

Project Development Workshop for the Global Taxonomy Initiative in Africa

Organised by: CBD Secretariat & BioNET

MEETING REPORT



The Workshop Participants (Photo: NMK)

National Museums of Kenya, Nairobi, Kenya 16th- 18th November 2009

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ABBREVIATIONS

CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna
	and Flora
СРВ	Cartagena Protocol on Biosafety
CSP	GEF Country Support Programme
DGEF	Division of GEF Coordination
GEF	Global Environment Facility
GISIN	Global Invasive Species Information Network
GTI	Global Taxonomy Initiative
I3N	IABIN Invasives Information Network
IABIN	Inter American Biodiversity Information Network
IAS	Invasive alien species
IPM	Integrated Pest Management
IPPC	International Plant Protection Convention
IUCN	World Conservation Union
IYB	International Year of Biodiversity
M&E	Monitoring and evaluation
MEA	Multilateral Environmental Agreement
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Needs Self Assessment for Global Environmental
	Management
NFAP	National Forestry Action Programme
NGO	Non Governmental Organisation
NHM	Natural History Museum (UK)
PDF-B	Project Development Facility, Block B (GEF project development grant)
POPs	Persistent organic pollutants
RAF	Resource allocation framework (GEF)
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice (of the
	CBD)
SCBD	Secretariat of the Convention on Biological Diversity
SDC	Swiss Agency for Development and Cooperation
SGP	GEF Small Grants Programme (implemented by UNDP)
STAP	Scientific and Technical Advisory Panel (of the GEF)
UNCCD	UN Convention to Combat Desertification
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change



EXECUTIVE SUMMARY

The Secretariat of the Convention on Biological Diversity (CBD) convened a project development workshop 16 – 18 November 2009 in response to paragraph 15 of CBD decision VIII/3. The aim was to promote country-driven projects under the Global Taxonomy Initiative (GTI).

The technical aspects of the workshop were organised by the Secretariat of BioNET, the Global Network for Taxonomy (BioNET-Sec) with support from the Natural History Museum, London (NHM) and the Global Invasive Species Information Network (GISIN) with logistics being organised by BioNET-EAFRINET through its regional coordinating organisation the National Museums of Kenya (NMK).

The principal objective of the workshop was to develop concept notes for fundable projects that implement the GTI with a focus on invasive alien species (IAS) and protected areas. A subsidiary but still important function of the workshop was to train participants in the art of proposal writing.

Potential workshop participants from all over Africa submitted project outlines that addressed taxonomy and invasive species to the workshop organising committee in September 2009. Project participants were selected according to the clarity, logic and feasibility of their project outlines as well as the relevance of these project outlines to IAS and taxonomy, protected area management, and national, regional and international developmental priorities. 21 project outlines were submitted of which the following 12 were selected for further development at the workshop:

- 1. Establishing an IAS monitoring database for ecologically sensitive areas in East Africa.
- 2. The taxonomic infrastructure to support invasive species management: building the short-term and long-term solutions.
- 3. Building capacity to mine data from botanical collections in order to monitor changes in alien invasive species and possible climate change.
- 4. Development of an identification guide for alien weeds and invasive plants for East Africa.
- 5. Diversity and sustainable use of macrofungi in selected forest reserves of Ghana.
- 6. Management of invasive alien plants in agriculture, forestry and rangeland from prevention to control.
- 7. The effect of the invasive *Prosopis* spp on indigenous plant-pollinator interactions in Lake Bogoria National Reserve.
- 8. Community engagement in marine IAS, taxonomy and marine protected area management.
- 9. Assessment and mapping of invasive alien plants in the Serengeti Ecosystem: Case study of Ngorongoro, Serengeti and Ikorongo-Grumeti Reserves, Tanzania.
- 10. Integrated invasive species management and protected area development.
- 11. Mainstreaming pro-poor urban and rural community forest conservation to restore mangroves ecosystem.
- 12. Capacity building to support research and extension programs for sustainable management of invasive fruit fly species in West Africa.

Twenty workshop participants from Western, Eastern and Southern Africa were selected

Participants were supported by four international resource persons representing the Secretariat of the CBD (SCBD), BioNET-Sec, NHM and GISIN, who were available throughout the workshop. In addition the Executive Director of the Global Invasive Species Programme (GISP) and the IUCN Global Coordinator for Invasive Species and donor representatives from UNEP/GEF and JICA were available as resource persons on Day 1. In addition to the international resource persons, many of the participants also brought with them considerable project development and project implementation experience. Together with the resource persons, the participants provided a valuable source of peer review which helped to expose the project ideas to critical appraisal early in their gestation.



The workshop programme was a mix of presentation, plenary discussions and breakout sessions. Training in proposal writing was principally "learning by doing" but supplemented by presentations on key areas such as donor priorities, background on invasive species issues in Africa, the role of taxonomy in invasive species management, the project development process, the GTI and the mechanics of proposal writing, notably a session on the logical framework process. Plenary sessions served to introduce participants and their project ideas to the group, elicit overall feedback on the submitted project outlines and to gather and crystallise ideas generated and discussed during the breakout sessions. The bulk of the workshop was spent in the breakout sessions where project ideas were developed by project proponents working together with their peers and the resource persons.

The 12 project outlines were grouped into four "project clusters" - groups of projects with common themes – as follows: 1) collections and databases; 2) IAS management; 3) agro-biodiversity; and 4) protected areas. Participants worked together with others whose project was grouped in the same project cluster when developing their project ideas in the breakout sessions in order to facilitate peer review and if possible inter-project synergies. Project development guidelines, compiled by BioNET-Sec, had been circulated to participants prior to the workshop. These guidelines, which outlined the components of a typical project proposal, were used as a basis to evaluate and refine project outlines into project concepts during the breakout sessions.

It was emphasised that subjecting the project ideas to critical analysis at this stage would save a great deal of time and heartache later on. The following four possible outcomes for project ideas as a consequence of this critical review were outlined: 1) ideas maintained; 2) ideas revised; 3) ideas merged; and 4) ideas abandoned. Eight of the twelve project ideas were maintained, two were revised and two were merged.

The participants agreed that the workshop had been a very encouraging first step towards success, i.e. translating ideas into projects that would ultimately have tangible impacts. To maintain the momentum built by this workshop the following "next steps" were agreed:

- Refine project ideas into fully fledged project proposals following a consultative process including contacting relevant national authorities.
- Continue to subject proposal iterations to critical review by selected workshop resource people.
- Identify and approach potential donors and keep abreast of calls for proposals.
- Utilise national, regional and global plans, initiatives, organisations and meetings as vehicles through which to promote project ideas and proposals. e.g. NBSAPs, AFRICOM, BioNET-Sec and the African BioNET LOOPs (NAFRINET, WAFRINET, SAFRINET and EAFRINET) and the CBD notably through the 2010 SBSTTA and COP meetings (notably through the post 2010 strategic plan and targets) and through events to celebrate the International Year of Biodiversity (IYB 2010).

BioNET-Sec is facilitating the follow up work in the context of, among others, The UVIMA Project with support of workshop resource persons.

Travel and subsistence costs for the workshop were provided by the Government of Spain with additional support being provided by the Swiss Agency for Development and Cooperation and the US National Biological Information Infrastructure, through its partnership with the Polistes Foundation.



1. INTRODUCTION

This workshop was convened in line with paragraph 15 of decision VIII/3 the Conference of the Parties to the Convention on Biological Diversity (CBD) which requested the Executive Secretary to convene, with support from relevant organisations and donors, a project development seminar aimed primarily at those countries who have already identified taxonomic needs or that have submitted proposals for pilot projects under the Global Taxonomy Initiative (GTI), to promote formulation of country-driven projects based on identified taxonomic needs and to explore potential benefits of developing new, and enhancing existing, regional or global projects to address common taxonomic needs that have already been identified.

The technical aspects of the workshop were organised by the Secretariat of BioNET-INTERNATIONAL, the Global Network for Taxonomy (BioNET-Sec) with logistics being organised by BioNET-EAFRINET through its regional host organisation the National Museums of Kenya (NMK).

The Government of Spain has made a contribution to support the travels of experts from developing countries, CBD Parties and Parties with economies in transition to participate in this workshop. Additional financial support was provided by SDC (Swiss Agency for Development and Cooperation) and the US National Biological Information Infrastructure, through its partnership with the Polistes Foundation.

In kind support was provided by BioNET-Sec, BioNET-EAFRINET, NMK, the UK Natural History Museum (NHM) and the Secretariat of the Convention on Biological Diversity (SCBD).

The principal objective of the workshop was to develop concept notes for fundable projects that implement the GTI with a focus on IAS and protected areas. A subsidiary but still important function of the workshop was to train participants in the art of proposal writing. The training was principally "learning by doing" but this was supplemented by formal presentations on key areas such as donor priorities, background on invasive species and the GTI and the mechanics of proposal writing, notably a session that sought to demystify the logical framework process.

A key part of this workshop was the preparatory process. Potential participants were contacted and asked to produce an outline of a project that addressed taxonomy and invasive species. This document was to be a maximum of 400 words (excluding any supporting documentation). The following were suggested headings: project title; aims and objectives; outputs; duration; estimated overall budget; links to existing projects; possible co-funding sources; possible executing institutions; suggested donors and participating countries/region/sub-region. The project outlines were evaluated according to the following criteria: clarity and logic, feasibility; degree to which IAS issues were addressed; the degree to which taxonomy featured; the degree to which proposals addressed protected area concerns; and the degree to which projects mainstreamed development issues. Those scoring the highest overall marks were selected. This process served to select participants who were seriously committed to developing fundable projects and helped potential participants clarify their thinking prior to the workshop. 21 project outlines were given a short document *Guidelines for Project Development* prior to the workshop that summarised the project development process (Appendix E).

