

## **A. PROJECT BRIEF**

### **1. Identifiers:**

Project Number:	2140 (GEFSEC)
Project Name:	<b>Removing Barriers to Invasive Plant Management in Africa</b>
Duration:	<b>4 years</b>
Implementing Agency:	<b>United Nations Environment Programme (UNEP)</b>
International Executing Agencies:	<b>CAB International (CABI) - Lead Agency World Conservation Union (IUCN) – Assisting Agency</b>
National Executing Agencies:	<b>Ethiopian Agricultural Research Organisation, Ethiopia Council for Scientific and Industrial Research, Ghana National Environment Management Authority, Uganda Environmental Council of Zambia, Zambia</b>
Requesting Countries:	<b>Ethiopia, Ghana, Uganda, Zambia</b>
Eligibility:	<b>All four countries have ratified the Convention on Biological Diversity: Ethiopia: 5<sup>th</sup> April 1994 Ghana: 29<sup>th</sup> August 1994 Uganda: 8<sup>th</sup> September 1993 Zambia: 28<sup>th</sup> May 1993</b>
GEF Focal Area(s):	<b>Biodiversity</b>
GEF Prog. Framework:	<b>OP #1 – Arid and Semi-arid Ecosystems OP #2 – Coastal, Marine and Freshwater Ecosystems OP #3 – Forest Ecosystems</b>
GEF Biodiv. Strat. Priority:	<b>BD #2 – Mainstreaming Biodiversity in Production Sectors BD #4 – Dissemination of Best Practices</b>

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### **2. 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 eventually 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.

### 3. Costs and Financing (Million \$US):

<b>GEF:</b>	Project:	5,000,000	
	PDF (A&B):	725,000	
<b>Subtotal GEF:</b>			<b>5,725,000</b>
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<b><u>Co-financing (Project)<sup>1</sup>:</u></b>			
	<b><u>In-kind</u></b>	<b><u>Cash</u></b>	<b><u>Total</u></b>
<b>Implementing Agency</b>			
CAB International:	375,000	375,000	<b>750,000</b>
IUCN:	125,000	125,000	<b>250,000</b>
<b>Government</b>			
Ethiopia:	510,223	500,000	<b>1,010,223</b>
Ghana:	637,318	500,000	<b>1,137,318</b>
Uganda:	596,031	500,000	<b>1,096,031</b>
Zambia:	649,408	500,000	<b>1,149,408</b>
<b>Sub-total A:</b>			<b>5,392,980</b>
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<b><u>Co-financing (PDF-B):</u></b>			
CAB International:	50,000	180,000	<b>230,000</b>
IUCN:	50,000	40,000	<b>90,000</b>
Ethiopia:	95,000	-	<b>95,000</b>
Ghana:	95,000	-	<b>95,000</b>
Uganda:	95,000	-	<b>95,000</b>
Zambia:	95,000	-	<b>95,000</b>
<b>Sub-total B:</b>			<b>700,000</b>
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<b><u>Co-financing (PDF-A):</u></b>			
CABI:	8,000	-	<b>8,000</b>
IUCN:	3,000	-	<b>3,000</b>
Ethiopia:	2,900	-	<b>2,900</b>
Ghana:	2,900	-	<b>2,900</b>
Uganda:	2,900	-	<b>2,900</b>
Zambia:	2,900	-	<b>2,900</b>
PPRI:	2,400	-	<b>2,400</b>
US Dept of State:	-	50,000	<b>50,000</b>
Other:	6,000	-	<b>6,000</b>
<b>Sub-total C:</b>			<b>81,000</b>
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<b>Sub-total Co-financing:</b>			<b>6,173,980</b>
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<b>Total Project Cost</b>			<b>\$US 11,898,980</b>
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### 3. Associated Financing (Million \$US): N/A

<sup>1</sup>Letters of commitment to provide co-financing from the Governments of Ethiopia, Ghana, Uganda and Zambia, and from CABI and IUCN have been forwarded (see Annex L) to: Ahmed Djoghlaif, Director, UNEP Division of Global Environment Facility Coordination, PO Box 30552, Nairobi, Kenya.

