invasive species were identified during the PDF-B, and surveys conducted to assess the extent of the invasion. Monitoring protocols have been developed and commenced to provide baseline data. The monitoring will continue throughout the project as the control programmes are implemented, providing indicators of progress with respect to both the invasive plant and the biodiversity at the site. Further details of the sites are given in Annex Giii. The sites were selected using a number of criteria:
 - Biodiversity importance of the sites
 - A range of situations should be selected to provide broad experience from which lessons can be learned.
 - Both wetland/aquatic and terrestrial ecosystems should be included (in each country if possible).
 - The sites should include some well established and well known invasives, common to many countries.
 - The sites should also include some less well known invasive species that may only be present in a few countries, or are not yet widely recognised as invasive.
 - The sites should include one or more in which there are conflicting interests in the invasive species that need resolving.
65. Based on the above criteria the following sites were selected. The principal problem IAS in each area are indicated in brackets. However, because the management will be based on ecosystem goals it is likely to go beyond single species management.
 Ethiopia - Amibara District (*Prosopis* sp.), Awash River Catchment System (*Eichhornia crassipes*), Welenchiti Area (*Parthenium*).
 Ghana - Afram Headwaters Forest Reserve (*Broussonetia papyrifera*), Oti Arm of the Volta Lake (*Eichhornia crassipes*).
 Uganda - Budongo Forest Reserve (*Senna spectabilis*), Lake Mburo National Park Area (*Cymbopogon nardus* and *Eichhornia crassipes*).
 Zambia - Chunga Lagoon, Lochinvar National Park (*Mimosa pigra*), Mosi-oa-Tunya National Park area (*Lantana camara* and *Eichhornia crassipes*).

Ethiopia

66. Based on the criteria given in section 63 three locations were selected as Project Pilot Sites in Ethiopia: Ambare District and the Welenchiti area. Both areas are of high national and international importance for biodiversity conservation with the Awash National Park just 40 kms from the two project sites. The Awash National Park and surrounding region are being threatened by several *Prosopis* species in terrestrial habitats and Water Hyacinth in the rich wetlands of the river catchment area. Both the National Park and the wetlands have been identified as Important Bird Areas for Ethiopia, which is a strong indicator of their biodiversity value. *Parthenium* is having a substantial impact in arable and grazing land in the Welenchiti area. It is reported to reduce forage production by up to 90% and Sorghum yield losses varied from 40-97%. *Parthenium* also poses a serious threat to

the protected biodiversity in the Awash National Park. For more details on the biodiversity and IAS situation in Ethiopia see Annex G.iii.

Ghana

67. Two locations were chosen in Ghana as pilot sites. Afram Headwaters Forest Reserve (AHFR) lies within the Upper Guinea forest block, a biodiversity hotspot with the highest mammal diversity of any hotspot in Ghana, as well as being a highly ranked but threatened endemic bird area. It also represents one of the largest remaining secondary forest fragments in Ghana, and as such is critical in maintaining native biodiversity in the region. AHFR is increasingly under threat from *Broussonetia*, a species introduced for the pulp and paper industry. Under the project a pilot area-wide management program will be implemented, including optimising control in farmer's field management of seed reservoirs inside and outside the AHFR. Full details can be found in Annex G.iii. A second location has been selected in the Oti arm of Lake Volta. The area is of key economic importance to Ghana, as a major fishing ground, source of irrigation water, and as a major transport artery. Lake Volta although an artificial lake has more than 160 species of fish, and is the only site in Africa where all three species of African crocodile occur. Water hyacinth is a major threat to the lake system despite expensive and environmentally unsustainable emergency control measures taken in 1999. The area of infestation has since expanded, covering an area of 10,000 ha and stretching over 100 km. The proposed project will support community actions in the field of biological control in order to reduce source infections in the Oti Arm. This will significantly reduce the risk of Water Hyacinth entering Lake Volta and thus endangering more biodiversity and the hydropower generating facility at the dam (see Annex G.iii).

Uganda

68. Two pilot sites were chosen in Uganda: Budongo Forest Reserve and Lake Mburo National Park. The Budongo Forest Reserve harbours the endangered Chimpanzee, and has been designated as an Important Bird Area - Uganda's second most important bird area. The challenge is to balance conservation of forest biodiversity and ecological processes, production of hardwood timber on a sustainable basis and the needs of local communities. Management of the impacts of *Senna spectabilis*, an invasive species covering more than 1000 ha of the park, forms part of this challenge. Under the proposed project *Senna* management trials will be undertaken in the Budongo Forest Reserve, where management by manual and chemical means will be investigated along with active forest restoration and *Senna* suppression methods. Lake Mburo National Park has been designated as an Important Bird Area with over 310 bird species documented. The park has seen a reduction in diversity of large mammals through a combination of human impact from tsetse fly control, habitat destruction through cultivation, settlement and the impact of domestic animals. This may have been spearheaded by the expansion of *Cymbopogon*, an aggressive grass species, which now covers up to 70% of the surface area in some parts of the park, thus excluding other plant species and reducing forage available to wild animals. During the proposed project, integrated management methods will be pioneered for *Cymbopogon* affected areas both inside and outside the park. Additionally, an area-wide Water Hyacinth management program will be undertaken by the project, to prevent the park waters and lakes becoming infested via rivers and ponds which are already infested, and connect directly with the lakes in the National Park. Annex Giii provides full details.

Zambia

69. Two pilot sites have been selected for the project: Chunga Lagoon, Lochinvar National Park and Mosi-oa-Tunya National Park (Victoria Falls). The Lochinvar National Park, including the Chunga Lagoon, is an area of globally important biodiversity including mammals, birds, reptiles and plants. As far back as 1980 *Mimosa pigra* began to spread onto the floodplain and as a result many parts of the National Park are now entirely covered with this invasive species, which has excluded the native fauna and flora from the most productive and special areas of the Lochinvar National Park and Kafue Flats – with a significant impact on biodiversity, tourism and livestock grazing. It is the intention of the proposed project to address the invasion by thoroughly assessing the extent and spread of *Mimosa* in the Chunga Lagoon and then attempting to control its spread to other areas in the National Park, to

reduce its impact, and to start restoring the ecosystem (see Annex Giii). *Lantana camara* has invaded both the woodlands, the riparian areas and the unique mist forest below the Victoria Falls in the Mosi-oa-Tunya National Park, as well as many other areas in the National Park. The park is an Important Bird Area, a refuge to globally important mammal biodiversity, and habitat for a unique assemblage of moisture-loving plants and animals, not found elsewhere. The project will further analyse the situation of Lantana invasion in the Mosi-oa-Tunya area and develop protocols for its control in critical sites as well the general area. Possible future infestations by Water Hyacinth from sewage ponds serving Livingstone and also Maramba River, both with connections to the National Park via the Zambesi River, will be contained by the proposed project.

COMPONENT 4: BUILDING CAPACITY FOR SUSTAINABLE IAS MANAGEMENT

70. Based on the needs assessment undertaken during the PDF-B, and modified as appropriate to take account of the institutional cooperation mechanisms that are established under Component 1, a capacity building programme will be implemented (see Annex I). The primary focus of the programme will be on human resources, with necessary training provided to existing staff. Training provided will comprise of modules on IAS in existing courses, short courses on topics such as IAS awareness, risk analysis, control methods and identification skills, longer post-graduate training in areas such as environmental economics and environmental law and research projects linked to pilot site activities.
71. To ensure available capacity in the longer term, support will be provided to the education sector to include IAS issues in school and tertiary education curricula. Through co-operation with key institutions responsible for curriculum development, large numbers of students at different levels will receive training on IAS as an important environmental issue. Capacity will be built at a central level so that there is a multiplicative effect; those trained under this intervention will train others. Activities will be followed through in a small number of pilot training institutions.
72. Some essential equipment will be provided as required to quarantine services (particularly inspection units at border points such as air and sea ports), and to IAS control units, including a rapid response team. National delegates will be facilitated to participate in the global bodies relating to IAS, which will contribute to building local capacity as well as fulfilling international obligations.

RISKS AND SUSTAINABILITY

RISKS AND ASSUMPTIONS

73. The logical framework matrix in Annex B summarises the principal risks and assumptions associated with the project. Every effort has been made to minimise these in the design of the project strategy and its activities and outputs. This has included a review of past and ongoing GEF projects or projects in similar sectors. In addition there has been a wide consultation through review and discussions with the Steering Committee and country stakeholders during the PDF-B.
74. At the level of the development objective, the primary risk is that other threats to biodiversity are not managed, so that biodiversity continues to be lost, even if not due to IAS. Habitat destruction through unsustainable natural resource management practices or conversion of natural ecosystems is a threat in all countries. However, all countries have a NBSAP (Ethiopia's is to be finalised) describing threats to biodiversity and strategies for reducing them, and all countries have designated protected areas. Several of the pilot sites (Annex Giii) are in protected areas so the risk should be minimal there. At the level of the immediate objectives, it is assumed that political and economic stability is maintained, and there is no sudden change that negatively impacts on environmental policy.
75. At the output level there is a risk, as with any project involving multisectoral involvement, that for reasons beyond the control of the project there is inadequate 'buy-in' from an important sector or stakeholder group. The most important intersectoral relationship that has become apparent in the PDF-B (reflecting experience in other countries) is that between the agriculture and environment sectors. While most capacity and experience in IAS issues resides in the agricultural sector, biodiversity

conservation comes under the environment. Building effective communication and coordination between the respective institutions has been an important activity of the PDF-B, and in Uganda has resulted in a change in the NEA from agriculture to environment. Addressing the challenge of developing involvement of other sectors is part of the purpose of the project, and has commenced in the PDF-B by involving staff from several ministries in project activities. This will be continued in the full project, both at the project management level (through the national steering committee) and in composition of the task teams.

76. Although an enabling policy and institutional environment may be created, there remains a risk that enforcement of regulations is difficult. Experience in other countries in Africa shows that enforcement may be difficult due to lack of resources on the one hand or lack of awareness on the other. The information and public awareness Component is designed to mitigate this risk, but if powerful interests try to circumvent established procedures enforcement can be problematic.
77. Some risks pertain to implementation of control programmes against IAS. One of these is that it may be impossible to resolve conflicting views, particularly of local stakeholder groups, regarding an invasive such as occur in regard to *Prosopis* or other useful invasives. Establishing systems for resolving such conflicts is part of the project, and the use of participatory and consultative approaches will reduce the risk. A second risk in the context of the pilot site control programmes is that permission to import biological control agents may be refused. Ghana, Uganda and Zambia have all implemented biological control previously, but Ethiopia has never done so. This has been considered during the planning of pilot site control operations.
78. A risk in many developing countries in Africa is the loss of trained human resources from the public sector, as a result of transfer, emigration or health problems (particularly HIV/AIDS and malaria). This can interfere with all aspects of project implementation as well as sustainability. The risks will be mitigated in part through the appointment of a national coordinator position funded by the project. While training human resources is important, the project will also place emphasis on the establishment and documentation of systems that are not dependent on individuals.
79. It is assumed that the project management and implementation arrangements (See Annex F) will remain functional throughout the intervention. Several factors could affect this assumption. As noted in the previous paragraph, key personnel can be lost for various reasons; linkages between institutions and stakeholder groups may weaken for personal or political reasons; capacity of local executing agencies may be marginally adequate so susceptible to other hindrances. These risks have been mitigated in the PDF Phase during which important linkages and roles have been strengthened, and lessons learned and incorporated into the project design. This is reflected in the local variation in implementation arrangements in the four countries.

SUSTAINABILITY

80. Sustainability is built into the intervention in a number of ways. Mainstreaming of IAS and biodiversity conservation is a strategy for sustainability, reflected by the multisectoral approach and the involvement of a wide range of stakeholder groups. Financial sustainability is also addressed through mainstreaming, but specific mechanisms for promoting financial sustainability will also be developed. Long term sustainability of capacity building is considered through the activities targeting educational institutions. Dissemination of best practices will contribute to wider sustainability.
81. In addressing IAS issues it is widely recognised that the most cost effective approach is “prevention is better than cure”. Thus although pilot control programmes are included in this project, there is an emphasis on prevention in all four components. Effective implementation of prevention will thus reduce long term costs associated with IAS.
82. The project has been designed to be sustainable by developing systems and procedures which are low cost to maintain. One activity will specifically address cost recovery mechanisms, so that net costs to the government particularly of prevention procedures are minimised. By adopting a multisectoral approach the aim is that IAS issues will be incorporated into the plans, policies, and therefore budgets

of the various ministries, thereby spreading the costs and providing for the necessary sustainability and 'mainstreaming' of IAS activities (meets Biodiversity SP # 2). The project design does not encourage the establishment of new organisations, but rather a collaborative framework and mechanisms that facilitate cooperative activities and coordination.

83. Nevertheless, some recurrent government expenditure will be required if the outputs are to be sustained. This will be addressed in three ways; by developing the awareness of the value of the approach, by enhancing the country ownership of interventions, and by instigating cost recovery mechanisms. Component 2 will raise awareness of IAS amongst all stakeholder groups, including government ministries who will need to allocate budget funds to IAS activities. As well as creating awareness, by involving the different sectors, the value of a cross-sectoral approach will have been demonstrated. Part of the awareness component will be to show the economic costs of IAS, requiring skills in environmental economics which are lacking. Thus the capacity building component includes training in assessing the social and economic costs of IAS in terms that are readily understandable.
84. Under Component 1 mechanisms will be identified for recovery of costs of some activities involved in IAS prevention and management. Some Plant Health Inspectorate Services already charge for their services. Charges can be levied for phytosanitary inspections and certification, any quarantine treatments or procedures required, and for conducting risk analyses prior to import. Opportunities for funding eradication or control operations will also be investigated though these are harder to implement.

IMPLEMENTATION ARRANGEMENTS & STAKEHOLDER PARTICIPATION

IMPLEMENTATION ARRANGEMENTS

85. Arrangements for project co-ordination and implementation were developed during the steering committee meetings and stakeholder workshop held during the PDF-B phase of the project. Organisational structures for project implementation at regional and national levels are shown in Annex F. UNEP is the implementing agency (IA) of this GEF project, with CABI, assisted by IUCN as the international executing agency (IEA). The IEA will host the project co-ordination unit (PCU), headed by the international project co-ordinator (IPC). The national co-ordination units (NCUs), headed by a national project co-ordinator (NPC) will be hosted by the national executing agency (NEA) in each of the four partner countries (See Charts in Annex F).

Implementing Agency

86. The United Nations Environment Programme (UNEP) is the Implementing Agency (IA), with responsibility for project management, overview, monitoring, and liaison with, and reporting, to GEF.

International Executing Agency

87. The International Executing Agency (IEA), CABI, will host the International Project Coordination Unit (PCU). The IEA is responsible as lead agency for project implementation, and staff, administrative and financial management. The PCU will be headed by an International Project Coordinator (IPC), funded by GEF and based at the PCU, in Nairobi, Kenya. The IPC will be recruited following a quality-based selection procedure. He/she will be responsible for liaising with the IA and the international steering committee, coordinating activities across the four partner countries, and for ensuring the National Project Co-ordinators (NPCs) and the National Co-ordination Units (NCUs) are provided with the necessary support (see Terms of Reference in Annex J). The assistant project co-ordinator (APC) will be recruited by IUCN, again using a quality-based selection procedure, and will also be based at the PCU in Nairobi. Both CABI and IUCN have considerable experience (almost 100 years and more than 50 years, respectively) of successfully managing and implementing projects in a diverse range of African countries including the four pilot countries participating in the current project.

International Steering Committee

88. The International Steering Committee (ISC) will consist of ten representatives of the following organisations:

- CAB International (International Project Coordinator)
- World Conservation Union, IUCN (Assistant IPC)
- National Executing Agencies (Directors):
 - Ethiopian Agricultural Research Organisation, Ethiopia
 - Council for Scientific and Industrial Research, Ghana
 - National Agricultural Research Organisation, Uganda
 - Environmental Council of Zambia, Zambia.
- United Nations Environment Programme/Global Environment Facility
- Global Invasive Species Programme
- Two international experts in the project components

The IPC will be the secretary to the ISC and convene annual ISC meetings plus one at the start of the project and one at project completion. The main role of the ISC is to provide overall guidance on project implementation, and monitor progress and performance on an annual basis (see Annex J).

National Executing Agency

89. In each partner country the project will be coordinated by a National Coordination Unit (NCU), housed within the National Executing Agency, but operating independently of it initially. The Director of the NEA will be the National Project Director (NPD) and the NCU will be led by a full-time National Project Coordinator (NPC), funded by GEF and recruited through open competition for the post (see Terms of Reference in Annex J). He/she will work under the guidance of the IPC and be responsible for liaising with the IPC and the national steering committee. They will have responsibility for day to day management of the project, coordinate nationwide activities in collaboration with other national, provincial and local government agencies, NGOs and local communities, and co-ordinate activities within the NCU. In order to ensure joint programming of GEF interventions with related projects, formal and informal inter-agency links will be maintained. It is envisaged that the coordination unit will, during the life of the project, become the basis for a permanent coordinating mechanism for addressing IAS in the country, so its relationship with the NEA and its physical location may change during the project.

National Steering Committee

90. The National Coordinator will be the secretary to a National Steering Committee (NSC) that will be consulted on priority issues and meet regularly. NSCs were formed during the PDF-B, and experience of those will be used in constituting the full project national steering committee (see Terms of Reference in Annex J). The NSC chair will be the Director of the National Executing Agency. The National Steering Committee will comprise representatives from the different sectors involved in the project. Senior officials from government departments will be included, who will be able to make decisions on behalf of their departments. The private sector and civil society groups will also be represented on the steering committee.

91. Task Teams (TT) each under the leadership of a Task Team Leader (TTL) selected from an appropriate government, private sector or civil society organisation, will be assigned by the NCUs for specific groups of activities. The TTLs will be subcontracted, or where appropriate seconded, to the NCU. Their selection will be done in close coordination with the PCU. There will be a Task Team for each pilot site, which will include representatives of local stakeholder groups involved in management of the site.

International Advisory Group

92. An International Advisory Group (IAG) will be established to provide advice to the IEA/PCU and indirectly the NEAs/NCUs. The advisory group will not meet frequently, but their advice will be sought on technical issues and project outputs as they arise during implementation of activities

National Advisory Committee

93. National Advisory Committees (NACs) will be constituted to provide *ad hoc* advice to the NEAs and NCUs, with the aim of providing technical advice rather than having any management authority. Some members of the technical committees may also be members of the NSC.

STAKEHOLDER PARTICIPATION

94. Primary responsibility for project implementation rests with the NEAs in each partner country. However, the project has been designed to facilitate stakeholder participation at international, national and site levels of implementation. Stakeholder participation through steering committee meetings, stakeholder workshops and community based meetings, initiated during the PDF-A and PDF-B phases of the project, has provided a solid foundation for stakeholder participation in the full project. This will be expanded during the full project to include stakeholders from more sectors and different geographic regions so that the project can benefit from and respond to the needs of a broader group of stakeholders. A key aspect of stakeholder participation in ensuring the success and sustainability of the project will be resolving misunderstandings and conflicts between different the stakeholders/stakeholder groups, at various levels. It is anticipated that during the project inception phase, more detailed guidelines for stakeholder participation will be developed, with indicators identified to monitor the extent and quality of participation, and to explicitly address issues relating to conflict resolution.

International

95. At the international level, an International Steering Committee was constituted during the PDF-B comprising the Directors of the four national and two international executing agencies, key international organisations with expertise in IAS, together with international experts on specific project components. The ISC provided input into the design of the full project through comments based on draft proposals and through direct communication with IEA staff. Members of the ISC played a key role in disseminating and promoting the PDF-B and its outputs through the newsletters and web pages of the organisations they represent. During the full project the ISC, comprising representatives as for the PDF-B phase, will continue to provide external input to the project through correspondence, invitations to comment on documents and participation in the ISC meetings. An important function of the ISC is to ensure that project implementation is linked effectively with external programmes and projects.
96. For the full project, an International Advisory Group (IAG) will be established, comprising international IAS experts, especially those from the African continent, in the specific project components. The IAG will comprise representatives from different sectors and geographic regions to provide advice on technical issues and project outputs as they arise during implementation of activities. This will ensure that the project benefits from experience in other IAS projects and regions, and that strong linkages and potential dissemination pathways are developed with other on-going initiatives in IAS around the world.
97. During the full project there will be annual international stakeholder workshops which will provide a forum for international organisations and individuals with expertise in IAS from around the world to share information and exchange ideas on the project. The progress of project activities and outputs will be presented to the stakeholders for their comment and input.

98. The IPC will establish a web page for disseminating information concerning the project and its activities. The web page will include an electronic notebook which will enable readers from around the world to comment on the project and make recommendations as appropriate.

National

99. In the national stakeholder analyses conducted during the PDF-B, four broad categories of stakeholders were identified: government, the private sector, civil society, and regional/international bodies.
100. Government includes both the policy makers and planners responsible for creating the regulatory framework, and the technical staff who implement measures for the prevention and control of IAS. The productive sectors (both private and government managed) are stakeholders because their economic activities can be negatively impacted by IAS. Examples include the Zambian power generating authority (ZESCO) whose hydropower operations are affected by water weeds, and producers of cotton on irrigated plantations in Ethiopia affected by *Prosopis*.
101. The private sector may also be responsible, intentionally or unintentionally, for the import of alien species. Thus the private sector has a role both in the prevention of IAS, and in the management of those species affecting their operations.
102. Civil society, including NGOs, CBOs and the general public are all involved in activities that are potential invasion pathways. Travellers carrying plant material intentionally or unintentionally are an invasion pathway, so the general public need to be aware of the potential impact of their actions, as well as play a role in managing existing or new invasions.
103. Women are involved in all aspects of IAS from invasion pathways through to the implementation of management and control strategies. Women in Africa are particularly affected by IAS during land preparation, crop production and the collection of firewood etc. During the PDF-B phase of the project, it was recognised that women were inadequately represented at all levels. Therefore during the inception phase of the project, country-specific mechanisms involving affirmative action will be established to ensure that women are involved in all aspects of the project including recruitment, representation on committees, training and consultancies, etc.
104. During the PDF-B, NSCs comprising Government, Private sector, Civil Society and Regional/International Bodies were established to ensure stakeholder participation. They provided overall guidance, technical advice and assisted in the implementation of activities. In the full project, the cross-sectoral nature of the NSCs will be maintained. However, their role will be limited to providing overall direction to the NPC whilst the more technical aspects of the project will be guided by the national advisory group. Key government ministries represented on the NSC include those of environment, agriculture, natural resources, trade and transport, but in the full project, the NSC will be expanded to include representatives of other ministries identified as having a stake in IAS, such as tourism, water, energy, health, local government, finance and justice.
105. In the full project, a National Advisory Committee (NAC) comprising individuals from the different stakeholder groups, as appropriate, will be constituted to provide *ad hoc* technical advice to the NEAs and NCUs. The aim of the NAC is to provide specific technical advice on key project components or activities rather than having any management authority.
106. National stakeholder workshops will be held annually to target the different stakeholder groups in each country. The workshops will provide a forum for the different stakeholder groups to share information and provide input to the project.
107. Participatory activities at the community level will raise awareness of IAS and provide a forum whereby stakeholders can become involved in the project activities and provide inputs as appropriate.

108. During the PDF-B phase, each country identified pilot sites for inclusion in the full project. Baseline studies were conducted in which stakeholder lists were developed and consultations carried out with the major stakeholders in order to develop the intervention proposals (see Annex I). During the full project, site management committees (SMCs) will be established based on local stakeholder consultations to ensure ‘ownership’ of the management plans for each site. The management plans will clearly delineate responsibilities for implementation by the different stakeholder groups i.e. government, private sector, civil society and regional/international bodies.
109. The project will foster stakeholder participation with a particular emphasis on the needs and views of local communities in the determination of management objectives, and preparation and implementation of management plans for each project site. This will involve participatory assessment tools, such as participatory rural appraisal, and will identify barriers to community participation in the management of IAS. Local communities do not necessarily have a single point of view on issues, and tend to be stratified by age, kinship and gender. In addition, they often reflect different interests based on wealth, involvement in the market, political affiliations etc. These differences can pose significant challenges for those working with such communities, as well as for those within the communities who are trying to reach agreement on contentious issues. A participatory approach to pilot site management is, therefore, essential for the development of an effective and sustainable approach to IAS management.
110. National training needs were identified during stakeholder analyses conducted during the PDF-B and appropriate training activities have been included in the full proposal (see Annex B).

INCREMENTAL COSTS AND PROJECT FINANCING

111. The four components together with project management fully complement the baseline of activities that exists at the national and pilot site level. Details of incremental costs and a description of benefits are provided in Annex A. Table 1 below provides a summary of baseline and incremental costs by component and Table 2 gives information on co-funding and requested GEF grant funding by component.

MONITORING, EVALUATION AND DISSEMINATION

MONITORING AND EVALUATION

112. Monitoring and evaluation will be undertaken at three levels: project outcomes and impacts, in relation to the logical framework; delivery of project outputs; monitoring of project implementation and performance (see Annex M). Project management and co-ordination involving monitoring and evaluation, has been separated as a fifth component in the workplan (Annex B1).

Table 1. Baseline and Incremental Costs in US\$

Component	Partner	Baseline	Alternative	Increment
Component 1: Strengthen Policy Environment	Ethiopia	50,000	146,636	96,636
	Ghana	2,500	98,773	96,273
	Uganda	16,961	173,214	156,253
	Zambia	18,500	169,628	151,128
Total		87,961	588,251	500,290
Component 2: Information & Awareness on IAS Management	Ethiopia	81,000	341,591	260,591
	Ghana	151,720	265,977	114,257
	Uganda	108,313	377,677	269,364
	Zambia	57,635	275,824	218,189
Total		398,668	1,261,069	862,401
Component 3: IAS Control & Prevention	Ethiopia	1,087,550	1,752,918	665,368
	Ghana	3,477,528	3,982,504	504,976
	Uganda	4,042,226	4,916,413	874,187
	Zambia	2,087,155	2,589,020	501,865
Total		10,694,459	13,240,855	2,546,396
Component 4: Building Capacity for IAS Management	Ethiopia	162,400	559,032	396,632
	Ghana	297,250	842,260	545,010
	Uganda	215,193	395,968	180,775
	Zambia	134,258	452,087	317,829
Total		809,101	2,249,347	1,440,246
Component 5: Project Management & Co- ordination	Ethiopia	0	590,994	590,994
	Ghana	0	876,803	876,803
	Uganda	0	615,453	615,453
	Zambia	0	960,397	960,397
	Project Co-ordination	-	-	-
	Unit:	-	-	-
	i. Project Management	0	500,000	500,000
	ii. Technical	-	-	-
	Backstopping	0	350,000	350,000
	iii. M&E	0	250,000	250,000
	iv. Regional Workshops	0	300,000	300,000
	v. Steering Committee	-	-	-
	Meetings	0	200,000	200,000
	vi. Communication & Dissemination	-	-	-
		0	400,000	400,000
Total			5,043,647	5,043,647
GRAND TOTAL		11,990,1890	22,383,169	10,392,980

Table 2. Component Financing in US\$

Component	Partner	Increment	Co-funding			Requested from GEF
			In-kind	Cash	Total co-funding	
Component 1: Strengthen Policy Environment	Ethiopia	96,636	20,569	27,749	48,318	48,318
	Ghana	96,273	24,323	20,463	44,786	51,487
	Uganda	156,253	31,904	40,490	72,394	83,859
	Zambia	151,128	72,716	27,595	100,311	50,817
Total		500,290	149,512	116,297	265,809	234,481
Component 2: Information & Awareness on IAS Management	Ethiopia	260,591	101,157	25,193	126,350	134,241
	Ghana	114,257	46,572	21,253	67,825	46,432
	Uganda	269,364	76,302	69,847	146,149	123,215
	Zambia	218,189	58,845	49,210	108,055	110,134
Total		862,401	282,876	165,503	448,379	414,022
Component 3: IAS Control & Prevention	Ethiopia	665,368	158,017	182,503	340,520	324,848
	Ghana	504,976	147,066	124,136	271,202	233,774
	Uganda	874,187	315,902	178,441	494,343	379,844
	Zambia	501,865	72,717	139,308	212,025	289,840
Total		2,546,396	693,702	624,388	1,318,090	1,228,306
Component 4: Building Capacity for IAS Management	Ethiopia	396,632	160,307	60,680	220,987	175,645
	Ghana	545,010	149,127	124,938	274,065	270,945
	Uganda	180,775	33,607	44,580	78,187	102,588
	Zambia	317,829	196,637	36,747	233,384	84,445
Total		1,440,246	539,678	266,945	806,623	633,623
Component 5: Project Management & Co-ordination	Ethiopia	590,994	70,173	203,874	274,047	316,947
	Ghana	876,803	270,230	209,211	479,441	397,362
	Uganda	615,453	138,316	166,642	304,958	310,495
	Zambia	960,397	248,493	247,140	495,633	464,764
	PCU:					
	i. Project Management	500,000	125,000	125,000	250,000	250,000
	ii. Technical Backstopping	-	-	-	-	-
	iii. M&E	350,000	87,500	87,500	175,000	175,000
	iv. Regional Workshops	250,000	65,500	62,500	125,000	125,000
	v. Steering Committee Meetings	300,000	75,000	75,000	150,000	150,000
	vi. Comm. & Dissemination	-	-	-	-	-
		200,000	50,000	50,000	100,000	100,000
		400,000	100,000	100,000	200,000	200,000
Total		5,043,647	1,227,212	1,326,867	2,554,079	2,489,568
GRAND TOTAL		10,392,980	2,892,980	2,500,000	5,392,980	5,000,000

Monitoring project impact

113. The project logical framework in Annex B will provide the basis for monitoring project impact, which will be consolidated in the Logframe Tracking form. Impacts at the development objective level will be monitored by those responsible for monitoring regional and global trends in biodiversity conservation. Some pertinent data will be collected during this intervention. This will be primarily from the pilot sites.
114. At the level of the immediate objective, information will be collected as part of the relevant activities under each project component during the project. This impact monitoring will be consolidated into a Project Benefit Monitoring and Evaluation System (PBME) that will be established during the project

inception phase. This will be reviewed by the ISC, together with information from other sources as indicated in the logical framework.

115. Activities carried out during the PDF-B provide the foundation for the establishment of strategically chosen project impact indicators. These will be finalised during the project inception phase. Quantified baseline measures for each project component and statistically well designed monitoring protocols will facilitate the calculation of objectively verifiable project impact indicators. Qualitative factors, especially those affecting the management of IAS at pilot sites will be assessed using participatory evaluation techniques. Indicators for the components will be refined during the project inception phase by the NSC, who will be responsible for verification. Task teams for each activity will collect data for the indicators. The PBME will be contained in the project inception report which will be reviewed at the first ISC meeting.
116. An independent review team arranged by UNEP will conduct the mid-term review after two years to evaluate progress towards the project objectives. A final evaluation will also be conducted which will include a review of all project documentation and other relevant data. The means of verification given in the logframe indicate the need for specific evaluation activities not indicated in the intervention.

Delivery of project outputs

117. During the project inception phase, detailed country workplans will be developed based on the overall workplan and timetable given in Annex B1. These will include specific timeframes and milestones and deliverables for each project output, which will form the basis for subsequent monitoring. More detailed workplans will be prepared annually. The NSC and the NPC will be responsible for overseeing the preparation of workplans, and for monitoring achievement of milestones under each output.
118. The PCU will provide input and guidance to the NSC and NPC in preparation of workplans. The PCU will co-ordinate an annual internal review of progress on delivery co-ordinated by the ISC.
119. In each country Task Teams will be responsible for the implementation of activities. They will be given Terms of Reference, including timeframes and deliverables, by the NCU which will be responsible for ensuring timely delivery to the required standards.

Monitoring project implementation and performance

120. The National Executing Agencies, assisted by the NPCs will be responsible for establishing financial and administrative procedures for national activities. Their reports will be consolidated and checked by the PCU for further authorisation by the IEA units reporting to UNEP DGEF. General provisions will be included in the contract to be signed between the National and International Executing Agencies, and this will form the basis for the financial and administrative oversight of National Coordination Units. The UNEP Operations Manual (currently in draft) will be adhered to with regard to all administrative and financial monitoring and reporting procedures and formats.
121. Based on the detailed annual workplans and Task Team Terms of Reference and workplans, NPCs will monitor activities of the Task Teams to ensure inputs are made on time and according to expenditure plans. National workplans will be monitored by the NSC, and the IPC. NPC workplans will include regular visits to pilot sites.
122. The International Project Coordinator will make regular monitoring and support visits to the national coordination units. Implementation of the PDF-B showed that these are extremely valuable, and greater budgeting provision has been made on the basis of that experience. The project will be subject to CAB International's normal monitoring arrangements through line management and appraisal. This entails ensuring that all inputs are made on time and within budget, and outputs are produced to the required qualitative and quantitative standards.

123. Financial and progress reporting to UNEP DGEF will be the responsibility of the IPC, and will be according to UNEP formats and schedules. Deliverables will include annual project budgets, and quarterly and annual financial reports. An annual project audit will also be commissioned.

DISSEMINATION

124. Dissemination activities are included in the project outputs (see logical framework), at national, regional and international levels, as there will be outputs and lessons learned meriting replication at all levels. At the national level improved communication and information sharing is one of the project outputs, so will be addressed in detail. National communication strategies for improved IAS prevention and management were drafted during the PDF-B, and these will be implemented during the project.
125. At sub-regional level provision has been made for national representatives to disseminate project outputs and lessons to relevant stakeholders, such as the regional economic blocs (COMESA, EAC, ECOWAS, IGAD and SADC), regional agricultural research networks (ASARECA, CORAF) and other relevant regional fora.
126. At regional and international levels the project executing agency will disseminate the project outputs. As a founder partner of GISP, strong links are maintained with the secretariat, with both CABI and IUCN on the GISP board. Additional dissemination opportunities will occur through the proposed project 'Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management' being developed by GISP for GEF funding.
127. Indicators for dissemination activities are shown in the logical framework. Among the dissemination products and activities will be a project website, with reciprocal links to national, GISP, NEPAD, IUCN and CABI websites. All project documents and outputs will be available on the website. These will include national IAS strategies, publicity materials, referenced journal articles, IAS management plans, risk analysis procedures, newsletters, and project progress reports.

REPLICATION

128. The design of the project and choice of focus countries provides good opportunity for replication particularly in Africa, but also in developing countries elsewhere. Although each country has its own particular challenges, the four broad categories of barrier to effective IAS management identified and analysed during the PDF-A and PDF-B phases are likely to pertain in other countries in the continent. The approach to be adopted in this project is novel in Sub-Saharan Africa, but in its implementation of COP decisions is one that would be widely applicable by other parties to the CBD.
129. The replication strategy of the project comprises three components; dissemination of project outputs; involvement of personnel from other African countries in project activities; promotion of replication through related initiatives (see particularly Component 4 in Annex I).
130. Dissemination activities have been described above. In the context of replication they will target other countries and organizations in each of the sub-regions in Africa, the focus countries having primary responsibility for this. Dissemination will also target continental and international organizations, and this will be the responsibility of the international executing agency. Dissemination pathways to be utilised will be as already noted.
131. The four countries will involve personnel from other countries within their sub-region in their national project activities where appropriate. Example activities in which participation is envisaged include workshops (such as in developing the ISSAP), pilot site control and restoration activities, biological and socio-economic surveys. In addition appropriate persons from neighbouring countries will be invited to visit the focus countries on study tours to learn about different aspects of the project activities.
132. The international executing agency will promote the uptake and replication of project experiences, lessons learned and outputs through links to related initiatives and programmes. These will include

those listed elsewhere. GISP will be one route through which involvement in other initiatives can be facilitated, such as by arranging for personnel from the four focus countries to act as advisors or consultants to activities elsewhere in Africa. NEPAD (with assistance from UNEP) has developed 14 concepts for interventions on IAS in the continent, and implementation of any of those would provide an uptake and replication mechanism for outputs of this project.

SECTION 3 - WORKPLAN AND TIMETABLE, BUDGET, FOLLOW-UP

3.1 Workplan and Timetable

A detailed Work-Plan is provided in Annex B1.

3.2 Budget

A detailed budget in UNEP format is presented in Annex Y. This budget is based upon the GEF approved budget provided in the Full-size Project Brief

3.3 Follow-up

Subsequent to the execution of the Full-Sized UNEP/GEF Project on IAS in four focus countries i.e. Ethiopia, Ghana, Uganda and Zambia, there will be good opportunities for replication of the lessons learned to other countries, particularly those in Africa.