Workshop resource persons were selected in consultation with the GTI Coordination Mechanism, taking into account regional and sectoral participation. Four international resource persons, all with considerable project development experience, were available throughout the workshop. In addition the Executive Director of the Global Invasive Species Programme (GISP) and the IUCN Global Coordinator for Invasive Species and donor representatives from UNEP/GEF and JICA were available as resource persons on Day 1. Many of the participants also brought with them considerable project development and project implementation experience. Together with the resource persons, the



participants provided a valuable peer review resource which would help expose the project ideas to critical appraisal early in their gestation.

The programme (Appendix A) was a mix of presentations, plenary discussions and breakout sessions. The presentations provided the participants with an overview of invasive species issues in Africa, the role of taxonomy in invasive species management, the project development process, donor priorities and other key background issues. Plenary sessions served to introduce participants and their project ideas to the group, to elicit overall feedback on the submitted project outlines and to gather and crystallise ideas generated and discussed during the breakout sessions. The bulk of the workshop was spent in the breakout sessions where project ideas were developed by project proponents working together with their peers and the resource persons.

2. DAY 1

2.1. Opening and Introductory Session

2.1.1. OPENING ADDRESS: DR. GEOFFREY MWACHALA (HEAD OF BOTANY, NMK, KENYA)

Dr. Mwachala opened the workshop and in so doing made the following points:

- There is intricate linkage between biodiversity conservation and livelihoods
- The realization of the world that effective and sustainable biodiversity is undermined by taxonomic barriers gave rise to the GTI, requiring parties to undertake certain activities aimed removing such barriers.
- There needs to be an understanding that knowledge begins with calling things with their right and distinctive names. For instance, distinguishing a pollinator from a pest is the first important step towards getting a solution for pest control and improved agricultural production.
- The most important step therefore towards attainment of sustainable biodiversity conservation and economic developments is to remove taxonomic barriers taking into account national, regional and global needs.

Dr. Mwachala singled out the present workshop as being an opportunity to develop projects that can help to remove these taxonomic barriers.

2.1.2. INTRODUCTION, LOGISTICS, ADAPTIVE AGENDA WORKSHOP OBJECTIVES & SELF-INTRODUCTION OF PARTICIPANTS: DR. JOHN MAUREMOOTOO (REGIONAL PARTNERSHIPS OFFICER, BIONET SECRETARIAT)

The principal workshop objective was reiterated as was the process whereby participants were selected for participation. The fact that this was very much a workshop and not a talking shop was emphasised. It was hoped that the workshop would develop the participant's capacity to successfully develop projects but it was not a training workshop in the traditional sense. The emphasis was very much on 'learning by doing'. It was therefore essential to keep presentations and discussions to time so that enough time was available for the development of project outlines in breakout sessions.

The workshop participants and facilitators introduced themselves, their proposed projects and their expectations for the workshop. The following list is a summary of the participant's expectations:

- The production of fundable project proposals (which the majority of participants cited as an expectation).
- Improved understanding of the project development process.



- To learn of successful approaches to IAS management undertaken by or known to other participants.
- The strengthening of networks and general networking for various reasons including:
 - Strengthening of IAS management capacity.
 - Improvement of information.
 - The documentation of heritage.

John reiterated the fact that participation in this workshop does not mean that the participant's proposed project will be funded. Rather the workshop provides an environment in which the proponents will have the opportunity to sharpen their thinking in the area for which they are seeking funds. Critical but supportive feedback from resource people and fellow project proponents should help to refine project ideas so that an external reviewer can clearly see that the project proponent is using taxonomy to address development priorities including those of the CBD. The workshop also provides a significant platform to promote the potential project. The seminar report, CBD meetings and the CBD and BioNET Secretariats can be used as promotional vehicles for these concepts, notably at SBSTTA 14 which will be held in Nairobi, Kenya in May 2010. In the final analysis, however, the return generally depends upon the investment. Project development is often a long and frustrating process and a great deal of the workload inevitably falls upon the project proponent.

2.1.3. THE GLOBAL TAXONOMY INITIATIVE AND THE IAS PROGRAMME OF WORK OF THE CBD: DR. JUNKO SHIMURA (PROGRAMME OFFICER, TAXONOMY AND INVASIVE SPECIES, SECRETARIAT OF THE CBD)

The presentation began with a short overview of the Convention on Biological Diversity (CBD) which commits governments to: take appropriate measures to conserve biological diversity; ensure the sustainable use of biological resources; and to promote the fair and equitable sharing of benefits arising from the use of genetic resources. Under the CBD governments agree to: prepare national biodiversity strategies and action plans; identify genomes, species and ecosystems crucial for conservation and sustainable use; monitor biodiversity and factors that are affecting biological systems; establish effectively managed systems of protected areas; rehabilitate degraded ecosystems; exchange information; conduct public information programmes; and implement various other activities to meet the objectives of the CBD.

The Global Taxonomy Initiative (GTI) is a cross-cutting programme under the CBD. The GTI aims to remove the taxonomic impediment (the fact that in most countries in the world, there is too little taxonomic expertise, information and infrastructure available to enable them to work with their biota in the way they need). The GTI was developed by the Parties (to the CBD) to:

- Identify taxonomic needs and priorities;
- Develop and strengthen human capacity to generate taxonomic information;
- Develop and strengthen infrastructure and mechanisms for generating taxonomic
- information, and for facilitating sharing of and access to that information; and
- Provide taxonomic information needed for decision-making regarding the conservation of biological diversity, sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (the three objectives of the CBD).

The programme of work for the GTI has 18 planned activities under 5 operational objectives:

- **Operational objective 1:** Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention.
 - Planned Activity 1: Country-based taxonomic needs assessments and identification of priorities.
 - Planned Activity 2: Regional taxonomic needs assessments and identification of priorities.



- Planned Activity 3: Global taxonomic needs assessments.
- Planned Activity 4: Public awareness and education.
- **Operational objective 2:** Provide focus to help build and maintain the human resources, systems and infrastructure needed to obtain, collate, and curate the biological specimens that are the basis for taxonomic knowledge.
 - *Planned Activity 5*. Global and regional capacity building to support access to and generation of taxonomic information.
 - *Planned Activity 6*. Strengthening of existing networks for regional cooperation in taxonomy.
- **Operational objective 3:** Facilitate an improved and effective infrastructure/system for access to taxonomic information; with priority on ensuring countries of origin, gain access to information concerning elements of their biodiversity.

Target under operational objective 3: A widely accessible checklist of known species, as a step towards a global register of plants, animals, microorganisms and other organisms.

- Planned Activity 7: Develop a coordinated taxonomy information system
- **Operational objective 4:** Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components.
 - o Planned Activity 8. Forest biological diversity.
 - *Planned Activity 9*. Marine and coastal biological diversity.
 - *Planned Activity 10*. Dry and sub-humid lands biodiversity.
 - o Planned Activity 17. Inland waters biological diversity.
 - Planned Activity 12. Agricultural biological diversity.
 - Planned Activity 13. Mountain biological diversity.
 - *Planned Activity 13b*. Island biological diversity.
- **Operational objective 5:** Within the work on cross cutting issues of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components.
 - o Planned Activity 14. Access and benefit-sharing.
 - o Planned Activity 15. Invasive alien species.
 - o Planned Activity 16. Support in implementation of Article 8 (j).
 - *Planned Activity 17.* Support for ecosystem approach and CBD work on assessment including impact assessments, monitoring and indicators.
 - Planned Activity 18. Protected areas.

Taxonomy can offer services in all areas relevant to the CBD such as climate change : adaptation and mitigation landscape change ; invasive alien species; pollution; over exploitation; agricultural development; food security; human health and access and benefit sharing.

With regard to this workshop, Junko emphasised the fact that doing taxonomy for taxonomy's sake was unlikely to get funded by most donors. Taxonomy had to provide the tools for the achievement of the ultimate objectives of the CBD – conservation of biological diversity and the fair and equitable sharing of its benefits.

2.1.4. THE IMPACT OF INVASIVE SPECIES IN CONTINENTAL AFRICA – AND SOME TAXONOMIC ISSUES: DR. GEOFFREY HOWARD (GLOBAL INVASIVE SPECIES COORDINATOR, IUCN)

Continental Africa comprises mainly of tropical countries with many neighbours (up to 8); all have cross-border ecosystems and porous borders; most have limited capacity for biosecurity.



Mainland Africa has very few vertebrate invaders. Alien mammals are very few in tropical Africa. IAS are restricted to the Black rat (*Rattus rattus*). The coypu (*Myocastor coypus*) is established but is rare, feral dogs and domestic cats are absent. In temperate Africa there are some established mammals - deer and foreign ovids. The cane toad (*Bufo marinus*) is present and invasive in Egypt (temperate Africa) and has the potential to move up the Nile (South) to the tropics. There are some invasive bird species in tropical Africa e.g. the Indian house crow (*Corvus splendens*) and the Indian minah (*Acridotheres tristis*) but the major group of invasive vertebrates are the fish (e.g. Nile tilapia *Oreochromis niloticus* and the common carp *Cyprinus carpio*) which have been intentionally introduced and spread naturally. Geoffrey touched briefly on invertebrates, giving some information on exotic crayfish which are reported to be spreading in Africa. He did not discuss invasive insect species and other arthropod groups.

The most prominent invasive species are plant invaders. There are many alien invasive plants in Africa that cause extensive damage to biodiversity as well as to human development, health, food production and livelihoods. Many of these species come from tropical America, Asia and Australia. These are probably the most harmful exotics in continental Africa as they are widespread, and continuing to expand in terms of their distributions and impacts - yet they remain largely un-noticed and so ignored - to the future peril of Africa. Alien invading plants in mainland Africa presently include Water hyacinth, *Eichhornia crassipes*, and other aquatics (and semi-aquatics) such as *Pistia* stratiotes, Salvinia molesta, Azolla filiculoides, Hydrilla verticillata, Limnocharis flava, Mimosa pigra, Mimosa invisa, Arundo donax, shrubs such as Lantana camara, Chromolaena odorata, Calotropis procera, Senna didymobotrya, Senna hirsuta, Thevetia peruviana, climbers such as Cryptostegia grandiflora, Cardiopspermum grandiflorum, Rubusspp., Solanum seaforthianum, trees such as Acacia mearnsii, Prosopisspp., Cedrela odorata, Broussonetia papyrifera, Senna spectabilis, Azadarachta indica, Leucaena leucocephala, Parkinsonia aculeata, Calliandra houstoniana and many grasses and herbs such as Chromolaena odorata, Parthenium hysterophorus, Canna indica, Striga spp., Ageratumspp., Solanum incanum, Tithonia diversifolia, Tithonia rotundifolia and Montanoa hibiscifolia.