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Endorsed: 20<sup>th</sup> September 2004

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Endorsed: 22<sup>nd</sup> June 2004

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Endorsed: 6<sup>th</sup> September 2004

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## **LIST OF ACRONYMS & ABBREVIATIONS**

ACODE	Advocates Coalition for Development and Environment (Uganda)
AHFR	Afram Headwaters Forest Reserve
AMCEN	African Ministerial Conference on the Environment
APC	Assistant Project Coordinator
ARC	Agricultural Research Centre (Ethiopia)
ARDC	Agricultural Research and Development Centre (Uganda)
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AWF	African Wildlife Foundation
CABI	CAB International - HQ, Wallingford, UK
CABI-ARC	CAB International – Africa Regional Centre, Nairobi, Kenya
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CGIAR	Consultative Group on International Agricultural Research
COMESA	Common Market for Eastern and Southern Africa
COP	Conference of Parties
CORAF	Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole
CSIR	Council for Scientific and Industrial Research (Ghana)
DANIDA	Danish International Development Co-operation
DEC	District Environment Committee (Ghana)
DEC	District Environment Committee (Uganda)
DEWA	Division of Early Warning and Assessment (UNEP)
DWA	Department of Water Affairs (Zambia)
EAC	East African Community
EAP	Regional Office for Africa (NEPAD)
EARO	Ethiopian Agricultural Research Organisation
ECOWAS	Economic Community of West African States
ECZ	Environmental Council of Zambia
EIA	Environmental Impact Assessment
EPA	Environmental Protection Authority (Ethiopia)
EPA	Environmental Protection Agency (Ghana)
ESTC	Ethiopian Science and Technology Commission
EWCO	Ethiopia Wildlife Conservation Organisation
FAO	Food and Agricultural Organisation
FORIG	Forestry Research Institute of Ghana
GEF	Global Environment Facility
GIDA	Ghana Irrigation Development Authority
GISIN	Global Invasive Species Information Network
GISP	Global Invasive Species Programme
GSBA	Globally Significant Biodiversity Area
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
IA	Implementing Agency
IAG	International Advisory Group
IAPSC	Inter-African Phytosanitary Council
IAS	Invasive Alien Species
IBA	Important Bird Area
IBC	Institute of Biodiversity Conservation
ICAO	International Civil Aviation Organisation

ICIPE	International Centre for Insect Physiology and Ecology
ICLARM	World Fish Centre
ICRAF	World Agroforestry Centre
IEA	International Executing Agency
IGAD	Intergovernmental Authority on Development
IMO	International Maritime Organisation
IPC	International Project Coordinator
IPPC	International Plant Protection Convention
ISC	International Steering Committee
ISPM	International Sanitary and Phytosanitary Measure
ISSAP	Invasive Species Strategy and Action Plan
ISSG	Invasive Species Specialist Group
IUCN	World Conservation Union
LI	Learning Institution
LVEMP	Lake Victoria Environmental Management Programme
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries (Uganda)
MoARD	Ministry of Agriculture and Rural Development (Ethiopia)
MoE	Ministry of Education (Ethiopia)
MoFA	Ministry of Food and Agriculture (Ghana)
MoFA	Ministry of Federal Affairs (Ethiopia)
MoFED	Ministry of Finance and Economic Development (Ethiopia)
MoFPED	Ministry of Finance, Planning and Economic Development (Uganda)
MoLF	Ministry of Lands and Forestry (Ghana)
MoTI	Ministry of Trade and Industry (Ethiopia)
MoWR	Ministry of Water Resources (Ethiopia)
MSE	Ministry of Science and Environment (Ghana)
MSP	Medium Size Project
MTENR	Ministry of Tourism, Environment and Natural Resources (Zambia)
MWLE	Ministry of Water, Lands and Environment (Uganda)
NAADS	National Agriculture Advisory Services (Uganda)
NAC	National Advisory Committee
NARO	National Agriculture Research Organisation (Uganda)
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Self-Assessment for Global Environmental Management
NCU	National Coordination Unit
NEA	National Executing Agency
NEAP	National Environmental Strategy and Action Plan
NEMA	National Environmental Management Authority (Uganda)
NEPAD	New Partnership for African Development
NGO	Non Governmental Organisation
NHCC	National Heritage Conservation Commission (Zambia)
NORAD	Norwegian Agency for Development Cooperation
NP	National Park
NPC	National Project Coordinator
NPD	National Project Director
NPCS	National Project Coordination Secretariat (Ethiopia)
NPCU	National Project Coordination Unit (Ethiopia, Ghana & Zambia)
NSC	National Steering Committee
OP	Operational Programme
PDF-A	Project Development Facility, Block A (GEF project development grant)