SECTION 4 - INSTITUTIONAL FRAMEWORK AND EVALUATION

4.1 Institutional Framework

CABI will be responsible for the implementation of the project in accordance with the objectives and activities outlined in Section 2 of this document. UNEP as the GEF Implementing Agency will be responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and will provide guidance on linkages with related UNEP and GEF-funded activities. The UNEP/DGEF Co-ordination will monitor implementation of the activities undertaken during the execution of the project and will be responsible for clearance and transmission of financial and progress reports to the Global Environment Facility. UNEP retains responsibility for review and approval of the substantive and technical reports produced in accordance with the schedule of work.

All correspondence regarding substantive and technical matters should be addressed to:

At CABI

Dr Sarah Simons,
Deputy Director,
CAB International Africa Regional Centre,
P. O. Box 633-00621
Nairobi, Kenya.
Tel: (254 20) 7224450
Fax: (254 20) 7122150
E-mail: S.Simons@cabi.org

At UNEP

Mr Max Zieren,
Task Manager Biodiversity,
UNEP/ Division of GEF Coordination,
P.O. Box 30552, 00100 Nairobi, Kenya.
tel.: +254-20-624795
fax: +254-20-62 4041/4642

All correspondence regarding administrative and financial matters should be addressed to:

At CABI

Mr Dennis Rangi,
Director,
CAB International Africa Regional Centre,
P. O. Box 633-00621,
Nairobi, Kenya.
Tel: (254 20) 7224450
Fax: (254 20) 7122150
E-mail: D.Rangi@cabi.org

With a copy to:

Mr Morris Akiri
Financial Manager,
CAB International Africa Regional Centre,
P. O. Box 633-00621,
Nairobi, Kenya.
Tel: (254 20) 7224450
Fax: (254 20) 7122150
E-mail: M.Akiri@cabi.org

At UNEP

D. Hastie, Chief,
Budget and Financial Management Service (BFMS),
UNON,
P.O. Box 30552
Nairobi, Kenya.
Tel: (254) 20 623821
Fax: (254) 20 623755

With a copy to:

Sandeep Bhambra,
Fund Management Officer,
UNEP /DGEF Co-ordination,
P.O.Box 30552
Nairobi, Kenya.
Tel: 254-20-623347
Fax: 254-20-623162
Email: Sandeep.Bhambra@unep.org

4.2 Evaluation

UNEP will organize independent evaluations at mid-term and completion of the project to measure the degree to which the objectives of the project have been achieved.

SECTION 5 - MONITORING AND REPORTING

5.1 Management Reports

5.1.1 Progress Reports

Within 30 days of the end of reporting period, CABI will submit to UNEP/DGEF Coordination, using the format given in Annex Q, Half-yearly Progress Reports as at 30 June and 31 December.

5.1.2 Terminal Reports

Within 60 days of the completion of the project, CABI will submit to UNEP/DGEF Coordination a Terminal Report detailing the activities taken under the project, lessons learned and any recommendations to improve the efficiency of similar activities in the future, using the format provided in Annex T.

5.1.3 Substantive Reports

At the appropriate time, CABI will submit to UNEP three copies in draft of any substantive project report(s) and, at the same time, inform UNEP of its plans for publication of that text. Within 30 days of receipt, UNEP will give CABI substantive clearance of the manuscript, indicating any suggestions for change and such wording (recognition, disclaimer, etc.) as it would wish to see figure in the preliminary pages or in the introductory texts. It will equally consider the publishing proposal of CABI and will make comments thereon as advisable.

It may request CABI to consider a joint imprint basis. Should CABI be solely responsible for publishing arrangements, UNEP will nevertheless receive 10 free copies of the published work in each of the agreed languages, for its own purposes.

5.2 Financial Reports

(i) Details of expenditures will be reported on an activity by activity basis, in line with project budget codes as set out in the project document, as at 31 March, 30 June, 30 September and 31 December using the format given in Annex S. All expenditure accounts will be dispatched to UNEP within 30 days of the end of the Three-month period to which they refer, certified by a duly authorised official of CABI

(ii) In addition, the total expenditures incurred during the year ending 31 December, certified by a duly authorised official, should be reported in an opinion by a recognised firm of public accountants, and should be dispatched to UNEP within 180 days, i.e. 30 June. In particular, the auditors should be asked to report whether, in their opinion:

- ◆ Proper books of account have been maintained;
- ◆ All project expenditures are supported by vouchers and adequate documentation;
- ◆ Expenditures have been incurred in accordance with the objectives outlined in the project document.
- ◆ The expenditure reports provide a true and fair view of the financial condition and performance of the project

(iii) Within 180 days of the completion of the project, CABI will supply UNEP with a final statement of account in the format as for the quarterly expenditure statements duly signed by authorised official of CABI and certified by recognised firm of public accountants.

If requested, CABI shall facilitate an audit by the United Nations Board of Auditors and/or the Audit Service of the accounts of the project.

(iv) Any portion of cash advances remaining unspent or uncommitted by CABI on completion of the project will be reimbursed to UNEP within one month of the presentation of the final statement of accounts. In the event that there is any delay in such disbursement, CABI will be financially responsible for any adverse movement in the exchange rates.

(v) Within 30 days of the reporting period, CABI shall submit to UNEP GEF Coordination, annual cofinancing report for the project using the format provided in Annex X showing:

- ◆ Amount of cofinancing realized compared to the amount of cofinancing committed to at the time of project approval, and
- ◆ Reporting by source and by type:
 - ◆ Sources include the agency's own cofinancing, government cofinance (counterpart commitments), and contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector, and beneficiaries.
 - ◆ Types of cofinance. Cash includes grants, loans, credits and equity investments. In-kind resources are required to be:
 - ◆ dedicated uniquely to the GEF project,
 - ◆ valued as the lesser of the cost and the market value of the required inputs they provide for the project, and

- ♦ monitored with documentation available for any evaluation or project audit.

5.3 Terms and Conditions

5.3.1 Non-Expendable Equipment

CABI will maintain records of non-expendable equipment (items costing US\$1500 or more as well as items of attraction such as pocket calculators, cameras, computers, printers, etc.) purchased with UNEP funds (or with Trust Funds or Counter funds administered by UNEP) and will submit, using format in Annex U, an inventory of such equipment to UNEP, once a year, indicating description, serial no., date of purchase, original cost, present condition, location of each item attached to the progress report submitted on 31 December. Within 60 days of completion of the project, CABI International will submit to UNEP a final inventory of all non-expendable equipment purchased under this project indicating description, serial number, original cost, present condition, location and a proposal for the disposal of the said equipment. Non-expendable equipment purchased with funds administered by UNEP remains the property of UNEP until its disposal is authorised by UNEP, in consultation with CABI. CABI shall be responsible for any loss or damage to equipment purchased with UNEP administered funds. The proceeds from the sale of equipment, (duly authorised by UNEP) shall be credited to the accounts of UNEP, or of the appropriate trust fund or counterpart funds. A duly authorised official of CABI should physically verify the inventory.

5.3.2 Responsibility for Cost Overruns

Any cost overruns (expenditures in excess of the amount in each budget sub-line) shall be met by the organisation responsible for authorising the expenditure, unless written agreement has been received in advance from UNEP. In cases where UNEP has indicated its agreement to a cost overrun in a budget sub-line to another, or to increase the total cost to UNEP, a revision to the project document amending the budget will be issued by UNEP.

5.3.3 Cash Advance Requirements

Initial cash advance of US\$ 500,000 will be made upon signature of the project document by both parties and will cover expenditures expected to be incurred by CABI during the first six months of the project implementation. Subsequent advances are to be made quarterly, subject to:

- (i) Confirmation by CABI, at least two weeks before the payment is due, that the expected rate of expenditure and actual cash position necessitate the payment, including a reasonable amount to cover "lead time" for the next remittance; and
- (ii) The presentation of
 - ♦ A satisfactory financial report showing expenditures incurred for the past quarter, under each project activity.
 - ♦ Timely and satisfactory reports on project implementation

Requests for subsequent cash advances should be made using the standard format provided in Annex R.

5.3.4 Claims by Third Parties against UNEP

CABI shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, and shall hold UNEP and its staff non-liaible in case of any claims or liabilities resulting from operations carried out by CABI or other project partners under this project document, except where it is agreed by CABI and UNEP that such claims or liabilities arise from gross negligence or willful misconduct of the staff of UNEP.

5.3.5 Amendments

The Parties to this project document shall approve any modification or change to this project document in writing.

5.3.6 United Nations Security Council Resolution on the fight against terrorism

The United Nations Security Council Resolution 1373 of 28 September 2001 on the fight against terrorism shall be adhered to by the Executing Agency, failure to which shall, without prejudice to other legal actions, lead to the immediate cancellation of the project.

LIST OF ANNEXES:

ANNEX A:	Incremental Cost Annex
ANNEX B:	Logframe matrix
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ANNEX C:	STAP Roster Technical Review
ANNEX C1:	Response to STAP (and IA comments as appropriate)
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ANNEX G:	Available Reference Documents including maps <ul style="list-style-type: none">i. Invasives Glossaryii. List of Project Outputs from PDF-Biii. Descriptions of Pilot Sites in each Country (including maps)iv. List of GEF and other IAS related project interventions
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ANNEX X:	Format for Report on Co-Financing (separate excel sheet)
ANNEX Y:	Budget in UNEP Format (separate excel sheet)
ANNEX Z:	List of Non-expendable Equipment ¹ (separate excel sheet)

¹ Based on the feasibility studies by the project on pilot site investments and activities in the four countries, a decision will be made by UNEP/DGEF whether the equipment investments are justified as drafted in this annex on non-expendable equipment.

ANNEX A: INCREMENTAL COST

BROAD DEVELOPMENT GOALS

The biodiversity of Africa, including that found in the four project countries, is of global significance at ecosystem, species and genetic levels. At the same time, the development strategies of all four countries rely heavily on the sustainable conservation and utilization of biodiversity, particularly in the agricultural, forestry and tourism sectors. The project therefore aims at protecting this diversity from IAS for global benefit as well as for national and local benefit in the areas of food security, sustainable land use and economic advancement.

The four participating countries acknowledge the need to protect their biodiversity from IAS, and are party to African and global conventions and treaties that contribute to realizing that need, including the African Convention on the Conservation of Nature and Natural Resources (recently revised and adopted by the African Union, and including control of IAS) and the Phytosanitary Convention for Africa. NEPAD's framework Action Plan for the Environment identifies IAS as a priority programme area.

BASELINE

The overall baseline conditions against which the project was designed are:

- Ecosystem, species and genetic diversity of global significance is threatened in Africa by IAS.
- The risks of invasions are increasing, through the increased trade, travel and tourism needed for development.
- Governments lack coherent frameworks for managing the situation, due to weak enabling policy environments, lack of awareness and information, poor implementation and limited capacity.
- IAS issues have been recognized but not mainstreamed.

Barriers to effective management of IAS were identified in four areas, providing the basis for four project components.

Policy and institutional environment

None of the four countries has an IAS strategy and action plan as prescribed by COP decisions V/8 and VI/23, and for which decision VI/17 requested GEF to provide funding for as a priority. However, all do have NBSAPs which identify IAS as threats to biodiversity:

- IBCR (2004). National Biodiversity Strategy and Action Plan (Draft). Institute of Biodiversity Conservation and Research, Ethiopia.
- MoE (2003). National Biodiversity Strategy, Ministry of Environment, Ghana.
- NEMA (2002). National Biodiversity Strategy and Action Plan. (Awaiting cabinet approval). National Environment Management Authority, Uganda.
- MTENR (1999). National Biodiversity Strategy and Action Plan. Ministry of Tourism, Environment and Natural Resources, Zambia.

What the NBSAPs all fail to do is identify IAS as a major cross-cutting issue which needs mainstreaming into environmental and other policy. At present there are no plans for this to be done.

All four countries also have Plant Protection Acts, designed to prevent the introduction of organisms that would damage agricultural production:

- Ethiopia
 - Plant Protection Decree No. 56
 - Plant Quarantine Council of Ministries Regulation 4/1992
- Ghana
 - Prevention and Control of Pests and Diseases of plants, Act 307
- Uganda
 - Plant Protection Act Cap 31
 - Plant Protection and Health Bill 2003
- Zambia
 - Noxious Weeds Act, Cap 231
 - Plant Pests and Diseases Act, Cap 233

Although risk analysis under the IPPC International Phytosanitary Standards should now include environmental considerations, this is not done in the four pilot countries, the primary concern in terms of plants being noxious weeds that compete with agricultural crops.

IAS are mentioned implicitly or occasionally explicitly in national policies and plans in agriculture, forestry and environment sectors, but are not consistently identified as a major threat. This sometimes results in conflicts, such as in Ethiopia where *Prosopis* is identified as an IAS under the Forestry Research Strategy but is recommended for planting by the National Plan to Combat Desertification. Currently there are no plans to rationalize these inconsistencies in any of the countries.

Institutional coordination and collaboration in developing multisectoral or ecosystem approaches to IAS management is very weak apart from a few individual cases such as water hyacinth control (though even then there is some conflict between those who see the plant as a resource and those who see it as an IAS).

None of the countries has cost recovery mechanisms designed to provide sustainable financing of services and other activities associated with IAS management.

The baseline cost for this component is estimated at \$87,961. This comprises the cost of finalizing the NBSAP in Ethiopia, and the personnel costs for legal sections in the ministries of environment and agriculture.

Information and awareness

In all countries there is a broad lack of awareness of the threat posed by IAS in general, and often even of the dangers associated with individual species. Publicity, when it is produced, almost invariably concerns single high profile species such as water hyacinth, with many other invasives receiving no mention. National plant quarantine services generally do not have the budget for public awareness campaigns, although they maintain fixed notices at ports of entry.

Information on biodiversity present in the countries was collated during the development of the NBSAPs, though it is certainly incomplete for many taxa; mammals and birds are usually the best documented. Plant species lists are maintained in some of the project sites, but are usually weak on non-native species, even if they are included. Plant protection departments maintain pest lists including weeds if they affect agriculture, but these are also incomplete and need updating. Information on impact as well as distribution of IAS is also generally incomplete or absent except in a few cases. No country maintains an IAS database.

Use of and contribution to globally available information resources is limited. Internet access in capital cities is improving, though can still be expensive and unreliable. In many national institutions there may be one or a few access points for the entire institute. The result is that while e-mail is used regularly, use of on-line databases and other information resources is restricted.

Communication between sectors and institutes within the countries is poor, partly because (except in Uganda) there is no established body for coordinating IAS activities including information flow. The sectoral approach to addressing development issues also tends to limit cross-sectoral communication.

The baseline cost for this component of the project is £398,668. This includes the costs of awareness and information activities in ongoing IAS projects (see Prevention and Management below). It also includes the costs for communication facilities (particularly internet) and information systems that are scheduled to be upgraded in the NEAs during the life of the project. Limited costs for national quarantine service public awareness activities and communications are included.

Prevention and management

All four countries have national plant protection organizations. Their mandates include preventing the introduction of pests (invasive species) that could damage plants. This has almost always been taken to mean agricultural pests, but in principle, through accession to the International Plant Protection Convention, it now includes pests of plants in the natural environment. However, capacity to conduct risk

analysis for agricultural pests is limited and even more so for assessing the risks from environmental pests or invasives. Intentional introductions of species (including plants) are rarely assessed for the risks of them becoming invasive, rather than the risks from associated organisms.

Similarly, some monitoring and surveillance activities occur in agricultural ecosystems, but no country has a general surveillance and rapid response system for the early detection and eradication of new invasions.

All four countries have planned or ongoing activities for specific IAS (see Annex Giv) e.g.:

Ethiopia

- Integrated management of *Prosopis* implemented by EPA and funded by the Government of Ethiopia.
- Strengthening the Conservation and Management of the Wildlife Protected Area system of Ethiopia implemented by the Ethiopian Wildlife Conservation Organisation and funded by UNDP/GEF
- Integrating Land Degradation Concerns in Development Policy in Eastern Africa implemented by the Institute of Biodiversity Conservation and Research and funded by UNEP/GEF
- Conservation and sustainable use of biodiversity in the Gregory Rift Valley Lakes implemented by the Institute of Biodiversity Conservation and Research and funded by UNEP/GEF

Ghana

- Biocontrol of *Chromolaena* implemented by the Crops Research Institute and funded by the Government of Ghana
- Integrated management of the Volta River Basin implemented by EPA and funded by GEF
- Water weed management in West Africa Water Bodies implemented by EPA and funded by the African Development Bank.

Uganda

- Integrated control of *Cymbopogon* in S.W. Uganda implemented by NARO and funded by Danida
- Lake Victoria Environment Management Project implemented in Uganda by the Ministry of Agriculture, Animal Industry and Fisheries & NARO and funded by the World Bank/GEF
- Conservation of Natural High Forests implemented by Forest Department, Ministry of Water, Land and Environment and funded by the EU
- Mt Elgon Conservation and Development Project implemented by the Ministry of Water, Land and Environment and funded by NORAD

Zambia

- Mechanical and chemical control of *Mimosa pigra* in the Kafue flats of Zambia implemented by the Zambia Wildlife Authority and funded by the Government of Zambia
- Effective management of the National Protected Area systems implemented by ECZ and funded by UNEP/GEF
- Securing the Environment for Economic Development implemented by the Ministry of Environment, Natural Resources and Tourism and funded by UNDP/GEF
- Sustainable Land Management in the Zambian Miombo Woodland Ecosystem Area implemented by the Ministry of Environment, Natural Resources and Tourism and funded by UNDP/GEF
- Southern Africa Biodiversity support Programme implemented by ECZ and funded by UNDP/GEF

Baseline costs for this component are £10,694,459 and comprise the personnel and direct costs of the relevant components of the above projects and programmes. Also included are the costs of prevention activities by national plant protection organizations, port of entry controls, inspections and post-entry surveillance.

Capacity development

All countries recognize capacity building as a need in most sectors including environmental management, and so are devoting resources to training and skills development. But none of the countries has capacity building programmes designed to build capacity in the various aspects of IAS management. Environmental education curricula in primary to tertiary levels include biodiversity issues, but fail to give IAS the prominence that their importance as a cause of biodiversity loss merits. All the countries have national institutions and universities that undertake research on IAS issues, although as with other institutes they tend to focus on agricultural problems. Research capacity is generally in the areas of IAS management (particularly biological or chemical control), while research capacity on prevention and early detection is much more restricted.

Training required for effective multisectoral approaches to IAS management is lacking in several specific areas including risk assessment, taxonomy, impact assessment, socioeconomics, community mobilization, environmental law, policy analysis and development. Thus although there is some capacity in the four countries, it is uneven and inadequate within an overall framework for IAS prevention and management.

Baseline costs for this component are estimated at \$809,101. Costs are comprised of the capacity building (human resource and equipment) components of the projects listed above, and the individual post-graduate training (and associated costs) already occurring in the four countries.

GLOBAL ENVIRONMENT OBJECTIVES

The project will provide benefits globally, nationally and locally. By improving policies, strategies, mechanisms, and institutions for IAS prevention and management at the national level, globally significant biodiversity will be protected in the pilot sites to begin with, and subsequently in other important ecosystems (including protected areas) in the participating countries. This will also have benefits to the local communities immediately impacted by invasives including those deriving livelihoods from forest, fresh water and agricultural ecosystems, directly through production, or indirectly such as through tourism and ecosystem services.

Further benefits will accrue through replication of the approaches used at the pilot sites to other sites in the four countries. The approach used in the project as a whole will also provide lessons and opportunities for replication in other countries in Africa.

GEF ALTERNATIVE

At project completion IAS issues will be recognized by stakeholder groups as a major threat to economic development as well as biodiversity, and IAS strategies and action plans will be in place and in the process of implementation. Implementation of the developed IAS strategies will ensure mainstreaming of IAS issues into national policies and plans, and coordinated multisectoral responses to the risks of potential invasives and reaction to actual invasions.

Policy and institutional environment

In each country a comprehensive framework for addressing IAS issues will be developed as an Invasive Species Strategy and Action Plan (ISSAP). This will draw on the generic materials developed under GISP, COP decisions, and specific examples from countries where the process is more advanced. The ISSAP will be a key point of reference for IAS activities in the country.

Included in the ISSAP will be identification of roles for different stakeholders, organizations and institutions. As decided during the project, an apex or coordinating body of some description will be established and commence functioning.

In Ethiopia and Ghana sub-national bodies will also be established. NBSAPs will be revised to elevate the importance attached to IAS. Based on analysis of legislation, policies and plans, the project will develop

guidelines and recommendations on modifications to resolve inconsistencies, close gaps, and remove overlaps.

Cost recovery mechanisms for services in relation to IAS prevention and management (e.g. risk analyses, inspections) will be developed and implemented.

The result will be an enabling policy and institutional environment that provides a coherent framework for the sustainable prevention and management of IAS in each country.

The incremental cost of this component is calculated as \$500,290. GEF funds of \$234,481 will cover the cost of further analysis of legislation and policies, and consultations and stakeholder meetings to develop the ISSAP and policy guidelines, and to publish and disseminate the ISSAP. National governments will provide co-financing of \$149,512 (in-kind) and \$116,297 (cash), covering salaries of all the various stakeholders who will be involved in the consultations and meetings. It also covers the personnel and other costs of the government staff who will implement the cost recovery mechanisms (most likely at the quarantine authorities), and personnel costs for taking part in the coordinating/apex body that will be established.

Information and awareness

National communication strategies drafted during the PDF-B will be refined and implemented, targeting different groups of stakeholders. Emphasis will be placed on identified pathways, and in the ecosystem approach to management. Materials will be developed in different media and languages, as required by the target audiences. At local level target audiences will be those involved in the pilot sites under component 3.

In each country procedures for official information flow will be established and implemented as an activity of the coordination/apex body, one of its presumed functions. The body itself might also be the repository for national IAS information, or the task might be delegated to an appropriate existing organization. Whichever option is adopted, the IAS information 'centre' would collect and collate information on IAS distribution and impact in the country, as well as associated research and project activities.

Information flow to and from organizations and databases outside the project countries will be increased, particularly with regional and international bodies that serve as nodes in global information flow, including the CBD. GISP is developing a Global Invasive Species Information Network (GISIN) to which the countries will be linked.

The total cost of the increment in this component is estimated at \$862,401, of which the cost to GEF will be \$414,022. The GEF contribution will cover the cost of the development, production and dissemination of the publicity and awareness campaign materials including printed and audiovisual formats. GEF will also cover the cost of establishing communication procedures and of establishing the national IAS information repository. National governments will provide co-financing of \$282,876 (in-kind) and \$165,503 (cash). This will pay for salaries of information and communications staff in different government departments involved in developing publicity materials and contributing information to the national unit. Secondary dissemination of materials through government channels will also be covered by national co-financing.

Prevention and management

Procedures for risk analysis will be developed and implemented in the responsible authorities in each country. These will be based on the guidelines provided in international standards (such as ISPM No 11 rev. 1).

Under the remit of the national coordinating/apex body, a national monitoring and rapid response mechanism will be developed and implemented. This will overlap to some extent with the mechanisms for information flow in component 2, but will also include contingency plans and practical procedures for field responses to potential invasions including plans for eradication campaigns if appropriate. Through the

surveillance and communication systems developed, information on IAS distribution and impact (biological, social, economic) will be collected and collated as part of component 2.

In each country two pilot sites were selected during the PDF-B phase which will serve as test cases of the management of ecosystems where alien plants have already established and become invasive. The sites were selected using a number of criteria, including that they should provide opportunity for addressing serious IAS problems, as well as have high demonstration value.

Details of the management programmes are site specific, but will follow the same approach. Each site will have a management committee including community and other stakeholder groups through which pilot site management decisions will be made. This will bring to the fore conflicting interests and views, which will be addressed as a key part of developing the management plan. An EIA will be conducted prior to implementation, with management focused on ecosystem level goals and outcomes. Integrated control methods incorporating local knowledge will be used.

Systematic biological and socioeconomic monitoring will be conducted to monitor progress and document outcomes.

The incremental cost of the alternative in this component is estimated to be \$2,546,396, with a cost to GEF of \$1,228,306. GEF funds will cover the development of risk analysis methods; the establishment of surveillance and rapid response mechanisms; the cost of the stakeholder meetings and consultations involved in the development and implementation of the management plans; the equipment (where necessary) for control operations; the surveys to monitor progress and outcomes. National programmes will contribute co-financing of \$693,703 (in-kind) and \$624,388 (cash). This will cover the staff salaries for the implementing risk analyses; recurrent costs of surveillance; staff costs for the stakeholders involved in site management.

Capacity building

Training needs have been identified during the PDF-B and a programme of training activities will be delivered to address the priority needs. This will be based on in-country short courses and post-graduate research degrees based at the pilot sites. In some cases however it will be necessary to go outside the country for the required training. In all cases training will emphasize practical application in the context of the ISSAP. Training manuals and modules will be developed that can be used in subsequent courses.

Key items of equipment will be provided to support the activities of quarantine departments, ports of entry, rapid response units and control teams. Priority items have been identified during the PDF-B. Vehicles will be purchased under the project management and coordination component.

Delegates from the four countries will be supported to participate in regional and international fora that will build national experience and capacity. Criteria for deciding which meetings to attend will be agreed by the national steering committees, but possible fora are the Interim Commission on Phytosanitary Measures, CBD, AMCEN and NEPAD environment action plan meetings.

Support will be given for the integration of IAS issues into school and tertiary educational curricula. Guidelines for school curricula will be drafted, and resource packs to support teaching of the topic developed and distributed to pilot schools. Guidance and support will be given to university staff for the incorporation of IAS topics into both undergraduate and taught post-graduate degrees.

The total incremental cost of this component is \$1,440,246 of which \$633,623 will come from GEF funds. This will pay for planning and delivering short courses; the development and production of training materials, curriculum development work; development and production of teacher resource packs; post graduate research degrees. National co-financing will total \$539,678 (in-kind) and \$266,945 (cash), which will cover provision of training facilities, salaries of national trainers and trainees, university and government research institute salaries, repeat courses and additional production of manuals and resource packs.

Project management and coordination

The total cost of national and international coordination is estimated at \$5,043,647, of which \$2,489,568 is requested from GEF. This will contribute to the cost of a full time international project coordinator (IPC) and direct coordination unit administrative costs, international travel, and the costs of the International Steering Committee. The GEF funds will also contribute to the national coordination units, the salary of a full time national project coordinator, the direct administrative costs of the national coordination unit, and coordinators' local and international travel. Each national coordination unit will require office equipment and a car. CAB International and IUCN will contribute \$750,000 (\$375,000 in-kind and \$375,000 in cash) and \$250,000 (\$125,000 in-kind and \$125,000 in cash) respectively, and national governments \$727,212 (in-kind) and \$826,867 (cash) towards coordination and management.

INCREMENTAL COST

The incremental costs and benefits of the proposed project are summarised in the following incremental cost matrix. Baseline expenditures amount to \$11,990,189. The alternative has been costed at \$22,383,169. The incremental cost of the project, \$10,392,980 is required to achieve the project's global environmental objectives. Of this amount \$5,000,000 (or \$5,775,000 including PDF-A and PDF-B resources) is requested for GEF support, or approximately, 50% of the total cost of implementing the alternative. The remaining 50% of the cost of the alternative will come from the national and international partners and other donors and includes in-kind contributions.

INCREMENTAL COST MATRIX

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Global benefits	Globally significant biodiversity in pilot sites under threat from IAS ² .	IAS in pilot sites, both inside and outside protected areas, managed to ensure sustainable conservation of globally significant biodiversity.	Implementation of integrated management approaches for pilot sites under threat from IAS.
	Coherent IAS management frameworks lacking in developing countries because of a weak enabling environment, low levels of awareness, lack of systematic management and limited capacity.	Existence of coherent IAS management frameworks to strengthen the enabling environment, increase awareness, improve management and build capacity to serve as models for developing countries.	Building of coherent IAS management systems.
	IAS management issues not embedded in the mainstream development process.	IAS issues integrated into development plans improving food security and facilitating the sustainable conservation of biodiversity.	Integration of IAS management issues into mainstream development process.
Domestic benefits	Enabling policy and institutional environment for cross-sectoral management of IAS is weak, fragmented and inconsistent.	Clear IAS policy framework developed, coordinated and consistent institutional arrangements for IAS management established.	Development of enabling policy and institutional environment for cross-sectoral management of IAS.
	Appropriate information on risks, impacts and management of IAS unavailable to stakeholder groups.	Information to facilitate IAS management made available to stakeholder groups.	Provision of information to stakeholder groups to facilitate management of IAS.
	Prevention and management of priority IAS carried out in an <i>ad hoc</i> manner.	Prevention and management measures for priority IAS undertaken systematically.	Implementation of systematic prevention and management measures.
	Inadequate capacity for cross-sectoral management of IAS.	Strengthened capacity for cross-sectoral management of IAS.	Capacity building for cross-sectoral management of IAS.

² In all cases IAS refers to invasive plant species

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Component 1. Enabling policy and institutional environment for cross-sectoral prevention and management of IAS strengthened.	Fragmented, inconsistent and unclear plans, policies and guidelines for IAS management and a lack of attention paid to IAS issues in mainstream plans and policies.	Comprehensive national strategies, action plans and guidelines for IAS management and integration of IAS issues into mainstream plans and policies.	Formulation of comprehensive national strategies, action plans and guidelines for IAS management and integration of IAS issues into mainstream plans and policies.
	Inadequate collaboration between stakeholders responsible for IAS management.	Apex bodies and national coordination structures for IAS management functioning effectively.	Establishment of effective apex bodies and national coordination structures for IAS management.
	Cost recovery mechanisms for IAS management poorly developed.	Cost recovery mechanisms for IAS management operational.	Development of cost recovery mechanisms for IAS management.
	Ethiopia: 50,000 Ghana: 2,500 Uganda: 16,961 Zambia 18,500 Total: 87,961	Ethiopia: 146,636 Ghana: 98,773 Uganda: 173,214 Zambia 169,628 Total: 588,251	Ethiopia: 96,636 Ghana: 96,273 Uganda: 156,253 Zambia: 151,128 Total: 500,290 Co-finance: 265,809 Cost to GEF: 234,481
Component 2. Appropriate information on risks, impacts and management of IAS utilised by key stakeholder groups and awareness levels raised.	Publicity and awareness efforts on IAS issues are isolated, limited in scope, single species focused and sectoral.	National communication strategies emphasising a pathways and ecosystem approach to IAS management, targeting different stakeholders.	Implementation of comprehensive multi-sectoral national communication strategies on IAS emphasising a pathway and ecosystem approach.
	Nationally and internationally held information on IAS is difficult to access, collate and synthesise to aid effective management.	National and international information on risks, impacts and management of IAS integrated into national information systems linked to international databases.	Formation of national IAS databases linked to national and international databases.
	Ethiopia: 81,000 Ghana: 151,720 Uganda: 108,313 Zambia 57,635 Total: 398,668	Ethiopia: 341,591 Ghana: 265,997 Uganda: 377,677 Zambia 275,824 Total: 1,261,069	Ethiopia: 260,591 Ghana: 114,257 Uganda: 269,364 Zambia: 218,189 Total: 862,401 Co-finance: 448,379 Cost to GEF: 414,022

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Component 3. Strategies for the prevention and management of IAS implemented.	No clear procedures are implemented to analyse the risk of invasiveness of plants imported into the participating countries.	Appropriate risk analysis procedures for plant importation developed and implemented.	Development and implementation of risk analysis procedures for plant importation.
	Lack of systematic procedures for the early detection of nascent IAS infestations and for the rapid application of appropriate management interventions to these foci.	Early detection and rapid response procedures for effective management of nascent IAS infestations developed and implemented.	Development and implementation of early detection and rapid response procedures for effective management of nascent IAS infestations.
	Most priority IAS are either not managed or are being managed in a manner that does not involve cross-sectoral collaboration, local community involvement, an emphasis on pathways and the establishment of clear ecosystem level goals. Monitoring is usually inadequate for the adoption of effective adaptive management and replication beyond specific sites.	Management of priority IAS in pilot sites implemented involving local communities and identified stakeholders using approaches that emphasise pathways and clear ecosystem level goals. Rigorous monitoring protocols developed and implemented to ensure effective adaptive management, replication and dissemination of lessons learned.	Implementation of cross-sectoral management of sites affected by IAS using an approach emphasising pathways and ecosystem goals. Development and implementation of monitoring protocols to ensure effective adaptive management, replication and dissemination of lessons learned.
	Ethiopia: 1,087,550 Ghana: 3,477,528 Uganda: 4,042,226 Zambia: 2,087,155 Total: 10,694,459	Ethiopia: 1,752,918 Ghana: 3,982,504 Uganda: 4,916,413 Zambia: 2,589,020 Total: 13,203,749	Ethiopia: 665,368 Ghana: 504,976 Uganda: 874,187 Zambia: 501,865 Total: 2,546,396 Co-finance: 1,318,090 Cost to GEF: 1,228,306

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Component 4 Capacity for multisectoral prevention and management of IAS strengthened.	Lack of staff with capacity in areas relevant to IAS management including identification skills, risk analysis for IAS, teaching on IAS issues and IAS control techniques.	Staffed trained nationally and at pilot sites in areas relevant to IAS management including identification skills, risk analysis for IAS, teaching on IAS issues and IAS control techniques.	Implementation of training programmes for personnel from a range of organisations in areas of relevance to IAS management.
	Ethiopia: 162,400 Ghana: 297,250 Uganda: 215,193 Zambia: 134,258 Total: 809,101	Ethiopia: 559,032 Ghana: 842,260 Uganda: 395,968 Zambia: 452,087 Total: 2,249,347	Ethiopia: 396,632 Ghana: 545,010 Uganda: 180,775 Zambia: 317,829 Total: 1,440,246 Co-finance: 806,623 Cost to GEF: 633,623
Project management & co-ordination.		Effective national and international collaboration to produce project outputs with required standards of monitoring, evaluation and stakeholder participation at national and international levels.	Formation and maintenance of national and international structures to ensure collaboration to produce project outputs with required standards of monitoring, evaluation and stakeholder participation. Ethiopia: 590,994 Ghana: 876,803 Uganda: 615,453 Zambia: 960,397 CABI: 1,500,000 IUCN: 500,000 Total: 5,043,647 Co-finance: 2,554,079 Cost to GEF: 2,489,568

ANNEX B. LOGFRAME MATRIX³

Table: Project Planning Matrix (PPM)	PROJECT TITLE: REMOVAL OF BARRIERS TO INVASIVE PLANT MANAGEMENT IN AFRICA 2005-2008		
Objectives	Indicators	Means of verification	Important assumptions
<p><i>Development objective (Goal):</i></p> <p>Globally significant ecosystems, species and genetic diversity conserved in Africa.</p>	<p>Biodiversity indices (richness and evenness of indigenous species) in project pilot sites in 4 globally significant ecosystems: Semi-arid Grassland Savannah , Woodland-Savannah, Tropical Forest and Inland Aquatic/Wetland, maintained (0% change) from baseline by Q4 Yr4.</p> <p>Rate of spread of Invasive Alien Species in project pilot sites in 4 globally significant ecosystems: Semi-arid Grassland Savannah (Baseline=10% cover) Woodland-Savannah (Baseline=10%) Tropical Forest (Baseline=15%) Inland Aquatic/Wetland (Baseline=20%), reduced by 80% by Q4 Yr4.</p>	<p>Annual reports of Protected Area Departments in the project countries. Data in CBD and Global Biodiversity Assessment reports. Biodiversity Surveys (reports) for project pilot sites & modelling</p> <p>IAS Monitoring Reports on each Pilot Ecosystem. Remote sensing and ground surveys of IAS in pilot ecosystems.</p>	<p>Commitment to biodiversity conservation at global scale through concerted management of all threats to biodiversity.</p>

³ During the first year the project will re-confirm or establish the Indicator Baseline values for incorporation into the Project Monitoring Plan. National Executing Agencies will be strengthened and assisted in completing the design and running of monitoring programs, including data collection and analysis, as well as reporting and budgeting procedures to sustain the program. Particular emphasis will be on establishing a uniform monitoring system for measuring impact indicators at the project's 'Immediate Objective' level. Adequate staff and budget resources have been included in the project design to implement the M&E plan.