The example of the spread of *Parthenium hysterophorus* as an expanded problem in Africa was outlined. The species rapidly spreads along roads and can cause problems in pastures, crops, in periurban areas and in protected areas. For example parthenium threatens crops unless weeded at regularly, but people get sick while weeding with respiratory problems and eczema.

Some important practical taxonomic issues related to appreciation, prevention and management of biological invasions in mainland Africa are:

- 1. Recognition of actual or potential invasives e.g. related species may or may not be invasive and it is important to know the difference.
- 2. Correct identification of suspect species. e.g. people frequently report the presence of the Indian house crow when in fact it is the native crow they have seen.
- 3. Correct reporting of actual invasions. e.g. many fresh water plant invasions are reported as being water hyacinth when they are not. This has management implications (see point 5).
- 4. The possibility of likely invasibility in related species. Invasiveness may have taxonomic underpinnings so knowing that a close relative of an invasive is present should encourage further investigation of that species.
- 5. Specificity of possible biocontrol agents. When seeking reliable biocontrol agents for invading species, we need to look at the susceptibility of related species especially those in the same family and with similar plant habits

2.2. Donor Perspectives & Successful Project Development Approaches

Presentations by JICA and UNEP/GEF were given during this session. A planned presentation on the LifeWeb Initiative was postponed until Day 3.



2.2.1. JICA'S COOPERATION IN FORESTRY AND NATURE CONSERVATION: JOHN NGUGI (JICA)

JICA's mission and policy, strategy for forest and nature conservation and an overview of JICA's approach to biodiversity were outlined.

JICA's mission is as follows: *We, as a bridge between the people of Japan and developing countries, will advance international cooperation through the sharing of knowledge and experience and will work to build a more peaceful and prosperous world.* JICA's overseas development charter (2003) sets out four priority issues: poverty reduction, sustainable growth, addressing global issues and peace keeping. JICA's overseas cooperation consists of bilateral support through grants and loans and multilateral support through contributions to international organisations.

JICA's project sites in the area of nature conservation and forest management were shown. Eight of these are in Africa. These include sites in Burkina Faso, Mali, Gabon, Ethiopia, Madagascar and Malawi. JICA's strategy of forest and nature conservation is based upon addressing the vicious circle of poverty, excessive human activity and the destruction of the natural environment which means focusing on the human activity – natural environment nexus to achieve harmony between nature and human activities. This is to be achieved by understanding systems (research, study and community awareness), protection (policy/institutional improvement, capacity and technology development) and use (community-based livelihoods and natural resource use and sound forest management). These have been translated JICA's three major intervention areas: sustainable use of natural resources by communities, biodiversity conservation and sustainable forest management. Current overarching issues that affect these issues include: governance for forestry and nature conservation, climate change, corporate social responsibility and multilateral framework building.

Details of the process of preparing project proposals for JICA were outlined and are summarised in figure 1 below:







The presentation closed by highlighting the areas that are in JICA's opinion the most important common problems in biodiversity and ecosystem conservation that need to be addressed: land management (loss of wildlife habitats, fragmentation of natural forests / ecosystems, etc.); habitat quality (logging, pollution - water quality, soil condition air quality, etc.) and species / population issues (poaching, invasive species, heavy commercial harvesting, etc.). A common overarching issue is a lack of coordination between agencies and weak cooperative governance processes. It was recommended that efforts are made to develop a mechanism to link multiple agencies and consolidate conservation efforts by different institutions under an integrated conservation framework (a cross-sectoral approach). JICA could support such efforts through bilateral cooperation.

2.2.2. OVERVIEW OF THE GEF: STEPHEN TWOMLOW (SENIOR PROGRAMME OFFICER, UNEP/DGEF)

Stephen began the presentation with a brief overview of the Global Environment Facility (GEF) and its origins.

GEF is the mechanism for financing "incremental costs" of new "global environmental" actions by developing countries. Incremental costs can be defined as the difference in scenarios between the "baseline" or "what would happen without GEF intervention" and an "alternative". The GEF intervention constitutes the new "global environmental" actions that will result in that "alternative" scenario, the cost of which will be borne by GEF.

GEF is the designated financial mechanism for: the CBD, United Nations Framework Convention on Climate Change (UNFCCC), the Stockholm Convention on Persistent Organic Pollutants (POPs) and it is a financial mechanism for the United Nations Convention to Combat Desertification (UNCCD)

GEF also closely cooperates with other international agreements and treaties with common global objectives (on international and transboundary water systems and the Montreal Protocol on Substances that Deplete the Ozone Layer).

The GEF Council is the main governing body of the GEF with primary responsibility for developing, adopting, and evaluating GEF programs. The Council meets every 6 months to review and approve all projects. The GEF Assembly is composed of all (168) member countries. It meets every 3 years to review general policies, operations, and amendments to the GEF Instrument. The GEF Secretariat, based in Washington, D.C, coordinates the formulation of projects included in the annual work programme, oversees the implementation of this programme, and makes certain that operational strategy and policies are followed. GEF projects are managed through its implementing agencies, which include UNEP. The STAP (Scientific and Technical Advisory Panel) provides objective scientific and technical advice on GEF policies, operational strategies, and programs, conducts selective reviews of projects in certain circumstances and at specific points in the project cycle, and maintains a roster of experts. Each country receiving GEF assistance has designated government officials responsible for GEF activities: a political focal point who coordinates matters related to GEF governance and an operational focal point who oversees project related matters. These focal points help ensure that projects arise from their country's own priorities. The GEF governance framework is depicted schematically in Figure 2.





Figure 2. Schematic representation of the GEF governance framework

Stephen outlined the financial history of the GEF and the relative allocations to its different focal areas (biodiversity, climate change, international waters, land degradation, multi-focal areas, ozone depletion and POPs). Biodiversity and climate change received approximately equal allocations in 2007 (approximately 30% each of total GEF disbursements).

The allocation of scarce GEF resources to all eligible countries is based upon a resource allocation framework (RAF). Allocations are based on global environmental benefits in each focal area and country level performance. In the Biodiversity focal areas for GEF 4 countries receive individual allocations or countries have joint access to group resources.

The GEF agencies are requested to focus their involvement in GEF project activities within their respective comparative advantages. UNEP is the only GEF Agency whose core business is the environment. UNEP plays a key role in assisting countries assessing GEF funds through supporting the development and execution of GEF projects that fit within its comparative advantage:

- Regional and Global initiatives
- Assessments
- Capacity Building
- New approaches such as field scale development of payments for ecosystem services (PES) approaches, the assessment of below ground Biodiversity and the status and trends in pollination services.

The GEF project cycle, from development of a concept paper to project completion and evaluation was outlined. This process holds for GEF 4 but may change slightly for GEF 5 although the essence is likely to be unchanged. A key stage early in the project cycle is the endorsement of the National GEF Operational Focal Point. Following this the GEF agencies work with countries on three major phases: project preparation & approval; project implementation; and project closing & evaluation. The



details of the project cycle vary between the type of GEF project under consideration. Projects under the Small Grants programme (SGP) are approved by the UNDP country programme office. The project cycle for a full size project and that for a medium size project are shown in Figures 3 and 4. Full size projects are subjected to a more complex review and approval process.



Figure 3. The GEF project cycle for a full size project





Figure 4. The GEF project cycle for a medium size project

The vital role of countries in identifying national priorities for GEF funding, developing a comprehensive and coherent GEF strategy in consultation with key stakeholders and in integrating GEF priorities within broader national environment and sustainable development frameworks was emphasised.

Any project not yet in the GEF pipeline will be submitted for funding under GEF 5. Replenishment negotiations have recently begun and will be completed in early 2010. Biodiversity funds will be allocated according to four objectives:

- Objective One: Improve Sustainability of Protected Area Systems
 - Increase Financing of Protected Area Systems
 - Expand Ecosystem and Threatened Species Representation within Protected Area Systems
 - Improve Management Effectiveness of Existing Protected Areas
- Objective Two: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/Seascapes and Sectors
 - Strengthen the Policy and Regulatory Framework for Mainstreaming Biodiversity
 - o Implement Invasive Alien Species Management Frameworks
 - Produce Biodiversity-friendly Goods and Services
- Objective Three: Build Capacity for the Implementation of the Cartagena Protocol on Biosafety (CPB)
 - Single-country projects
 - Regional or sub-regional projects
 - Thematic projects
- Objective Four: Build Capacity on Access to Genetic Resources and Benefit Sharing (ABS)
 - Still under negotiation



In terms of things that can be achieved following this workshop for those seeking to develop a project for GEF funding Stephen recommended the following:

- Identify national/regional/global priorities for GEF and other donor funding.
- Develop a comprehensive and coherent strategy/program in consultation with key stakeholders that meet GEF and other donor requirements.
- Develop novel ideas.
- Get GEF National Operational Focal Points endorsements.

2.2.3. SUCCESSFUL DEVELOPMENT OF INVASIVE SPECIES PROJECTS – LESSONS FROM LATIN AMERICA: SILVIA ZILLER (INSTITUTE HORUS)

Silvia introduced the Global Invasive Species Information Network (GISIN) as a network for invasive species management with the following functions among others: a way of summarising dispersed and difficult to access information; a way of assessing knowledge gaps; a tool for better forecasting; a means of enhancing understanding of the IAS problem and a way of catalysing local actions.