PBF-B	Project Development Facility, Block B (GEF project development grant)
PBME	Project Benefit Monitoring and Evaluation
PCU	Project Coordination Unit
PEAP	Poverty Eradication Action Plan (Uganda)
PI	Private Institution
PMA	Plan for Modernisation of Agriculture (Uganda)
PPRSD	Plant Protection and Regulatory Services Directorate (Ghana)
ROA	Regional Office for Africa (UNEP)
SABSP	Southern Africa Biodiversity Support Programme
SADC	Southern African Development Community
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SCBD	Secretariat of the Convention on Biological Diversity
SCOPE	Scientific Committee on Problems of the Environment
SMC	Site Management Committee
SPS	Sanitary and Phytosanitary
STAP	Scientific and Technical Advisory Panel
TT	Task Team
TTL	Task Team Leader
UEB	Uganda Electricity Board
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
URC	Uganda Railway Corporation
USAID	US Agency for International Development
UWA	Uganda Wildlife Authority
WB	World Bank
WTO	World Trade Organisation
WWF	World Wide Fund for Nature
ZAWA	Zambia Wildlife Authority
ZRA	Zambia Revenue Authority

## **B. PROJECT DESCRIPTION**

### **BACKGROUND AND CONTEXT (BASELINE COURSE OF ACTION)**

#### THE GLOBAL THREAT OF INVASIVE ALIEN SPECIES

1. The 7<sup>th</sup> 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.

## SCOPE OF THE INTERVENTION

### 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. In the case of Uganda, NEMA is already mandated to produce these but has so far lacked the means.
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 Environment Management Authority, 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.

**Table 1. Baseline and Incremental Costs in US\$**

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

**Table 2. Component Financing in US\$**

Component	Partner	Increment	Co-funding			Requested from GEF
			In-kind	Cash	Total co-funding	
<b>Component 1:</b> 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
<b>Total</b>		<b>500,290</b>	<b>149,512</b>	<b>116,297</b>	<b>265,809</b>	<b>234,481</b>
<b>Component 2:</b> 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
<b>Total</b>		<b>862,401</b>	<b>282,876</b>	<b>165,503</b>	<b>448,379</b>	<b>414,022</b>
<b>Component 3:</b> 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
<b>Total</b>		<b>2,546,396</b>	<b>693,702</b>	<b>624,388</b>	<b>1,318,090</b>	<b>1,228,306</b>
<b>Component 4:</b> 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
<b>Total</b>		<b>1,440,246</b>	<b>539,678</b>	<b>266,945</b>	<b>806,623</b>	<b>633,623</b>
<b>Component 5:</b> 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
	<b>PCU:</b>					
	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
<b>Total</b>		<b>5,043,647</b>	<b>1,227,212</b>	<b>1,326,867</b>	<b>2,554,079</b>	<b>2,489,568</b>
<b>GRAND TOTAL</b>		<b>10,392,980</b>	<b>2,892,980</b>	<b>2,500,000</b>	<b>5,392,980</b>	<b>5,000,000</b>



## **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).

#### **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.

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## **LIST OF ANNEXES:**

- A. Incremental Cost Annex
- B. Logframe matrix
- B1. Workplan and Timetable
- C. STAP Roster Technical Review
- C1. Response to STAP (and IA comments as appropriate)
- D. Letter(s) of Endorsements
- E. Root Cause Annex
- F. Implementation Arrangements
- G. Available Reference Documents including maps
  - i. Invasives Glossary
  - ii. List of Project Outputs from PDF-B
  - iii. Descriptions of Pilot Sites in each Country (including maps)
  - iv. List of GEF and other IAS related project interventions
- H. Project Categorisation Annex (not included)
- I. Detailed Description of Project Components
- J. Terms of Reference
- K. Breakdown of Co-financing Commitment
- L. Letter(s) of Commitment to Provide Co-financing
- M. Monitoring and Evaluation Plan
- N. Tracking Tool for Biodiversity Projects in the Production Environment (SP2)