<p>Immediate objective:</p> <p>Removing barriers to the management of IAS through effective implementation of CBD Article 8(h) in 4 countries in Africa.</p>	<p>Legitimacy of IAS guidelines, policies, plans and institutional arrangements (baseline=0) recognised by at least 50% of the selected 80 stakeholder groups by Q4 Yr 4.</p> <p>IAS information available and accessible to a target of 80% of identified stakeholder groups by Q4 Yr 4.</p> <p>Total economic cost of IAS in four countries reduced by a target of at least 20% below baseline projections of \$10,694,459 by Q4 Yr 4.</p> <p>Biodiversity indices (richness and evenness of indigenous species) in project sites in 4 globally significant ecosystems: Semi-arid Grassland Savannah , Woodland-Savannah, Tropical Forest and Inland Aquatic/Wetland, maintained (0% change) from baseline by Q4 Yr4</p> <p>Capacity (Institutional, Human Resources and Equipment) for IAS management (baseline=10%) increased to >50% of National IAS Strategy requirements by Q4 Yr 4.</p>	<p>Project baseline awareness and project completion awareness impact surveys. Key informant interviews.</p> <p>Project stakeholder impact assessment surveys / Informant surveys, literature searches, analyses of library catalogues, analyses of hits on relevant websites</p> <p>Project Report on National IAS economic impact assessments (surveys and modelling).</p> <p>Biodiversity Surveys (reports) at project pilot sites & modelling).</p> <p>Project training impact study. Key informant interviews</p>	<p>Commitment to IAS management in the 4 pilot countries is maintained.</p> <p>Political stability is maintained.</p>
<p>Outcome 1:</p> <p>Enabling policy and institutional environment for cross-sectoral prevention and management of IAS strengthened.</p>	<p>A minimum of one (1) National IAS strategy and action plan developed and promoted in each of the 4 pilot countries by Q4 Yr 3.</p> <p>At least 1 set of policy guidelines for incorporating IAS considerations into national and provincial sector policies/plans developed and promoted in each of the 4 pilot countries by Q4 Yr 3.</p> <p>NBSAPs of at least 3 pilot countries modified to include IAS by Q4 Yr 4.</p> <p>One (1) National IAS coordination / apex body established in each of the 4 pilot countries by Q2 Yr 2.</p>	<p>Published National IAS strategies and action plans. Reports of stakeholder consultations and workshops.</p> <p>Published IAS policy guidelines. Reports from stakeholder consultations and workshops.</p> <p>NBSAP.</p> <p>Project reports.</p>	<p>Cooperation from national and provincial authorities is maintained.</p> <p>NBSAPs are modified within the project timeframe.</p> <p>Political support for an IAS apex body is maintained.</p>

	Cost recovery mechanisms for IAS management (e.g. import risk analysis/phytosanitary certificates and EIA) in place in at least 2 countries by Q4 Yr 4.	Official publications; project progress and technical reports	Relevant bodies support and enforce the identified and prioritised cost recovery mechanisms.
Outcome 2: Appropriate information on risks, impacts and management of IAS utilised by key stakeholder groups and awareness levels raised.	<p>Average IAS-awareness levels in a total of 80 selected target groups (communities, national and provincial governments, etc) in the 4 pilot countries increase by at least 80% above baseline (5%) by Q4 Yr 4 (final)</p> <p>National IAS information systems (websites and databases) established in each of the 4 pilot countries by Q2 Yr 3 and updated 1 x per annum</p> <p>Number of hits on IAS website in each of the 4 pilot countries increases by an average of 10% per annum by Q3 Yr 3.</p> <p>Linkages (at least 4) between IAS websites/databases in each of the 4 pilot countries and global/regional IAS websites/databases established by Q2 Yr 2.</p> <p>National IAS data in at least 3 pilot countries transferred to Global databases by Q4 Yr 3.</p>	<p>Baseline- and project completion awareness impact survey reports.</p> <p>Progress reports; database/website design reports; web address verification</p> <p>Internal website clock</p> <p>Effective internet linkages between National/Regional/Global IAS Websites & Databases</p> <p>National IAS data can be accessed on Global databases.</p>	<p>Support for the project from policy makers & private sector is maintained.</p> <p>Stakeholders participate fully in awareness-raising campaigns.</p> <p>Staff trained by the project continue to be available to establish websites and databases. IT infrastructure effective.</p>
Outcome 3: Strategies for the prevention and management of priority IAS implemented	<p>1 set of technical guidelines for IAS risk analysis adopted by the quarantine authorities of at least 3 pilot countries by Q4 Yr. 3.</p> <p>National intersectoral monitoring and rapid response mechanism (established and) communicated officially & effectively in all 4 pilot countries by Q4 Yr 3.</p> <p>At least 80% of species (plants/propagules) imported subject to environmental risk analysis in at least 3 of the pilot countries by Q4 Yr 4.</p>	<p>Official letters of endorsement in the four countries.</p> <p>Project reports, reports of stakeholder consultations and workshops.</p> <p>Assessment study on rapid response procedures.</p> <p>Logbooks maintained by monitoring agencies; National IAS databases</p>	<p>Support for the project from the relevant authorities is maintained.</p> <p>Communication network functions effectively.</p> <p>Willingness for intersectoral cooperation.</p>
Outcome 3:cont'd	National invasive plants lists, including the biological and socioeconomic impact of priority invasive plants, incorporated into the databases in each of the 4 pilot countries by Q3 Yr 4.	Project reports, scientific publications; Lists of invasive plants. National IAS websites/databases	Staff trained by the project continue to be available to undertake surveys.

Strategies for the prevention and management of priority IAS implemented	<p>Ecosystem IAS management plans endorsed by Stakeholder Agreements in 8 pilot sites by Q4 Yr 2.</p> <p>Key IAS control and/or management practices applied in 8 pilot sites by Q4 Yr 3.</p>	<p>Pilot site management plans. Formation of Stakeholder Co-management Group Stakeholder Agreements signed.</p> <p>Project site reports. National SC meeting minutes; UNEP supervision missions to field sites.</p>	<p>Support for IAS management plans is maintained by stakeholders</p> <p>Introduction of biological control agents is supported by the relevant authorities. Stakeholder groups have agreed on co-management.</p>
<p>Outcome 4:</p> <p>Capacity built for multisectoral prevention and management of IAS</p>	<p>Training impact study in each of the 4 pilot countries showing positive trend in knowledge, awareness and changed behaviour levels on IAS prevention and management with at least 60% of trainees by Q4 Yr 4.</p> <p>1 Multisectoral IAS Training strategy developed and promoted in each of the 4 pilot countries by Q4 Yr 1.</p> <p>At least 400 stakeholders (policy-makers) trained in IAS awareness; at least 100 stakeholders (quarantine authorities/taxonomists) trained in risk analysis (prevention); and at least 400 stakeholders (community leaders) trained in IAS management in each of the 4 pilot countries by Q4 Yr. 3.</p> <p>3 Msc/PhD studies relevant to IAS completed in each of the 4 pilot countries by Q4 Yr 4.</p> <p>At least 8 national IAS policies and programmes presented by IAS trainees in at least 4 international fora e.g. annual ICPM meeting in Rome, IAPSC general assembly, Ramsar COP 9 (Uganda), AMCEN, CBD COP 8 & SBSTTA by Q4 Yr 4</p>	<p>Training impact study t.b. conducted in final project year.</p> <p>Report on agreed training strategy and training manuals.</p> <p>Project progress and training reports; Training impact study</p> <p>Theses, project reports.</p> <p>Back-to-office reports, project progress reports.</p>	<p>Trained personnel are not lost to the system e.g. through transfer, emigration or disease.</p> <p>Support for the project from the relevant authorities is maintained.</p> <p>Support for training and capacity building activities is maintained.</p>
	<p>Guidelines for integration of IAS issues into school curricula adopted by at least 3 national curricula development bodies for the four countries by Q4 Yr 3.</p> <p>IAS information packs for schools developed by Q4 Yr 3 and distributed to at least 10 schools around the pilot sites in each of the 4 pilot countries by Q1 Yr 4.</p>	<p>Published curriculum guidelines.</p> <p>Distribution lists IAS information packs, as included in project progress reports.</p>	<p>Government education authorities support initiative.</p> <p>School authorities support initiative.</p>

prevention and management of IAS	IAS modules developed and added to at least 1 university course in each of the 4 pilot countries by Q4 Yr 4.	University syllabuses; project progress reports.	Support for the project maintained by university authorities.
Outcome 5: Project managed and co-ordinated	1 International project co-ordinator appointed by Q1 Yr 1 1 National project co-ordinator appointed in each of the 4 pilot countries by Q2 Yr 1 1 National Co-ordination Units (NCU) established in each of the 4 pilot countries by Q2 Yr 1 1 Accounting and activity reporting system established in each of the 4 pilot countries by Q2 Yr 1 Inception phase completed by Q2 Yr 1 Annual workplans completed by Q1 each year 1 Annual training workshop for project personnel completed in by Q4 Yrs 1,2 & 3 National Steering Committee Meetings convened at least once per quarter Annual International Steering Committee Meeting Convened M&E plan and baseline finalised by 4 th Q Yr 1 Mid-term evaluation completed by 4 th Q Yr 2 Terminal evaluation completed by 4 th Q Yr 4	Project Reports Project Reports Project Reports Project Reports Inception Phase Report Annual Workplans Workshop Reports Minutes of National Steering Committees Minutes of International Steering Committee M&E Plan, inception phase report, project reports Mid-term evaluation report Final evaluation report	Support for the project maintained by relevant authorities

Outputs:

Outcome 1. Enabling policy and institutional environment for cross-sectoral prevention and management of IAS strengthened

- 1.1. Develop a national IAS strategy, action plan and policy guidelines, and modify NBSAPs to incorporate IAS issues.
- 1.2. Develop mechanism for coordination and promotion of IAS management between stakeholders, including private sector and local communities.
- 1.3. Develop and implement cost recovery mechanisms for IAS activities, from the public and private sector.

Outcome 2. Appropriate information on risks, impacts and management of IAS utilised by key stakeholder groups and awareness levels raised.

- 2.1. Review national communication strategy for ensuring effective transfer of information on IAS between stakeholders.
- 2.2. Develop National IAS Databases/Websites and undertake comprehensive public awareness campaigns.
- 2.3. Facilitate external communication, information exchange data transfer with international & regional organisations, neighbouring & partner countries.

Outcome 3. Strategies for the prevention and management of priority invasive alien species implemented.

- 3.1. Establish appropriate IAS risk analysis procedures for quarantine authorities.
- 3.2. Establish early detection and rapid response systems for IAS.
- 3.3. Conduct surveys at national level to document presence and impact of IAS.
- 3.4. Implement, evaluate and document control projects identified by the PBF B for priority IAS threatening globally important biodiversity.

Outcome 4. Capacity built for prevention and management of IAS.

- 4.1. Conduct training programme for different stakeholders e.g. policy-makers, scientists, quarantine officers, extensionists and affected communities.
- 4.2. Provide equipment and material support to quarantine departments, border crossings, IAS control units, etc.
- 4.3. Facilitate participation of national delegates in relevant international bodies e.g. the Interim Commission on Phytosanitary Measures, CBD, NEPAD, AMCEN, etc.
- 4.4. Formulate programmes for integrating IAS issues into learning institution curricula.

Outcome 5. Project managed and co-ordinated

- 5.1. Make arrangements for overall project administration and implementation infrastructure.
- 5.2. Establish and operate accounting and activity reporting system.
- 5.3. Inception phase & preparation of work plans
- 5.4. Conduct training workshops for personnel in project countries.
- 5.5. National Steering Committee meetings.
- 5.6. International Steering Committee meetings.
- 5.7. Establish and implement M&E plan
- 5.8. Perform midterm evaluation of the project and take necessary action to improve project delivery.
- 5.9. Perform terminal evaluation of the project.

ANNEX B-1: WORK PLAN & TIME TABLE⁴

Lead Institution are identified by the following numbers: International: CABI-IUCN (I1); Ethiopia - EARO (E1), EPA (E2), MoARD (E3), MoE (E4); Ghana – CSIR (G1), EPA (G2), MoFA (G3), PPRSD (G3), VRA (G4), Forestry Commission (G5); Uganda – NARO (U1), NEMA (U2), MAAIF (U3), Makerere University (U4), UWA (U5); Zambia – ECZ (Z1), MTENR (Z2), ZAWA (Z3), Ministry of Agriculture and Cooperatives (Z4), Ministry of Education (Z5).

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	Component 1. Strengthening the enabling policy and institutional environment for cross-sectoral prevention and management of IAS	I1, E1, E2, E3, G1, G2, U1, U2, U3, Z1, Z2, Z4								
1	1.1. Develop a national IAS strategy, action plan and policy guidelines, and modify NBSAPs to incorporate IAS issues.									
1	1.1.1. Review baseline conditions of plans, policies and initiatives related to IAS issues.									
1	1.1.1.1. Define scope of work									
1	1.1.1.2. Identify and contract experts									
1	1.1.1.3. Develop workplan and timeline									
1	1.1.1.4. Review existing policies and plans									
1	1.1.1.5. Draft report									
1	1.1.1.6. Review report									
1	1.1.1.7. Draft report revision									
1	1.1.1.8. Review final report									
1 - Benchmark	1.1.1.9. Print and deliver report to identified stakeholders									
1	1.1.2. Conduct stakeholder consultations and workshops to develop and promote IAS strategy and action plans – linked to 1.1.1.									
1	1.1.2.1. Define scope of work									
1	1.1.2.2. Identify and contract experts to conduct consultation meetings									

⁴ Detailed (national) workplans will be developed during the first three months of the project and approved by the national and international SCs

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
1	1.1.2.3. Develop workplan and timeline									
1	1.1.2.4. Identify personnel from relevant institutions with whom to meet									
1	1.1.2.5. Conduct consultation meetings on draft policies/strategies									
1 - Benchmark	1.1.2.6. Prepare report on consultation meetings									
1	1.1.3. Develop guidelines for incorporating IAS issues into national and area-specific plans (development, poverty, disaster management plans, etc.) – linked to 1.1.1.									
1	1.1.3.1. Define scope of work									
1	1.1.3.2. Identify and contract experts									
1	1.1.3.3. Develop workplan and timeline									
1	1.1.3.4. Draft IAS guidelines/strategy and action plans									
1	1.1.3.5. Conduct stakeholders' workshops to review draft guidelines (linked to									
1	1.1.3.6. Draft revised guidelines									
1	1.1.3.7. Conduct stakeholder workshop to review final draft guidelines									
1	1.1.3.8. Final revision of guidelines									
1-Benchmark	1.1.3.9. Print and deliver guidelines/strategy and action plans to identified stakeholders									
1										
1	1.1.4. Modify NBSAP to include IAS issues – linked to 1.1.1.									
1	1.1.4.1. Define scope of work									
1	1.1.4.2. Identify and contract experts									
1	1.1.4.3. Develop workplan and timeline									
1	1.1.4.4. Draft report on appropriate areas to revise in NBSAP									
1	1.1.4.5. Review report									
1	1.1.4.6. Draft report revision									
1	1.1.4.7. Review final report									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
1	1.1.4.8. Print and deliver report to identified stakeholders									
1-Benchmark	1.1.4.9. Revise NBSAP through appropriate national authorities									
2	1.2. Develop mechanisms for coordination and promotion of IAS management between stakeholders, including private sector and local communities.									
2	1.2.1. Establish national IAS coordination mechanisms.									
2	1.2.1.1. Define scope of work									
2	1.2.1.2. Identify and contract National Project Coordinator Unit staff members									
2	1.2.1.3. Identify and contract National Steering Committee members									
2	1.2.1.4. Develop workplan and timeline									
2	1.2.1.5. Draft report									
2	1.2.1.6. Review report									
2-Benchmark	1.2.1.7. Print and deliver report to identified stakeholders									
2-Benchmark	1.2.1.8. National IAS coordination mechanism/unit/apex body established									
3	1.3. Develop and implement cost recovery mechanisms for IAS activities, from the public and private sector.									
3	1.3.1. Identify and prioritise sources of finance and revenue issues – linked to 1.1.1.									
3	1.3.1.1. Define scope of work									
3	1.3.1.2. Identify and contract experts									
3	1.3.1.3. Develop workplan and timeline									
3	1.3.1.4. Prepare recommendations on financing activities and sources of revenue									
3	1.3.1.5. Prioritise sources of finance and revenue									
3-Benchmark	1.3.1.6. Print and deliver report to identified stakeholders									
3	1.3.2. Produce a financial plan – linked to 1.1.1.									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
3	1.3.2.1. Prepare a financial plan									
3	1.3.2.1. Review financial plan									
3-Benchmark	1.3.2.2. Print and deliver financial plan to identified stakeholders									
3	1.3.3. Establish collection & mobilisation mechanisms – linked to 1.1.1.									
3	1.3.3.1. Prepare a collection and mobilisation plan									
3	1.3.3.2. Review collection and mobilisation plan									
3-Benchmark	1.3.3.3. Print and deliver collection and mobilisation plan to identified stakeholders									
3	1.3.4. Implement a pilot financing activity.									
3	1.3.4.1. Consultations with implementing agencies									
3-Benchmark	1.3.4.2. Implementation of recommended actions by collaborating agencies									
	Component 2. Utilising of appropriate information on risks, impacts and management of IAS utilised by key stakeholder groups and raising awareness levels.	I1, E1, E2, E3, G1, G2, U1, U2, U4, Z1, Z5								
4	2.1. Review national communication strategy for ensuring effective transfer of information on IAS between stakeholders.									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
4	2.1.1. Review identified target groups									
4	2.1.1.1. Define scope of work									
4	2.1.1.2. Identify and contract experts									
4	2.1.1.3. Develop workplan and timeline									
4	2.1.1.4. Review identified target groups									
4-Benchmark	2.1.1.5. Print and deliver report to identified stakeholders									
4	2.1.2. Review relevant existing communications strategies									
4	2.1.2.1. Investigate relevant communications strategies									
4	2.1.2.2. Draft report									
4	2.1.2.3. Review report									
4-Benchmark	2.1.2.4. Print and deliver report to identified stakeholders									
4	2.1.3. Review dissemination methods including existing mechanisms where appropriate.									
4	2.1.3.1. Investigate relevant dissemination methods									
4	2.1.3.2. Draft report									
4	2.1.3.3. Review report									
4-Benchmark	2.1.3.4. Print and deliver report to identified stakeholders									
5	2.2. Develop National IAS Databases/Websites and undertake comprehensive public awareness campaigns.									
5	2.2.1. Design, construct, test and use national web-based information system.									
5	2.2.1.1. Define scope of work									
5	2.2.1.2. Identify and contract experts									
5	2.2.1.3. Develop workplan and timeline									
5	2.2.1.4. Assess available information for use in a national web-based information system									
5	2.2.1.5. Construct outline national web-based information system									
5	2.2.1.6. Review of national web-based information									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	system by identified stakeholders									
5-Benchmark	2.2.1.7. Make updated national web-based information system available on the World Wide Web									
5	2.2.1.8. Review and update web-based information system									
5	2.2.2. Establish and maintain linkages between national and global databases.									
5-Benchmark	2.2.2.1. Access relevant websites and establish links from national web-based information system									
5-Benchmark	2.2.2.2. Transfer national data to global databases									
5	2.2.2.3. Review and update links with other websites									
5	2.2.3. Implement awareness campaigns targeting different stakeholders at national and pilot site levels.									
5	2.2.3.1. Investigate relevant awareness campaigns									
5	2.2.3.2. Draft report									
5	2.2.3.3. Review report									
5-Benchmark	2.2.3.4. Print and deliver report to identified stakeholders									
5	2.2.3.5. Implement awareness raising campaign through project activities – links to relevant activities under all components									
5	2.2.4. Produce awareness-raising materials including newsletter, documentaries, fliers, etc. in appropriate languages for the target audiences.									
5	2.2.4.1. Define scope of work									
5	2.2.4.2. Identify and contract experts									
5	2.2.4.3. Develop workplan and timeline									
5	2.2.4.4. Review target audiences and modes of delivery									
5	2.2.4.5. Assess available information for use in the production of awareness-raising materials									
5	2.2.4.6. Gather new information to use in the production									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	of awareness-raising materials									
5-Benchmark	2.2.4.7. Produce and distribute awareness raising materials									
5	2.2.5. Monitor the effects of publicity and awareness campaigns on public awareness and incorporate findings into publicity and awareness campaigns.									
5-Benchmark	2.2.5.1. Produce monitoring tools for the assessment of the effects of publicity and awareness campaigns									
5-Benchmark	2.2.5.2. Use tools to assess public awareness levels before, during and after publicity and awareness campaigns									

6	2.3. Facilitate external communication, information exchange data transfer with international & regional organisations, neighbouring & partner countries.									
6	2.3.1. Facilitate external communications and information exchange with GISP, IPPC Secretariat, NEPAD Sub-regional Environment Action Plan, IGAD, ECOWAS, EAC and SADC and neighbouring countries.									
6	2.3.1.1. Define scope of work									
6	2.3.1.2. Identify and contract experts									
6	2.3.1.3. Develop workplan and timeline									
6	2.3.1.4. Identify appropriate bodies through which to channel external communication and information exchange									
6	2.3.1.5. Participate in appropriate meetings									
6-Benchmark	2.3.1.6. Produce reports on external communication and information exchange activities									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
6	2.3.2. Undertake workshops to exchange information on activities, outputs, outcomes and lessons learned among the four countries participating in the IAS project.									
6	2.3.2.1. Develop workshop agenda									
6	2.3.2.2. Hold workshops									
6-Benchmark	2.3.2.3. Produce final report on workshops									
6	2.3.3. Contribute IAS information for publication in international journals.									
6	2.3.3.1. Identify available information on IAS that is suitable for publication									
6	2.3.3.2. Identify appropriate vehicles for publication									
6-Benchmark	2.3.3.3. Produce and submit manuscripts for publication									
6	2.3.4. Disseminate information and lessons learned.									
6	2.3.4.1. Develop a dissemination plan and timeline									
6	2.3.4.2. Produce dissemination materials – linked to activities in Components 2 & 4									
6-Benchmark	2.3.4.3. Distribute dissemination materials to identified stakeholders									
6	2.3.4.4. Undertake visits (in country and regionally) to disseminate information and lessons learned									
	Component 3. Implementing strategies for the prevention and management of priority invasive alien species.	I1, E1, E3, G1, G3, G4, G5, U1, U3, U4, U5, Z1, Z3, Z4								
7	3.1. Establish appropriate IAS risk analysis procedures for quarantine authorities.									
7	3.1.1. Review risk analysis procedures as they apply to IAS.									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
7	3.1.1.1. Define scope of work									
7	3.1.1.2. Identify and contract experts									
7	3.1.1.3. Develop workplan and timeline									
7	3.1.1.4. Review relevant risk analysis procedures									
7	3.1.1.5. Draft report									
7	3.1.1.6. Review report									
7-Benchmark	3.1.1.7. Print and deliver report to identified stakeholders									
7	3.1.2. Establish appropriate risk analysis procedures and guidelines for IAS.									
7	3.1.2.1. Consultations to establish national risk assessment capacities, gaps and needs									
7	3.1.2.2. Draft report on appropriate risk analysis procedures for IAS									
7	3.1.2.3. Review report									
7-Benchmark	3.1.2.4. Print and deliver report to identified stakeholders									
7	3.1.3. Sensitisation of key stakeholders to facilitate the adoption of IAS risk analysis guidelines for quarantine procedures.									
7	3.1.3.1. Consult with identified stakeholders on proposed risk analysis guidelines									
7	3.1.3.2. Hold training sessions on proposed risk assessment guidelines – linked to 4.1.2.									
7-Benchmark	3.1.3.3. Produce final report on training									
7-Benchmark	3.1.3.4. Endorsement of risk analysis procedures by quarantine authorities									
8	3.2. Establish early detection and rapid response systems for IAS.									
8	3.2.1. Review the international and national experiences of early detection and rapid response systems at national									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	entry points and within country.									
8	3.2.1.1. Define scope of work									
8	3.2.1.2. Identify and contract experts									
8	3.2.1.3. Develop workplan and timeline									
8	3.2.1.4. Review relevant early detection and rapid response systems for IAS									
8	3.2.1.5. Draft report									
8	3.2.1.6. Review report									
8-Benchmark	3.2.1.7. Print and deliver report to identified stakeholders									
8	3.2.2. Build early detection and rapid response mechanisms for new IAS infestations around pilot national entry points and project pilot IAS management sites, including human, financial, regulatory, and institutional resources and support.									
8	3.2.2.1. Consultations to establish national and pilot site risk assessment capacities, gaps and needs									
8	3.2.2.2. Draft report on appropriate early detection and rapid response mechanisms for IAS around national entry points and project pilot IAS management sites									
8	3.2.2.3. Review report									
8	3.2.2.4. Print and deliver report to identified stakeholders									
8	3.2.2.5. Hold training sessions on proposed early detection and rapid response mechanisms – linked to 4.1.2.									
8-Benchmark	3.2.2.6. Produce final report on training									
8	3.2.2.7. Acquire necessary materials for implementation of early detection and rapid response mechanism									
8	3.2.3. Establish institutional linkages and communication and notification procedures to facilitate early detection and rapid response.									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
8	3.2.3.1. Consult with identified stakeholders									
8	3.2.3.2. Draft report on linkages and communication and notification procedures									
8	3.2.3.3. Consult with identified stakeholders									
8-Benchmark	3.2.3.4. Print and deliver report to identified stakeholders									
8-Benchmark	3.2.3.5. Establish national intersectoral monitoring and rapid response mechanism									
9	3.3. Conduct surveys at national level to document presence and impact of IAS.									
9	3.3.1. Determine impact criteria.									
9	3.3.1.1. Define scope of work									
9	3.3.1.2. Identify and contract experts									
9	3.3.1.3. Develop workplan and timeline									
9	3.3.1.4. Review methods for determining impact criteria									
9-Benchmark	3.3.1.5. Draft report									
9										
9	3.3.2. Develop methodology for defining IAS presence.									
9	3.3.2.1. Review methods for determining impact									
9-Benchmark	3.3.2.2. Draft report									
9	3.3.3. Develop methodology for defining IAS impact.									
9	3.3.3.1. Review methods for defining IAS impact									
9	3.3.3.2. Draft report incorporating information from 3.3.1 & 3.3.2									
9	3.3.3.3. Review report									
9	3.3.3.4. Draft report revision									
9	3.3.3.5. Review final report									
9-Benchmark	3.3.3.6. Print and deliver report to identified stakeholders									
9	3.3.4. Undertake surveys through existing organisations as appropriate.									
9	3.3.4.1. Review existing information on IAS presence									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	and impact									
9	3.3.4.2. Train collaborators in survey techniques - linked to 4.1.2.									
9	3.3.4.3. Undertake initial and repeat surveys in designated locations									
9	3.3.4.4. Data entry and analysis									
9-Benchmark	3.3.4.5. Produce survey reports									
9	3.3.5. Develop and populate national database on presence and impact of IAS – linked to 2.2.									
9	3.3.5.1. Construct outline national database									
9	3.3.5.2. Review of national database by identified stakeholders									
9-Benchmark	3.3.5.3. Produce information summaries from national database and make available on web-based information system									
9	3.3.5.4. Review and update national database									
9	3.3.6. Use information derived from this activity to produce and update national invasive plant lists.									
9	3.3.6.1. Produce draft national invasive plant list									
9	3.3.6.2. Review of draft national invasive plant list by identified stakeholders									
9-Benchmark	3.3.6.3. Produce updated plant list and make available on web-based information system									
9	3.3.6.4. Review and update plant list									
10	3.4. Implement, evaluate and document pilot control projects identified by the PDF-B for priority IAS threatening globally important biodiversity: Awash River catchment system – Ethiopia; the Oti Arm of the Volta Lake – Ghana; the Lake Mburo area – Uganda and; the Zambezi feeder water systems around Livingstone – Zambia (current									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	priority IAS – water hyacinth).									
10										
10	3.4.1. Review site and species selection carried out under PDF-B.									
10	3.4.1.1. Define scope of work									
10	3.4.1.2. Identify and contract experts									
10	3.4.1.3. Develop workplan and timeline									
10	3.4.1.4. Conduct consultation meetings									
10	3.4.1.5. Review existing information									
10	3.4.1.6. Draft report									
10	3.4.1.7. Review report									
10	3.4.1.8. Draft report revision									
10	3.4.1.9. Review final report									
10-Benchmark	3.4.1.10. Print and deliver report to identified stakeholders									
10										
10	3.4.2. Consult with identified stakeholders.									
10	3.4.2.1. Identify stakeholders									
10	3.4.2.2. Stakeholder consultations to identify purpose and objectives of control projects									
10	3.4.2.3. Draft report									
10	3.4.2.4. Review report									
10	3.4.2.5. Draft report revision									
10	3.4.2.6. Review final report									
10-Benchmark	3.4.2.7. Print and deliver report to identified stakeholders									
10	3.4.3. Establish and maintain contact with those working on the priority species to aid in formulation of long term control plans the sustainable management of their impact.									
10	3.4.3.1. Identify relevant individuals and institutions working on priority species									
10	3.4.3.2. Produce contacts database									
10	3.4.3.3. Establish contact with identified individuals and institutions									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
10-Benchmark	3.4.3.4. Make contact list and relevant information available on web-based information system – linked to 2.2.									
10	3.4.3.5. Review, update and upload contacts and information on priority species									
10										
10	3.4.4. Produce detailed ecosystem management plan to take account of the following among others: ecosystem and socio-economic goals, mechanisms for stakeholder involvement and resolution of conflicts of interest, available management methods, options for mitigation, options for ecosystem restoration, required trials as necessary, and synergies with other initiatives/organisations.									
10	3.4.4.1. Stakeholder consultations to produce detailed ecosystem management plans									
10	3.4.4.2. Draft management plan									
10	3.4.4.3. Review management plan									
10	3.4.4.4. Draft management plan revision									
10	3.4.4.5. Review final management plan									
10	3.4.4.6. Print and deliver management plan to identified stakeholders									
10-Benchmark	3.4.4.7. Endorsement of management plan by stakeholder agreements at pilot sites									
10	3.4.4.8. Review and revise management plan									
10										
10	3.4.5. Complete an environmental impact assessment on proposed interventions.									
10	3.4.5.1. Define scope of work									
10	3.4.5.2. Identify and contract experts									
10	3.4.5.3. Develop workplan and timeline									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
10	3.4.5.4. Undertake environmental impact assessment									
10	3.4.5.5. Revise management plan as necessary									
10	3.4.6. Project implementation including surveillance and mapping of the priority species in and around pilot sites, integrated management including biological control where recommended, biological and socio-economic results and outcomes monitoring and weed management and restoration trials if necessary.									
10	3.4.6.1. Consultations with identified stakeholders									
10	3.4.6.2. Mapping of priority species in and around pilot sites									
10	3.4.6.3. Data entry, analysis and uploading of relevant information to web-based information system									
10	3.4.6.4. Establish pre-treatment biological, socio-economic and outcomes monitoring									
10-Benchmark	3.4.6.5. Establish baseline biological, socio-economic and outcomes information									
10	3.4.6.6. Training of local community in monitoring activities as necessary - linked to 4.1.2.									
10	3.4.6.7. Establish and maintain control infrastructure and acquire necessary equipment									
10	3.4.6.8. Train local community in control activities									
10	3.4.6.9. Implement control activities									
10	3.4.6.10. Maintain monitoring									
10	3.4.6.11. Data entry, analysis and uploading of relevant information to web-based information system – linked to									
10-Benchmark	3.4.6.12. Documentation of changes from baseline									
10	3.4.6.13. Review control activities									
10	3.4.6.14. Revise management plan targets as necessary – linked to 3.4.5.5.									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1	Year 2	Year 3	Year 4
10	3.4.6.15. Establish and maintain biological control facilities as necessary					
10	3.4.6.16. Train local communities in biological control activities as necessary					
10	3.4.6.17. Implement biological control activities					
10	3.4.6.18. Review biological control activities					
10	3.4.6.19. Revise management plan targets as necessary – linked to 3.4.5.5.					
10	3.4.6.20. Establish and maintain management and restoration trials as necessary					
10	3.4.6.21. Train local communities in maintenance of management and restoration trials					
10	3.4.6.22. Implement management and restoration trials					
10-Benchmark	3.4.6.23. Review results of management and restoration trials					
10	3.4.6.24. Integrate results of management and restoration trials into management plan as necessary – linked to 3.4.5.5.					
10						
10	3.4.7. Disseminate results & lessons learned.					
10-Benchmark	3.4.7.1. Summarise control activities and monitoring results in annual reports					
10	3.4.7.2. Upload reports on to web-based information system – linked to 2.2.1.					
10	3.4.7.3. Distribute reports to identified stakeholders					
10-Benchmark	3.4.7.4. Disseminate information on control activities through activities and tasks outlined under Component 2					
10	3.4.8. Formulate follow-up plans – linked to 1.3.					
10	3.4.8.1. Draft follow-up plans					
10	3.4.8.2. Review follow-up plans					
10	3.4.8.3. Draft follow-up plans revision					

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
10	3.4.8.4. Review final follow-up plans									
10-Benchmark	3.4.8.5. Print and deliver follow-up plans to identified stakeholders									
11	3.5. The Amibara District in Afar Region – Ethiopia (current priority aquatic IAS - <i>Prosopis</i> species).									
11	Sub-activities and Tasks as detailed for Activity 3.4									
12	3.6. The Welenchiti area in the Oromiya Region – Ethiopia (current priority IAS - <i>Parthenium hysterophorus</i>).									
12	Sub-activities and Tasks as detailed for Activity 3.4									
13	3.7. The Afram Headwaters Forest Reserve – Ghana (current priority IAS - <i>Broussonetia papyrifera</i>).									
13	Sub-activities and Tasks as detailed for Activity 3.4									
14	3.8. The lake Mburo area – Uganda (current priority terrestrial IAS - <i>Cymbopogon nardus</i>).									
14	Sub-activities and Tasks as detailed for Activity 3.4									
15	3.9. The Budongo Forest Reserve – Uganda (current priority IAS - <i>Senna spectabilis</i>).									
15	Sub-activities and Tasks as detailed for Activity 3.4									
16	3.10. The Mosi-oa-Tunya National Park – Zambia (current priority IAS - <i>Lantana camara</i>).									
16	Sub-activities and Tasks as detailed for Activity 3.4									
17	3.11. The Chunga Lagoon, Lochinvar National Park – Zambia (Current priority IAS - <i>Mimosa pigra</i>).									
17	Sub-activities and Tasks as detailed for Activity 3.4									
	Component 4. Capacity building for prevention and management of	I1, E1, E3,								

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	IAS.	E4, G1, G2, U1, U4, Z1, Z5								
18	4.1. Conduct training programme for different stakeholders e.g. policy-makers, scientists, quarantine officers, extensionists and affected communities.									
18	4.1.1. Review of training needs assessment and agreement on training strategy.									
18	4.1.1.1. Define scope of work									
18	4.1.1.2. Identify and contract experts									
18	4.1.1.3. Develop workplan and timeline									
18	4.1.1.4. Review training needs assessment									
18	4.1.1.5. Draft report on needs assessment and training strategy									
18	4.1.1.6. Review report									
18	4.1.1.7. Draft report revision									
18	4.1.1.8. Review final report									
18-Benchmark	4.1.1.9. Print and deliver report to identified stakeholders									

18	4.1.2. Develop and implement customised training methods (stand alone short courses, seminars, modules and elements in existing courses, etc.) to build capacity in topics such as IAS awareness, risk analysis, IAS identification, IAS management, data management, accessing and using IAS information sources, communication and teaching of IAS issues and promotion of compliance and enforcement of IAS guidelines.									
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UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1	Year 2	Year 3	Year 4
18	4.1.2.1. Draft course outlines based on training strategy objectives					
18	4.1.2.2. Review course outlines					
18	4.1.2.3. Draft course materials					
18	4.1.2.4. Review course materials					
18	4.1.2.5. Finalise course materials					
18-Benchmark	4.1.2.6. Implement courses					
18	4.1.2.7. Course assessment					
18	4.1.3. Undertake post-graduate studies and research in IAS issues.					
18	4.1.3.1. Identify priority areas based on national IAS strategy, training needs assessment and training strategy – linked to 1.1					
18	4.1.3.2. Implement identified post-graduate studies and research					
18	4.1.3.3. Disseminate results through activities and tasks outlined under Component 2					
18	4.1.4. Pre and post implementation knowledge surveys.					
18	4.1.4.1. Develop methods for pre and post implementation knowledge monitoring					
18	4.1.4.2. Review methods					
18	4.1.4.3. Draft methods revision					
18	4.1.4.4. Implement knowledge surveys					
18	4.1.4.5. Assessment of knowledge surveys					
18-Benchmark	4.1.4.6. Produce information summaries from knowledge surveys and make available on web-based information system – linked to 2.2.1					
18	4.1.4.7. Disseminate results through activities and tasks outlined under Component 2					
19	4.2. Provide equipment and material support to quarantine					