GISIN is a distributed network that provides a framework that allows invasive species databases to be accessed by other servers, facilitates the use of data from a variety of providers and standardises and integrates data.

The first GISN product was an online list of IAS systems created in 2004. GISIN then conducted a global IAS information needs assessment. There were a great number of knowledge gaps. e.g. 50% of respondents did not know what level of web services their organization provides and/or uses and 80% did not know what existing protocols are appropriate for IAS information management. There were equally large data gaps. Only 30 of 194 countries had online IAS databases and while plant databases are relatively common, those relating to invertebrates/others were not.

GISIN has laid out principles for information sharing:

- Fill information gaps
- Provide easy info access
- Integrate data from all partners
- Facilitate incorporation of data into global networks
- Enhance the public's understanding of the problem

GISIN has also laid out rules for (invasive species) information sharing:

- Interpret scientific data so that it is useful to the non-scientist
- Maintain provider-controlled data
- Respect intellectual property rights
- Provide open access to information

Silvia presented the work of I3N, the Invasives Information Network of IABIN (Inter American Biodiversity Information Network) as an example of the development of an information network based on GISIN's principles.

There were common problems related to biological invasions in the Americas: a lack of data; a lack of knowledge; and a lack of perception. Following the 2004 GISIN workshop in Baltimore the I3N database was developed and a negotiation and awareness process was undertaken with IABIN focal points and I3N leads. Training workshops were held in 19 countries in the Americas between 2005 and 2009. Between 2004 and 2009 the following tools were developed: national invasive species databases; species risk assessment modules (plants, terrestrial vertebrates, fishes); and a vectors and pathways assessment module. These tools are available in English, Spanish and Portuguese. The network has the following advantages:

• The results of risk assessments can serve other countries under similar conditions.



- Vectors and pathways assessments can benefit from information available throughout the continent and especially in neighbouring countries.
- Information from neighbouring countries can be used in prevention efforts.
- Information available for multiple countries can trigger joint efforts against IAS.

Silvia presented the example of Brazil in which the I3N work has helped to stimulate activity on invasives. State programmes for IAS have utilised official lists based on the I3N information; control of invasives is compulsory in protected areas and invasive seedlings are forbidden in public nurseries. There is also increased work at the municipal level with invasive species being removed from some city parks and invasive street trees being replaced by natives in some municipalities.

2.3. Plenary Session – Presentation and Preliminary Review of Project Ideas

Each participant or spokesperson for a group of participants presented their project ideas (Appendix C). Preliminary discussions of the project ideas focused on the following evaluation criteria: feasibility, relevance, effectiveness, efficiency, impact and sustainability. The projects were grouped into "project clusters" - groups of projects with common themes. Participants would work together with others in the same project cluster when developing their project ideas in the following days to facilitate peer review and if possible inter-project synergies. The project titles, project proponents and the thematic areas into which they were grouped are given in Table 1.

Project title	Project proponents	Project Cluster
Establishing an IAS monitoring Database for Ecologically Sensitive	Bernard Risky Agwanda	Collections and
areas in East Africa.		databases
Diversity and sustainable use of macrofungi in selected Protected Area forest reserves of Ghana.	Mary Apetorgbor	IAS management
Community engagement in marine IAS, taxonomy and MPA management.	Adnan Awad & James Kairo	Protected areas
Management of Invasive Alien Plants in Agriculture, Forestry and	Oumar Balde	IAS management
Rangeland from Prevention to control.		, , , , , , , , , , , , , , , , , , ,
Capacity building to support research and extension programs for	Aimé Bokonon-Ganta	Agro-biodiversity
sustainable management of invasive fruit fly species in West Africa		
Assessment and mapping of invasive alien plants in the Serengeti	Hamza Kija	Protected areas
Ecosystem. Case study of Ngorongoro, Serengeti and Ikorongo-		
Grumeti Reserves, Tanzania.		
The effect of the invasive Prosopis spp on indigenous plant-pollinator	Wanja Kinuthia & Chris	IAS management
interactions in Lake Bogoria National Reserve.	Odhiambo	
The taxonomic infrastructure to support invasive species	Chris Lyal	Collections and
management: Building the short-term and long-term solutions.		databases
Integrated invasive species management and protected areas	Melckzedeck Osore &	Protected areas
development.	Soud Juma	
Mainstreaming pro-poor urban and rural community forest	Melckzedeck Osore &	Protected areas
conservation to restore mangroves ecosystem	Soud Juma	
Building capacity in order to mine data from botanical collections in	Tebogo Rampho	Collections and
order to monitor changes in alien invasive species and possible		databases
climate change.		
Development of an identification guide for alien weeds and invasive	Arne Witt	Collections and
plants for East Africa.		databases

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3. DAY 2

The day began with two presentations followed by working group sessions in which the participants continued to refine their projects.

3.1. Presentations

3.1.1. THE MANY ROLES FOR TAXONOMY IN INVASIVES MANAGEMENT: DR. CHRISTOPHER LYAL, BRITISH NATURAL HISTORY MUSEUM

Chris presented the results of a taxonomic needs assessment for invasive species management conducted by the British Natural History Museum and BioNET with support from GISP.

This was the first global level assessment of the taxonomic support needed to manage invasive alien species.

The results of this assessment confirm and help explain why taxonomy is a critical tool for combating the threats from invasives. Results and recommendations are based on analyses of selected documentary and expert sources. They provide a reference and framework for action for agencies and authorities responsible for invasives management; for taxonomic institutions; and for networks, funders, coordinating and policy bodies.

Three broad types of need were identified:

I end-users: taxonomic outputs and service's needed by non-taxonomists for invasives management

II within institutions: taxonomic capacity, information resources and prioritisation within institutions in order to deliver those services

III across institutions: activities and prioritisation of needs at a level above individual institutions, to enable them to implement the changes required.

The main needs are:

- Lists of names of invasives, including taxonomic names, synonyms and vernacular names, to be created, maintained and made available.
- Pathway and distribution mapping and modelling, and threat assessment, to be facilitated by specimen- and observation-based data on invasives captured and made available through a global system.
- Modelling tools to be developed and made available.
- Sustainable identification services for invasives at appropriate geographical levels facilitated and supported.
- Identification tools in appropriate format and language, including high numbers of images, created and their availability improved.
- Reference collections established and maintained at appropriate institutions nationally or regionally.
- Improvement of understanding of taxonomic needs associated with management of invasives by all parties.
- Access to taxonomic information to be considered at the planning stage of management and control programmes and measures to ensure this built into plans.

Innovation in delivering taxonomy to end-users is essential to respond to the threat posed by invasives with necessary urgency, making best use of available capacities. Much can be achieved by promoting, mobilising and packaging existing information according to user needs.



3.1.2. GISIN AND THE USE OF I3N TOOLS TO SHARE STANDARDIZED INVASIVE SPECIES INFORMATION (SILVIA ZILLER)

Silvia gave a follow-up presentation – a walkthrough of the I3N IAS database developed between 2004 and 2005. She showed the front screen and different ways of searching for information such as by species name and other levels in the taxonomic hierarchy, by vectors, pathways and diet. Other searches that could be done, for example for experts, projects, bibliography and controlled vocabulary were also presented. Processes for inputting data and quality control were outlined. The I3N tools for risk analysis for species introductions and vectors and pathways were also introduced.

More information is available on:

- <u>www.gisin.org</u>
- <u>http://i3n.iabin.net</u>
- <u>www.gisp.org</u>

3.2. Putting Flesh on the Bones – Working Group Sessions (Continued)

Before participants went into the small group session they were asked to consider the possible outcomes for their project ideas in the coming two days. These include the following:

- Crystallisation of ideas which will be developed into a full project proposal following this workshop
- Changed concept that will be developed into a full project proposal following this workshop
- Merging of project ideas with other participants into a new project idea will be developed into a full project proposal following this workshop
- Abandoning of the project idea after subjecting it to critical analysis.

It was re-emphasised that subjecting the project idea to critical analysis at this stage could save a great deal of time and heartache later on. Participants were encouraged to ask questions such as the following that could aid this analysis:

- What are the ultimate problems you are addressing? e.g. causes of poverty, mitigation of climate change, enhancement of key ecosystem services, etc.
- Does your project provide the solution or part of the solution to the problem you are addressing?
- Where do you want your system to be in 20 years?
- How can your project outcomes be sustained?
- What are your assumptions and are any of these killer assumptions?

Based on critical analysis in the breakout groups eight of the project ideas were maintained, two were revised (*management of invasive alien plants in agriculture, forestry and rangeland from prevention to control*, and *the effect of the invasive Prosopis spp on indigenous plant-pollinator interactions in Lake Bogoria national reserve*) and two were merged (*The taxonomic infrastructure to support invasive species management and building the short-term* and *long-term solutions and Establishing AIS monitoring Database for Ecologically Sensitive areas in East Africa*).

4. DAY 3

The day began with three presentations followed by a working group session in which the participants continued to refine their projects and produced ideas for steps to take following this workshop. These next steps were discussed at the final plenary session.



4.1. Presentations

4.1.1. PROJECT DEVELOPMENT, THE INTERNATIONAL YEAR OF BIODIVERSITY & SBSTTA: JUNKO SHIMURA

Junko introduced two high profile events that could serve to highlight the project ideas developed during this workshop. The United Nations has declared 2010 to be the International Year of Biodiversity (IYB). The purpose of the International Year is to raise public awareness of the importance of biodiversity and the consequences of its loss. It will also seek to promote the engagement of the public and other actors for the implementation of the Convention on Biological Diversity. The Year will also celebrate successes in realising the target of achieving a significant reduction in the rate of biodiversity loss by 2010. The objective is to obtain a commitment by the global community to reinforce the implementation of the CBD.