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	departments, border crossings, IAS control units, etc.									
19	4.2.1. Review of equipment needs assessment and beneficiary institutions.									
19-Benchmark	4.2.2. Procure equipment and provide material support.									
20	4.3. Facilitate participation of national delegates in relevant international bodies e.g. the Interim Commission on Phytosanitary Measures, CBD, NEPAD, AMCEN, etc.									
20	4.3.1. Identify key bodies in which national delegates should be represented.									
20	4.3.1.1. Stakeholder consultations to identify appropriate bodies									
20	4.3.1.2. Establish contact with identified international bodies									
20										
20	4.3.2. Identify key national representatives attending international bodies.									
20	4.3.2.1. Stakeholder consultations to identify key national representatives – linked to 5.5 and other stakeholder consultations									
20-Benchmark	4.3.2.2. Participate in appropriate meetings									
20	4.3.2.3. Disseminate national information in meetings									
20-Benchmark	4.3.2.4. Produce reports on meetings attended									
21	4.4. Formulate programmes for integrating IAS issues into learning institution curricula – linked to 4.1.									
21	4.4.1. Establish communication and understanding with competent government organisations (MoE)/higher education institutions, etc. responsible for curriculum development in the country.									
21	4.4.1.1. Define scope of work									
21	4.4.1.2. Identify and contract experts									
21	4.4.1.3. Develop workplan and timeline									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
21	4.4.1.4. Stakeholder consultations with those responsible for curriculum development									
21	4.4.2. Review relevant curricula and develop guidelines for incorporating IAS issues into these curricula.									
21	4.4.2.1. Review curricula									
21	4.4.2.2. Draft report									
21	4.4.2.3. Review report									
21-Benchmark	4.4.2.4. Print and deliver report to identified stakeholders									
21-Benchmark	4.4.2.5. Guidelines adopted by national curricula development bodies									
21	4.4.3. Develop and distribute IAS curriculum-related packages for schools.									
21	4.4.3.1. Consultations with identified stakeholders – linked to 4.4.1.4									
21	4.4.3.2. Produce draft materials									
21	4.4.3.3. Review materials									
21-Benchmark	4.4.3.4. Produce final materials									
21-Benchmark	4.4.3.5. Distribute materials to pilot schools									
21	4.4.4. Integrate IAS issues into curricula of pilot schools and higher education institutions.									
21	4.4.4.1. Consult with identified stakeholders – linked to 4.4.1.4									
21	4.4.4.2. Produce curriculum materials									
21	4.4.4.3. Review curriculum materials									
21	4.4.4.4. Produce final curriculum materials									
21-Benchmark	4.4.4.5. Use materials for incorporation of IAS issues into curricula									
21-Benchmark	4.4.4.6. IAS modules incorporated into a university course in each country									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	Component 5. Project management co-ordination	II, E1, G1, U1, Z1								
22	5.1. Make arrangements for overall project administration and implementation infrastructure.									
22	5.1.1. Appoint global project coordinator.									
22	5.1.1.1. Define scope of work									
22-Benchmark	5.1.1.2. Identify and contract personnel									
22										
22-Benchmark	5.1.2. Appoint project personnel in participating countries.									
22	5.1.2.1. Define scope of work									
22	5.1.2.2. Identify and contract personnel									
22-Benchmark	5.1.3. Establish and equip national project offices.									
23	5.2. Establish and operate accounting and activity reporting system.									
23-Benchmark	5.2.1. Develop an accounting system									
23	5.2.2. Implement an accounting system									
23-Benchmark	5.2.3. Develop activity reporting systems									
23	5.2.4. Implement activity reporting systems									
24	5.3. Inception phase & preparation of work plans									
24	5.3.1. Review project documents									
24	5.3.2. Prepare draft project and annual work plans									
24	5.3.3. Review work plans									
24-Benchmark	5.3.4. Finalise work plans									
25	5.4. Conduct training workshops for personnel in project countries.									
25	5.4.1. Review project personnel training needs									
25	5.4.2. Formulate terms of reference for training workshops									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
25	5.4.3. Hold training workshops in project countries									
25-Benchmark	5.4.4. Produce workshop reports									
26	5.5. National Steering Committee meetings.									
26	5.5.1. Stakeholder consultations to establish National Steering Committee									
26-Benchmark	5.5.2. Draft terms of reference for National Steering Committee									
26-Benchmark	5.5.3. Meetings to take place at least once every quarter									
26	5.5.4. Approve guidelines and criteria for project management									
26	5.5.5. Approve budget and work plans									
26	5.5.6. Approve key experts and contractors									
26	5.5.7. Approve project reports									
26	5.5.8. Oversee monitoring and evaluation									
26	5.5.9. Seek continued/additional co-funding from project partners									
26-Benchmark	5.5.10. Produce National Steering Committee minutes									
27	5.6. International Steering Committee meetings									
27	5.6.1. Stakeholder consultations to establish International Steering Committee									
27-Benchmark	5.6.2. Draft terms of reference for International Steering Committee									
27-Benchmark	5.6.3. Meetings to take place annually									
27	5.6.4. Provide technical support to project personnel									
27	5.6.5. Track project progress and project impact									
27	5.6.6. Review budget and work plans									
27	5.6.7. Review project reports									
27	5.6.8. Seek co-financing									
27-Benchmark	5.6.9. Produce International Steering Committee reports									
28	5.7. Establish and implement M&E plan									
28	5.7.1. Finalise M&E plan, indicators and baseline									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
28	5.7.1.1. Consult with stakeholders on M&E plan and baseline									
28	5.7.1.2. Prepare draft M&E plan and baseline									
28	5.7.1.3. Review M&E plan and baseline									
28-Benchmark	5.7.1.4. Finalise M&E plan and baseline									
28	5.7.1.5. Implement M&E plan									
28	5.7.2. Implement M&E plan and reporting									
28-Benchmark	5.7.2.1. Prepare and submit semi-annual progress reports									
28-Benchmark	5.7.2.2. Prepare and submit quarterly financial reports									
28	5.7.2.3. Monitor the achievement of milestones and outputs as specified in annual work plans									
28	5.7.2.4. Establish that deviations from plans are reported in a timely fashion and corrected promptly									
28	5.7.2.5. Monitor procurement procedures									
28	5.7.2.6. Monitor audit reports									
28	5.7.2.7. Monitor that project personnel and steering committees are fulfilling their terms of reference									
29	5.8. Conduct national midterm evaluation workshops of the project and take necessary action to improve project delivery (UNEP Independent study).									
29	5.8.1. Define scope of work									
29	5.8.2. Identify and contract experts									
29	5.8.3. Develop workplan and timeline									
29	5.8.4. Perform midterm evaluation									
29	5.8.5. Circulate midterm evaluation among identified stakeholders									
29	5.8.6. Approve midterm evaluation									
29	5.8.7. Incorporate midterm evaluation findings into modified work plans									
30	5.9. Perform terminal evaluation of the project (UNEP									

UNEP Activity Number	Components, Activities, Sub-activities and Tasks	Lead Institutions	Year 1		Year 2		Year 3		Year 4	
	independent study).									
30	5.9.1. Define scope of work									
30	5.9.2. Identify and contract experts									
30	5.9.3. Develop workplan and timeline									
30	5.9.4. Perform terminal evaluation									
30	5.9.5. Submit terminal evaluation									

ANNEX C. STAP REVIEW

Project Number: TBA
Project Name: **Removing Barriers to Invasive Plant Management in Africa**
Countries: **Ethiopia, Ghana, Uganda, Zambia**
STAP Reviewer: Dr. J. Michael Halderman, Independent Consultant, Berkeley, CA
Date: November 3, 2004

General Issues

a) Global priority of project in regard to biodiversity

The project has high global priority in regard to conserving biodiversity. By dealing with invasive alien species (IAS) the project addresses the second most important cause of global loss of biodiversity. IAS is a major current threat to biodiversity in Africa (the acronym IAS refers to invasive plants in the project documents because first priority among invasive alien species was correctly given to plants). If the threat posed by IAS is to be significantly reduced the factors involved need to be much better recognized and understood, and the barriers to managing invasive plants in Africa removed. The present project is therefore relevant, important and timely.

b) Cost-effectiveness of proposed project interventions in regard to achieving focal area objective(s)

The approach taken in the project (the four components are briefly described below in this review, and Annex A of the project documents presents the incremental costs and benefits) is cost-effective in regard to achieving the project's objectives of: (a) removing barriers to the management of IAS through effective implementation of the Convention on Biological Diversity Article 8(h) in four African countries and thereby (b) promoting the conservation of globally significant ecosystems, species and genetic diversity in Africa. Prevention of IAS is emphasized in all four project components in recognition of the generally accepted view that prevention (rather than control) is the most cost effective long term approach to dealing with IAS. The need expressed in project documents to include pilot control programs that would address some impacts of IAS currently perceived as major threats in the four countries (to gain legitimacy and support for the project among stakeholders at all levels) is valid and justifies the cost involved. It is correct, as stated in the documents, that not addressing IAS-caused problems through pilot control programs would jeopardize the support needed in the four countries for the project to work towards its broader objectives.

c) Adequacy of project design (overall design, Logframe, pilot sites)

The project is appropriately designed to achieve its objectives. (As discussed below, the four year time frame of the project is too short for the project to achieve these objectives.) During project preparation four categories of barriers to effectively managing IAS in the selected African countries were identified and four corresponding components of the project developed. Each of the four components is relevant and necessary (sound arguments are presented in Annex I).

Component 1 (strengthening the enabling policy environment) is essential as the present policy and institutional environment is inadequate, fragmented and inconsistent. Component 2 (provision, exchange and utilization of information among key stakeholders in IAS management) is necessary as existing information in the countries concerned is limited, sectoral, single species (not ecosystem) focused, and difficult to access (including information available internationally). Component 3 (implementation of IAS control and prevention programs) is necessary for the project to achieve its goals. Component 4 (building capacity for sustainable IAS management) is necessary to achieve effective management of IAS on a sustainable basis.

The selection of the four African countries involved in the project (Ethiopia, Ghana, Uganda, Zambia) was appropriate as they are from different regions and have different biodiversity conditions (relevant to replication in and dissemination to other African countries), experience significant problems with IAS and

have officially recognized threats from IAS, have ratified the CBD, and have actively participated in project preparation.

The Logframe is generally sound. Some assumptions in the Logframe appear questionable, for example those dealing with whether trained staff would be available to carry out certain activities. It would seem a project responsibility to ensure that staff be trained (under component 4) and available to carry out key activities.

The pilot sites in the four countries (as described in Annex G.III) appear to have been well selected according to appropriate criteria. However, the assumption (“consensus is reached on control programme and any conflicts of interest resolved”) under Output 3 in the Logframe regarding the endorsement of ecosystem IAS management plans at pilot sites by year two actually represents one of the key challenges facing the project. Although the project brief states that participatory approaches will be used where appropriate to allow resolution of potential conflicts in pilot control programs, presenting this challenge as an assumption in the Logframe suggests that this matter may be considered somewhat beyond the scope of the project. The importance of resolving conflicts of interest at various levels in order to achieve project objectives requires much more attention than, on the basis of project documents, this matter has so far received and is discussed under “d” below. The limited discussion of participatory development in the project documents is discussed under “stakeholder involvement” below.

d) Feasibility of implementation, management capacity and O&M

The coordination and implementation arrangements (Project Brief and Annex F) developed for the project are appropriate and sound. Management capacity at the regional level appears solid, but a clear indication of the coordination and management challenge the project faces is provided by the three pages of acronyms and abbreviations at the beginning of the project brief that identify the very large number of institutions and groups involved. Key factors confronting those involved with project coordination and management are the different and sometimes complex political and administrative conditions in the four African countries, as well as differences in regard to national efforts to deal with IAS issues. These factors may well affect project implementation in the different countries. Project preparation in Uganda appears relatively advanced. For example, task teams led by different Ugandan institutions are responsible for each of the four project components. If this approach works well and if conditions are appropriate, at a later stage the project might consider introducing this approach in one or more of the other countries. In view of Ethiopia’s size and federal system, it is appropriate that project executing structures will be established at both the regional and district levels. It might be significant that Ethiopia has not finalized its National Biodiversity Strategy and Action Plan (NBSAP) and it has not approved a draft proclamation to allow the use of biological control agents.

Successfully resolving conflicts between different stakeholder groups will be one of the key challenges facing the project in its efforts to achieve its objectives. Potential conflicts range from competition between different ministries and agencies at the national level to different views on the part of stakeholder groups in the pilot control programs. Project designers are aware of these potential problems, for example between agriculture and environment sectors. Extensive stakeholder consultations and the deliberate involvement of staff from several ministries took place during project preparation and this approach will be continued in the main project. While this approach is certainly appropriate and necessary, in some places project documents suggest that awareness raising among various stakeholder groups is the key to reaching consensus. More emphasis should be given in project design, and particularly in project activities, to the fact that awareness-raising is only part of the solution to the deeper problems that usually involve political factors (at various levels) and/or competition for scarce resources. During the mid-term review it would be useful to assess the success of the project’s approach to resolving the inevitable conflicts in the four countries and to decide if changes in approach are needed.

The evolving approach to monitoring seems appropriate for scientific, technical, administrative and financial issues but could be strengthened in regard to participation and socioeconomic issues, particularly those related to the pilot sites, where more emphasis on qualitative factors would be useful.

Perhaps the most important factor regarding feasibility of implementation is that the project's four year time period is far too short for significant progress to be achieved and a solid basis for sustainable activities firmly established. A more realistic time period would be 10-15 years. The present project should be seen as a necessary first step and not the solution to the problems.

Key Issues

i. Scientific and technical soundness of the project.

The project has been carefully and thoroughly designed following sound technical and scientific principles. The organizations involved are leaders in the field internationally and within the four African countries. UNEP is the International Implementing Agency. CABI and IUCN were founder members of the Global Invasive Species Program (GISP, established in 1997) that has developed a Global Strategy on Invasive Alien Species and hosted key international meetings on IAS matters. CABI played the lead role in project preparation, will be the lead executing agency and will host the international project coordination unit. The IUCN will be the second lead agency for the project and will provide the assistant project coordinator. An Invasive Species Strategy and Action Plan will be developed in each of the four African countries and used to guide further activities. The descriptions of the pilot sites in each country (Annex G.III) provide evidence of the global priority and technical soundness of this project proposal.

Appropriate institutions have been selected as national executing agencies in the four African countries: the Ethiopian Agricultural Research Organization (Ethiopia), Council for Scientific and Industrial Research (Ghana), National Environment Management Authority (Uganda), Environmental Council of Zambia (Zambia).

Specific measures will be taken to ensure technical and scientific soundness throughout the life of this project including the establishment of: an international steering committee, international advisory group, national steering committees, national advisory committees and sub-committees. The combination of the project's adaptive management approach and these committees and groups should enable the project to maintain high technical and scientific standards.

Several issues usually included here in a STAP Review have been addressed above under "general issues." Additional issues relevant to this point are discussed below under "stakeholder involvement."

ii. Identification of the global environmental benefits and/or drawbacks of the project.

The project aims to remove barriers to the management of invasive alien plants (as briefly explained above). Given the baseline situation in the four African countries, IAS represent a major threat to globally significant biodiversity. There is compelling evidence that the problems will get worse if significant steps are not taken rapidly. Representatives of African countries at a meeting hosted by GISP in 2000 identified invasive plants as the most important current threat to biodiversity in Africa. The descriptions of the pilot sites in the four African countries (Annex G.III) provide considerable information on specific environmental problems and issues. Looking more broadly, if all four components of the project are successful over a long enough period (10-15 years) the project could produce major environmental benefits in regard to conserving globally significant ecosystems, species and genetic diversity. The effects would be most significant in wetland and aquatic ecosystems, but would also take place in natural grasslands and elsewhere. No globally significant environmental drawbacks were identified.

iii. Project fit within the context of GEF goals, operational strategies, programme priorities, Council guidance and relevant conventions.

The project fits well with GEF goals, operational strategies, program priorities and guidance. The proposed project explicitly aims to implement Article 8(h) of the Convention on Biological Diversity in four African countries, and it faithfully reflects the criteria and spirit of the Biodiversity focal area. Article 8(h) of the CBD aims to prevent the introduction of, to control, or to eradicate those alien species which threaten ecosystems, habitats and species.

The project fits appropriately with Operational Program Number 1 (Arid and Semi-Arid Zone Ecosystems), Operational Program Number 2 (Coastal, Marine, and Freshwater Ecosystems) and Operational Program Number 3 (Forest Ecosystems). Further, the project will work to mainstream biodiversity in productive landscapes and sectors (biodiversity strategic priority number 2) and to disseminate relevant best practices (biodiversity strategic priority number 4).

iv. Regional context.

Over the years invasive alien plants have entered Africa intentionally and accidentally. Increasing trade between African countries, and with the rest of the world, increases the likelihood of additional invasive plants arriving in the future. Sub-Saharan Africa is the region being addressed by the proposed project. The four specific African countries (Ethiopia, Ghana, Uganda, Zambia) selected for this project provide an appropriate regional balance as they represent different biodiversity conditions and experiences relevant to IAS (as noted above).

v. Replicability of the project.

The project has been designed, primarily under Component 2, to promote dissemination of its findings and replication of its methods at national, regional and international levels. There are solid plans to establish national information systems (websites and data bases) as well as linkages between the four participating African countries and relevant international websites and data bases. A project website will make a variety of project documents available. Given the involvement of CABI and IUCN, it is likely that this aspect of the project will perform well. There are also appropriate plans for a variety of more conventional activities to increase awareness of IAS-related issues among various stakeholders within the participating countries and in neighbouring countries.. In addition to disseminating information through regional organizations, more direct methods involving face to face interaction will be employed to promote dissemination in neighbouring countries. The latter include attachments for officials from nearby countries to the IAS units set up in the four participating countries and road shows with officials of participating countries travelling to other countries to share their experiences.

There should be considerable opportunity for replication if the project is successful in developing appropriate and effective information, lessons and materials.

vi. Sustainability of the project.

The project is well designed and deserves to be approved and financed by the GEF. Even if the project performs well, however, it is very unlikely that its activities and impact will be sustainable (according to environmental, socioeconomic, institutional and financial criteria) within four years. Removing barriers to invasive plant management in Africa is simply too big and complex a task for a project of this size in such a short time period. What the project can realistically achieve in four years is to develop a solid foundation upon which continuing work can build.

One of the most valuable contributions the project could make to promote genuine sustainability of project activities and impact would be to pioneer successful strategies and approaches to resolve misunderstandings and conflicts between various stakeholders. Achieving real progress in this direction will require building on the existing project approach but also a shift in emphasis. Much will depend on the quality of the individuals recruited by the project and on the specific approach taken to deal with these problems. The context (political, institutional, socioeconomic, etc) varies considerably between the four participating countries, and this may well influence project activities and results.

Secondary Issues

vii. Linkages to other focal areas.

The project deals with biodiversity and is linked to international waters.

viii. Linkages to other programmes and action plans.

The project has established links with some key related projects and activities, while other links are to be developed during the course of project implementation. The project intends to communicate, and coordinate where necessary, with some of the numerous activities related to biodiversity conservation, including those funded by GEF (Annex G IV provides an extensive list of related projects). The project brief indicates that there is considerable scope and need for linkages with other projects at the national and pilot site levels.

The proposed GEF-funded project “*Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management*” is clearly very closely related to the project under review here. The other project will be global in scope and implemented through GISP and regional networks of individuals and organizations involved in IAS management. According to project documents the two projects will be complementary and “project synergies” will be maintained by a two-way flow of information. Another GEF-funded project, “*Reducing Biodiversity Loss at Cross Border Sites in East Africa*,” appears particularly relevant as it deals with the critical issues of land use, land tenure systems and relevant policy. It was not possible to determine if there are specific links to that project. If not, it would be useful to establish effective linkages and benefit from the lessons learned by that project.

ix. Other beneficial or damaging environmental effects.

No damaging environmental effects were identified or are apparent.

x. Stakeholder involvement.

The project designers have done an impressive job of involving a wide variety of stakeholders in project preparation. This work has taken place at the country, regional and pilot site levels. A theme of this review is that resolving misunderstandings and conflicts between different stakeholders, at various levels, should become a more explicit focus and one of the key objectives of the project.

A participatory approach is to be taken at the pilot sites, but there is very little information provided about what this approach will involve. Reference in project documents to such an approach is consistent with the widespread recognition among rural development professionals that a decentralized, participatory approach is much more effective and sustainable than other approaches. But the project documents do not address, or indicate recognition, of why local communities do not necessarily have a single point of view on issues. Rural communities in Africa tend to be stratified by age, kinship and gender. In addition, they often reflect different interests based on wealth, involvement in the market, political affiliations etc. These differences can pose significant challenges for those working with such communities, as well as for those within the communities who are trying to reach agreement on contentious issues. In view of the project’s involvement with communities, it might be useful to briefly discuss in the project brief the designers’ views on such issues.

In regard to (a) the involvement of women in the project and (b) the value of indigenous knowledge, it might be useful to specify what concrete steps will be taken to ensure that these two issues will be effectively followed up during project implementation.

xi. Capacity building.

The emphasis on capacity building is a key aspect of this project. Building effective capacity at the various levels is essential to the achievement of the project’s objectives and to the long term sustainability of project activities. It will take considerably longer than four years to build the needed capacity. The Logframe provides as assumptions some points that might be dealt with by capacity building, although some aspects may be beyond the control of the project.

xii. Innovativeness of the project.

The project is addressing a very important problem - removing barriers to invasive plant management in Africa - that has to date received far too little attention. The project’s multi-sectoral approach that follows

the guidelines of integrated ecosystem management is appropriate, and it is innovative in the way it is used to address the continental problem.

Recommendations

The project is soundly designed using four appropriate components to address the pressing IAS problem in Africa. It should be approved and financed by the GEF. Project strengths include the multi-sectoral approach, stakeholder participation and consultation. However, four years is far too little time for the project to achieve its important objectives, particularly in regard to sustainability. One of the most valuable contributions the project could make to promote genuine sustainability of project activities and impact would be to pioneer successful strategies and approaches to resolve misunderstandings and conflicts between various stakeholders. Achieving real progress in this direction will require a shift in emphasis.

ANNEX C1. STAP REVIEW RESPONSE

1. The STAP Review confirms that the project is/has:

- a high global priority in regard to conserving biodiversity
- relevant, important and timely
- appropriately designed to achieve its objectives
- cost-effective in terms of achieving the project's objectives
- an appropriate regional balance with the four pilot countries representative for the IAS problems in Africa (Ethiopia, Ghana, Uganda, Zambia)
- appropriate and sound co-ordination and implementation arrangements
- an appropriate and innovative approach which is multi-sectoral and follows the guidelines of integrated ecosystem management
- scientifically and technically sound
- extensive stakeholder consultations during initiation and design
- fully suited to the regional needs and requirements
- fully eligible for GEF assistance

General Issues

a. Global priority of project in regard to biodiversity

2. No issue

b. Cost-effectiveness of proposed project interventions in regard to achieving focal area objective(s)

3. No issue

c. Adequacy of project design (overall design, Logframe, pilot sites)

4. Issue: The Logframe is generally sound. Some assumptions in the Logframe appear questionable, for example those dealing with whether trained staff would be available to carry out certain activities. It would seem a project responsibility to ensure that staff be trained (under component 4) and available to carry out key activities.

5. Response: We accept that the wording of some of the assumptions in the Logframe regarding the availability of trained staff was imprecise. These assumptions have now been reworded (see Annex B). The point we were trying to make in the assumptions is, staff that have been trained by the project are not lost to the system due to reasons beyond our control e.g. HIV/AIDs (See paragraph 78). As the STAP Reviewer correctly points out, staff training will be carried out under Component 4 to enable the project activities to be implemented, should the assumptions hold.

6. Issue: The assumption, “consensus is reached on control programme and any conflicts of interest resolved” under Outcome 3 in the Logframe regarding the endorsement of ecosystem IAS management plans at pilot sites by year two actually represents one of the key challenges facing the project. Although the project brief states that participatory approaches will be used where appropriate to allow resolution of potential conflicts in pilot control programs, presenting this challenge as an assumption in the Logframe suggests that this matter may be considered somewhat beyond the scope of the project. The importance of resolving conflicts of interest at various levels in order to achieve project objectives requires much more attention than, on the basis of project documents, this matter has so far received and is discussed under “d” below. The limited discussion of participatory development in the project documents is discussed under “stakeholder involvement” below.

7. Response: We recognise that endorsement of ecosystem IAS management plans at the pilot sites is one of the key challenges facing this project. On the basis of the reviewer's comments, however, it would appear that we have not conveyed the importance of issues relating to ‘resolving conflicts of interest,’ in

the project documentation. To take this into account we have reformulated the assumption under Outcome 3 (See Annex B) to make it clear that issues such as community involvement and resolving conflicts of interest must be within the scope of the project. An expanded discussion of these aspects has been incorporated into the Project Component Annex (Annex I). We have also expanded our discussion under the 'Stakeholder involvement' section in the Project Proposal (see below).

d. Feasibility of implementation, management capacity and O&M

8. Issue: Key factors confronting those involved with project coordination and management are the different and sometimes complex political and administrative conditions in the four African countries, as well as differences in regard to national efforts to deal with IAS issues. These factors may well affect project implementation in the different countries.

9. Response: Agree that complex political and administrative challenges will be among the key factors confronting those involved with project co-ordination. These issues have been explicitly taken into account in the text (See paragraphs 87 and 89) and in Annexes F and J. From previous experience, the National Steering Committees and Advisory Groups will exert a mitigating effect on some of the complex issues arising in each country, and both of the International Executing Agencies i.e. CAB International (established in 1908) and IUCN (established in 1943) have had considerable experience in managing these challenges. As a further measure we intend developing a, 'Risk Assessment Matrix' during the initial 6 month inception phase.

10. Issue: It might be significant that Ethiopia has not finalized its National Biodiversity Strategy and Action Plan (NBSAP) and it has not approved a draft proclamation to allow the use of biological control agents.

11. Response: Ethiopia does have an advanced draft of its National Biodiversity Strategy and Action Plan (NBSAP) and although it has not been finalised, it is being utilised in its draft form, so this is not considered to be an obstacle to project implementation. Indeed it is our intention that this project can serve as a catalyst for finalising the NBSAP in Ethiopia. The draft proclamation to allow the use of biological control agents in Ethiopia is in its final stages of approval, and it is intended that project activities under Component 1 will facilitate its adoption (See paragraph 50) early on in the project to enable Biocontrol programmes to be implemented.

12. Issue: In some places project documents suggest that awareness-raising among various stakeholder groups is the key to reaching consensus. More emphasis should be given in project design, and particularly in project activities, to the fact that awareness-raising is only part of the solution to the deeper problems that usually involve political factors (at various levels) and/or competition for scarce resources.

13. Response: Although we agree that awareness-raising amongst various stakeholder groups is only part of the solution in terms of reaching consensus, it remains a crucial first step, especially amongst policy-makers, towards reaching consensus. Perhaps part of the problem here is one of terminology. In order to clarify our approach we have now emphasised these points in the text (See paragraph 50) and the Project Component Annex (Annex I).

14. Issue: During the mid-term review it would be useful to assess the success of the project's approach to resolving the inevitable conflicts in the four countries and to decide if changes in approach are needed.

15. Response: Agree this would be useful and will be included in the Terms of Reference for the mid-term review. The planned development of a 'Risk Assessment Matrix' during the initial 6 month inception phase will further support this process.

16. Issue: The evolving approach to monitoring seems appropriate for scientific, technical, administrative and financial issues but could be strengthened in regard to participation and socioeconomic issues, particularly those related to the pilot sites, where more emphasis on qualitative factors would be useful.

17. Response: Agree that the text could be strengthened with regard to participation and socioeconomic issues, especially those related to the pilot sites. Wording in the relevant sections in the text i.e. Monitoring, Evaluation and Dissemination (See paragraph 114) and Annex I has been modified to place more emphasis on the importance of participation and socio-economic issues, and other qualitative factors, in particular those affecting the management of IAS at pilot sites.

18. Issue: Perhaps the most important factor regarding feasibility of implementation is that the project's four year time period is far too short for significant progress to be achieved and a solid basis for sustainable activities firmly established. A more realistic time period would be 10-15 years. The present project should be seen as a necessary first step and not the solution to the problems.

19. Response: Agree that a more realistic time period for the establishment of systems for managing IAS in developing countries – a relatively new concept - would be 10-15 years. However, as was clearly demonstrated during the PDF-B significant progress can be achieved within shorter time-frames, especially in terms of deliverables at pilot sites. The essence of this project is to remove the barriers to invasive plant management in developing countries. A key aspect of this project is to pilot approaches towards the sustainable management of IAS e.g. by exploring different models for financial sustainability, which can ultimately be scaled-up both nationally and regionally. Thus, this project should be seen as a necessary first step towards establishing a solid foundation for the management of IAS in developing countries in the longer term.

Key Issues

i. Scientific and technical soundness of the project.

20. No issues

ii. Identification of the global environmental benefits and/or drawbacks of the project.

21. No issues

iii. Project fit within the context of GEF goals, operational strategies, programme priorities, Council guidance and relevant conventions.

22. No issues

iv. Regional context.

23. No issues

v. Replicability of the project.

24. No issues

vi. Sustainability of the project.

25. Issue: The project is well designed and deserves to be approved and financed by the GEF. Even if the project performs well, however, it is very unlikely that its activities and impact will be sustainable (according to environmental, socioeconomic, institutional and financial criteria) within four years. Removing barriers to invasive plant management in Africa is simply too big and complex a task for a project of this size in such a short time period. What the project can realistically achieve in four years is to develop a solid foundation upon which continuing work can build.

26. Response: Agree that what the project can realistic achieve in four years is to develop a solid foundation for the sustainable management of IAS in developing countries in the longer term (See Annex C1 paragraph 19).

27. Issues: One of the most valuable contributions the project could make to promote genuine sustainability of project activities and impact would be to pioneer successful strategies and approaches to resolve misunderstandings and conflicts between various stakeholders. Achieving real progress in this direction will require building on the existing project approach but also a shift in emphasis. Much will depend on the quality of the individuals recruited by the project and on the specific approach taken to deal with these problems. The context (political, institutional, socioeconomic, etc) varies considerably between the four participating countries, and this may well influence project activities and results.

28. Response: Agree that pioneering successful strategies and approaches to resolve misunderstandings and conflicts between various stakeholders would be one of the most valuable contributions of this project towards sustainability of project activities and impact. Considerably more emphasis has now been given to these aspects in the wording in the text (See paragraph 50) as well as the Detailed Description of Project Components (Annex I). Further agree that the quality of the individuals recruited by the project will be a key determinant in the approach to resolving misunderstandings and conflicts adopted by the project. All co-ordinators will be following a quality-based selection procedure (See paragraph 87) and one of the selection criteria will be a proven ability/track record in conflict resolution (see Annex J). Training and workshops provided by the project are additional forums for seeking conflict resolution. Finally, it is recognised that the political, institutional and socio-economic context varies considerably between the four participating countries (See Annex C1, paragraph 9).

Secondary Issues

vii. Linkages to other focal areas.

29. No issue

viii. Linkages to other programmes and action plans.

30. Issue: Another GEF-funded project, “*Reducing Biodiversity Loss at Cross Border Sites in East Africa*,” appears particularly relevant as it deals with the critical issues of land use, land tenure systems and relevant policy. It was not possible to determine if there are specific links to that project. If not, it would be useful to establish effective linkages and benefit from the lessons learned by that project.

31. Response: We are aware of the GEF project, “*Reducing Biodiversity Loss at Cross Border Sites in East Africa*,” (See Annex Giv) and have already established specific links to the project through its co-ordinator, Dr Alan Rodgers, United Nation Development Project (See paragraph 37).

ix. Other beneficial or damaging environmental effects.

32. No issue

x. Stakeholder involvement.

33. Issue: A theme of this review is that resolving misunderstandings and conflicts between different stakeholders, at various levels, should become a more explicit focus and one of the key objectives of the project.

34. Response: Agree that resolving misunderstandings and conflicts between different stakeholders at various levels will underpin the success of the project and was not sufficiently emphasised in the text. These issues have now been given a more explicit focus in the text (See Paragraph 94 and Annexes B and I), however rather than being a key objective, we would consider these issues to be a cross-cutting approach to achieving the objectives of the project, and ensuring sustainability.

35. Issue: The project documents do not address, or indicate recognition, of why local communities do not necessarily have a single point of view on issues. These differences can pose significant challenges for those working with such communities, as well as for those within the communities who are trying to reach agreement on contentious issues. In view of the project's involvement with communities, it might be useful to briefly discuss in the project brief the designers' views on such issues.

36. Response: Agree that the project documents did not adequately address or indicate recognition of differing views within local communities. The wording in the text has now been expanded to demonstrate recognition of these issues and emphasise why a participatory approach is essential in the development of an effective and sustainable IAS management (See paragraph 108 & 109 and Annex I).

37. Issues: In regard to (a) the involvement of women in the project and (b) the value of indigenous knowledge, it might be useful to specify what concrete steps will be taken to ensure that these two issues will be effectively followed up during project implementation.

38. Response: Agree that these are extremely important points. During the PDF-B phase of the project it was recognised that women were inadequately represented at all levels. To address the concerns of the reviewer the text has been revised to include a paragraph on the involvement of women and affirmative measures to be implemented to ensure appropriate levels of representation in the full project (See paragraph 103). Indigenous knowledge was captured during socio-economic assessments carried out under the PDF-B phase of the project (See paragraph 61 and Annex I). This information has been collated in national project reports and ways of utilising this knowledge will be considered in further detail during the inception phase of the project.

xi. Capacity building.

39. Issue: Building effective capacity at the various levels is essential to the achievement of the project's objectives and to the long term sustainability of project activities. It will take considerably longer than four years to build the needed capacity.

40. Response: Agree that it will take considerably longer than four years to build the needed capacity, however, Component 4 is a necessary first step towards building capacity in IAS management (See Annex C1, paragraph 19).

41. Issue: The Logframe provides as assumptions some points that might be dealt with by capacity building, although some aspects may be beyond the control of the project.

42. Response: Agree that some of the assumptions concerning capacity building were inappropriately worded, and these have now been revised to take account of the training which is planned under Component 4 (See Annex B and C1, paragraph 5). Assumptions concerning capacity building, especially training, that may be beyond the control of the project, have been reworded (See Annex B).

xii. Innovativeness of the project.

43. No Issue

Recommendations

44. Issue: Four years is too little time for the project to achieve its important objectives, particularly in regard to sustainability. One of the most valuable contributions the project could make to promote genuine sustainability of project activities and impact would be to pioneer successful strategies and approaches to resolve misunderstandings and conflicts between various stakeholders.

45. Response: Agree that removing barriers to invasive plant management in Africa is a complex task and it will require more than four years for the activities and impacts to become fully sustainable. Nevertheless, considerable progress was made during the PDF-B phase, and this is expected to continue during the full project (See Annex C1, paragraph 19). Thus, the progress achieved during this project will establish a solid foundation for the long-term management of IAS in developing countries.

ANNEX D: LETTERS OF ENDORSEMENT



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The Federal Democratic Republic of Ethiopia
ENVIRONMENTAL PROTECTION AUTHORITY

ቀን 20 SEP 2004
Date
ቁጥር 1/AA/16/2004
Ref. No.

Mr. Ahmed Djoghlaif
Director, UNEP division of GEF Co-ordination
Nairobi, Kenya

Fax: 254 20 62 40 41

Subject: Endorsement of Full Project on "Removing Barrier to Invasive Plants
Management in Africa: Ethiopia, Uganda Zambia and Ghana"

The Ethiopian Agricultural Research Organization (EARO) has requested the endorsement of the aforementioned project. As you might be aware, EARO together with the CAB-International-Africa Regional Center has been working on developing initiative for 'Removing Barriers to Invasive Plant Management' in Ethiopia.