The CBD Secretariat (SCBD) together with its partners will be organising many high profile events to celebrate IYB. Junko encouraged participants to work within their institutions and with other institutions to ensure that their activities are publicised during IYB and that any relevant events are linked to IYB. This linkage can serve to increase the profile of the particular institution and of the practice and utility of taxonomy. Anybody can use the IYB logo on relevant material but it would be greatly appreciated if those using the logo could inform the CBD Secretariat.

The forthcoming CBD SBSTTA meeting scheduled to take place between 10 and 21 May 2010 represents a strategic opportunity to promote the project concepts developed before, during and after this workshop to a wider audience. If it is possible it would be excellent for participants to be present at the meeting for them to be able to present their ideas, as part of networking or through formal presentations, for example at side meetings. If it will not be possible to be present at SBSTTA it would be opportune to discuss the proposed projects with national representatives who will be present and could promote the projects in the manner suggested above.

4.1.2. THE LIFEWEB INITIATIVE: JOHN MAUREMOOTOO (ON BEHALF OF JASON SPENSLEY OF LIFEWEB)

The LifeWeb initiative was established following CBD COP9 Decision IX/18 to support the implementation of the CBD Programme of Work on Protected Areas. There was a German commitment of €40 m in 2008 and a commitment to fund at least this amount each year up to 2012, up to a total of \$500 million. Spain's commitment is €5 million Euro over 2 years and there is growing interest from various other donors. LifeWeb has a small coordination office which was established in the CBD Secretariat in June 2009.

LifeWeb's goal is: to catalyze new and additional funding for the creation and management of protected areas; and its purpose is: To strengthen the use of protected areas as tools to conserve biodiversity, address climate change and achieve the millennium development goals, as well as advance implementation of the Convention on Biological Diversity Programme of Work on Protected Areas.

LifeWeb provides a clearing house of protected area funding needs to support donor decisionmaking; communicates recipient priorities and funding opportunities, including co-convening meetings to articulate highest priority needs and support donor coordination; and actively encourages and recognises donor support for protected area solutions to the climate crisis, biodiversity conservation, and sustainable livelihoods.



LifeWeb works as follows:

- 1. Recipients submit expressions of Interest based on national priority setting (e.g. ecological gaps, management effectiveness needs, sustainable finance plans, etc.)¹.
- 2. Donors identify short list of projects based on their interests.
- 3. Bilateral agreement reached.
- 4. Funds flow directly between donors and recipients.
- 5. Additional opportunity: Co-convene donor coordination.

Completed national priority setting products (ecological gaps, management effectiveness, finance plans, etc) can be compelling fundraising tools to:

- Illustrate strategic prioritisation for maximum impact.
- Demonstrate government leadership and stakeholder collaboration.
- Provide platform or high level government presentation of needs to donors.
- Enable and attract donor coordination.

Getting one or two donors on board can also be a factor for success as it can challenge others to become involved also. LifeWeb can then support by inviting and attracting donor commitment. The coordination office in the CBD does the following:

- Manage the electronic clearing house.
- Encourage and support development of recipient Expressions of Interest.
- Actively encourage and recognise donor support for Expressions of Interest.
- Informally communicate needs and opportunities to donors and recipients.
- Formally co-convene donor coordination meetings.
- Support development and dissemination of tools for protected areas to address climate change mitigation and adaptation.
- Ensure implementers have best and most up to date tools and guidance materials available for implementing planned activities.
- Report on progress made in association with this initiative to implementation of the CBD Programme of Work on Protected Areas.

The role of the coordination office as a hub is illustrated in Figure 5.





¹ Available at www.cbd.int/lifeweb/submit



4.1.3. THE LOGICAL FRAMEWORK APPROACH (CHRIS LYAL)

The Logical Framework Approach

In this presentation Chris attempted to demystify the logical framework approach and embed it into the project development and project management framework – as a management tool and not just as an onerous obligation to donors.

The logical framework approach is a set of open-ended management tools, practiced differently by different organizations, although the principles are the same. Some form of logical framework approach is needed by all major donors but logframes have value beyond this. If well formulated, they can help to: organise your thinking; relate activities to expected results; set performance indicators; allocate responsibilities; and communicate project information concisely.

The logical framework approach is embedded in the project cycle (see 2.2.2.) from project conception to evaluation. The project logframe is constructed during project planning which is part of the project design phase but it is informed by outputs from the project analysis phase which precedes the project planning phase, although generally project design is an iterative process. Three key elements of the planning phase are stakeholder analysis, problem analysis and risk analysis. Stakeholders are People **affected** by the impact of an activity and people who can **influence** the impact. Stakeholders include the following:

- user groups people who use the resources or area.
- interest groups have an interest or opinion or who can affect the use of a resource or area.
- winners and losers.
- Beneficiaries.
- Intermediaries.
- those involved in or excluded from the decision-making process.

Stakeholders can be primary stakeholders – Those who benefit from or are adversely affected by an activity. They are usually wholly dependent on resource or area for survival, with few options when faced with change or secondary stakeholders - all other people and institutions with a stake or interest or intermediary role in resource or area. Stakeholders can be summarized in a stakeholder table with a list of stakeholders, their interests (hidden or open) in relation to the project, a preliminary assessment of likely impact of project on each stakeholder's interests (+, -, +/-, ?) and the relative priority the project should give to meeting interests of each stakeholder (e.g. 1-5; 1 is highest). An example of a stakeholder table is shown below.

Project: Carrying out baseline survey to see if area should be given protected area status					
Stakeholders Interests			Priority		
	Primary				
1. Local villagers making	 Potential loss of livelihood through exclusion 	-	1		
a livelihood from area	from area				
	Secondary				
2. Parks Authority	 Extending area of authority 	+ / -			
	 Potential management capacity shortfall 				
3. National conservation	 Meets campaign objectives 	+	1		
group					
4. Ministry of Tourism	 Potential for additional tourist attraction 	+	2		

Table 2. A hypothetical stakeholder table

Stakeholders can then be grouped into a simple matrix with columns indicating their importance to the project in terms of satisfying their needs and rows indicating their influence over the project (Table 3).



Table 3. A stakeholder analysis matrix

	Box A Stakeholders of high importance but low influence • Require special initiatives to protect interests	Box B Stakeholders of high importance and high influence. • Need to construct good working relationships to ensure effective coalition of support for the project			
portanc	Box D Stakeholders of low importance and low influence. • May need limited monitoring	Box C Stakeholders of low importance but high influence: • Can affect outcomes • Interests are not project target • May be source of risk • Relationships need careful monitoring			
	Influence ov	• May be able to block the project			

This information determines levels of participation in the proposed project. Actions can be classified as: Action FOR - being <u>informed</u> or set tasks. Others set the agenda and direct the process. **Action FOR/WITH** - being <u>consulted</u>; others analyse and decide course of action **Action WITH** - <u>partnership</u>; work with others to set priorities and course of action. 4. **Action BY** - <u>control</u>; little or no input by others.

This information can be summarized in a participation matrix. An example of a participation matrix is shown below.

Type of	Inform	Consult	Partnership	Control
participation				
Stage in project				
Identification				
Planning				
Implementation				
Monitoring &				
evaluation				

Table 4. The format of a participation matrix

Problem analysis can aid project design in: crystallising the overall issue addressed into individual problems; analyse negative aspects of the project situation; establish causal relationships; help gather information through stakeholder consultation, etc. The first step in problem analysis can be undertaken by constructing a problem tree. A 'starter problem' is selected and placed centrally, problems directly causing the starter problem are placed below it, problems which are direct effects of starter problem are placed above it and problems that are neither a cause or effect are placed at the same level. Figure 6 shows the form of the problem tree and figure 7 shows a hypothetical problem tree relating to the starter problem of a limited knowledge of the biota in Nairobi National Park, Kenya.



Figure 7. A hypothetical problem tree

A problem tree can then be converted into an 'objectives tree'. This is sometimes simplistically achieved through a simple rewording: 'lack of sufficient water becomes 'provide sufficient clean water.' The resultant objectives tree then shows a 'means-ends' relationship. The theory is that, by tackling each objective in the project and converting each problem into a new, positive state our intervention should turn the core-problem around. These objectives in the tree then provide a basis for project and program definition. An example of an objectives tree derived from the hypothetical problem tree is shown in Figure 8.





The Objectives Tree



Risk assessment examines the potential for unwanted happenings or consequence which at worst can result in project failure. Risk assessment and management must be built into project design. There are three main phases of risk assessment: Identification - what are the risks? Estimation - what is their likely probability? And evaluation - what is their likely impact? For every identified risk one must identify risk management measures.

THE LOGFRAME

The above is essential background for the production of a logframe. A logframe is presented as a matrix with: the project summary (goal, purpose, outputs and activities); indicators of performance; means of verifying the indicators; and important risks and assumptions (Table 5).

Project Summary	Measurable indicators	Means of verification	Important assumptions
Goal			
'Greater why'			
Purpose			
'Why'			
Outputs			
What?			
Activities			
How?			

Table 5. The logframe format

Project summary objectives should be SMART: **specific** (to avoid differing expectations), **Measurable** (to monitor and evaluate progress), **Appropriate** (to the problems, goal & organisation), **Realistic** (achievable, challenging & meaningful and **Time-bound** (with a specific time for achievement). A completed action should be used to describe the objective (e.g. train = the activity, trained = the objective). Strong action verbs should be used e.g. decrease/increase instead of provide, strengthen instead of produce, etc.



The project goal is a higher order objective, perhaps of a programme or a sector, is outside the control of project team and may require several projects for its achievement. The project purpose is why the project is being done. It summarises the expected impact of project. There is one purpose per project and it is inside the control of the project team. Outputs describe what project will deliver (measurable end results). They should be necessary and sufficient for the purpose to be met. There is likely to be more than one output per purpose. Activities define how the team will carry out the project. There may be several main activities for each output.

The logframe structure is based on cause and effect; if something is achieved, then something else will result. So, if certain activities are carried out, then one can expect certain outputs. The same 'if/then' relationship holds between output and purpose.