Indeed, Invasive Alien Species are one of the most serious growing threats to the biodiversity and other resources in Ethiopia. The project outputs are also consistent with the national environmental strategies.

The GEF National Operational Focal Point, Environmental Protection Authority therefore, fully support the implementation of the project.

Cc.

Mr. Dennis Rangi, Director
CAB International-Africa Regional Center,
Nairobi, Kenya
Fax, + 254-20-522150/524001

Dr Tsedeke Abate
Director General EARO
Fax: 251-1-46 12 94
P.O.Box 2003
Addis Ababa, Ethiopia



Sincerely yours

For / *[Signature]*

BERHANE G/EGZIABHER (Dg)
DIRECTOR GENERAL

☎ 46 50 07 ☎ 12760
46 50 11
46 50 10

ቴሌ ፋክስ
TELE FAX: 251-1-46 48 82
አዲስ አበባ: ኢትዮጵያ
Addis Ababa, Ethiopia

E-mail: esid@telecom.net.et
Website www.epa.gov.et

In case of reply the
Number and date of this
Letter should be quoted

MINISTRY OF ENVIRONMENT
AND SCIENCE
P. O BOX MB 232
ACCRA



REPUBLIC OF GHANA

Tel: 666049/662264
Fax: 666628

22nd June 2004

Our Ref: MGS/14/P 3-7/W-3

Your Ref:

Mr Ahmed Djoghla,
Director, UNEP Division of GEF Co-ordination,
Nairobi,
Kenya.


Fax: +254-20-624041
Phone: +254-20-624166
Email: Ahmed.Djoghla@unep.org

Dear Sir

**RE: ENDORSEMENT OF FULL UNEP/GEF-FUNDED PROPOSAL ON INVASIVE
PLANT MANAGEMENT IN AFRICA.**

Following the successful completion of the UNEP/GEF-funded PDF-A and PDF-B phases of the project entitled, "Removing Barriers to Invasive Plant Management in Africa", the GEF Focal Point of CBD/GHANA acknowledges with thanks the receipt of a proposal for a full UNEP/GEF-funded project, scheduled to begin in January 2005. Our country gives high priority to the prevention and control of invasive weeds because of their potentially serious effects on the economy and our valued biodiversity. This is reflected in our National Biodiversity Strategy and Action Plan and other official documents. I am therefore happy to inform you that the GEF Focal Point endorses this project and will ensure full collaboration by the relevant government departments in order to make this a successful project.

Yours sincerely


E.O. NSENKYIRE
AG. CHIEF DIRECTOR
For: MINISTER

cc. Prof. E. Owusu Beinaah, Acting Director General, CSIR, Accra, Ghana.
Mr Dennis Rangi, Director, CAB International – Africa Regional Centre, Nairobi,
Kenya.

Telephones: Kampala 234700/9 (10 lines)

Fax: Kampala 230163

Telex: 81170

Telegrams: "FINSEC"

In any correspondence on
this subject please quote No. ALD 58/141/01



Ministry of Finance, Planning
and Economic Development
P.O. Box 8147,
Kampala.
Uganda.
Plot 2-12 Apollo Kaggwa Rd
Finance HQs Building

THE REPUBLIC OF UGANDA

13th September 2004

Mr. Ahmed Djoghlaif
Executive Director
UNEP Division of GEF Coordination
P.O. Box 30552
NAIROBI

**ENDORSEMENT OF PROJECT ON REMOVING BARRIERS TO THE
MANAGEMENT OF ALIEN INVASIVE SPECIES IN AFRICA**

Refer to ours of 6th September 2004 committing the Government of Uganda to co-finance the above-mentioned project.

In my capacity as GEF Focal Point for Uganda, I endorse and forward to you for funding, the proposal for the full scale project on "Removing Barriers to Invasive Plant Management in Africa".

A handwritten signature in black ink, appearing to read 'M. C. Muduuli', with a horizontal line underneath.

M. C. Muduuli (Mrs.)

For: **PERMANENT SECRETARY/SECRETARY TO TREASURY**

cc. Mr. Dennis Rangi
Director, CABI-Africa Regional Centre
NAIROBI

The Director General
National Agricultural Research Organisation
ENTEBBE

The Executive Director
National Council of Science and Technology
KAMPALA

Telephone: 229410-13
Telex: ZA 45510
Fax: 229417
Email: menr@zamnet.zm



REPUBLIC OF ZAMBIA

In reply please quote:

No.

Tel: 229417
Fax: 229417
Email: menr@zamnet.zm

MINISTRY OF TOURISM, ENVIRONMENT AND NATURAL RESOURCES

KWACHA HOUSE
CAIRO ROAD
P.O. BOX 30575
10101 LUSAKA

ENVIRONMENT AND NATURAL RESOURCES
MANAGEMENT DEPARTMENT
KWACHA HOUSE
CAIRO ROAD
P.O. BOX 34011
LUSAKA

MTENR/6/7/7

24th June, 2004.

Mr. Ahmed Djoghlaif,
Director, UNEP Division of GEF Co-ordination,
Nairobi,
KENYA.

Fax: +254-20-624041
Phone: +254-20-624166
Email: Ahmed.Djoghlaif@unep.org

Dear Sir,

ENDORSEMENT OF GEF-FUNDED PROPOSAL ON INVASIVE PLANT MANAGEMENT IN AFRICA.

May I draw your attention to the aforementioned subject. We hereby acknowledge receipt of a proposal for a UNEP/GEF-funded proposal entitled "Removing Barriers to Invasive Plant Management in Africa". The Government of Zambia has prioritized Invasive Alien Species (IAS) in its National Biodiversity Strategy and Action Plan, together with the Zambia Wetlands Strategy and Action Plan (ZWSAP). Our Government is particularly concerned about the potential threat of IAS to the Indigenous biodiversity in Protected Areas, as well as their detrimental effects on the economy.

I am, therefore, happy to inform you that the GEF Focal Point has endorsed this project and will ensure full collaboration by the National Executing Agency, the Environmental Council of Zambia, together with other relevant government departments, in order to make this a successful project.

Yours Sincerely,



D. Siame

Acting Director

& GEF Operational Focal Point – ENRMD

MINISTRY OF TOURISM, ENVIRONMENT & NATURAL RESOURCES.

c.c. The Permanent Secretary, **MTENR, Lusaka.**

C.C. Mr. Dennis Rangi,
Director, CAB International,
Africa Regional Centre, Nairobi, **Kenya.**

c.c. Mr. Edward Zulu,
Director,
Environmental Council of Zambia,
Lusaka.

ANNEX E: ROOT CAUSE ANALYSIS

Table 1. Root causes threats to biodiversity in sites of global environmental value in the four project countries

	Ethiopia	Ghana	Uganda	Zambia
Intermediate	<ul style="list-style-type: none"> • Deforestation • Soil degradation • Logging • Poaching • Encroachment • Desertification • Over-fishing • Invasive alien species • Water pollution 	<ul style="list-style-type: none"> • Deforestation • Soil degradation • Logging • Wildlife poaching • Encroachment • Desertification • Over-fishing • Invasive alien species • Water pollution 	<ul style="list-style-type: none"> • Deforestation • Soil degradation • Logging • Wildlife poaching • Encroachment • Over-fishing • Invasive alien species • Water pollution 	<ul style="list-style-type: none"> • Deforestation • Soil degradation • Logging • Wildlife poaching • Desertification • Over-fishing • Invasive alien species • Water pollution
Proximate	<ul style="list-style-type: none"> • High demand for wood • Unsustainable agriculture • Poor land productivity • Over-grazing • Over-fishing • Land tenure insecurity • Resource use conflicts • Bush fires • Limited economic opportunities • Lack of community based conservation programmes • Loss of indigenous knowledge • Inadequate legislation and inadequate enforcement of legislation • Poor environmental awareness 	<ul style="list-style-type: none"> • High demand for wood • Unsustainable agriculture • Poor land productivity • Over-grazing • Land tenure insecurity • Resource use conflicts • Bush fires • Limited economic opportunities • Loss of indigenous knowledge • Inadequate legislation and inadequate enforcement of legislation • Poor of environmental awareness 	<ul style="list-style-type: none"> • High demand for wood • Unsustainable agriculture • Poor land productivity • Over-grazing • Land tenure insecurity • Resource use conflicts • Bush fires • Limited economic opportunities • Loss of indigenous knowledge • Inadequate legislation and inadequate enforcement of legislation • Poor environmental awareness 	<ul style="list-style-type: none"> • High demand for wood • Unsustainable agriculture • Poor land productivity • Over-grazing • Land tenure insecurity • Resource use conflicts • Bush fires • Limited economic opportunities • Loss of indigenous knowledge • Inadequate legislation and inadequate enforcement of legislation • Poor environmental awareness
Ultimate	<ul style="list-style-type: none"> • Poverty • Population growth • Unsustainable development • Climatic change 	<ul style="list-style-type: none"> • Poverty • Population growth • Unsustainable development • Climatic change 	<ul style="list-style-type: none"> • Poverty • Population growth • Unsustainable development • Climatic change 	<ul style="list-style-type: none"> • Poverty • Population growth • Unsustainable development • Climatic change

Table 2. Expected baseline actions to accompany GEF support in the four project countries

Ethiopia	Ghana	Uganda	Zambia
<ul style="list-style-type: none"> • Food Security Strategy • Environmental Policy of Ethiopia • National Biodiversity Strategies and Action Plan • National Policy on Biodiversity Conservation and Research • National Science and Technology Policy and Strategy • National Agricultural Research Policy and Strategy • Weed Science Research Strategy • Plant Protection Research Strategy • Strategic Plan on Dry Land Agricultural Research • Ethiopian Forestry Action Plan • Water Resources Management Policy • Forestry Research Strategy • Pollution Control Proclamation • Environmental Impact Assessment Proclamation • Forest Resources Conservation Proclamation • The Federal Land Administration and Utilisation Proclamation • Plant Protection Decree • The Plant Quarantine Council of Ministers Regulation No. 4 • Regulation for Importation of Biological Control Agents • National Action Plan to Combat Desertification 	<ul style="list-style-type: none"> • Comprehensive Development Framework • Economic Recovery Programme • National Environment Policy • National Fisheries policy • National Land Policy • National Water Policy • National Forestry and Wildlife Policy • National Agricultural policy • National Wetland policy of Ghana • National Tourism Policy • National Biodiversity Strategy and Action Plan • Environmental Protection Agency Act • Fisheries Act • Forest Plantation Development Fund Act • Forest Protection Decree • Land Planning and Soil Conservation Ordinance • Local Government Act • Prevention and Control of Pest and Diseases of Plants Act • Rivers Ordinance • Timber Resources Management Act • Traditional Medicine Practice Act • Volta River Development Act • Wildlife Animals Preservation Act • Water Resources Commission Act 	<ul style="list-style-type: none"> • Poverty Eradication Plan • Plan for Modernisation of Agriculture • National Environment Management Policy • National Biodiversity Strategy and Action Plan • National Water Policy • Wetland Sector Strategic Plan • Uganda Forestry Policy • National Wetlands Policy • Wildlife Policy • Fisheries Policy • Agriculture Policy • Tourism Policy • The Local Government Act • The National Environment Act • The National Forestry and Tree Planting Act • The Wildlife Act • The Plant Protection Act Cap • The Plant Protection and Health Bill 	<ul style="list-style-type: none"> • Poverty Reduction Strategy • Transitional National Development Programme • The National Environmental Action Plan • National Biodiversity Strategy and Action Plan • The Water Policy • Draft National Fisheries Policy • National Wetlands Policy • National Wildlife Policy • National Forestry Policy • National Draft land Policy • National Tourism Policy • The Environmental Protection and Pollution Control Act • The Agricultural Lands Act • The Noxious Weeds Act • The Plant Pests And Diseases Act • The Plant Variety and Seeds Act • The National Heritage Conservation Commission Act • The Water Act • The Water Supply and Sanitation Act • The Fisheries Act • The Inland Waters Shipping Act • The Zambia Wildlife Act • The Lands Act • Tourism Act • The Forestry Act • The Mines and Minerals Act

Table 3. Other projects and their linkages to the project components in the four project countries.

Numbered project components with significant linkages to the listed projects are given in brackets. ¹Projects that are global in scope. They are linked to project activities in all countries but not listed under Ethiopia because of space limitations.

Ethiopia	Ghana	Uganda	Zambia
<ul style="list-style-type: none"> • Strengthening the Conservation and Management of the Wildlife Protected Area System (1,2,4) • Conservation and sustainable use of medicinal plants (3) • Community Based Integrated National Resources Management: Improving Ecosystem Integrity and Rural Livelihoods (3,4) • Awash Conservation and Development Project (3,4) • Afar Pastoralist Development and Emergency Project (1,4) • Support to the Biodiversity Institute and Integrated Forest Management Project (1,4) • African NGO-Government Partnership for Sustainable Biodiversity Action (2,4) • Botanical and Zoological Taxonomic Networks in Eastern Africa: Linking Conservation to Taxonomy (2,4) • Eastern Africa Regional Wetlands Conservation and Support Programme (2,3,4) • Nile Transboundary Environmental Action Project, Phase I (1,2,3,4) • Institutional Strengthening and Resource Mobilisation for Mainstreaming Integrated Land and Water Management Approaches into Development Programs in Africa (1) • Conservation of Soaring Migratory Birds in the Eastern Sector of the Africa-Eurasia Flyway System (Rift Valley and Red Sea Flyways) (2,3,4) 	<ul style="list-style-type: none"> • Coastal Wetlands Management (1,2,3,4) • Natural Resource Management (1,4) • Biodiversity Conservation of Lake Bosomtwe Basin (3,4) • Northern Savanna Biodiversity Conservation Project (3,4) • Sustainable Land Management for Mitigating Land Degradation, Enhancing Agricultural Biodiversity and Reducing Poverty (1,2,4) • Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area (1,2,3,4) • Integrated Management of Invasive Aquatic weeds in West Africa (1,2,3,4) • Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management (1,2,3,4)¹ • National Biodiversity Strategy and Action Plans (1,2,3,4)¹ • Development of National Biosafety Frameworks (1,2,3,4)¹ • National Capacity Self-Assessment for Global Environmental Management (1,4)¹ 	<ul style="list-style-type: none"> • Land Degradation Assessment in Drylands (2,3,4) • Lake Victoria Partnership (1,2,3,4) • Striga management (2,3,4) • Institutional Capacity Building for Protected Areas Management and Sustainable Use (1,2,3,4) • Reducing Biodiversity Loss at Cross-Border Sites in East Africa (1,2,3,4) • Lake Victoria Environmental Management Programme (1,2,3,4) • Transboundary Agro-Ecosystem Management Programme for the Lower Kagera River Basin (1,2,3,4) • Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management (1,2,3,4)¹ • National Biodiversity Strategy and Action Plans (1,2,3,4)¹ • Development of National Biosafety Frameworks (1,2,3,4)¹ • National Capacity Self-Assessment for Global Environmental Management (1,4)¹ 	<ul style="list-style-type: none"> • Sustainable Land Management in the Zambian Miombo Woodland Ecosystem Area (1,3,4) • Effective Management of the National Protected Areas System (1,2,3,4) • Securing the Environment for Economic Development (1,3,4) • Southern Africa Biodiversity Support Programme (1,4) • Inventory, Evaluation and Monitoring of Botanical Diversity in Southern Africa: A Regional Capacity and Institution Building Network (1,2,4) • International Mycoherbicide Programme for Water hyacinth crassipes Control in Africa (3) • Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management (1,2,3,4)¹ • National Biodiversity Strategy and Action Plans (1,2,3,4)¹ • Development of National Biosafety Frameworks (1,2,3,4)¹ • National Capacity Self-Assessment for Global Environmental Management (1,4)¹

ANNEX F. IMPLEMENTATION ARRANGEMENTS

A. PROJECT CO-ORDINATION AND IMPLEMENTATION ARRANGEMENTS AT REGIONAL LEVEL

Arrangements for project co-ordination and implementation at the regional level are outlined in the Project Description. These arrangements are represented diagrammatically in Figure F1 below.

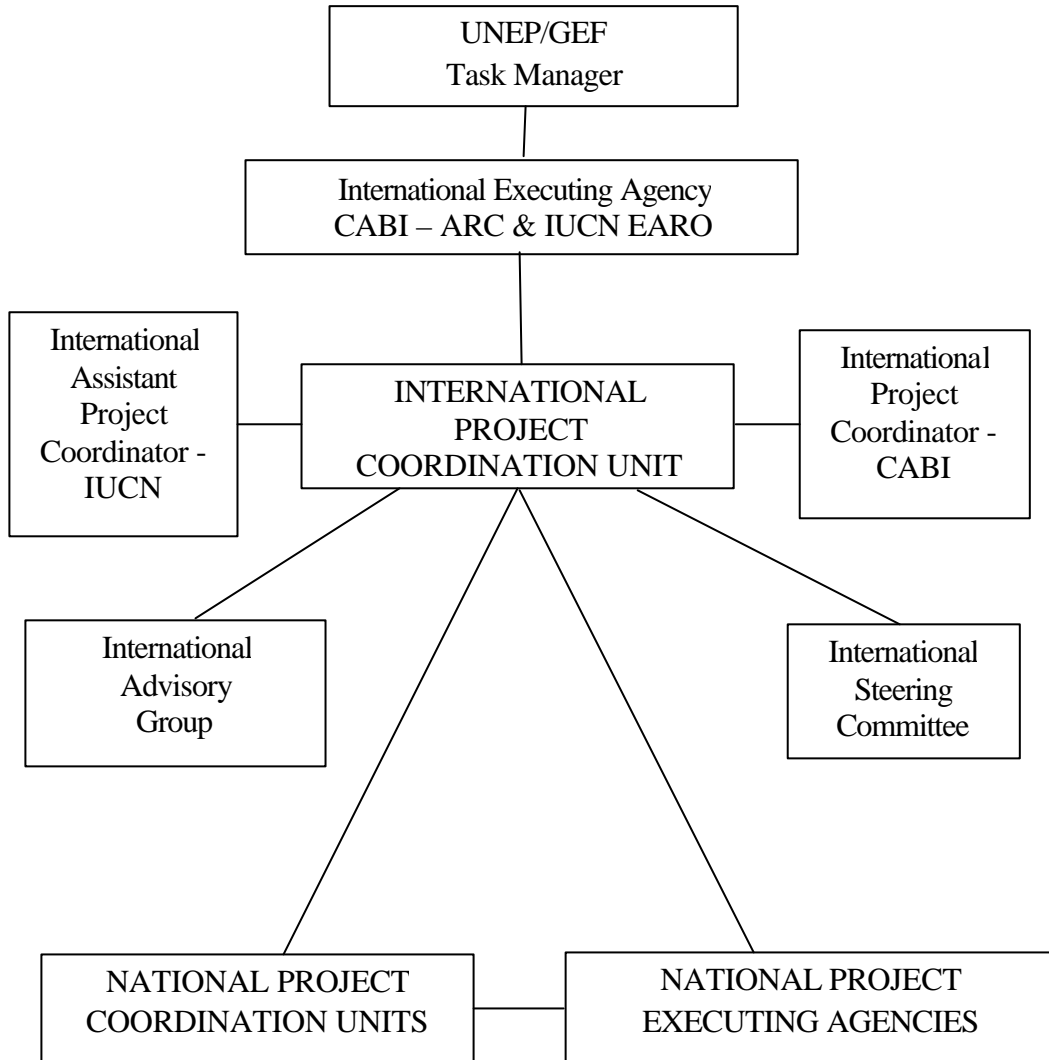


Figure F1. Project Management Structure at the Regional Level. See Project Description for details. National project management structures are represented diagrammatically in Figures F2 – F5.

Table F1. Institutional Profiles for Regional Level Project Management Institutions.

Institution	Role in Project
<p>CABI-International and the CAB Africa Regional Centre (CABI-ARC)</p> <p>CAB International (CABI) is an international, intergovernmental not-for-profit organisation, with its headquarters in the UK. Founded in 1908, the same year in which it started its activities in East Africa, CABI is one of the oldest organisations working in sustainable development. CABI's mission is to improve human welfare through the generation, dissemination and application of scientific knowledge in support of sustainable development. Globally, CABI has more than 500 staff, under two operating Divisions, CABI Bioscience and CABI Publishing. Together the two Divisions provide a unique capability and resource, which is available for projects worldwide to draw on, bringing global knowledge to bear on local problems and issues.</p> <p>CABI gained full international status in 1985 and is registered with the United Nations as an 'international treaty' with membership open to all countries. It is owned and run by its member countries, 15 of which are in Africa.</p> <p>CABI operates through a network of centres including CABI ARC in Nairobi. There are CABI officers in Ghana, Uganda and Zambia. Although Ethiopia is not yet a CABI member country CABI has very close links with Ethiopia where it has successfully executed a number of projects..</p> <p>CABI has been involved with invasive species prevention and management for all of its 90 year history. CABI collated and published "Invasive Alien Species: A Toolkit of Development, Prevention and Management Practices". CABI coordinated the needs assessment exercise on which the proposed action is based, and is managing the GEF funded project on IAS in Uganda and three other countries in Africa. CABI has recently organised a regional IAS workshop for West Africa in Ghana. CABI-ARC has particular strength in IAS, which is one of the six Strategic Themes under which it organises its activities to improve the livelihoods of the rural poor in Africa. The coordination of CABI's IAS activities worldwide is based in CABI-ARC, though its IAS network.</p> <p>CABI, along with IUCN and SCOPE (Scientific Committee on Problems of the Environment) were founder members of GISP (Global Invasive Species Programme) and serves on its governing board.</p>	<p>CABI-ARC will be the lead executing agency for the project. It will host the international project coordination unit (composed of staff from CABI-ARC and IUCN-EARO) and the international project coordinator. CABI-ARC will provide the necessary financial and management services to ensure the efficient and timely execution of project activities. The Finance and Administration team at CABI-ARC will oversee the financial management of the project and senior management will provide overall oversight of project implementation. CABI-ARC will allocate the equivalent to one senior scientist and two programme assistants to the project per year as well as other resources (office space, computing equipment, communication facilities, etc.) to ensure smooth project implementation.</p> <p>The international project coordinator will make regular visits to national coordination units. Other CABI staff will also make visits as required. These visits will make sure that outputs are delivered on time and to the necessary quality. These visits will also fulfil a substantial capacity building function for the national coordination units.</p> <p>CABI-ARC will host an annual International Steering Committee Meeting. The Committee will be composed of the chairs of the National Steering Committees, national project coordinators and international experts in areas covered under the four project components. CABI-ARC will also establish an International Advisory Group comprising of established IAS experts. Although not meeting frequently, this group will be very useful for the provision of feedback on specific technical matters.</p> <p>CABI's Liaison Officers in Ghana, Uganda and Zambia will support project execution as required.</p> <p>Other CABI centres will be kept up to date of the progress of the project through the CABI IAS network both via its listserv and the annual meeting of the IAS network members. These measures will help to ensure that the full range of expertise in CABI is made available for the project.</p> <p>CABI will maintain links with other related initiatives and will seek further funding to build on project activities to help to ensure the long term sustainability of the project outputs.</p>
<p>IUCN - The World Conservation Union Regional Office for Eastern Africa (IUCN-EARO)</p> <p>The World Conservation Union is an international not-for-profit organisation that has been working in biodiversity conservation for over 50 years. IUCN is registered in Switzerland and operates through a Secretariat spread across the world as well as through some 10,000 technical experts in its Commissions and more than one thousand</p>	<p>IUCN will be the second lead executing agency for the project. IUCN will provide an assistant project coordinator. Together with CABI-ARC IUCN-EARO will form the project coordination unit. IUCN-EARO senior management will help to provide overall oversight of project implementation. IUCN-EARO will allocate</p>

<p>members (states, government organisations and NGOs) in 140 countries. IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.</p> <p>IUCN has five regional programs in Africa based in Regional Offices supported by country offices. All four participating countries are connected to IUCN Regional Offices. Those in Ethiopia and Uganda are supported by the Eastern African Regional Office in Nairobi (and a country office in Kampala), that in Ghana by the Bureau régional de l'IUCN pour l'Afrique de l'Ouest based in Burkina Faso and that in Zambia by the Southern African Regional Office in Harare (and a country office in Lusaka).</p> <p>IUCN has been involved with the issue of invasive species for more than ten years. While global issues are addressed from Switzerland, there is a hub of expertise in invasive species in the Secretariat in Eastern Africa. The IUCN Invasive Species Specialist Group is based in New Zealand but runs a global network and database of information about invasive species which covers the world.</p> <p>IUCN, along with CABI and SCOPE (Scientific Committee on Problems of the Environment) were founder members of GISP (Global Invasive Species Programme) and serves on its governing board.</p>	<p>substantial staff time (equivalent to 50% of one senior scientist and one programme assistant per year) and other resources (office space, computing equipment, communication facilities, etc.).</p> <p>In addition IUCN will offer specialist support to the project in areas related specifically to the conservation and sustainable use of indigenous biodiversity.</p> <p>The assistant project coordinator and other IUCN staff will make regular visits to national coordination units to support those of the international project coordinator and CABI-ARC staff.</p> <p>IUCN-EARO will assist CABI-ARC in the organisation of the annual International Steering Committee Meeting and in the establishment of the International Advisory Group, which is likely to receive considerable support from IUCN staff worldwide</p> <p>IUCN's national staff in Ghana, Uganda and Zambia will support project execution as required.</p> <p>Other IUCN centres will be kept up to date of the progress of the project through relevant IUCN Commissions. This will help to provide valuable feedback for the project from a wide range of the expertise in IUCN.</p> <p>IUCN will maintain links with other related initiatives and seek further funding to build on project activities.</p>
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B. PROJECT CO-ORDINATION AND IMPLEMENTATION ARRANGEMENTS AT NATIONAL LEVELS

ETHIOPIA

The arrangements for project co-ordination and implementation have been established during the PDF-B phase of the project through a series of project steering committee meetings and at a national stakeholder workshop, which took place in January 2004.

The proposed options for project implementation arrangements will maximise the participation of stakeholders from the agriculture, water, power, forestry, education, research, environment, and development sectors as well as the private sector, local communities, CBOs and NGOs.

The National Executing Agency for Ethiopia will be the Ethiopian Agricultural Research Organisation (EARO), which falls under the Ministry of Agriculture and Rural Development (MoARD). The National Project Director will be the Director of EARO. The Project Director will be accountable to CABI-ARC for the delivery of agreed national project outputs, maintain regular communication with CABI-ARC and will supervise the work of the National Coordination Unit (NCU), which will be responsible for the day to day running of the project.

The National Coordination Unit (NCU) will be established to coordinate the execution of each project component. EARO will house the NCU and will be responsible for project coordination. A full-time project coordinator will be responsible for the day to day running of the NCU. National taskforces for policy, information, prevention and management and capacity building will be established by the NCU from technical experts in each component areas.

A National Steering Committee (NSC) will be established. This will be chaired by a senior representative from MoARD and comprise of senior representatives of relevant government and non-government bodies.

The NSC will provide guidance to the project, especially in regard to national political and administrative issues and will take decisions on issues related to legislation, regulations and guidelines on IAS management. It will also ensure federal level inter-sectoral integration of IAS-related projects. EARO will be given the status of chair in the NSC in order to ensure integration and harmonisation in the planning and implementation of any locally implemented IAS projects.

A National Advisory Committee (NAC) will be established for the provision of technical support to aid the implementation of project activities. Advisory sub-committees will be established to deal with particular technical issues as they arise.

Project executing structures will also be established at the Regional State and ‘Woreda’⁵ (District) levels. In a large and diverse country with a Federal system of government such as Ethiopia it was considered to be important to have a project implementation structure that operated at several administrative levels so as to ensure maximum community participation in project activities. Both Woreda and Regional State Coordination Units will be housed in institutions closely linked with EARO and will ultimately report to the NCU.

Day to day activities at pilot sites will be coordinated by the local Agricultural Research Centres, who will report to the PCU. They will provide details of pilot site activities to the Regional State and Woreda Coordination Units.

These arrangements rely on existing institutions to ensure that coordination can be rapidly established. Once operational these arrangements will be sustainable as they do not rely on bodies established solely for project execution.

⁵ The Woreda is the lowest administrative level in Ethiopia

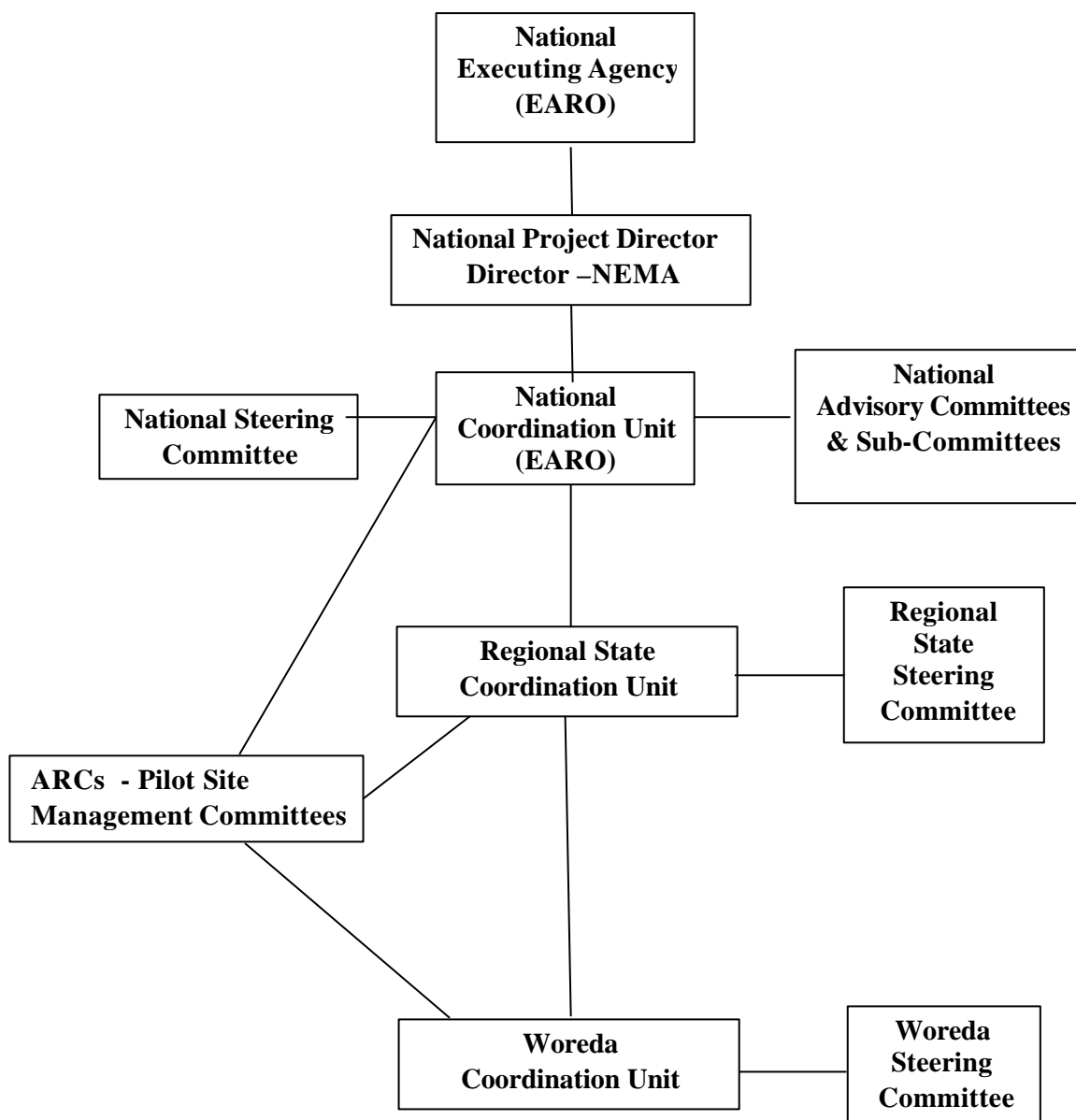


Figure F2. Project Management Structure for Ethiopia. See text for details.