There should be clear logical links between statements in the project summary column. However, external factors may break links. Assumptions are statements about the uncertainty factors -external factors you cannot control or factors you choose not to control. These may have been identified in the preceding risk analysis.

Measurable indicators define in measurable detail the performance levels required by the objectives in project summary column. Measurable indicators demonstrate results and tell us how to recognise the accomplishment of objectives. Measurable indicators are stated in terms of quantity, quality and time, e.g. "4 staff trained to PhD level by year 5". Output level indicators establish terms of reference for the project and indicate deliverables for which project team is accountable.

Means of verification are sources of information to demonstrate what has been accomplished. Specific activities, e.g. surveys may be needed to gather the necessary information. Indicators chosen must be verifiable. They may include publications, surveys, project notes, minutes, reports and records; photographs, tapes, videos etc.

In summary the logical framework approach depends on clarity, honesty, recognition of all salient factors, flexibility and rigour.

4.2. Working Group Sessions (Continued)

Project concepts were subjected to final review by the resource persons and fellow participants during this session. Measures to be taken to continue the project development process were also discussed during this session.

4.3. Workshop evaluation

Workshop evaluation sheets were completed. The results were very positive with the vast majority of participants finding the workshop useful and leaving with their expectations fully met. Some reservations were expressed about facilities though most were satisfied and two participants encountered transport problems. A full analysis of the workshop evaluations is presented in Appendix D.

4.4. Plenary session: Define the process to take proposal development forward

The participants agreed that the workshop had been very valuable in many ways (Appendix D) but the "proof of the pudding" would be the success with which the project ideas introduced at this workshop were translated into projects and ultimately the degree to which these projects resulted in actual on the ground impact. It was therefore critical that the momentum generated by this workshop process was maintained.

One of the first steps was to refine any project ideas further where necessary, ideally into fully fledged project proposals. One part of this process will be consulting relevant documentation



including each country's NBSAP. It was agreed that the groups would continue to circulate their project concepts for comment from the workshop resource people. Because of time constraints detailed review would not be possible but overall comments and suggestions could be made. Resource people were assigned to review projects belonging to particular project clusters as follows: Collections and databases – Chris Lyal; management– John Mauremootoo; agricultural biodiversity – John Mauremootoo; and protected areas – Jason Spensley (of the LifeWeb Secretariat). Project proponents would also further refine their concepts within their own organisations.

These internal discussions would form part of the consultative process. Following withinorganisation consultation, the project proponents would conduct outside consultations with relevant stakeholders. In some cases this could be done through existing projects and programmes. Among those stakeholders would be those affected by the project, potential project partners and relevant focal points. Among the key stakeholders would be relevant national authorities (CBD National Focal Points and others).

During the course of the workshop several but not all of the projects targeted particular donors. Evidently it is essential to find a suitable donor and proponents would all need to do some background work on which donors are funding which types of project in order to target their approaches intelligently. Such work would be useful even for those project proponents who had already identified an apparently suitable donor as, of course, this identification is no guarantee of funding! The consultative process may help in identifying suitable donors.

It was agreed that the project ideas could be usefully promoted through regional and global initiatives and organisations. The NEPAD Secretariat could prove a useful vehicle through which to promote projects as could AFRICOM which is a Pan-African organisation. The BioNET Secretariat and the African BioNET LOOPs (NAFRINET, WAFRINET, SAFRINET and EAFRINET) can also be very useful in promoting project initiatives. The CBD can help this process as well, notably through the SBSTTA meeting in Nairobi and through IYB activities as outlined by Junko Shimura in the morning session (Section 4.1.1). Project proponents were encouraged to develop their projects as far as possible so that they could be showcased at CBD SBSTTA 14 which would be very valuable for their profile.

One highlight at COP10 (to be held in October 2010 in Japan) will be Strategic Plan of post 2010 and the post 2010 targets which will be both 'global targets' and 'national targets'. The latter will be decided by the national authority. Funding opportunity may exist in this area. The national authorities will be obliged to report on their NBSAPs to SCBD in 2012 and the Parties will be encouraged to report based on national biodiversity status data at COP10. It is possible that help that the project proponents can offer their own government in the reporting process will bring about opportunities for the participants to receive national funds and endorsement for GEF or other donors.

Many projects are funded through a response to calls for proposals. It is therefore, essential that project proponents "keep their ears close to the ground" so that they are able to respond to such calls. Deadlines for such calls are often very tight so having a ready-made proposal in place can be a great asset. Of course, the proposal will have to be amended so that it fits with the donors' proposal format but this is likely to be much faster than writing a proposal from scratch. Often the greatest obstacle to getting a proposal ready for submission in time is the need for official approval from project partners. In such cases the prior consultation process undertaken following this workshop is likely to be of considerable value. The BioNET Secretariat regularly circulates calls for proposals to LOOP partners and the workshop participants will be added to the Secretariat's mailing list.

One possibility for follow up was to catalyse a regional approach to invasive species by following the approach outlined by Silvia Ziller for the Americas whereby an information network has increased the profile of invasive species issues in the region and resulted in on the ground action.



Ultimately though, as emphasised throughout, it will be the project proponent's responsibility to develop their own projects though it was strongly felt that this workshop and the preparatory process had given the participants a great deal of help towards achieving their goal of the development of successful projects.

4.5. Workshop Closure: Geoffrey Mwachala

Dr. Mwachala thanked the participants and resource persons for their energy, enthusiasm and commitment throughout the workshop. He reiterated his commitment to develop projects and programmes that utilise taxonomy to help resolve major global challenges such as food security, biodiversity loss and climate change and looked forward to seeing many of the participants again in Nairobi for the forthcoming SBSTTA meeting.



Appendix A: Workshop Agenda

Monday 16 th Nov	Activity	Principal Resource
2009		person (s)
8.30 – 9.00 a.m.	Registration	Jane Barasa,
		NMK, Kenya.
9.00 – 9. 15 a.m.	Opening	Dr. Geoffrey Mwachala
		Head of Botany, NMK, Kenya
9.15 – 9.30 a.m.	Introduction, logistics, adaptive agenda and workshop objectives	John Mauremootoo
9 30 – 10 15 a m	Self introduction of participants – participants' interests	John Mauremootoo
	and their expectations from this workshop	
10.15 – 10.30 a.m.	The Global Taxonomy Initiative and the IAS Programme	Junko Shimura
	of Work of the CBD	
10.30 – 11.00 a.m.	COFFEE BREAK	
11.00 - 11.30 a.m.	The impact of invasive species in Africa	Geoffrey Howard
11.30 – 11.45 a.m.	Discussion	
11.45 a.m. – 1.00	Donor priorities and the project development cycle –	Representatives of donors
p.m.	presentations from UNEP – GEF and JICA	
	JICA's Cooperation in Forestry and Nature	John Ngugi
	Conservation	
	Overview of the GEF	Stephen Twomlow
1.00 – 2.00 p.m.	LUNCH BREAK	
2.00 – 2.30 p.m.	The Global Invasive Species Network: information	Silvia Ziller
	sharing for informed decision making	
2.30 – 3.30 p.m.	Plenary session – presentation of submitted project	John Mauremootoo
	ideas and preliminary review: Will it fly? What areas	
	could be strengthened? What donors might it appeal to,	
	etc.	
3.30 – 4.00 p.m.		
4.00 – 6.00 p.m.	Plenary session – presentation and preliminary review	John Mauremootoo
	of project ideas (continued)	
6.30 – 8.00 p.m.	COCKTAIL RECEPTION	

Tuesday 17 th	Activity	Principal Resource person	
November 2009		(s)	
9.00 – 9.30 a.m.	The many roles for taxonomy in invasives management	Chris Lyal	
9.30 – 9.45 a.m.	Discussion		
9.45 – 10.45 a.m.	GISIN and the use of I3N tools to share standardized	Silvia Ziller	
	invasive species information		
10.45 – 11.15 a.m.	COFFEE BREAK		
11.15 a.m. – 5.30	Putting Flesh on the Bones	Facilitation Team (John	
p.m.	Working group sessions: Development of project ideas	Mauremootoo, Silvia Ziller, Chris	
	into concept papers	Lyal, Junko Shimura)	

Wednesday 18 th	Activity	Principal Resource person
November 2009		(s)
9.00 – 9.15 a.m.	Project development and IYB & SBSTTA:	Junko Shimura
9.15 – 9.30 a.m.	The LifeWeb Initiative	John Mauremootoo
9.30 - 10.15	The logical framework approach	Chris Lyal
10.15 – 10.45 a.m.	COFFEE BREAK	
10.45 a.m.– 12.15	Working group session: Development of concept	Facilitation Team
p.m.	papers (continued)	
12.15 – 12.30 p.m.	Workshop evaluation	Facilitation Team
12.30 – 1.30p.m.	Next Steps	Facilitation Team
	Plenary session: Define the process to take proposal	
	development forward	
1.30 – 2.00 p.m.	Closing of the Meeting	Dr. Junko Shimura &
		Dr. Geoffrey Mwachala
2.00 p.m.	LUNCH	



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1	Dr. John Mauremootoo	BioNET Secretariat	Regional Partnerships Officer	E: <u>jmauremootoo@gmail.com</u> C:+44 (0) 784 6219689 O: +44 (0) 1934 876565 P: BioNET Secretariat Bakeham Lane, Egham, Surrey	UK	Resource person
2	Dr. Chris Lyal	The Natural History Museum	UK GTI Focal point, Research Taxonomist	E: <u>c.lyal@nhm.ac.uk</u> O: +44 (0) 207 942 5113 C: +44 (0) 7944099902 P: Cromwell rd, London SW7 5BD	UK	Resource person
3	Dr. Junko Shimura	Secretariat of the Convention on Biological Diversity	Programme Officer	E: junko.shimura@cbd.int O: +1 514 287 8706 P: 413 Ste – Jacques Street suite 800 Montreal QC H2Y 1N9	Canada	Resource person
4	Dr. Silvia Ziller	The Horus Institute, Brazil Global Invasive Species Information Network (GISIN)	Executive Director/ Collaborator	E: <u>sziller@institutohorus.org.br</u> O: +55 48 3338 2856 C: +55 48 9161 8994 P: Servidao Cobra Coral, 111 Campeche Florianopolis – SC 88063- 513	Brazil	Resource person
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6	Dr. Sarah Simons	Global Invasive Species Programme	Executive Director	E: <u>S.simons@gisp.org</u> O: +254 20 7224461 P: 633-00621, Nairobi	Kenya	Resource person (Day 1)
7	Dr. Geoffrey Mwachala	NMK	Head of Botany Department	E: gmwachala@museums.or.ke gmwachala@yahoo.com O: +254 02 3742131 ext. 2274 C: +254 733 851433 P: 40658-00100, Nairobi	Kenya	Resource person (opening and closing addresses)
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Appendix B: List of Participants and Resource Persons

CBD

	NAME	ORGANIZATION	POSITION	ADDRESS	COUNTRY	Workshop role
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1	Dr. Stephen Twomlow	UNEP-DGEF	SPO Biodiversity & Land Degradation	E: <u>stephen.twomlow@unep.org</u> O: +254 20 7025076 C: +254 726 590285 P: 30552 Nairobi	Kenya	Resource person (donor)
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1 3	Dr. Fabian Haas	ICIPE	Head, BSU	E: <u>fhaas@icipe.org</u> C:+254 728 132 868 P. 30772 00100, Nairobi	Kenya	Participant
1 4	Mr. Christopher Odhiambo	NMK	National Pollination Manager GEF/FAO Project	E: <u>codhiambo@mpala.org</u> O: +254 20 3742131 ext. 2255 C: +254 722 397762 P: 40568-00100, Nairobi	Kenya	Participant
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1 6	Dr. Rudo Sithole	AFRICOM	Executive Director	E: <u>r.sithole@africom.museum</u> O: +254 20 3748668 C: +254 711 947762 P: 38706, 00600 Ngara Nairobi	Kenya	Participant
1 7	Mr. Adnan Awad	GISP	Director	E: <u>awad.adnan@gmail.com</u> O: +27 (0) 21 959 3088 C: +27 (0) 82 785 9678 P: BcB Dept. University of the Western Cape Bellevile 7535, P.O. Box 17, CT	South Africa	Participant
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F CBD

	NAME	ORGANIZATION	POSITION	ADDRESS	COUNTRY	Workshop role
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2 3	Dr. Mary Apetorgbor	Council for Scientific and Industrial Research /Forestry Research Institute of Ghana	Senior Research Scientist	E: <u>mapetorgbor@yahoo.com</u> <u>mape@csir-forig.org.gh</u> O: +233 (0)51 60123/60373 C: +233 (0) 244 855385/264 855385 P: Forestry Research Institute of Ghana, P.O. Box 63, KNUST, Kumasi	Ghana	Participant
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P CBD

	NAME	ORGANIZATION	POSITION	ADDRESS	COUNTRY	Workshop role
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9	_			O: +254 20 3742131/4 ext 2286	-	
				C: +254 721 632365		
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Appendix C. Project Outlines for Development into Concept Papers

ESTABLISHING AIS MONITORING DATABASE FOR ECOLOGICALLY SENSITIVE AREAS IN EAST AFRICA: BERNARD RISKY AGWANDA

Introduction

Amount of threat posed by alien and invasive species in ecosystems, habitats and species and therefore human livelihoods is well globally recognised and CBD decision on it in Article 8(h) (CBD VII/13). Its multidisciplinary nature is also well understood spanning WFO, WTO CITES among others. However national responsibilities in Eastern Africa have not been well taken due to lack of documenting systems which underpin monitoring.

An inventory accompanied with database system dedicated to storing, reporting occurrence, seizure and management of alien and invasive species is vital to the mitigation of its effects in the regions economy. Ecologically sensitive areas are vulnerable to these heinous species. This include coastal systems (where ships and boats docks, wetlands, parks and reserves protected because of species of conservation concern and other unique ecosystems.

<u>Aim</u>

To establish a regional inventory and database for monitoring alien and invasive species in Eastern African ecologically sensitive areas based on experts and staffs working on entry border points. Specific objectives

- 1. Identify key ecological sensitive areas using objectively agreed criteria
- 2. Develop an inventory
- 3. Establish a regional database that can be updated online
- 4. Integrate decision support system to port entry point staff

Methods

- i. Field work
- ii. Stakeholder/expert working sessions
 - Develop criteria for identifying ecologically sensitive areas/systems
 - Share responsibilities
 - needs assessment and prioritizations
 - management system required
- iii. Expert consultations
 - Inventory and distribution of AIS
 - Tools and infrastructure required
 - Associated species and contributing factors
- iv. Desktop work
 - establishment
- v. Communication

Duration: two and a half years

Scope: All species of AIS in Kenya Uganda and Tanzania



DIVERSITY AND SUSTAINABLE USE OF MACROFUNGI IN SELECTED PROTECTED AREA FOREST RESERVES OF GHANA: MARY M. APETORGBOR

Project Coordinator: Dr (Mrs) Mary M. Apetorgbor (Forestry Research Institute of

Ghana)

Expected Project Duration: 2 years

Expected Budget: USD 68,640

Collaborators: Three scientists (two from Ghana and one from Germany) are expected

to participate in the project.

Background

Forest vegetation is home to probably fifty per cent of the world's species, making them an extensive library of biological and genetic resources. In addition, this vegetation helps to maintain the climate by regulating atmospheric gases and stabilizing rainfall, protect against desertification, and provide numerous other ecological functions (FAO, 1990).

However, these precious systems are among the most threatened on the planet. Although the precise area is debatable, each day at least 32,300 ha of forest are degraded. Along with them, the planet loses several hundreds of plant and animal species to extinction, the vast majority of which have never been documented (FAO, 1990).

Ghana once had a vast forest cover of 8.2 million hectares but that has changed drastically. Since 1981 the annual rate of deforestation has been 2.5% per annum. The intact forest is estimated at between 10.9 and 11.8% of the original cover and 6.9% of the country's total area which is declining at a rate of 1.3% per annum (MES, 2002). The primary forests are therefore being replaced by less diverse plantations and secondary forests (FAO, 1989).

There is a fairly good knowledge and information base on the species diversity of plants and animals and ecological processes within the terrestrial habitats. However, very little is known about the microbial diversity of terrestrial and aquatic ecosystems in the country. Some macrofungi grow in association with indigenous trees that are sought after for wood in forest reserves, off reserves and fields under fallow. As the native forests dwindle due to over-exploitation of timber, mining, bush burning and the establishment of plantations with exotic species among others, the diversity of these macrofungi also reduces with time.

In general, information on the diversity, abundance and distribution of macrofungi especially the ectomycorrhizal, edible and medicinal species and their variations with disturbance regimes such as invasive alien species in natural forests and transition zones of Ghana remain unidentified and understudied. Such information is crucial to assess the impact of forest on macrofungi such as the ectomycorrhizal that are needed to colonize germinating seedlings for proper growth as well as utilization of others for food and medicine by rural communities.

Rammeloo and Walleyn (1993) published a bibliography on the use and importance of edible fungi in the diet of local populations in sub-Saharan Africa. Various ethnomycological studies have been conducted on mushroom germplasm and their uses by the fringe communities in the Bia Biosphere reserve of Ghana (Obodai and Apetorgbor, 2001). Other surveys were carried out on indigenous knowledge and utilization of edible mushrooms in parts of Southern Ghana (Apetorgbor *et al.*, 2006).



The goal of this project is to generate a comprehensive list of plant and fungal species in forest reserves of Ghana and relate this with their overall management especially against invasive alien species.

OBJECTIVES

The specific objectives of the study are to:

- 1. document macrofungi currently harvested for use by forest fringe communities in two ecological zones (dry semi-deciduous and moist semideciduous forest zones) in Ghana.
- 2. identify the economic macrofungi (ectomycorrhizal, edible and medicinal) and facilitate germplasm conservation for further research.
- 3. determine the composition, species richness and distribution of macrofungi in the two ecological zones of Ghana.

4. examine management effects from control of Invasive Alien Species in the distribution of macrofungi.

OUTPUT AND ACTIVITIES

Output 1: Indigenous knowledge of economic macrofungi

Activities: An ethnomycological survey would be carried out to provide data on the socio-economic status of people in the fringe communities of the forest reserves. The survey would be undertaken randomly on people living in fringe communities around eight forest reserves in dry semi deciduous zone and two in the moist semi deciduous forest zone. An interview schedule with structured questionnaires would be used to obtain information from the fringe forest communities to document indigenous knowledge and utilization of macrofungi.

From these activities, species of economic macrofungi collected from the reserves by fringe forest communities would be known.

Output 2: Macrofungal species diversity in the reserves

Activities: A stratified random sampling design would be employed to locate five 1-hectare plots for the study in each reserve. The plots would be demarcated with the help of a field compass and the edges marked with pegs. Each plot would be further divided into sub-plots of 50m x 50m. The subplots within each hectare plot would be systematically surveyed to collect macrofungi in the two rainy seasons, April-June and September-November. The fruit bodies of the macrofungi would be photographed, described in the fresh condition and subsequently air-dried. Fungal collections that could not be identified in Ghana with the available literature would be packaged and sent to experts in Germany for identification. Voucher specimens would be preserved in the laboratory at the Forestry Research Institute of Ghana. The composition and density of macrofungi (ectomycorrhizal, edible and medicinal mushrooms) in the reserves would be known. There might be edible or medicinal macrofungi identified in an area but not known to be edible to the local people. These would be introduced to them to be included in their diet. Attempts would be made to domesticate some of the edible and/or medicinal mushrooms to be identified in the areas and the people taught how to cultivate them on local substrates.