Table F2. Institutional Profiles for Ethiopia

Institution	Role in the Project
Governmental Institutions	
<p>Ministry of Agriculture and Rural Development (MoARD) MoARD has a very wide remit. Among its powers and duties are the following:</p> <ul style="list-style-type: none"> To promote the expansion of rapid and sustainable agricultural and rural development. To prepare and implement land-use and administration policy as well as draft laws on the conservation and utilisation of forest and wildlife resources. To direction and coordinate the implementation of the Food Security Programme. To encourage and assist the provision of agricultural extension services to peasants and pastoralists. To provide comprehensive support to private investors engaged in the agricultural sector. To monitor events affecting agricultural development and set up early-warning systems. To conduct quarantine controls on plants, seeds, animals and animal products brought into or taken out of the country. To take the necessary measures to prevent outbreaks of animal and plant disease and migratory pests. 	<p>MoARD has been active on the steering committee throughout the PDF-B phase of the project and its involvement was crucial to the successful execution of the PDF-A. Its involvement has helped to ensure wide stakeholder participation in the PDF project phases. MoARD has also helped to begin the process of mainstreaming IAS issues into its core activities (notably the Food Security Programme), which are themselves central to the development process in Ethiopia.</p> <p>As the quarantine agency in Ethiopia MoARD has the authority to integrate IAS issues into quarantine practices. Early warning and rapid response activities will also be channelled through MoARD.</p> <p>The agricultural extension services of the MoARD provide an opportunity for dissemination of project outcomes and a vehicle through which to involve local communities in project activities.</p>
<p>Ethiopian Agricultural Research Organisation (EARO) EARO is a semi-autonomous body under MoARD. Its objectives are:</p> <ul style="list-style-type: none"> To generate, develop and adapt agricultural technologies that focus on overall agricultural development needs and its beneficiaries. To coordinate research activities of agricultural research centres or higher learning institutes and other related establishments which undertake agricultural research on a contractual basis. To build research capacity and establish a system that will make agricultural research efficient, effective and based on development needs. To popularise agricultural research results. <p>EARO has been designated to undertake internal quarantine activities for biological materials imported for research purposes. It has also been heavily involved in weed research activities in recent years.</p>	<p>EARO was the National Executing Agency for the PDF-B phase of the project and will coordinate the full GEF project.</p> <p>EARO will strengthen linkages and coordination among relevant IAS stakeholders. The project coordination unit will be housed within EARO.</p> <p>Through its research activities and through the execution of the PDF-A and PDF-B phases of the project EARO has built up considerable expertise in IAS issues.</p> <p>EARO enjoys close links with Federal and Regional Agricultural Research Centres and Research and Extension Advisory units at the Woreda level. This will help to ensure large scale dissemination of project outputs and wide community participation in project activities.</p>
<p>Environmental Protection Authority (EPA) The objectives of the EPA are to ensure that the country's social and economic development activities are carried out in a manner that will protect the welfare of human beings and the resource bases on which they depend for survival. The powers and responsibilities of the EPA include among others:</p> <ul style="list-style-type: none"> To coordinate measures to ensure that the environmental objectives outlined in the Environmental Policy of Ethiopia are realised. To prepare, review and update environmental policies, strategies and laws and enforce their implementation. 	<p>EPA has been very active in the PDF phases of the project, being represented on the project steering committee, on advisory committees and as part of the task teams that completed the PDF-B outputs. This high level of involvement will continue during the full project. EPA will be pivotal in the execution of Component 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i>. Much of the EPA's mandate concerns enabling environment issues. Their involvement in environmental information management will also see the EPA play a crucial role in the execution of</p>

<ul style="list-style-type: none"> • To establish a system for environmental impact assessment of public and private projects, as well as social and economic development policies, strategies, laws and programs. • To formulate environmental safety policies and laws; • To establish an environmental information system that promotes efficiency in environmental data collection management and use. • To coordinate, promote and carry out research of relevance to environmental protection. • To provide advice and support to regions regarding the management and protection of the environment. 	<p>Component 2 <i>Appropriate information on the risks, impacts and management of IAS disseminated to identified stakeholder groups.</i> It is planned to link project databases and the project website to the information systems being developed by EPA.</p>
<p>Institute of Biodiversity Conservation (IBC) IBC is a semi-autonomous body under MoARD. It was established to ensure the conservation and sustainable use of biodiversity resources. Among activities undertaken to this end are the following: initiation of policy and law regarding biodiversity conservation, genetic diversity surveys, implementation of conservation methods, importation of germplasm, development of a national zoological museum and national herbarium, research into genetic conservation, and studies to integrate traditional knowledge into conservation practice.</p>	<p>IBC has been active as part of the PDF-B project steering committee and has been represented at advisory committee meetings under the PDF-B phase of the project. In the full project IBC can help to integrate IAS concerns into protected area management. By promoting the use of indigenous biodiversity it is in a position to offer users non-invasive alternatives to invasive species where conflicts of interest arise.</p>
<p>Ethiopian Wildlife Conservation Organisation (EWCO) ECWO is a department under MoARD. EWCO is responsible for the establishment, development and administration of protected areas which fall under two or more Regional States. It fosters broad-based participation in the development, protection, rational utilisation and management of wildlife. EWCO is also responsible for the issuing of permits for hunting wildlife in protected areas, which are under its jurisdiction. EWCO is also responsible for implementing policies, laws and regulations pertaining to national parks and game reserves.</p>	<p>ECWO has just undergone restructuring and for this reason it was not strongly involved in the PDF phases of the project, although its parent ministry and the closely related IBC were. Under the full project ECWO will be ideally placed to ensure that IAS considerations are integrated into protected area management practices in Ethiopia.</p>
<p>Ministry of Water Resources (MoWR) MoWR has the following mandates among others:</p> <ul style="list-style-type: none"> • To determine conditions and methods required for the optimum allocation and utilisation of water that flows across or lies between more than one Regional Governments. • To prepare draft laws concerning the protection and utilisation of water resources. • To issue permit to construct and operate water works relating to waters and regulate same. • To make appropriate studies concerning water tariff and, upon approval, collect bulk charges for water use. • To undertake, and implement the results of studies pertaining to the utilisation of the waters of transboundary water resources. • To sign international agreements relating to transboundary rivers. • To prepare and implement plans that help to properly utilise water resources for development purposes. • To prescribe the quality standards for waters to be used for various purposes. 	<p>MoWR has been actively involved in the PDF phases of the project, being represented on the project steering committee. The involvement of MoWR in the project to date has been encouraging, signalling as it does an awareness that IAS can negatively affect water quality and availability. The involvement of MoWR will be crucial in the project activities relating to the management of water weeds.</p>
<p>Ethiopian Science and Technology Commission</p>	

<p>(ESTC) The overall objective of the ESTC is to encourage activities relating to science and technology. The ESTC is responsible for the encouragement and coordination of science and technology activities geared towards the conservation and sustainable use of biodiversity.</p>	<p>ESTC has been actively involved in the PDF phases of the project, being represented on the project steering committee. The involvement of the ESTC in the project will ensure that IAS research related activities are embedded within the national research framework. This will help in research coordination and in the dissemination of project outcomes to the national research community.</p>
<p>Ministry of Trade and Industry (MoTI) The major powers and responsibilities of the MoTI are to:</p> <ul style="list-style-type: none"> • Encourage the expansion of trade, industry and handicrafts. • Initiate studies and implement industrial projects in which the Federal Government engages itself. • Conduct, and implement the results of studies that help to control unfair trade practices. 	<p>MoTI has not been extensively involved with the project to date. During the full project it is planned to involve MoTI in the activities related to Component 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i>. Mainstreaming IAS issues into trade related concerns will be essential to the long term sustainable management of IAS in Ethiopia.</p>
<p>Ministry of Finance and Economic Development (MoFED) MoFED is responsible for:</p> <ul style="list-style-type: none"> • Preparing and implementing the consolidated annual budget of the Federal Government. • Formulating and supervising the implementation of policies and strategy for the country's economic development. • Initiating policy proposals that help to define the country's long term development. • Studying, preparing and reviewing projects in cooperation with concerned organs. 	<p>As the ministry with an overview on Ethiopia's economic development MoFED will be represented on the project steering committee. It will also play a part in the execution of activities relating to Component 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i>. The involvement of MoFED in the project will help to ensure that project outcomes are mainstreamed into Ethiopia's economic development agenda.</p>
<p>Ministry of Education (MoE) MoE is mandated to do the following among others:</p> <ul style="list-style-type: none"> • To devise and facilitate the implementation of measures to extend education throughout the country. • To determine the educational curriculum of senior secondary schools, higher education institutions and training institutions. • To provide assistance to Regional Governments in the preparation of educational curricula for elementary and junior secondary schools. • To ensure the availability of educational materials and textbooks in adequate quality and quantity. • To prepare and implement projects to improve the quality and enhance the expansion of education. • To ensure that the education given at every level is being supported by educational mass media. <p>To collect, compile and disseminate information on education.</p>	<p>MoE has not been extensively involved with the project to date. During the full project it is planned to involve MoE in the activities related to Component 4 <i>Capacity built for multisectoral prevention and management of IAS</i>. The involvement of MoE will help to ensure that guidelines for integrating IAS issues into curricula are implemented. Its involvement will also aid in the dissemination of education-related outputs to the Regional State level.</p>
<p>Ministry of Federal Affairs (MoFA) MoFA's main powers and duties are:</p> <ul style="list-style-type: none"> • To ensure that public peace and order is maintained. • To facilitate the resolution of misunderstandings arising among regions. • To give assistance to the regions with particular emphasis on the less developed ones. <p>The Ministry is coordinating the Pastoral Community Development Project. This initiative, which will expand in future, includes pastoral research, training and policy reform studies. The project will help to develop</p>	<p>The recently expanded role of MoFA as a coordinating agency for the Pastoral Community Development Project makes it a key stakeholder in IAS management at the community level. MoFA will, therefore, be involved with all project components. Its involvement will be crucial to help ensure community participation including that of society's most disadvantaged groups. MoFA will help to ensure that all activities conducted at the</p>

<p>appropriate pastoral policy instruments so that decentralisation and socio-economic development will be realised in pastoral community areas of Ethiopia. Pastoral policy issues, among others will include:-</p> <ul style="list-style-type: none"> • Policy and legal framework for community based bush clearing. • Natural resource management and regulatory policy issues. • Establishment of community based organisations for managing natural resources. 	<p>community level are inclusive.</p> <p>In turn the involvement of MoFA in the project will help to ensure that IAS issues are mainstreamed in rural development activities so that they reduce rather than exacerbate IAS problems .</p>
Regional State Institutions	
<p>Regional Agricultural Bureaux</p> <p>Among the powers and duties of the Bureaux of Agriculture of the Regional States, the most relevant ones to IAS management are:</p> <ul style="list-style-type: none"> • Ensuring that quarantine control is undertaken on plants, seeds, animals and animal products brought into or taken out of the regions. • Ensuring that laws, regulations and directives issued in relation to the protection, conservation and utilisation of water, fisheries and wildlife development are respected in the regions. • Preventing and controlling disasters caused by migratory and common plant pests and animal diseases. • Preparing and implementing regulations concerning the conservation and sustainable utilisation of forestry and wildlife, biodiversity of the region. • Supervising the implementation of directives issued to control damage caused by the depletion of natural resources and the prevention of water, soil and air pollution. • Following up on directives issued to control damage to environment caused by degradation of natural resources and air pollution. 	<p>Bureaux of Agriculture have been consulted throughout the implementation of pilot site activities under the project's PDF-B phase. This involvement will become much greater during the full project when more intensive activities are implemented at the community level under all four project components.</p> <p>Bureaux of Agriculture will be particularly relevant to the implementation of domestic quarantine control, community awareness programmes and pilot site IAS management programmes. They will be represented on Regional and Woreda level Steering Committees and Coordination Secretariats.</p>
<p>Regional Environmental Institutions</p> <p>Most of the nine Regional States have established environmental institutions. Though they go under various names the duties and responsibilities of each of the authorities are almost the same. Some of the most relevant ones to IAS management are listed below:</p> <ul style="list-style-type: none"> • To ensure that any development activity in the region is carried out without harming the environment. • To devise sensitisation mechanisms to help land users to protect the land from further degradation, and to take appropriate punitive measures against those failing to meet their obligations. • To develop systems enable the implementation of environmental impact assessment and follow up activities. • To carry out studies and adopt implementing strategies for the rehabilitation of degraded ecological areas. • To study the use and management of regional biodiversity resources, natural and man made heritage and parks and prepare regional strategies and regulations. • To prepare and implement natural resource development and environmental protection programs and strategies, and land use plans. 	<p>The Regional Environmental Institutions in areas where pilot site activities have been conducted under the PDF-B phase of the project have been consulted by those executing these activities. This involvement will become more intense during the full project.</p> <p>Regional Environmental Institutions will be relevant to the implementation of activities under all project components at the community level. Their participation will help to maximise the involvement of the grass-roots level in project activities. Involvement in the project will help the Regional Environmental Institutions implement landuse decrees relating to IAS that have so far have been poorly enforced.</p> <p>The Regional Environmental Institutions will be represented on Regional and Woreda level Steering Committees and Coordination Secretariats.</p>

Non-Governmental Organisations

A number of NGOs and professional societies have activities which are very relevant to IAS issues. In all cases maintenance of close involvement with NGOs will help ensure extensive community involvement in project activities. Many of these organisations have a strong poverty alleviation focus, which will help ensure that the concerns of Ethiopia's most underprivileged are maintained during the implementation of project activities. Another strong focus of many NGOs and CBOs is awareness-raising and capacity building. Organisations with this focus will be closely involved in activities related to Component 2 *Appropriate information on the risks, impacts and management of IAS disseminated to identified stakeholder groups* and Component 4 *Capacity built for multisectoral prevention and management of IAS*. In some cases proposed NGO and CBO activities may conflict with IAS management considerations. Close involvement of these organisations with the project can help to achieve consensus on ways of achieving development objectives without exacerbating IAS problems. NGOs and CBOs will be represented on project committees at all levels.

The following are some of the NGOs that have been consulted during the PDF-B process and with whom it is proposed to work closely during the full GEF project:

- The Ethiopian Wildlife and Natural History Society
- FARM Africa
- SOS Sahel
- CARE Ethiopia
- The Ethiopian Crop Protection Society
- The Forestry Society of Ethiopia

The Private Sector and State Run Industrial Sector

The private sector is not well developed in Ethiopia. However, it is expanding and has a role in IAS management. IAS are affecting plantation agriculture notably in cotton and sugar estates in some project pilot sites. The inclusion of private industry representatives as well as those from state run industries in project committees will provide help to bring IAS issues onto the agenda of these sectors.

Utilities in Ethiopia are under State ownership and they too have a role in IAS management. The water and electricity sectors are particularly important stakeholders. Some of their interests have already been addressed by including their parent ministries at the level of national committees. However, further representation will also be needed at the pilot site level where their activities have IAS management implications.

GHANA

Arrangements for project co-ordination and implementation were established during the PDF-B phase of the project through a series of project steering committee meetings and at a national stakeholder workshop, which took place in April 2004.

The Project Focal Point will be the Ministry of Science and Environment (MSE). As the GEF Focal Point and ministry mandated to implement Ghana's NEAP and NBSAP MSE will ensure that project activities are mainstreamed into environmental and into other sectoral plans.

The Focal Point will liaise with and supervise the Council for Scientific and Industrial Research (CSIR) who will be the National Executing Agency. The National Project Director (NPD) will be the Director of CSIR. The NPD will be accountable to the Focal Point and CABI-ARC for the delivery of agreed national project outputs, maintain regular communication with MSE and CABI-ARC and will supervise the work of the National Coordination Unit (NCU), which will be responsible for the day to day running of the project.

In addition to a full time National Project Coordinator, the NCU will comprise of an Assistant Project Coordinator, a full time secretary with book keeping skills and a driver. The coordinator will be responsible for the day to day running of the project. Specific duties will include ensuring that project outputs are delivered to the required quality and on time, coordinating the activities of project task teams and consultants, organising meetings, workshops and consultations, reporting to the international project coordinator and maintaining transparent project accounting.

There will also be a project coordination structure established in pilot sites. Like the National Coordination structure this will operate through existing organisations to minimise the time needed for establishment and to help to ensure sustainability. The Pilot Site Management Committee (SMC) for the Oti Arm of the Volta

Lake will operate through the Volta River Authority (VRA) who is responsible for water weed management in the area. The Pilot SMC for the Afram Headwaters Forest Reserve will operate through the Forestry Research Institute of Ghana (FORIG). The work in the pilot sites will involve local stakeholders through a participatory management approach. In addition ‘Consultative Committees’ will be established with members drawn from local stakeholder groups.

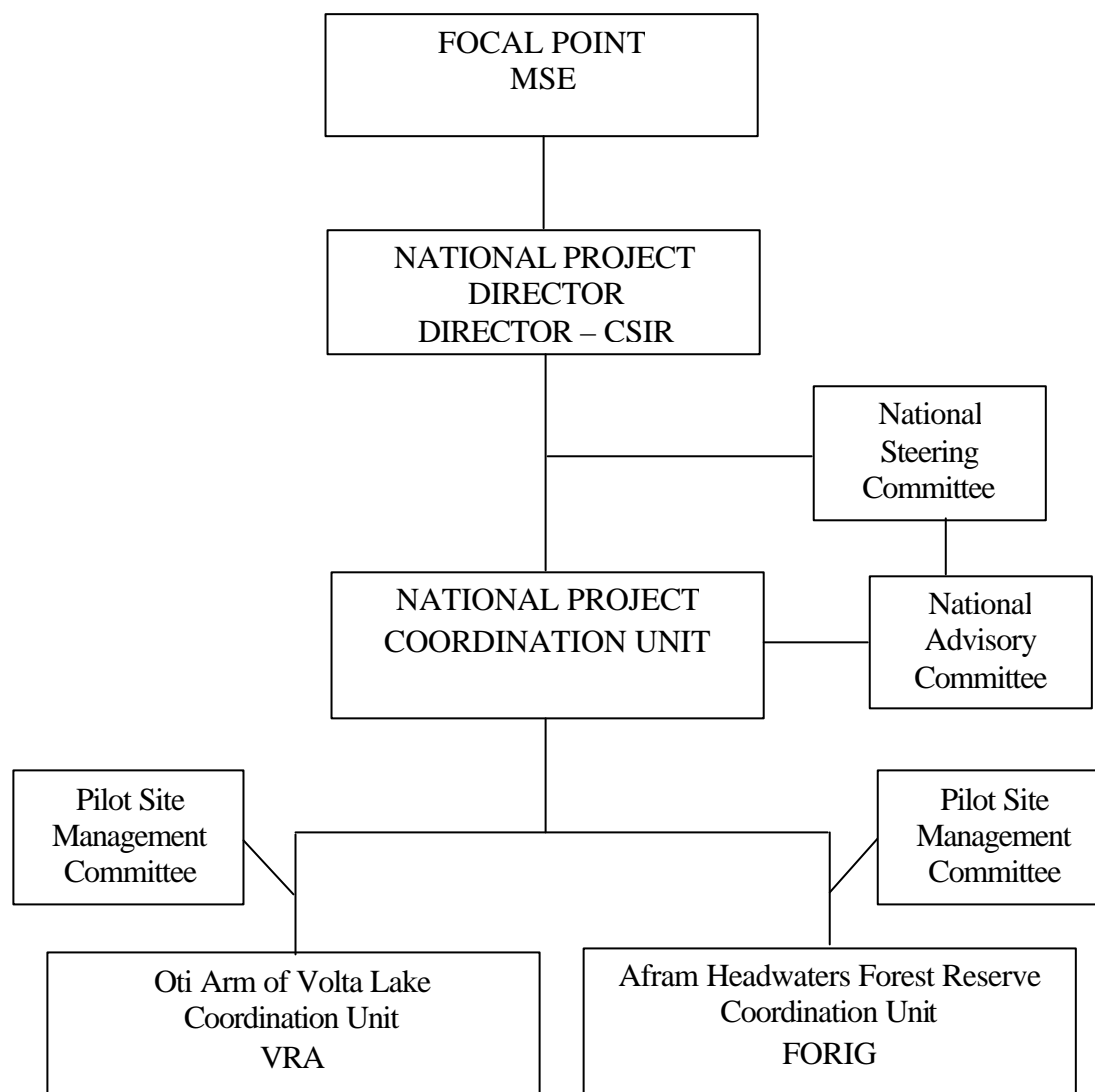


Figure F3. Project Management Structure for Ghana. See text for details.

The work of the NCU will be supported by a National Steering Committee (NSC) comprising of representatives of the stakeholder organisations listed in Table F2. The main functions of the NSC will be to provide general oversight and guidance to project implementation, especially in regard to national political and administrative issues, and to monitor project progress and performance.

The work of the NSC and NPCU will be supported by *ad hoc* advisory committees and sub-committees comprising of experts in specific fields of relevance to specific project activities.

Table F3. Institutional Profile for Ghana

Institution	Role in the Project
Governmental Institutions	
<p>Ministry of Science and Environment (MSE) MSE is mandated to implement Ghana's NEAP, which has identified key environmental issues and provides a framework for action. It is also mandated to implement Ghana's NBSAP.</p> <p>MSE is the GEF Focal Point Ministry for Zambia.</p> <p>MSE exercises ministerial responsibility over institutions such as the Environmental Protection Agency (EPA) and the Council for Scientific and Industrial Research (CSIR), which are involved in IAS management.</p>	<p>MSE will be the Project Focal Point. The involvement of MSE will help to ensure wide stakeholder participation in the full project.</p>
<p>Council for Scientific and Industrial Research (CSIR) CSIR falls under MSE. Its mandate is to co-ordinate the research activities of all agriculture, forestry and fishery institutes under the CSIR in particular and the country as whole. The following research agencies under CSIR are relevant to IAS management:</p> <ul style="list-style-type: none"> • Agricultural, Forestry and Fisheries Sector • Environment and Health Sector • Water Research Institute • Crops Research Institute • Savanna Agricultural Research Institute • Forestry Research Institute of Ghana 	<p>CSIR was the National Executing Agency for the PDF phases of the project and will coordinate the full GEF project.</p> <p>CSIR will ensure the national coordination of the project and strengthen linkages between relevant IAS stakeholders. The project coordination unit will be housed within CSIR. As a multisectoral body CSIR demonstrated its ability to coordinate activities undertaken by a wide variety of agencies during the PDF-B phase of the project.</p> <p>CSIR has a great deal of experience in research activities related to IAS issues and will coordinate all research-related aspects of the project.</p>
<p>Environmental Protection Agency (EPA) EPA is mandated to carry out the following among others:</p> <ul style="list-style-type: none"> • To advise sectoral ministries on the formulation of policies on all aspects of the environment and to make recommendations for the protection of the environment. • To promote studies, research, survey and analysis for the improvement and protection of the environment and the maintenance of sound ecological systems in Ghana. • To formulate plans, conduct and promote environmental education and awareness. • To ensure compliance with any laid down environmental impact assessment procedures in the planning and execution of development projects. 	<p>EPA has been very active in the PDF phases of the project, serving on the project steering committee, on advisory committees and in task teams convened to produce project outputs. This level of activity will be continued in the full project. EPA is likely to contribute expertise to all project components but will be particularly active in the execution of Component 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i> where its expertise on the enabling policy environment will be utilised, 2 <i>Appropriate information on risks, impacts and management of IAS available to key stakeholder groups</i> where its experience of establishing environmental information systems will be used and 4 <i>Capacity built for multisectoral prevention and management of IAS</i> where its education mandate is highly relevant.</p>
<p>Ministry of Food and Agriculture (MoFA) MoFA has responsibility for agricultural production in Ghana with the exception of the production of cocoa, coffee and sheanuts (responsibility of the Ghana Cocoa Board). It has oversight responsibility for the Plant</p>	<p>MoFA has been active in the PDF phases of the project through stakeholder consultations. Apart from its importance as the parent ministry of the PPRSD MoFA will be very involved in the project through its</p>

Protection and Regulatory Services Directorate (PPRSD) and the Irrigation Development Authority, agencies whose mandate include aspects of IAS management.	extension services, which will help to ensure that local communities are involved in relevant project activities. This will be particularly so with activities addressing the management of IAS that affect biodiversity and farming systems, notably pilot site activities falling under Component 3 <i>Strategies for the prevention and management of IAS implemented.</i>
Plant Protection and Regulatory Services Directorate (PPRSD) The PPRSD's remit includes the following: <ul style="list-style-type: none"> • Regulation of the importation of plants and plant parts • Confiscation of prohibited species. • Implementing plant pest control countrywide. • Certification of clean plant and planting materials. • Monitoring of the use of pesticides. 	PPRSD have been active in the PDF phases of the project through stakeholder consultations. During the full project it likely that it will participate in Component 1 though the implementation of cost-recovery mechanisms for IAS management. It will play a central role in the implementation of Component 3 executing activities related to risk analysis, early detection and rapid response. PPRSD will also be a significant beneficiary of Component 4 under which it will receive essential equipment and training.
Ministry of Lands and Forestry (MoLF) MoLF has the overall responsibility for formulating land and forestry policies. It exercises ministerial responsibility over sector institutions such as: The Forestry Commission and its agencies the Forestry Services Department and the Wildlife Department. It also monitors the implementation of policies and activities of private and public agencies that has concern the utilisation and management of forestry and wildlife resources.	PPRSD have been active in the PDF-B phase of the project through stakeholder consultations. Other than through its sector institutions its main involvement in the project is likely to be through its role in facilitating the integration of IAS issues into land and forest policies under Component 1.
The Forestry Commission The Forestry Commission is Ghana's agency for the regulation of conservation, management and utilisation of forest and wildlife resources.	The Forestry Commission has have been active in the PDF phases of the project through stakeholder consultations. As the management authority for Ghana's forest estate the Forestry Commission will participate in project activities that involve IAS management in forest lands. Their involvement will be particularly intensive in activities undertaken in the Afram Headwaters Forest Reserve under Component 3.
Volta River Authority The primary function of the VRA is to generate electricity for the country's industry. It is also mandated to provide facilities and assistance for the development of the Volta Lake as a source of fish and for the transportation of goods and people. In the exercise of these mandates, the VRA has committed a lot of human and financial resources into the maintenance of the lake by controlling waterweeds and planting forests in the denuded areas along the lake.	VRA has have been active in the PDF phases of the project through stakeholder consultations. It will be a vital partner in the pilot site management activities in the Oti Arm of the Volta Lake to be conducted under Component 3. It also has a role to play in Component 1 through the development of cost-recovery mechanisms for invasive species management.
Ghana Irrigation Development Authority (GIDA) GIDA is concerned with the development and maintenance of irrigation facilities for agricultural production. GIDA is concerned with IAS as numerous reservoirs, dams and dug-outs have become infested with invasive aquatic weeds.	GIDA has been involved in stakeholder consultations undertaken during the PDF phases of the project. It will be involved in the full project as an important stakeholder in Components 2 and 4. GIDA will be an agency that can aid in the dissemination and replication of project outputs.
The Universities Ghana has a number of universities. The University of Ghana at Legon seeks to become a centre for excellence in research teaching and the delivery of extension services and a world-class institution of higher learning. Some of its faculties and departments are actively involved in the	Staff from the Universities of Ghana have been involved in the PDF phases of the project, through consultation during the project and as members of the project steering committee and task teams. Further participation of the university sector will take place in

research and management of IAS. It also has a legal department with specialisation in environmental law. The Kwame Nkrumah University of Science and Technology seeks to provide an environment for teaching, research and entrepreneurship training in science and technology for the development of Ghana and Africa. Some of its research activities involve the management of IAS. The University of Cape Coast was established to train graduate teachers for secondary schools, Teacher Training Colleges and Technical Institutes. The University has since expanded its functions to the training of educational planners, administrators and agriculturists some of whose research activities are in the area of IAS management.	the full project in all component areas in particular those related to research and capacity building.
Regional Institutions	
District Assemblies The District Assemblies were established as the political administrative authorities for governance, development and planning in the districts. They are also empowered among others to: <ul style="list-style-type: none"> Plan and recommend to the Assemblies, strategies and activities for the protection and improvement of the environment, especially fragile and sensitive areas such as river courses, hill slopes, wetlands, watersheds, shrines and sacred groves, through activities such as watershed protection agroforestry, community forestry, erosion protection, etc. Mobilise community and individual efforts to preserve and enhance the local environment. Encourage those aspects of indigenous culture which promote conservation and enhancement of the environment. 	The District Assemblies have been consulted in areas where pilot site activities have taken place in the PDF-B phase of the project. The participation of the Assemblies will be crucial to the successful implementation of pilot site activities, which will have a grass-roots community conservation focus throughout. District Assembly members will be targeted for stakeholder consultation under Component 1 in order develop local guidelines and ordinances relating to invasive species management to gain support for their implementation. They shall also be involved in awareness-raising campaigns as part of Component 2 and in Capacity building activities as part of Component 4.
Village level leaders In Ghanaian culture, chiefs are symbols of authority in the community. Local development work must involve village levels chiefs and elders. In many areas local customs are maintained that help to regulate the use of the environment. In the coastal areas, it is forbidden to go fishing on Tuesdays. This reduces pressure on the demand for fish and thereby serves as a means of conservation. In the forest areas some days have been set aside when no farming activities take place. This serves to reduce the pressure on the clearing of the vegetation and therefore preserve bio-diversity. Certain areas have been declared to be sacred, which aids in their conservation.	Village chiefs and elders have been consulted in areas where pilot site activities have taken place in the PDF-B phase of the project. Maintaining a high level of consultation with village elders will be crucial in ensuring the success of project activities executed at the grass-roots community level. Village authorities will be involved in the planning and execution of pilot site management projects. They will also be a target for awareness-raising work and capacity building programmes. All of this work will have a development focus emphasising the economic importance of invasive species and the benefits of sound IAS management to the community including its most vulnerable members.
Non-Governmental Organisations	
<p>NGOs and CBOs will be involved in the project. Some of these groups have particular technical areas of expertise and this will be utilised in the execution of project activities. A great deal of NGO and CBO effort in Ghana is directed at poverty alleviation. This will be of great help in ensuring that project activities maintain a focus on society's most vulnerable groups, many of whom are affected by IAS. Many NGOs in Ghana play an active part in awareness-raising activities. This focus will be utilised in the execution of Component 4.</p> <p>The following are some of the NGOs that have been consulted during the PDF process and with whom it is proposed to work closely during the full GEF project:</p> <ul style="list-style-type: none"> The Ghana Wildlife Society (including the Wildlife Clubs of Ghana) Centre for African Wetlands Green Earth Organisation Ghana Association of Private Voluntary Organisation in Development (NGO umbrella organisation) 	

The Private and State Run Industrial Sector

The private sector is not well developed in Ghana. However, private industry is expanding. Consultation with private industry representatives as well as those from state run industries will help to bring IAS issues onto the agenda of these sectors.

The major power generators in Ghana are the VRA and the Electricity Company of Ghana. The involvement of the VRA in the project is outlined above. The VRA, the Electricity Company of Ghana and other smaller public and private utility companies will participate in the full project particularly in activities relating to Components 1 and 3.

UGANDA

Arrangements for project co-ordination and implementation were established during the PDF-B phase of the project through a series of project steering committee meetings and at a national stakeholder workshop, which took place in June 2004.

The Government of Uganda will execute the project through the National Agricultural Research Organisation (NARO), which is affiliated to the Ministry of Agriculture, Animal Industry and Fisheries. NARO was the project executing agency during the PDF phases and has a great deal of experience in implementation of IAS-related projects in Uganda.

The National Project Director will be the Director of NARO. The Project Director will be accountable to CABI-ARC for the delivery of agreed national project outputs, maintain regular communication with CABI-ARC and will supervise the work of the National Coordination Unit (NCU), which will be responsible for the day to day running of the project.

The National Coordination Unit (NCU) will be established within NARO. The full time National Project Coordinator and necessary support staff will be appointed to assure the satisfactory execution of the project.

Specific project outputs will be coordinated through Task Teams organised by project component. These will be institutions, sub-contracted through the NCU, with sufficient specialised knowledge to ensure that the outputs are of the required quality and that they are delivered in a timely manner. Work at the pilot site level will be coordinated by NARO.

A Project Steering Committee will be appointed at the national level to provide guidance to the project, especially in regard to national political and administrative issues, and to facilitate interagency coordination. The Committee will comprise of 9-10 people including representatives from:

- NARO (Chair)
- Ministry of Finance (GEF Focal Point)
- Ministry of Agriculture, Animal Industry and Fisheries
- NEMA
- Ministry of Water, Land and Environment
- Makerere University
- Uganda Wildlife Authority
- National and International NGOs and CBOs represented in Uganda e.g. Environment Alert, Ecotrust, IUCN Uganda Country Office

The main functions of the Project Steering Committee will be to provide general oversight and guidance to project implementation and to monitor project progress and performance.

In addition, an advisory committee and *ad hoc* advisory sub-committees will be formed. Advisory committee and sub-committee meetings will comprise of 4-6 people to discuss specific technical issues relating to the four project components and associated activities and sub-activities. The meetings will be composed of national specialists to provide guidance on technical issues relating to project implementation.

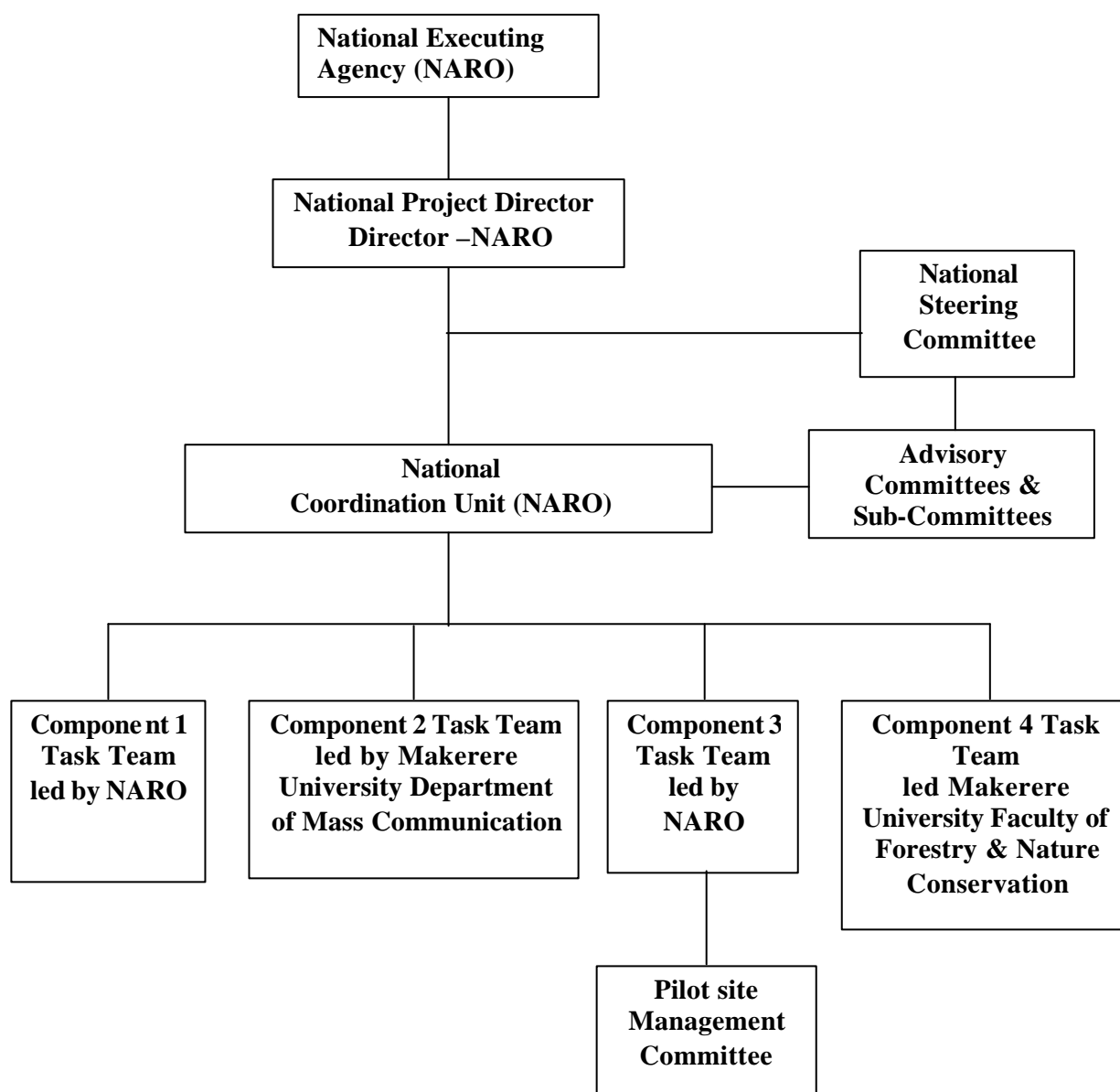


Figure F4. Project Management Structure for Uganda. See text for details.

Table F4. Institutional Profiles for Uganda

Institution	Role in the Project
Governmental Institutions	
National Agriculture Research Organisation (NARO) NARO is linked to MAAIF and operates through 12 newly created, decentralised agricultural research and development centres (ARDCs). The ARDCs will act as launching centres for adaptive research facilitating fine-tuning and dissemination of technologies to the specific agro-ecological zones of the country. NARO has a significant research portfolio on IAS. Specific examples include the impact assessment of pastoral weeds in South Western Uganda, a PhD study funded by DANIDA and USAID; integrated control of <i>Cymbopogon nardus</i> in	NARO will ensure the national coordination of the project and strengthen linkages and coordination among relevant IAS stakeholders. The project coordination unit will be housed within NARO. NARO, through the project coordination unit and national steering committee, will provide overall coordination for each project component. However, day to day execution of activities and sub-activities under each component will be carried out by

<p>South Western Uganda funded by DANIDA; and Cultural Perceptions and Economics of Cymbopogon, an MSc. Study funded by DANIDA. Through its research activities, NARO also carries out routine monitoring of the water hyacinth in Uganda's waters although it does not have a national responsibility for this activity.</p> <p>NARO has been coordinating the PDF-A and PDF-B phases of this project.</p>	<p>component coordinating institutions that have technical expertise in the relevant areas.</p> <p>NARO will directly coordinate Component 3, <i>Strategies for the prevention and management of invasive species implemented</i>. This will involve national coordination as well as coordination at the pilot site level. NARO will play a crucial role in undertaking applied research as part of this project .</p>
<p>The Ministry of Finance, Planning and Economic Development (MoFPED)</p> <p>MoFPED is the government institution responsible for formulating financial and monetary policies. It is also responsible for planning for the economic and social development of Uganda; allocating national resources for economic and social development; and coordinating the use of donor funds.</p> <p>Two departments relevant to IAS are the Expenditure Department and the Aid Liaison Department. The Expenditure Department integrates environmental issues in macro-economic planning and supports institutions dealing with natural resources. The Aid Liaison Department coordinates all projects with external support including the present IAS project.</p> <p>MoFPED is the GEF Focal Ministry in Uganda.</p>	<p>As well as being the GEF Focal Point for Uganda, responsible for approval of project cofinancing requests and represented on the project steering committee MoFPED will play a critical role in making the case for financial support for IAS related activities and will provide the support for the links between IAS issues and poverty eradication. This will help to ensure that project activities benefit some of Uganda's most vulnerable groups.</p> <p>The development of mechanisms for financing ongoing IAS activities from the public and private sector are likely to involve close interaction with MoFPED.</p>
<p>Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)</p> <p>MAAIF is the government ministry responsible for agriculture, animal industry and fisheries.</p> <p>MAAIF is responsible for the control of the water hyacinth at the national level through the Water Hyacinth Control Unit. The Unit undertakes an integrated approach involving biological, manual and mechanical control options. There is also a Quarantine Unit in MAAIF, under the Department of Crop Protection. The Plan for Modernisation of Agriculture (PMA), which supports the Poverty Eradication Action Plan (PEAP), is also falls under MAAIF. PEAP and PMA are central to the Government of Uganda's macro economic plans</p> <p>The National Agricultural Advisory Services (NAADS) is one of the seven core programmes under the PMA. NAADS has a mission to implement a decentralised, farmer-owned, and private sector serviced extension delivery system contributing to the realisation of the agricultural sector objectives. The NAADS structure has a very high potential for delivering IAS-related information.</p>	<p>MAAIF will be represented on the project steering committee, where it is going to play a critical role in ensuring the successful achievement of many of the proposed project activities. The participation of MAAIF in the project will help to ensure that IAS issues are mainstreamed within the PEAP and PMA. Coordination with activities undertaken under PMA will ensure that the project maintains its relevance to the needs of some of Uganda's most vulnerable groups.</p> <p>Project activities related to water hyacinth management will involve liaison with MAAIF.</p> <p>Measures to establish IAS risk assessment procedures and guidelines will be channelled through MAAIF who will also play a pivotal role in the establishment of IAS early detection and rapid response mechanisms. Successful synergy between the communications activities under the proposed project and the work of NAADS will help to ensure the sustainability of the IAS communication strategy.</p>
<p>The National Environmental Management Authority (NEMA)</p> <p>NEMA is affiliated to the Ministry of Water, Lands and Environment (MWLE), which is responsible for environmental policy formulation and overseeing policy implementation. NEMA is the apex body that has the mandate to coordinate, monitor and supervise all activities in the field of environment including biodiversity. It is responsible for the implementation of the National</p>	<p>NEMA will be represented on the project steering committee, where it is going to play a critical role in ensuring the successful achievement of many of the proposed project activities. The participation of NEMA in the project will help to ensure that IAS issues are fully integrated into the environment agenda in Uganda.</p>

<p>Environment Act, the National Environment Policy and provisions of the National Environment Action Plan (NEAP). The specific objectives of NEMA are to develop environmental laws, policies and guidelines for regulating environmental management and to ensure integration of environmental concerns into planning at the central, district and local levels. NEMA therefore works with district local councils to establish District Environment Committees (DECs). NEMA also provides training and some logistical support for District Environment Officers.</p> <p>NEMA coordinated the preparation of the National Biodiversity Strategy and Action Plan (NBSAP), ensuring that issues of IAS have been entrenched in the final document. NEMA has been also closely involved in the control of the water hyacinth. It is also the focal point for the Convention on Biological Diversity.</p>	<p>NEMA itself will coordinate Component 1, <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i>. It will also provide substantial technical input into awareness-raising activities and activities relating to the incorporation of IAS issues into learning institution curricula. Ensuring public involvement in environmental issues is central to NEMA's mission</p>
<p>Makerere University</p> <p>Makerere University is one of Africa's oldest educational institutes. There are several faculties and departments that have an interest in IAS both as a teaching subject and as a research topic. These include the Makerere University Institute of Environment and Natural Resources, the Faculty of Forestry and Nature Conservation and the Department of Mass Communication.</p> <p>Several undergraduate and post graduate studies at Makerere University have been undertaken in IAS related topics and staff from the University were very active in both the PDF-A and PDF-B phases of the project.</p>	<p>Makerere University, through its Department of Mass Communication will coordinate Component 2, <i>Appropriate information on the risks, impacts and management of IAS disseminated to identified stakeholder groups</i>. The university will also provide support in terms of research activities related to the project, notably under Component 3. Component 4 <i>Capacity built for multisectoral prevention and management of IAS</i> will be coordinated by the Makerere University Faculty of Forestry and Nature Conservation. Specialised training courses in IAS issues will be devised. These courses not only will be of value in building the IAS management capacity of identified stakeholders but will be useful in bolstering the teaching of IAS issues in university curricula.</p>
<p>Uganda Wildlife Authority (UWA)</p> <p>Under the Wildlife Act, the Uganda Wildlife Authority is charged with the responsibility of managing, coordinating and controlling human activities inside and outside protected areas to ensure sustainable utilisation of wildlife resources in Uganda. UWA manages ten national parks, ten wildlife reserves, seven wildlife sanctuaries and provides guidance for the management of 13 community wildlife areas.</p> <p>UWA intends to accomplish its mandate by carrying out research on wildlife conservation, restoring and maintaining security in parks and reserves, controlling poaching and illegal wildlife trade, carrying out wildlife education and awareness activities, and sharing benefits from parks and reserves with local communities. UWA undertakes IAS control activities in National Parks. It regularly sensitises tourists on the dangers of alien species and does not allow their introduction into the Parks.</p>	<p>As well as sitting on the project national steering committee UWA will play an important role in ensuring the success of the pilot IAS management activities undertaken under Component 3.</p> <p>UWA will also be involved in capacity building activities that will enhance its ability to fulfil its mandates with regard to IAS management. The emphasis of this project on the interaction between IAS issues inside and outside protected areas will help to increase the interaction between all land management sectors to enhance IAS management. UWA will be represented at cross-sectoral meetings organised under the project. Their involvement will help to ensure that IAS impacts on biodiversity are given due consideration.</p> <p>UWA is giving increasing prominence to the participation of local communities in protected area management. This emphasis will help to ensure wide stakeholder involvement in project activities.</p>
<p>Local and International Non-Governmental Organisations</p>	
<p>There are increasing numbers of local environmental NGOs in Uganda. Conservation NGOs include the Uganda Wildlife Society, Wildlife Clubs of Uganda, Environment Alert, Joint Energy and Environment Project and the Environmental Conservation Trust of Uganda.</p>	<p>These NGOs provide a pivotal role in mobilising and sensitising the people about environmental issues. In circumstances where government extension agencies are unlikely to have widespread reach into rural communities, NGOs and CBOs can supplement the</p>

<p>More scientific NGOs include Nature Uganda.</p> <p>A number of international NGOs have activities in Uganda. Several have rural development programmes (CARE, ACODE, World Vision). Conservation NGOs (IUCN, WWF, AWF) are all active, in both awareness-raising and project implementation.</p>	<p>efforts of the public sector and help to ensure that the concerns of the underprivileged are incorporated in national development. NGO strength lies in their long-term commitment, their transparency, their access to communities and their independence. NGOs were active in promoting awareness on the dangers of the water hyacinth in the last decade. They can play a similar role in the proposed project and also assist communities in project implementation.</p> <p>NGOs and CBOs will be involved in all project activities, notably those involving grassroots community action</p>
<p>The Private and State Run Industrial Sector</p>	
<p>Uganda's generally high levels of economic growth and the privatisation of state-run industries has led to a significant expansion of the country's private sector in recent years. The tourism industry is one of those expanding industries that is likely to be negatively affected by the continued encroachment of IAS. The Uganda Electricity Board (UEB), which has recently been privatised, provides hydroelectric power to Uganda, Kenya, Tanzania and Rwanda from Owen Falls Dam. The large biomass of water hyacinth at the dam has the potential to cause structural damage on the dam wall. Other hydroelectric facilities remain vulnerable to IAS. Uganda Railway Corporation (URC) is a parastatal organisation, which is undergoing restructuring in readiness for privatisation. Its operations are affected by the water hyacinth, which impedes access to Port Bell, one of Uganda's main land ports used by URC to link with Kenya and Tanzania. These are examples of industries that stand to benefit from the full project. In turn they are potential sources of funding for sustainable IAS management. Consultation with representatives of private and state run industries will help to more closely integrate IAS issues into the agendas of this sector.</p>	

ZAMBIA

Arrangements for project co-ordination and implementation were established during the PDF-B phase of the project through a series of project steering committee meetings and at a national stakeholder workshop, which took place in March 2004.

The Project Focal Point will be the Ministry of Tourism, Environment and Natural Resources (MTENR), also the GEF Focal Point ministry in Zambia. Its role as the project focal point will ensure that project outputs, notably those related to policy, are disseminated to the government of Zambia at the highest level. Its involvement will also help to ensure maximum participation in the project at all levels. The Focal Point shall liaise with and supervise the National Executing Agency, the Environmental Council of Zambia (ECZ), and will be a member of the National Steering Committee (NSC), chaired by ECZ.

The National Project Director will be the Director of ECZ. The Project Director will be accountable to the focal point and CABI-ARC for the delivery of agreed national project outputs, maintain regular communication with the MTENR and CABI-ARC and will supervise the work of the National Coordination Unit (NCU), which will be responsible for the day to day running of the project.

In addition to a full time National Project Coordinator, the NCU will comprise of a full time project assistant, a secretary, accounts staff and a driver. The Coordinator will undertake the following: act as Secretary to the National Steering Committee; coordinate all in-country technical and administrative project activities; develop terms of reference for national consultants and task teams; supervise day to day project activities; supervise preparation and control expenditure for task teams, project site coordinators and any consultants on the project; oversee the utilisation of in-country assets and supervise all administrative and project site coordinating staff.

The NSC will comprise of the Focal Point, the National Project Manager, the National Coordinator (Secretary) and representatives from key stakeholders groups as identified in both the PDF-A and PDF-B project phases. In addition the NSC will have the power to co-opt professionals with particular skills to the NSC on a case by case basis.

The NSC will meet regularly (based on needs but at least four times per year) for the following purposes: To appoint Advisory Committee and Sub-committee members according to specialist needs; to approve project plans; to approve terms of reference for task team members and consultants; to oversee the appointment of in-country consultants and to review reports and other project outputs. The NSC will provide overall guidance to the project, especially in regard to national political and administrative issues.

There will be two project site coordinators, one for the pilot site based near Livingstone (which will be under the National Heritage Conservation Commission - NHCC and the Zambian Wildlife Authority - ZAWA) and another for the pilot site based around Lochinvar National Park (which will be under ZAWA). The Coordinators will implement pilot site activities. Pilot Site Management Committees will be established comprising of identified stakeholders in pilot site areas.

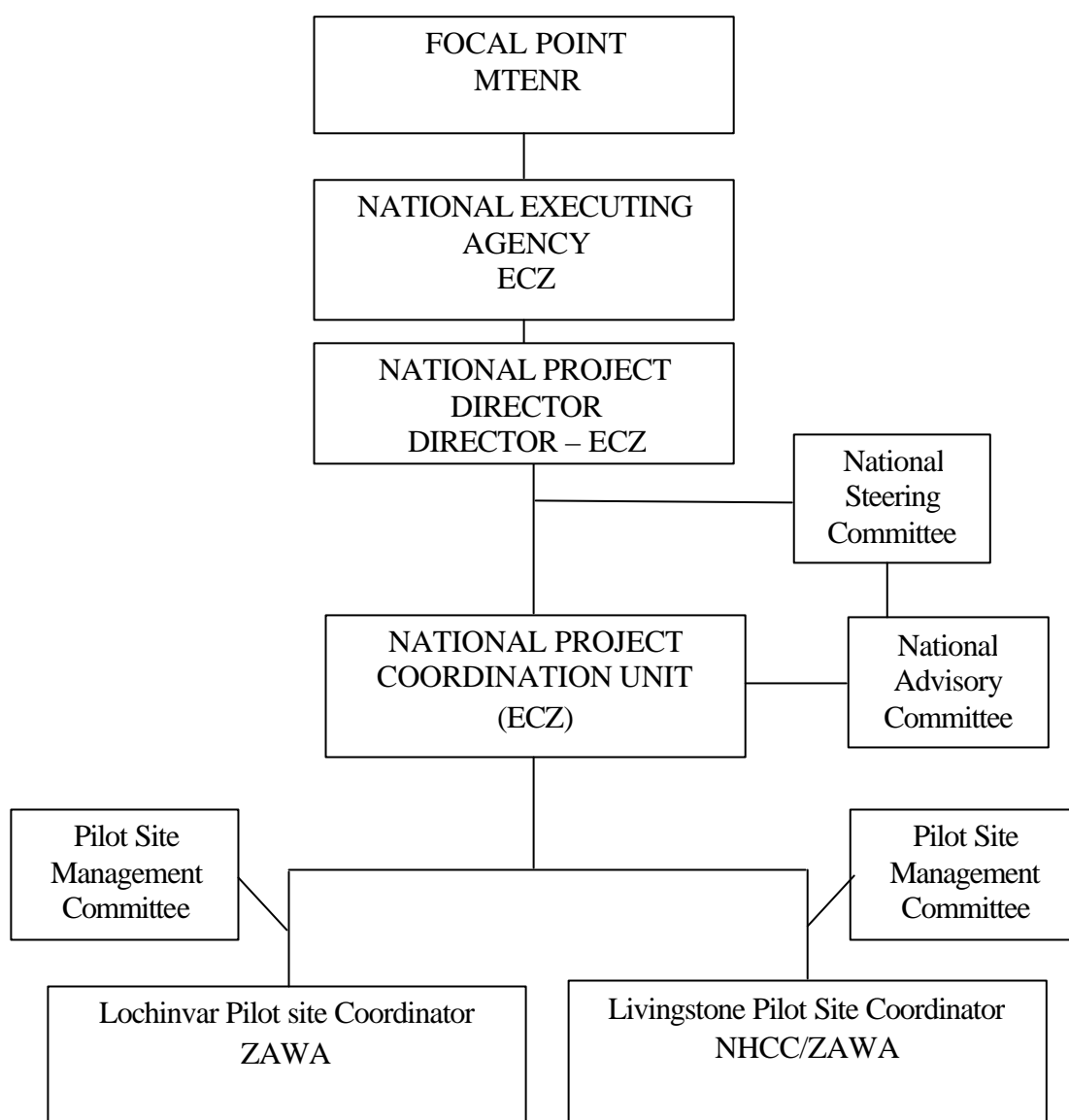


Figure F5. Project Management Structure for Zambia. See text for details.

Table F5. Institutional Profiles for Zambia

Institution	Role in the Project
Governmental Institutions	
<p>Ministry of Tourism, Environment and Natural Resources (MTENR) MTENR is mandated to implement Zambia's NEAP (1994), which has identified key environmental issues and provides a framework for action. The five most critical environmental problems identified in the NEAP were water pollution and inadequate sanitation, soil degradation, air pollution, wildlife depletion and deforestation. NEAP gives very little prominence to IAS. MTENR is also mandated to implement Zambia's NBSAP (1999), which, while still not giving IAS a high profile does highlight the threat posed by introduced plants to indigenous ecosystems and species.</p> <p>MTENR is the GEF Focal Point Ministry for Zambia.</p>	<p>MTENR have been active on the steering committee throughout the PDF-B phase of the project. Its participation has helped to ensure wide stakeholder involvement in the PDF-B project phase. Its prominence in the full project will fulfil a similar role.</p> <p>As the GEF Focal Point for Zambia MTENR will help to ensure that there is synergy between this and other GEF projects in Zambia.</p>
<p>Environmental Council of Zambia (ECZ) ECZ is a semi-autonomous body under MTENR. It was established as a body consisting of representatives of key stakeholder institutions such as the ministries responsible for water, lands, natural resources, commerce and industry.</p> <p>ECZ is mandated under the Environmental Protection and Pollution Control Act to undertake such activities as are necessary to protect the environment and control pollution, so as to provide for the health and welfare of persons, animals, plants and the environment. To implement this mandate ECZ has been empowered to coordinate policies relevant to environmental protection and management of natural resources.</p>	<p>ECZ was the National Executing Agency for the PDF-B phase of the project and will coordinate the full GEF project.</p> <p>ECZ will ensure the national coordination of the project and strengthen linkages between relevant IAS stakeholders. The project coordination unit will be housed within ECZ. As a multisectoral body ECZ demonstrated its ability to coordinate activities undertaken by a wide variety of agencies during the PDF-B phase of the project.</p> <p>ECZ's experience in legislation, EIAs and the implementation of cost-recovery mechanisms will be utilised in Component 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i>.</p>
<p>Zambia Wildlife Authority (ZAWA) ZAWA is a semi autonomous authority under MTENR. The role of ZAWA is to conserve and sustainably utilise wildlife by:</p> <ul style="list-style-type: none"> • Facilitating the active participation of local communities in the management of wildlife estates. • Promoting and developing tourism. • Educating the general public. • Enhancing the recognition of the economic value of wildlife resources among public and private stakeholders 	<p>ZAWA has been active during the PDF-B phase of the project as part of the project steering committee and as part of the task teams for the execution of several project components.</p> <p>Under the full project ZAWA will be in part responsible for the coordination pilot site control projects under Component 3 <i>Strategies for the prevention and management of invasive species implemented</i>. In addition ZAWA will play an active role in the implementation of other project components. Its education and community outreach activities will be particularly important in helping to ensure that IAS issues are incorporated into learning institution curricula (under Component 4 <i>Capacity for multisectoral prevention and management of IAS strengthened</i>) and that IAS information is communicated to community stakeholders (under Component 2 <i>Appropriate information on risks, impacts and management of IAS available to key stakeholder groups</i>). ZAWA also has considerable</p>

	experience of implementation of cost-recovery mechanisms, which could be utilised under Component 1.
<p>National Heritage Conservation Commission (NHCC) The National Heritage Conservation Commission Act established the NHCC and defines its functions and powers. The functions of the Commission are to conserve the historical, natural and cultural heritage of Zambia by preservation, restoration, rehabilitation, reconstruction, adaptive use, good management and any other necessary means.</p> <p>The Victoria Falls World Heritage Site falls under the management of NHCC.</p>	<p>NHCC has been active in the PDF-B phase of the project through its involvement in activities under Component 3. Those activities concerned survey work undertaken in the Victoria Falls area. These efforts will be expanded in the full project when NHCC will work together with ZAWA to coordinate pilot site activities in this location. A great deal of the NHCC's work involves liaison and awareness-raising activities with local stakeholders so the involvement of the NHCC will help ensure that local communities participate in management activities undertaken in the Victoria Falls area.</p>
<p>Ministry of Agriculture and Cooperatives The Ministry of Agriculture and Cooperatives is responsible for agriculture and in general terms, rural development. Key land and agriculture issues in Zambia include land tenure, soil and land degradation, food security and contamination of surface and ground water through fertiliser and chemical usage. The ministry has been active in IAS matters through its work on plant pests.</p> <p>The ministry is responsible for the Plant Quarantine and Phytosanitary Service who implement the Plant Pests and Diseases Act.</p>	<p>The Ministry has been actively involved in the PDF phases of the project. This involvement will continue during the full project.</p> <p>Through its responsibility for rural development the Ministry will be particularly important in helping to ensure that project activities involve grass-roots communities. The quarantine service will be involved in activities under Component 3. It will also be involved in Component 1. The quarantine service already has experience of implementing cost-recovery mechanisms, which could be utilised under this component.</p>
<p>Department of Water Affairs (DWA) and other relevant organisations in the water sector DWA is responsible for water resources management that includes assessment and development of surface and ground water. It has an establishment of over 270 hydrological stations throughout the country. Most of these hydrological stations are not functioning well because of ill funding. DWA has undertaken some work on water weed clearance.</p> <p>Other relevant organisations in the water sector include the Department of Maritime and Inland Waterways, The Zambezi River Authority, National Water Supply and Sanitation Council, the Department of Fisheries and the Water Board</p>	<p>DWA has been actively involved in the PDF phases of the project. This participation will continue during the full project. Its participation will be particularly relevant to activities under Components 1 and 3 <i>Strategies for the prevention and management of invasive species implemented.</i></p> <p>The other named stakeholders have also been consulted during the PDF phases of the project.</p> <p>Stakeholder workshops and consultations during project implementation will bring together organisations in the water sector to encourage a harmonised approach to the management of water weeds.</p>
<p>The Forestry Department The Forestry Department implements the Forests Act that provides for the establishment and management of National Forests and Local Forests, makes provision for the conservation and protection of forests and trees and the licensing and sale of forest produce. In terms of protection of species, it empowers the Minister to declare any kind or category of trees to be protected in the whole or part of Zambia. It prohibits the felling, cutting, burning, injuring, taking or removing of any protected tree.</p>	<p>The Forestry Department has been actively involved in the PDF phases of the project. In the full project it will participate in activities under Component 3. It will also benefit from training under Component 4. The adoption of a participatory approach to forest management in recent years has meant that the collaboration of the Forestry Department will help to ensure that project activities address the needs of local communities, traditional institutions and other grass-roots stakeholders.</p>
<p>Zambia Revenue Authority (ZRA) ZRA is charged with the responsibility of monitoring all</p>	<p>Although ZRA has not been involved in the PDF</p>

Zambia's imports and exports.	phases of this project staff have attended separate sensitisation meetings on quarantine of imported plant material conducted by ZAWA and the Phytosanitary Service. Under the full project ZRA will be involved in activities relating to Components 1 and 3.
Ministry of Education The Ministry of Education is mandated, among other functions to facilitate the provision of education in the country. This is done at tertiary, secondary and primary levels, therefore the ministry is in charge of devising educational curricula through the Curriculum Development Centre, to ensure the availability of educational materials and textbooks in adequate quality and quantity and to ensure that the education given at every level is being supported by educational mass media. They also are responsible for setting of Exams through the Examination Council of Zambia	The Ministry of Education has not been extensively involved with the project to date. During the full project it is planned to involve the Ministry in the activities related to Component 4. The participation of the Ministry of Education will help to ensure that guidelines for integrating IAS issues into curricula are implemented. ECZ has already worked closely with the Ministry to incorporate environmental Education and awareness issues into schools' curricula.
University of Zambia The university has a number of experienced members of staff who have carried out research into topics such as the biology, chemistry and distribution of invasive alien species. The university also has strong international connections. However, a lack of funds in recent years has discouraged research. Some topics of IAS relevance are taught at the University but not in a systematic way.	Staff from the University of Zambia have been involved in the PDF phases of the project both as formal consultants for the execution of project outputs and through consultation during the project. Further involvement will take place in the full project notably under Component 4.
Non-Governmental Organisations	
The involvement of NGOs and CBOs in the project will be of particular importance in helping to ensure that activities target grass-roots communities including the most marginalised.	
The following are some of the NGOs that have been consulted during the PDF-B process and with whom it is proposed to work closely during the full GEF project: <ul style="list-style-type: none"> • The Wildlife Conservation Society of Zambia • Environmental Conservation Association of Zambia • Community Resource Board • Livingstone Tourism Association • WWF- Zambia Education Project • Crane foundation of Zambia • Zambia National Education and Practionners Association 	
The Private Sector and State Run Industrial Sector	
The private sector is not well developed in Zambia. However, industries such as tourism are expanding. Continued IAS encroachment is likely to negatively affect tourism in Zambia as a whole and at pilot sites in particular. Consultation with private industry representatives as well as those from state run industries will help to bring IAS issues onto the agenda of these sectors.	
One of the largest companies in Zambia and one that has been particularly affected by IAS is ZESCO Ltd, the Zambian Electricity Supply Corporation. ZESCO has been involved in the PDF-B process and will continue to participate in the full project particularly in activities relating to Components 1 <i>Enabling Policy Environment Strengthened for Prevention and Management of IAS</i> and 3 <i>Strategies for the prevention and management of invasive species implemented</i> .	

ANNEX G.1. INVASIVES GLOSSARY

Some Definitions in the area of Invasive Species - specifically for Africa and for this programme

GROUP 1: INVASIVE SPECIES TERMS

This is a set of terms commonly used in association with invasive species and their management

Species = A group of organisms all of which have a high degree of physical and genetic similarity – with differences from other groups (other species)⁶

Invasive = having the capacity to infiltrate, occupy and expand in a new area or area occupied by a balanced ecosystem – causing its imbalance or change

Invasive species = a species which becomes established in natural or semi-natural ecosystems or habitats, which is an agent of change and threatens native biological diversity. Alternatively = *A species (of animal or plant or microorganism) which invades a new area causing negative impacts on biodiversity, agriculture, human development and even human health*

Alien species = A species occurring outside its normal distribution, an exotic species, a non-indigenous species. Technically: *A species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs or propagules of such species that might survive and subsequently reproduce*

Indigenous = native to an area (not imported)

Alien invasive species = an invasive species which is alien or exotic to the ecosystem in question

Invasiveness = propensity to invade ecosystems once introduced to a new area, proceeding from introduction to establishment, to naturalisation and then on to invasion

Endemic = found nowhere else, only found in that area

Threatened = in this context, the term “threatened” refers to a species or population that is in danger of extinction. The IUCN Red List process recognises several levels of threat and for species and populations they are: Critically Endangered, Endangered and Vulnerable. These states of being threatened can be at the global level or at regional and local level and refer to globally accepted criteria – see www.iucn.org/themes/ssc/redlists/rlcategories2000.html

Introduction (intentional or unintentional) = escape, release, dissemination or placement of a species outside of its range – usually as a result of human activity (but not always so)

Establishment = the settling of a species in a new area (after introduction) such that it can survive without human intervention, protection, support

Naturalisation = a further step from establishment such that a species can reproduce and spread without human intervention, protection or support

Invasion = expansion of a species in a new area in numbers and density and impact, often with devastating effects on native biodiversity as well as human development and often human health

⁶ More accurately and descriptively: a group of interbreeding individuals not interbreeding with another such group, being a taxonomic unit including geographical races and varieties and having two names in binomial nomenclature, the generic name and the species epithet, similar and related species being grouped in the same genus

NOTE: In many cases the sequence of an invasive species is ***Introduction, Establishment, Naturalisation*** and then ***Invasion*** – often in a short time – but not in all species and situations

Pathway = the means or route by which an invasive species moves from its place of origin (or recent habitat) to an area where it has not been before

Vector = the agent or mechanism that has assisted an invasive species to move along a pathway (e.g. vehicles, people travelling, containers, luggage, wind, water currents)

Pest = an organism that is not wanted – often a competitor for habitat, food or space or a disease vector of people, their livestock and crops or a destructive species

Weed = a plant growing where it is not wanted; a plant not valued for use, growing wild and regarded as hindering the growth of other (usually valuable) vegetation. **NB:** In Old English, “weed” = “plant” hence *seaweed* and *waterweed* – which are not usually weeds in the modern sense

Adventive = an organism in a new habitat but not completely established there (pre-naturalisation)

Phytosanitation = keeping plants free from diseases (pathogens and parasites)

Plant Protection = Prevention or management of pests of plants or plant products

Quarantine = literally the isolation of organisms to prevent transmission of diseases; Quarantine Service refers to a process to screen incoming organisms for their potential to cause damage and then to take action to prevent that danger

Epizootic = disease affecting a large number of animals simultaneously (the animal situation similar to *epidemic* in humans)

Disinfection = removal or killing of insects in cargo or in a vessel that could transmit undesirable species from one place to another

Risk Assessment = a process to assess the risk of introducing a species that could become a problem (e.g. invasive) or that has become established and could become a problem (e.g. invasive)

Monitoring = routinely measuring the intensity and extent of a plant problem

Surveillance = surveying the extent of a plant problem and then developing criteria for monitoring

Early warning = a process to alert authorities to the arrival or establishment of a problem plant species – before the problem becomes entrenched

Eradication = Complete removal or extinction of a species from an area – including seeds and other propagules

Control = Management of a pest or species to within acceptable limits (of, e.g., density, distribution or level of damage)

Integrated Control = Management of a pest or species using a number of integrated types of control – to the best advantage and management objective

Management of an Invasive Species = a range of activities and approaches to address a problem of invasion. This can (most simply) be prevention of the introduction or eradication of the species. More often it is the range of activities after invasion has occurred – which extend from no action to many and varied actions – depending upon the agreed objectives of management

Mitigation = offsetting the effects of a plant problem (e.g. invasion) by restoring affected ecosystems or enhancing alternative habitats for affected biodiversity, agriculture, livestock and general human development

Ballast water = seawater that is taken on board ships to balance their centres of gravity and stability in motion – which is discharged as a vessel is loaded – and which can carry alien species across oceans

Hull fouling = accumulation of sessile organisms on the underside of a boat or ship – ships can become vectors of alien species in this way

GROUP 2: ECOSYSTEM AND BIODIVERSITY TERMS (CONNECTED TO IAS)

These are terms not restricted to the invasive species jargon but commonly used in describing ecological and biodiversity situations and states

Biodiversity = **Biological diversity** = the variability among living things and the ecosystems they inhabit. Sometimes defined as “Species, Populations of species, Communities of Species and populations, genes, habitats and ecosystems”

Habitat = the locality or external environment in which a species/population (of plant) lives

Ecosystem = an ecological system (or place) formed by the interaction of interacting organisms and their environment (e.g. a forest, a wetland, a pond, a mountain, an agricultural setting, a city)

Tropical = belonging to an area of relatively high temperature and humidity between the “tropics”, i.e. 23 degrees North and South – often with season based on “wet” and “dry” rather than summer or winter

Temperate = belonging to a climatic area of the world where seasons are predominant, where temperatures fluctuate significantly between seasons and day length changes affect growth and development of plants

Aquatic = pertaining to organisms that live in freshwater (lakes, ponds, rivers, streams, watery parts of wetlands). Sometimes including marine systems as well

Terrestrial = pertaining to organisms (plants) that live primarily on land (and often cannot tolerate inundation for any length of time)

Marine = pertaining to organisms that live in the sea/ocean and in coastal situations dominated by the oceanic waters

Riverine = “Of rivers”, referring to organisms and habitats in or adjacent to rivers. Often when adjacent the term is “riparian”.

Lacustrine = “Of lakes”, referring to organisms and habitats in lakes

Palustrine = “Of swamps”, referring to organisms and habitats in or adjacent to swamps, marshes and associated wetlands

Wetlands = ecosystems or habitats influenced by water and dominated by vegetation that is adapted to inundation – either entirely (submerged), partly (emergent) or which is below ground

Vegetation = the plant life of an area – consisting of species, populations and matrices of these

Flora = the plants (species assemblage) peculiar to a country, area, specified environment or period

Fauna = the animals (species assemblage) peculiar to a country, area, specified environment or period

Wildlife = animals and plants that live and grow in “the wild” without human intervention

SOME ACRONYMS AND ORGANISATIONS OFTEN SEEN IN ASSOCIATION WITH INVASIVES

AMCEN = African Ministerial Conference on the Environment, see www.unep/ROA/amcen

CABI = CAB International, see www.cabi.org

CBD = Convention on Biological Diversity, see www.biodiv.org

EARO = Ethiopian Agricultural Research Organisation, see www.asareca.org/NARIs/earo

EARO = Eastern Africa Regional Office (of IUCN), see www.iucn.org/ourwork/earo

FAO = UN Food and Agricultural Organisation, see www.fao.org

GEF = Global Environment Facility, see www.gefweb.org

GISP = Global Invasive Species Programme – which has a secretariat based in South Africa - see www.gisp.org

IAS = Invasive alien species = alien invasive species = AIS

ISSG = Invasive Species Specialist Group of the IUCN Species Survival Commission (based in New Zealand at www.invasives.org)

ICAO = UN International Civil Aviation Organisation, see www.icao.int

ICLARM = World Fish Centre, see www.fishcentre.org

ICRAF = World Agroforestry Centre, see www.worldagroforestry.org

IMO = International Maritime Organisation, see www.imo.org

IUCN = The World Conservation Union, see www.iucn.org

ISSG = Invasive Species Specialist Group of the IUCN Species Survival Commission based in New Zealand at www.invasives.org

NEPAD = New Partnership for Africa’s Development, see www.nepad.org

Ramsar = Convention on Wetlands of International Importance, see www.ramsar.org

SBSTTA = Subsidiary Body on Scientific, Technical and Technological Advice (of the CBD), see www.biodiv.org/convention/sbstta

SCOPE = Scientific Committee on Problems of the Environment, see www.icsu-scope.org

UNCCD = United Nations Convention to Combat Desertification, see www.unccd.int

UNEP = United Nations Environment Programme, see www.unep.org

WTO = World Trade Organisation, see www.wto.org

ANNEX G.II. LIST OF PROJECT OUTPUTS FROM PDF-B

1. ETHIOPIA

Component 1

Anage, A., Reda, F., Tesfaye, G., Admasu, A. and Y. Ayalew 2004. Review of IAS related Policies and Strategies in Ethiopia. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Anage, A., Reda, F., Tesfaye, G., Admasu, A. and Y. Ayalew 2004. IAS Stakeholder analysis for Ethiopia. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Anage, A., Reda, F., Tesfaye, G., Admasu, A. and Y. Ayalew 2004. Evaluation of Policy and Strategy Baseline Conditions for IAS Management in Ethiopia and Proposed GEF Interventions in the IAS Enabling Environment. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Component 2

Kirub, A., Fenta, T., Kumsa, M., Abesha, D. and A. Molla 2004. A Pilot Communication Strategy for Invasive Alien Plant Management in Ethiopia. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Component 3

Regassa, S., Tesfaye, A., Tessema, T., Worku, A. Engida, G., Emanu, G. and F. Reda 2004. Invasive Alien Plant Control and Prevention in Ethiopia - Pilot Surveys, Baseline Conditions and Proposed GEF Interventions. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Component 4

Bekele, E., Desalegn, L. Bekele, T., Kirub, A., Amanuel, A. Solomon, B. and T. Awas 2004. Building Capacity for Sustainable IAS Management in Ethiopia. Needs Assessment. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

Bekele, E., Desalegn, L. Bekele, T., Kirub, A., Amanuel, A. Solomon, B. and T. Awas 2004. Building Capacity for Sustainable IAS Management in Ethiopia. Dissemination and Replication Strategy and Proposed GEF Interventions. Report submitted to EARO Ethiopia and CABI under the PDF-B phase of the UNEP GEF Project Removing Barriers to Invasive Plant Management in Africa. EARO, Addis Ababa, Ethiopia.

2. GHANA

Component 1

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ANNEX G.III. DESCRIPTIONS OF PILOT SITES IN EACH COUNTRY (INCLUDING MAPS)

1. ETHIOPIA

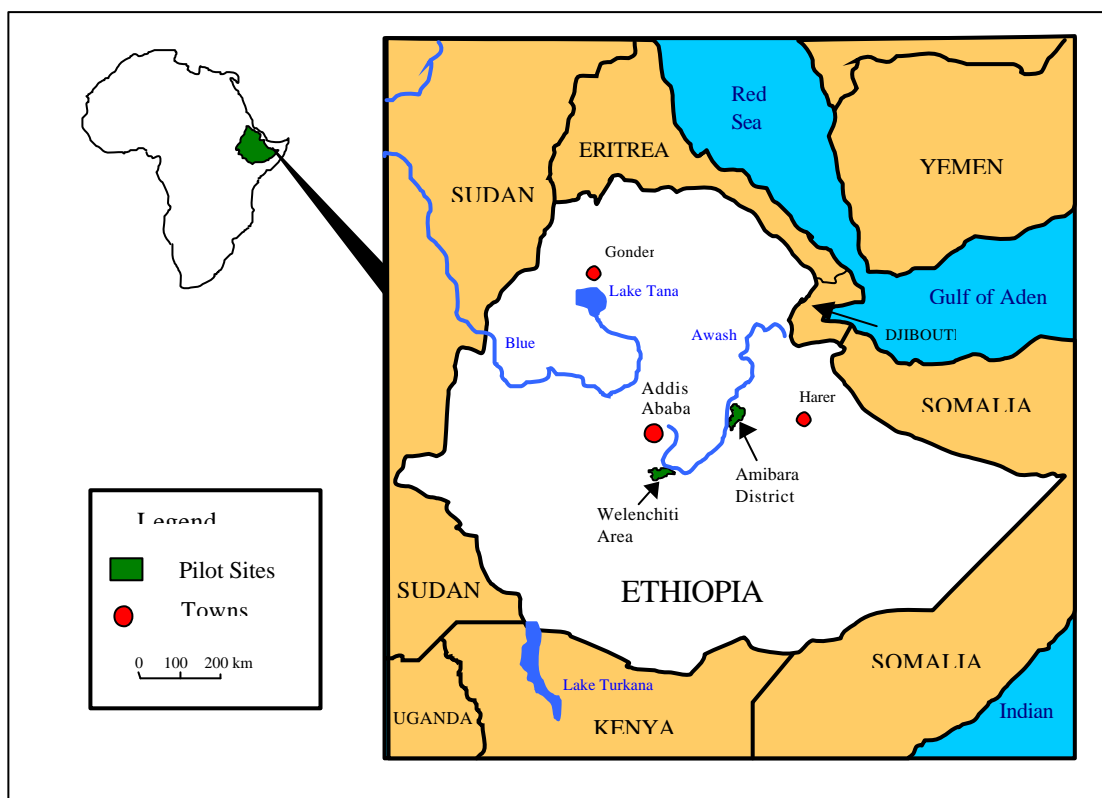


Figure 1. Location of Project Pilot Sites in Ethiopia.

1.1. Amibara District

The Amibara District, the location chosen as the pilot site for the management of *Prosopis* species, a thorny shrub of American origin, is located in the Middle Awash Basin (approximately 9° 17' N, 40° 22' E) in the Afar Regional State. The District has a semi-arid climate with a mean annual rainfall of c.600 mm falling between February and August. Temperatures vary between 10°C and 42°C.

The natural vegetation around the project site is acacia savannah. The best remaining example of this habitat is found in the Awash National Park. The Park covers an area of 827 km². Over 460 bird species have been recorded from the park, which has been designated an Important Bird Area (ET028, BirdLife International 2003). 76 mammals species have been recorded from the park, including the Threatened (IUCN 2001) Swayne's Hartebeest *Alcelaphus buselaphus swaynei*. It also houses significant populations of the Endangered Grevy's Zebra (*Equus grevyi*), which is now restricted to Ethiopia and Kenya. The park is 40 km away from the pilot site.

Pastoralism accounts for the majority of the land use in the area with cattle, camels, goats and sheep being the dominant species. In addition there is seasonal cultivation of staple crops such as tef and sorghum and large state and privately owned farms growing cotton, citrus fruits, sesame and groundnuts under irrigation.

Prosopis was introduced to the Amibara District in 1988 as a windbreak, to protect the citrus and for general amelioration of the harsh environment of the area. The most aggressive species of *Prosopis* is believed to be *Prosopis juliflora*. *Prosopis* soon became noticeably invasive and it now threatens fields, rangelands and protected areas. It is aggressively invading pastoral areas where it covers thousands of hectares in the Middle and Upper Awash Valley, and Eastern Harerge, destroying natural pasture, displacing native trees, forming impenetrable thickets, reducing grazing potential and increasing the incidence of crop pests. In spite of its uses surveys conducted under the PBF B phase of the project (Regassa *et al.* 2004) indicate that local communities are convinced that the harmful effects of *Prosopis* dramatically outweigh its benefits.

Prosopis is currently not present in the Awash National Park but will establish itself there if present trends continue. This prospect constitutes a serious threat to biodiversity.

1.2. Awash River Catchment System

Water hyacinth (*Eichhornia crassipes*), an aquatic plant native to the Amazon Basin, has been gradually spreading in Ethiopia over the last 30 years. It is at its most serious in the White Nile watershed of South-west Ethiopia, towards Sudan, and in the Awash River system, which supports major agricultural activities. Major fresh water lakes e.g. those of the Great Rift Valley are infested. Hydroelectric schemes, fishing, transport, water loss through evapotranspiration, irrigation and disease vectors are all issues to be addressed.

The project sites for the management of Water hyacinth have been selected in the Awash River catchments from Aba-Samuel Dam (8° 52' N, 38° 04' E), near Akaki, down to Lake Melka Denbi, 7 km away from Alem Tena town to the west.

Lake Melka Denbi is highly infested with Water hyacinth and is thought to be the source of infestation for neighbouring water bodies. Inhabitants of the area relate the introduction of Water hyacinth as ornamental plant by the foreign people who established and worked in the nearby fruit and vegetable farm. Water hyacinth now covers the entire water body. In surveys carried out under the PBF B phase of the project (Regassa *et al.*, 2004) farmers from the area reported that the weed prevents access for animals to drink and for people to fetch water. It makes the water impure as it favours the growth of parasites that affect human and animals.

The lake is connected to another lake, Melka Berbere, to the east, which is now also affected by the weed. During rainy season Melka Denbi joins the Awash River and becomes the source of infestation in Lake Koka, a major source of hydroelectric power and for irrigation canals and reservoirs at Wonji, a sugar producing area. In both cases the infestation is resulting in appreciable economic losses. The Water hyacinth infestations in both these areas are exacerbated by the effects of eutrophication, from a tannery in the case of Lake Koka and from heavy fertiliser use in the case of Wonji.

The Akakai-Aba-Samuel wetlands are an Important Bird Area for Ethiopia (ET029, BirdLife International 2003). The threatened Wattled Crane (*Grus carunculatus*) and the near threatened Lesser Flamingo (*Phoenicopterus minor*) are found in the area. There is also an important population of Common Crane (*Grus grus*) and the rare and restricted Wattled Ibis (*Bostrychia carunculatus*). It is a regular site for more than 20,000 waterbirds of at least 12 species. Although data do not exist on the effects of Water hyacinth on these bird populations they are highly likely to be negative in many cases.

1.3. Welenchiti Area

Welenchiti in the Oromia region of Ethiopia, is located about 40 Km to the west of the Awash National Park at approximately 8° 43' N, 39° 31' E. It is situated at an altitude of 1700 m and receives an annual rainfall 850 mm. The natural vegetation type is similar to found around the Amibara District though tree densities would have been higher given the greater rainfall and lower evapotranspiration in the Welenchiti area. The major crops growing around Welenchiti are tef, maize, sorghum and common bean. Cattle, camels, goats and sheep are dominant livestock.

Parthenium hysterophorus, a low annual shrub native to sub-tropical areas of North and South American, is believed to have been introduced accidentally into Ethiopia through aid shipments in the 1980s. The route of the spread of *Parthenium* has been along main roads from Addis Ababa to Dire Dawa to the east (which passes through Welenchiti and to Mekele to the north. From these new foci along movement corridors *Parthenium* invades adjacent fields that are used for crops and, after harvest for livestock. *Parthenium* plants are found at high infestation levels both during the crop growing and fallow periods. It is one of the very few green plants found at all growth stages after harvest during dry season. The weed's germination is not tied to a specific time of the year as it can germinate, grow and reproduce throughout the year. In contrast, most native species germinate at the beginning of the rainy season (June – September). Between *Parthenium* plants, one finds bare soil indicative of the high grazing pressure on fallow lands used as rangeland in this site.

Parthenium is having a substantial impact in arable and grazing land in the Welenchiti area. It is reported to reduce forage production by up to 90%. Sorghum grain yield losses varied from 40-97%, depending on the year and site, if *Parthenium* is left uncontrolled throughout the cropping season (Tamado and Milberg 2004). This invasive species is not used as forage nor favoured by livestock. Medical and veterinary effects of this species are just starting to come to light in some parts of the country.

Parthenium clearly poses a major threat to rangelands but may also threaten protected areas, where it is known to be present, if combined with overgrazing. The latter is a likely to occur should *Prosopis* become widespread in the Awash National Park. This will increase pressure on existing grazers. Increased incursion of domestic livestock into

the park (under the pressure of *Prosopis* and *Parthenium* invasion) would also result in overgrazing, facilitating *Parthenium* invasion resulting in a positive feedback process of ecosystem degradation and invasion.

2. GHANA

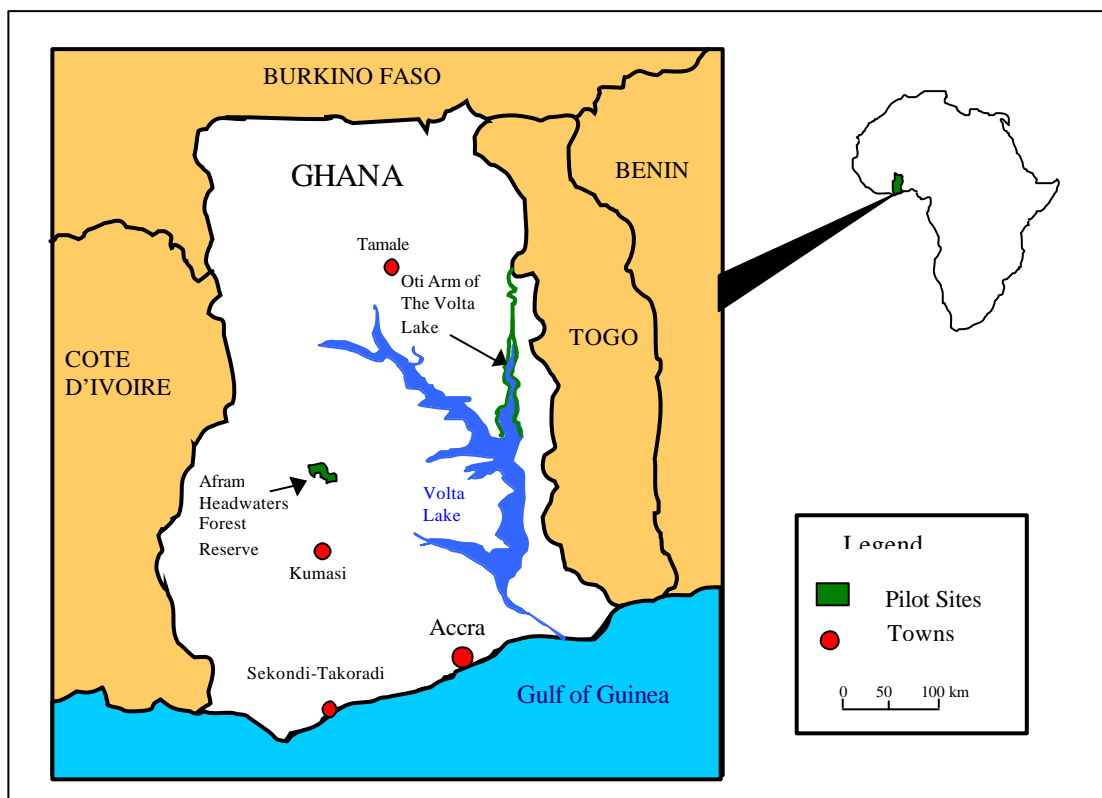


Figure 2. Location of Project Pilot Sites in Ghana.

2.1. Afram Headwaters Forest Reserve (AHFR)

The pilot site chosen for the management of *Broussonetia papyrifera* (paper mulberry), a large shrub to small tree native to northeastern Asia, is the 20,124 ha Afram Headwaters Forest Reserve (centred at 7° 5' N, 1° 35' W). AHFR is located c40 km north of Kumasi in the Ashanti Region of Ghana at an altitude of just above sea level. The vegetation is mainly dry semi-deciduous forest. Mean annual rainfall is between 1250 and 1500 mm with two rainfall peaks. AHFR lies within the Eastern portion of the Upper Guinea forest block, a biodiversity hotspot (Myers *et al.*, 2000), with the highest mammal diversity of any hotspot, an endemic bird area that has been ranked fifteenth of 218 centres based on biological importance and current level of threat (Slattersfield *et al.*, 1998) and a Centre of Plant Diversity (Davis *et al.* 1994).

AHFR, in common with most of Ghana's Forest Reserves, was established for watershed protection as well as timber production. As a consequence of timber extraction, replanting with favoured species and the undertaking of shifting cultivation in the reserve the forest structure of AHFR is now very different from its original state. Although no thorough biodiversity inventories have been carried out in AHFR its biodiversity value is likely to be high. It represents one of the largest remaining secondary forest fragments in the semi deciduous forest zone of Ghana. These large fragments are critical in maintaining native biodiversity in the region (Beier *et al.*, 2002).

AHFR is increasingly under threat from *Broussonetia*, whose establishment and spread has been facilitated by forest degradation. *Broussonetia* was introduced into Ghana by the Forestry Research Institute of Ghana (FORIG) of the Council for Scientific and Industrial Research (CSIR) in 1969 as part of an experimental programme to identify species for the pulp and paper industry. The experiment was abandoned and a pulp industry using *Broussonetia* was never established. *Broussonetia* has since invaded forest edges and canopy gaps in AHFR disrupting successional processes, with a likely long term negative impact on native biodiversity. It now covers a great deal of the forest edge, where it can form monotypic stands and it is also present in patches in the forest interior. *Broussonetia* does not appear to establish where a closed canopy persists.

The *Broussonetia* infestation is rapidly expanding beyond the forest due to long distance dispersal by birds, bats and other vertebrates, its ability to establish in open areas and to regenerate after fire and a lack of systematic efforts to manage the species. Its tough lateral roots increase land cultivation costs and compete with root crops thus reducing yield. This has had a very negative effect on the local farming community around the AHFR.

Management of *Broussonetia* to date has mainly comprised of farmers manually controlling the plant within the farmed area when time permits. This approach does not deal with *Broussonetia* reservoirs or nascent infestations if they do not occur on the farmer's field. Under the full project a pilot area-wide management programme will be implemented. Management will comprise of optimising control in the farmer's field (in terms of timing of operations and methods used), management of reservoirs (inside and outside AHFR) and the mapping and management of nascent foci (Blay *et al.*, 2004).

2.2. Oti Arm of the Volta Lake

The pilot site for management of an ecosystem affected by Water hyacinth in Ghana is the Oti Arm of the Volta Lake. Volta is one of the world's largest artificial lakes, having been created in 1965 by the construction of the Akosombo Dam. The lake covers an area of 8,482 km². The two major tributaries of the Volta River are the Oti and Afram rivers. Together, the rivers drain the Volta Basin.

The Volta Lake is of key economic importance to Ghana. It is a major fishing ground, provides irrigation water for farmland in the Accra plains and is a significant inland transportation artery. The Akosombo Dam generates enough hydroelectric power to supply most of Ghana's electricity needs.

In spite of the fact that the Volta is an artificial lake it does have some biodiversity importance. There are more than 160 species of fish in the lake with a single endemic species (*Steatocranus irvinei*). Lake Volta is one of the few places where all three of the species of crocodiles that exist in Africa occur: *Crocodylus niloticus*, the widespread Nile Crocodile, *Crocodylus cataphractus*, the Slender-snouted Crocodile and *Osteolaemus tetraspis*, the Dwarf Crocodile.

The confluence of the Oti arm and the main lake is 170 km to the north-east of the dam site at Akosombo. In October 1998 Water hyacinth was first reported to be present in the Oti Arm close to Dambai, about 80 km north of the confluence. It was soon realised that if there was not a rapid response that the weed would reach the main lake with disastrous economic and environmental consequences. Chemical and manual control measures were initiated in April 1999 with the aim of keeping the Water Hyacinth infestation from entering the main body of Lake Volta.

In spite of control efforts the area of the infestation has continued to expand. In December 2000 the infestation was estimated to cover 10,000 ha and to stretch over 100 km, with the highest infestation between Kitare and Kabonwele. Biological control was instituted at this time, when Water hyacinth weevils *Neochetina* spp. were released between Kitare and Blajai. Further releases of weevils were undertaken in June 2001 at which time the frontline was located at Adiembra.

Under the full GEF project it is proposed that current efforts are augmented by community actions in order to reduce source infestations in the Oti Arm. This will significantly decrease the risk of the weed entering into the main body of the Volta Lake (Blay *et al.*, 2004) and thus endangering more biodiversity and the hydropower generating facility at the dam.

3. UGANDA

3.1. Budongo Forest Reserve

The Budongo Forest Reserve (situated between 1° 37' and 2° 00' N and 31° 22' and 31° 46' E) has been chosen as the pilot site for the management of an ecosystem affected by *Senna spectabilis* (spectacular cassia), a medium to large tree from tropical America. The reserve covers an area of 79,300 ha in the west of Uganda in the Masindi District on the escarpment north-east of Lake Albert. The majority of the reserve is covered by tropical high-forest communities. Medium-altitude semi-deciduous *Cynometra-Celtis* forest covers about half of the site and *Combretum* savanna is widespread in drier areas. Mean annual rainfall is c.1600 mm falling in two main periods. Annual average minimum temperatures range from 17°C to 28°C.

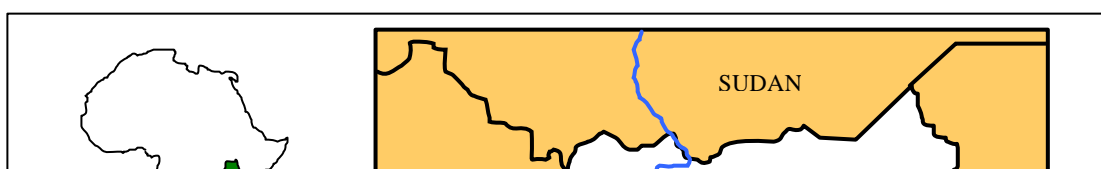


Figure 3. Location of Project Pilot Sites in Uganda.

The forest is probably best known for its endangered Chimpanzee (*Pan troglodytes*) population, which was the motivation behind the establishment of the Budongo Forest Project, which carries out research throughout the forest, mainly on primates and birds.

The Budongo Forest Reserve has been designated an Important Bird Area (UG019, BirdLife International, 2003) and is regarded as Uganda's second most important bird area (after Semliki National Park, IBA UG009) for species of the Guinea-Congo Forests biome. The Yellow-footed Flycatcher (*Muscicapa sethsmithi*), only known from Budongo in Uganda, used to be common in mature forest, though now it is extremely hard to find. Puvel's illadopsis (*Illadopsis puveli*), a recent addition, is not known elsewhere in East Africa. Other species such as the Piping Hornbill (*Ceratogymna fistulator*), Rufous-sided Broadbill (*Smithornis rufolateralis*), Spotted Greenbill (*Ixonotus guttatus*), Casin's Spinetail (*Neafrapus cassini*), Lemon-bellied Crombec (*Sylvietta denti*), Ituri Batis (*Batis ituriensis*) and Black-eared Ground Thrush (*Zoothera camaronensis*) are known from few other forests in the country. Other rare species in Budongo Forest include the Green-breasted Pitta (*Pitta reichenowi*) and the Red-fronted Antpecker (*Parmoptila woodhousei*), both with multiple recent records. Aside from the two biomes under which the site qualifies as an IBA, species restricted to other biomes also occur, including seven from the Afrotropical Highlands biome. Two species of birds found in Budongo Forest Reserve are not found elsewhere in East Africa. It also has some unique concentrations of trees and other vegetation not found together elsewhere in the region.

The vegetation of the forest is well known because of the pioneering work of Eggeling (1947) and forest ecology studies have continued since (e.g. Plumptre, 1996). Vegetation structure and composition has changed considerably following 60 years of selective logging and silvicultural treatment which has favoured the growth of valuable timber species, especially mahoganies. Today, the forest is the richest for timber production in the country. The challenge is to balance conservation of forest biodiversity and ecological processes, production of hardwood timber on a sustainable basis and the needs of local communities. Management of the impacts of IAS, notably *Senna* forms part of this challenge.

Senna was planted in the forest to demarcate boundaries and for use as fire wood. It is extremely fast-growing and flowers and sets seed precociously and profusely. Seeds remain viable for up to 3 years. It also resprouts readily when cut. *Senna* now covers more than 1000 ha in the reserve. It is common mainly along logging trails/landing sites where it forms pure stands at the expense of other species. It is not a favoured species for local communities and it is largely unpalatable to native animals. Its' spread is consequently considered to be an economic and environmental threat.

Under the full project pilot *Senna* management trials will be undertaken in the Budongo Forest Reserve, where management by manual and chemical means will be investigated along with active native forest restoration and *Senna* suppression methods (Ebong *et al.*, 2004).

3.2 Lake Mburo National Park and Surrounding Areas

The pilot sites chosen for the management of ecosystems affected by Water Hyacinth and *Cymbopogon nardus* (false citronella), a tussock forming grass of south Asian origin, are centred on the Lake Mburo National Park, located in the southwest of Uganda (centred at 1° 19' N, 30° 55' E) in the Mbarara District. The natural vegetation in the area ranges from acacia woodland to open savannah. Altitude varies from c.1250 - 1500m. The climate is semi-arid to sub-humid and characterised by low and erratic rainfall of between 500 –1000 mm pa.

Pastoralism has long been the major land use in the area. When *Cymbopogon* was introduced to Uganda early in the twentieth century it was assumed that it would be a good forage species. The opposite proved to be the case though *Cymbopogon* was and is still used for erosion control and for a variety of medicinal and artisanal purposes. Not only has *Cymbopogon* proved to be unpalatable to domestic stock but it is also extremely invasive. It is now found in high densities in many parts of the southwest of the country, where it covers up to 60% of the grassland area in some localities. The grass is believed to increase in abundance following overgrazing, which has been exacerbated following the influx of displaced persons into southwest Uganda in the 1980s.

Lake Mburo National Park, which covers an area of 37,000 ha, was gazetted in 1982. It has been designated an Important Bird Area (UG011, BirdLife International 2003) with over 310 bird species documented. These include many species that have not been recorded from other parks in Uganda such as the Rufous-bellied Heron (*Ardeola rufiventris*), Black-throated Barbet (*Tricholaema melanocephala*), Green-capped Eremomela (*Eremomela scotops*), southern red bishop (*Euplectes orix*) and the piping cisticola (*Cisticola fulvicapillus*). The Red-faced Barbet (*Lybius rubrifacies*), a restricted-range species, is occasionally seen, and not known from anywhere else in Uganda. The site is important for certain species of the Lake Victoria Basin biome, such as the White-winged Warbler, (*Bradypterus carpalis*) and Curruther's Cisticola (*Cisticola carruthersi*), which are rare in other IBAs. There are isolated records of two globally near-threatened species, the Lesser Flamingo (*Phoenicopterus minor*) and Great Snipe (*Gallinago media*). The NP is also important in Uganda as being the only remaining area where the formerly widespread impala (*Aepyceros melampus*) still exists.

Over the years there has been a reduction in the diversity of large mammals in the area because of human activity including hunting, tsetse fly control and habitat destruction through cultivation, settlement and the impact of domestic animals.

Cymbopogon was first noticed in the Lake Mburo National Park in the 1980s in sites that are in close proximity to rangeland areas. *Cymbopogon* is reported to be unpalatable to wild animals and it is currently spreading in the park. Surveys carried out under the PBF B phase of the project show that *Cymbopogon* can account for nearly 70% of the surface cover in some parts of the park, thus excluding other plant species and reducing forage available to wild animals. This infestation may well be encouraged by overgrazing by domestic animals that encroach into the park in the dry season.

During the full project integrated management methods will be pioneered for *Cymbopogon* affected areas both inside and outside the park (Ebong *et al.*, 2004).

Water Hyacinth is not present in Lake Mburo National Park. However, there is a high risk that the weed will reach the interlinking chain of lakes found in the southern parts of the park. Ponds within several kilometres of the park are infested with Water Hyacinth. These ponds communicate with the lakes via the River Ruizi. Under the full project an area-wide Water hyacinth management programme will be undertaken in order to prevent the weed from spreading beyond the current foci.

4. ZAMBIA

4.1 Chunga Lagoon, Lochinvar National Park

Lochnivar National Park is situated on the extensive Kafue Floodplain and adjacent area on the southern side of the Kafue River in the Southern Province of Zambia – centred at 15° 59' S, 27° 20' E. The northern boundary of the park is the Kafue River which is connected to the Chunga Lagoon, a large expanse of seasonally-inundated floodplain within the park. The floodplain of the Kafue Flats, especially that within Lochinvar NP, including the Chunga Lagoon, is an area of globally-important biodiversity involving mammals, birds, reptiles and plants. Back in 1980

Mimosa pigra, a spiny shrub of tropical American origin (a species that had been naturalised in Zambia for at least a century) began to spread from the river banks onto the floodplain, especially around the edges of Chunga Lagoon and the associated Nampongwe stream. For twenty years this spread was slow and steady, but over the last few years it has accelerated such that much of the edge of the lagoon and many parts of the floodplain, edges of the floodplain and associated streams are now entirely covered by *Mimosa*.

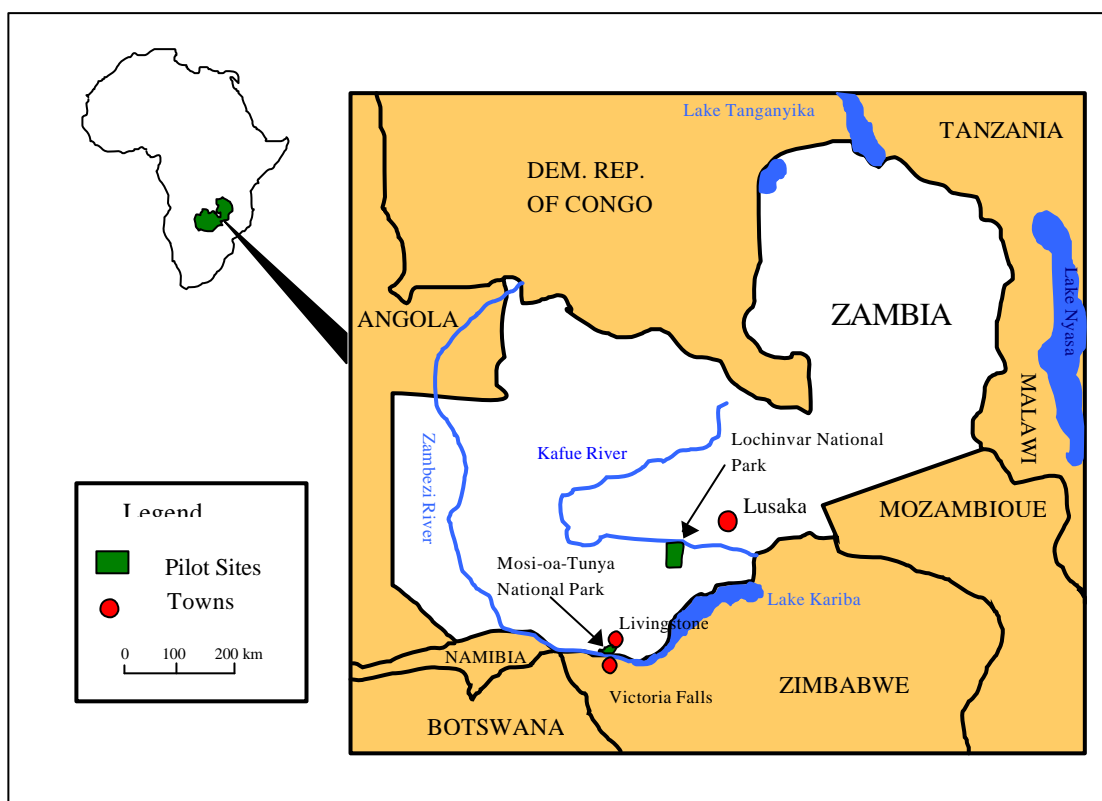


Figure 4. Location of Project Pilot Sites in Zambia.

The significance of this invasion is that it has excluded the native fauna and flora from the most productive and special areas of the Lochinvar NP and the Kafue Flats – with significant impact on biodiversity as well as tourism and livestock grazing. Most affected are the indigenous mammals and birds of the floodplain – especially the Kafue Lechwe (*Kobus leche kafuensis*, an endemic marsh antelope that feeds primarily on the vegetation of the flats). The infestation of *M. pigra* has also denied access to the threatened Wattled Crane (*Grus carunculatus*, which has its largest breeding population on the Kafue Flats dependent upon vegetation now excluded by the mimosa invasion), the large populations of ducks, geese and other waterfowl, and numerous Palearctic migratory birds as well as small mammals, passerine birds, reptiles and amphibians and even significant insects that depended upon the seasonal flooding and vegetation of the lagoon and surrounds.

The Kafue Flats is a Ramsar Site and an Important Bird Area (ZM011) with six other key species apart from the cranes (including the Vulnerable Slaty Egret, *Egretta vinaceigula* and Corncrake, *Crex crex* which use the floodplain) and many concentrations of both resident and migratory waterbirds. The Chunga Lagoon area is also home to the Sitatunga Antelope (*Tragelaphus spekei*) and the Oribi (*Ourebia ouribi*). All of these are affected by the advancing *Mimosa* as well as accumulations of Water hyacinth in the few remaining open water areas. The situation with regard to submerged organisms – both vegetation, fish and amphibians is not presently known but they are highly likely to be negatively affected by this alien vegetation and its shading of a previously highly productive aquatic system.

Mimosa has had significant impact on tourism in Lochinvar NP both by denying access to the area (both terrestrial and aquatic habitats), by making water availability very difficult and altering the scenery – but most significantly by rendering the area almost monospecific with regard to plants and almost completely devoid of the wildlife which is the basis of NP's tourism. *Mimosa* is also starting to spread outside of the NP boundaries where it serves to deny the transhumant cattle access to the rich grasses and other vegetation of the floodplain in the low-flood season.

It is the intention of the full project to address the invasion of the Chunga Lagoon area by thoroughly assessing the extent and spread of the *Mimosa* and then attempting to control its spread, reduce its impact and start to restore the ecosystem – through a combination of available means.

4.2 Mosi-oe-Tunya National Park area

Mosi-oe-Tunya is the local name for the Victoria Falls on the Zambezi River at around 17° 55' S, 25° 51' E. The river level at the top of the falls is around 875 m.a.s.l and the water descends a maximum of 103m over an edge which is 1,708 m across traversing the Zambia-Zimbabwe international border. The surrounding vegetation is dominated by mopane woodland and areas of Zambian teak forest. Nearer the river there is classic riparian vegetation and below the falls a unique growth of plants that are sustained by the spray in a “mist forest”. Unfortunately, *Lantana camara*, a shrub originating in tropical and sub-tropical regions of Central and South America has invaded both the woodlands, the riparian areas and the unique mist forest below the falls. The Mosi-oe-Tunya National Park itself encompasses woodland and riparian areas with fringing forest while the riverine and falls area is a World Heritage Site managed by both Zambia and Zimbabwe. *Lantana* is present in the National Park and the peri-urban areas around the falls as well as in the area immediately below the falls – including steep slopes that support unique forest vegetation as well as a myriad of special habitats for mammals, birds and many invertebrates. *Lantana* is steadily altering the structure of the vegetation around and below the falls and is thus affecting the flora as well as the fauna of this unique area.

Mosi-oe-Tunya (and the river valley downstream of the falls) is an Important Bird Area (ZM009) primarily because of the presence of nesting sites of the rare Taita Falcon (*Falco fasciinucha*). It is also a representative of the limited “Zambezi biome” with a large number of species of that system recorded here. The Black Stork (*Ciconia nigra*) and the Rock Pratincole (*Glareola nuchalis*) are known to breed in the falls area. The Mosi-oe-Tunya NP is a woodland area which is slightly artificial since it has several introduced mammals and is surrounded by a fence (as it is not far from urban Livingstone). Nevertheless it is a refuge for some of the remaining mammals of the area and so is an area of globally-important biodiversity – which is being infested by *Lantana*. The area below the falls, however, is unquestionably of great biodiversity importance not only for its unique combination of plants (species dependent on relatively high rainfall in a surrounding area of relatively low and very seasonal rainfall) but for the fact that it has a set of species of both plants and animals that are representative of the lower parts of Southern Africa – in the centre of the African Plateau. For example there are several species of butterflies found at Mosi-oe-Tunya that are characteristic of the coastal areas of Mozambique – because the Zambezi River Valley acts as an incursion of the “coastal fauna” inland at relatively low altitude. In addition the spray and the falls themselves harbour a range of aquatic and semi-aquatic invertebrates that are unique to the area. There are several endemic plants, especially herbs like *Rotala cataractae*, unique to the mist forest and an abundance of ferns and moisture-loving plants of the families Lythraceae and Lentibulariaceae. Much of this unique assemblage is threatened by *Lantana* as it spreads across the face of the falls, amongst the mist forest, the fringing forest and the surrounding woodlands.

The full project will attempt to further analyse the situation of the *Lantana* invasion in the Mosi-oe-Tunya area and to develop protocols for its control in critical sites as well as in the general area. This will require cooperation with neighbouring Zimbabwe as well as with the protected area authorities and the tourist industry.

Water hyacinth is present in the sewage ponds serving Livingstone and also in pockets in the Maramba River, a tributary of the Zambezi. Because of the fast flowing nature of the Zambezi in the area Water hyacinth is not likely to infest the river around Livingstone. However, these reservoirs are a source for slower flowing locations downstream. Under the full project it is planned to contain and if possible eradicate these reservoirs.

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ANNEX GIV. LIST OF RELATED PROJECTS

Country	Project	Funding Agency	Linkage to Proposed Intervention
Ethiopia	Strengthening the Conservation and Management of the Wildlife Protected Area System	GEF	One of the threats to protected areas is IAS.
Ethiopia	Conservation and sustainable use of medicinal plants	GEF	Invasive species pose threat to <i>in situ</i> conservation sites.
Ethiopia	Community Based Integrated National Resources Management: Improving Ecosystem Integrity and Rural Livelihoods	GEF	Management methods adopted must reduce and not exacerbate IAS problems.
Ethiopia	Awash Conservation and Development Project	Through CARE Ethiopia	Invasive species pose a threat to food security for pastoralists around Awash National Park
Ethiopia	AFAR PASTORALIST DEVELOPMENT AND EMERGENCY PROJECT	Through FARM-Africa	<i>Prosopis</i> management is a key element of this project
Ethiopia	Support to the Biodiversity Institute and Integrated Forest Management Project	GTZ	Incorporation of IAS into biodiversity inventories and IAS issues into sustainable forestry management plans
Regional	African NGO-Government Partnership for Sustainable Biodiversity Action	GEF	Multi-stakeholder development of action plans to conserve biodiversity need to consider IAS issues.
Regional	Botanical and Zoological Taxonomic Networks in Eastern Africa: Linking Conservation to Taxonomy	GEF	Taxonomic capacity is necessary for efficient management of IAS.
Regional	Eastern Africa Regional Wetlands Conservation and Support Programme	NORAD	Includes policy development, research, capacity building, awareness, monitoring; all areas of potential linkage.
Regional	Nile Transboundary Environmental Action Project, Phase I	GEF	IAS issues will affect land-water resource management.
Regional	Institutional Strengthening and Resource Mobilisation for Mainstreaming Integrated Land and Water Management Approaches into Development Programs in Africa	GEF	Compilation and dissemination of best watershed management practices will include consideration of IAS issues.
Regional	Conservation of Soaring Migratory Birds in the Eastern Sector of the Africa-Eurasia Flyway System (Rift Valley and Red Sea Flyways)	GEF	Habitat conservation in the flyway system will include IAS management.
Ghana	Coastal Wetlands Management	GEF	Management plan must consider IAS issues.
Ghana	Natural Resource Management	GEF	IAS concerns must be considered for sustainable natural resource management.
Ghana	Biodiversity Conservation of Lake Bosumtwi Basin	GEF	One of the main threats to protected areas is IAS.
Ghana	Northern Savanna Biodiversity Conservation Project	GEF	IAS concerns must be considered for sustainable natural resource management.
Ghana	Sustainable Land Management for Mitigating Land Degradation, Enhancing Agricultural Biodiversity and Reducing Poverty	GEF	Management methods adopted must reduce and not exacerbate IAS problems.
Regional	Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area	GEF	IAS considerations central to national and regional catchment plans. Provides opportunities for regional replication and dissemination.
Regional	Integrated Management of Invasive Aquatic weeds in West Africa	African Development Fund	Linkages with control activities. Provides opportunities for regional replication and dissemination.
Uganda	Land Degradation Assessment in		Planned activities to mitigate land degradation

Country	Project	Funding Agency	Linkage to Proposed Intervention
	Drylands		problems must reduce and not exacerbate IAS problems.
Uganda	Lake Victoria Partnership	Sida	Water hyacinth is a problem in Lake Victoria
Uganda	Striga management	Rockefeller Foundation	Research on methods for managing an invasive
Uganda	Institutional Capacity Building for Protected Areas Management and Sustainable Use	GEF	One of the main threats to protected areas is IAS.
Regional	Reducing Biodiversity Loss at Cross-Border Sites in East Africa	GEF	Land use, land tenure systems and policy considerations all interact with IAS considerations.
Regional	Lake Victoria Environmental Management Programme	GEF	Includes biological control of Water hyacinth.
Regional	Transboundary Agro-Ecosystem Management Programme for the Lower Kagera River Basin	GEF	IAS issues must be integrated into sustainable land management frameworks.
Zambia	Sustainable Land Management in the Zambian Miombo Woodland Ecosystem Area	GEF	IAS concerns must be considered for sustainable land management.
Zambia	Effective Management of the National Protected Areas System	GEF	One of the threats to protected areas is IAS. Project includes the Bangweulu Wetlands, which are affected by invasive plants.
Zambia	Securing the Environment for Economic Development	GEF	Includes sustainable economic development of Kafue and Mosi-oa-Tunya national parks, where invasive plants are present.
Regional	Southern Africa Biodiversity Support Programme	GEF	Linkages with capacity building and information dissemination activities.
Regional	Inventory, Evaluation and Monitoring of Botanical Diversity in Southern Africa: A Regional Capacity and Institution Building Network	GEF	Biodiversity inventories will aid IAS management. Taxonomic capacity is necessary for efficient management of IAS.
Regional	International Mycoherbicide Programme for Water hyacinth <i>crassipes</i> Control in Africa	DANIDA	Development of an environmentally benign biopesticide.
Global	Building Capacity and Raising Awareness in Invasive Alien Species Prevention and Management	GEF	Two way flow of information will be maintained to ensure project synergies.
Global	National Biodiversity Strategy and Action Plans	GEF	IAS pose one of the principal threats to biodiversity.
Global	Development of National Biosafety Frameworks	GEF	Includes development of policy and regulatory regimes, systems for assessment of environmental impact, capacity building and information exchange; all potential areas of linkage.
Global	National Capacity Self-Assessment (NCSA) for Global Environmental Management	GEF	Capacity building is central to the development of sustainable IAS management