Output 3: Macrofungal associations with plant species in the vegetation

Activities: Clumps of trees, shrubs and herb species (specifically ectomycorrhiza) under which sporocarps of macrofungi are collected would be marked and identified with the help of a plant taxonomist. The basal area of these plants in the clump would be estimated per hectare plot.



Superficial roots of these juvenile and mature plants would be excavated after tracing larger roots from the stem collar of target plants. Ectomycorrhizal roots are easily recognised by the presence of surface features (swollen root tips) but these would be confirmed in the laboratory by observing the Hartig net of fine roots in transverse section. The mycorrhizal status of plants in the vegetation would be known. Economic timber trees that cannot develop without mycorrhizal associations may be identified. Any invasive alien species so encountered would be identified and its effects on the vegetation determined. Seeds of these plants would be collected and attempts made to cultivate their seedlings with the specific fungi and help the local people grow the plants in agroforestry systems.

References

Apetorgbor, M. M., A. K. Apetorgbor and M. Obodai (2006). Indigenous knowledge on utilization of

edible mushrooms in Southern Ghana. *Ghana Journal of Forestry* **19& 20**: 20-34.

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- **Obodai**, M. and M. M. Apetorgbor (2001). An ethnobotanical study of Mushroom germplasm and its domestication in the Bia Biosphere Reserve. CSIR-Food Research Institute-Man and the Biosphere. *Final Report submitted to Environmental Protection Agency under the sponsorship of UNESCO-MAB.*
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COMMUNITY ENGAGEMENT IN MARINE IAS, TAXONOMY AND MPA MANAGEMENT: ADNAN AWAD & JAMES KAIRO

The International Ocean Institute provides training and technical support for project implementation throughout the 25 operational centres around the world. In Africa, centres in South Africa, Kenya, Egypt and Nigeria have a regional forum, currently coordinated by the Southern Africa operational centre, aiming to increase the extent and success of regional and sub-regional projects within Africa.

Through various recent projects and collaborations (IOI, IMO/GloBallast, GISP, UNEP, IUCN) several short training courses have been conducted on marine invasive alien species (IAS) management for the countries of the West and Central African Region (WACAF) and the Eastern and Southern African Region (including Western Indian Ocean Island States), as well as some of the countries along the Mediterranean North African Coast. Also a pilot marine taxonomy training course was developed and run for the WIO region. While these courses provide a good introduction to these priority issues, more practical and applied follow-up is required to adequately engage the appropriate coastal communities. The project outline below is intended to build on the groundwork already done, and on the existing network of partnerships and contacts throughout Africa concerned with addressing these issues.

Please note this concept covers a broad range of issues and areas. It could be easily tapered for application to more specific concerns and/or areas, as has been done in the past. This merely provides a basis for further discussion on a theme currently facing marine conservation efforts in Africa.

Project:	Community engagement in marine IAS, taxonomy and MPA management					
Goals:	Provide training in marine invasive alien species management & taxonomy to local					
	scientific community, MPA managers, ocean and resource users					
	Community involvement in identifying and managing key invasive species, with					
	particular emphasis on MPA management strategies					
	Establishment of long-term community based monitoring programmes					
Approach:	To be collaborative in nature (including funding), aimed at engaging existing					
	operational structures and support (e.g. IOI network, IMF					
	programmes/commissions)					
	Series of sub-regional training workshops and hands-on community sessions					
	coordinated through sub-regional hubs and associated nartnerships					
	Strategic design and management workshops for MPA management/establishment					
	aiming to increase taxonomic understanding within the region and manage key					
	threats including IAS and climate change					
	Conduct nilot surveys & develop ongoing monitoring for LAS in existing MPA's					
	thereby introducing appropriate survey techniques and protocols					
	Where possible incorporate taxonomic analysis of MDA vulnerability to IAS (Pick					
	Assessment)					
	Assessificities and banafits to both communities and ecosystems					
	incorporation of impacts and benefits to both communities and ecosystems					
Torrat areas.						
rarget areas:	WACAF Teylon Countries of the Western Indian Oscen Design					
	Countries of the Western Indian Ocean Region					
	North African Region					
Institutions:	IOI-SA, IOI-Kenya, IOI-Egypt, IOI-Nigeria, IOI-HQ (Malta)					
	Global Invasive Species Programme (GISP), Nairobi					
	Mediterranean Action Plan - RAC-SPA, Tunisia					
	IMO – GloBallast Programme					



Interim Guinea Current Commission, Benguela Current Commission, Agulhas & Somali Current Large Marine Ecosystem Programme, Canary Current LME Nairobi and Abidjan Conventions, UNEP (Secretariat) Director, International Ocean Institute - Southern Africa

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MANAGEMENT OF INVASIVE ALIEN PLANTS IN AGRICULTURE, FORESTRY AND RANGELAND FROM PREVENTION TO CONTROL: OUMAR BALDE

Objectives and AIMS: To revert the invasive status of alien invasive woody plants affecting agriculture, forestry and rangeland back to assets and to prevent of control future invasions.

Outputs

a. Inventory of the distribution and extend of invasions by the selected alien plant invaders and accompanying databases.

b. Valuation of the economic (ecological systems, social, biodiversity) impacts of these invasions and search for ways to resolve the conflict of interest issue.

c. Identification and application of best management practices for controlling/ managing the main woody plant invaders considering the conflict of interest issue (matching benefits of their existence with the cost of not controlling them).

d. projects to control the invasive alien in areas of optimal returns on investment within the IGAD sub-region,

e. Resultant benefits (e.g., use of productive land, food production, livestock maintenance, forest products, livelihood enhanced, additional water available, jobs created, poverty reduced),

f. Increased and coordinated capacity and policy environment for the sustainable management of the main existing alien plant invasions and methodologies to prevent new invasions.

Duration

A five year sub-regional programme to be established in the seven countries of IGAD with the intention of using the fifth year to spread the lessons learned to other regions within Africa. This program will build upon several other interventions in this sub region to spread the process to all seven countries ant to generate more specific projects for alien invasive plants that are more local in impact within Africa.

Total cost US \$ 25 million. This would involve local, national and sub*regional activities as well as eventual dissemination of findings and tools to other sub- regions of Africa.

Links to existing frameworks

The programme relates to the Convention on Biological Diversity (CBD), the International Plant Protection Convention (IPPC), the Global Invasive Species Programme (GISP), the UN Convention to combat desertification (CCD) and include five countries of the Nile River Basin (and associated Nile basin Initiative) as well as IGAD. It will build upon a developing GEF project" Removing barriers to Invasive plant Management in Africa" which will work in Uganda, and Ethiopia and expand from the IGAD sub-region and climatic zone in Africa through GISP and the networks of CAB International and IUCN.

Possible co-funding

Concerned countries will provide son in-kind contributions to make the project operational and related project could contribute too. IGAD can contribute too. Private sector involved with agriculture, livestock and forest products; NGOs, Research organizations,

Executing Agencies:

IGAD, GISP, CAB, International and Governments of IGAD States. Suggested donors ADB, World Bank, IUCN, GEF

Participating countries IGAD member countries



CAPACITY BUILDING TO SUPPORT RESEARCH AND EXTENSION PROGRAMS FOR SUSTAINABLE MANAGEMENT OF INVASIVE FRUIT FLY SPECIES IN WEST AFRICA: AIMÉ BOKONON-GANTA

Aims & Objectives

Bactrocera invadens (Diptera: Tephritidae) was recently reported in Africa as causing serious damage to fruit and vegetable species. The invading pest rapidly spread in several countries including the 12 WAFRINET countries. *B. invadens* is known to breed in various environments and under a wide range of agro ecologies, therefore adding to the already important level of direct and indirect impact of the flies on a wide range of plants, cultivated and wild including several fruit and vegetable species.

Aim: The aim of this project is to decrease fruit and vegetable losses due to invasive fruit fly pests in West Africa.

Objectives

- 1. To strengthen collaborative linkages within WAFRINET countries by developing standardized monitoring systems for both indigenous and invasive tephritid fly species;
- 2. To increase awareness of the existence of natural indigenous control agents and establish biological control as key component for management of fruit fly species;
- 3. To build capacity for detection, identification and management of tephritid fly species through training of 30 National Agricultural Research Service (NARS) scientists and 340 regional agricultural extension agents and small scale farmers for sustainability at project exit.

Activities

- Organize one training workshop at IITA-Benin for the 12 WAFRINET countries to inform, educate, and disseminate better knowledge of fruit fly pests and their management. The target group will be NARS research and extension scientists. The workshop will include both theoretical and practical aspects of fruit fly IPM with biological control as the most efficient and sustainable pest control method;
- 2. Organize in each of the 12 WAFRINET countries 2-day workshop sessions targeting regional extension agents and small scale farmers.
- 3. Produce and publish in various languages leaflets and posters on better knowledge and management of fruit fly pests.

Outputs

We plan to train 30 NARS research and extension scientists during the first phase of this project. The second phase targets a total of 340 participants from regions of the 12 countries.

- Duration: 1 year
- Estimated overall budget: US\$ 240,600.00
- Links to existing projects

The project will complement existing fruit fly management projects including the WAFFI, the ICIPE BMZ Fruit fly control project

- Possible co-funding sources : To be identified eventually
- Possible executing institutions: IITA
- Suggested donors: FAO, UNDP, USAID
- Participating countries/region/sub-region: 12 WAFRINET countries



ASSESSMENT AND MAPPING OF INVASIVE ALIEN PLANTS IN THE SERENGETI ECOSYSTEM. CASE STUDY OF NGORONGORO, SERENGETI AND IKORONGO-GRUMETI RESERVES, TANZANIA: HAMZA KIJA

Project summary: The Serengeti ecosystem is among the most biologically diverse and productive ecosystems in the world. Currently, little is known about the extent of IAP, especially its current and future distribution, the use of remote sensing and GIS techniques coupled with extensive ground field work may offer unique opportunity to measure the extent of these invasive over the ecosystem. Basically we aim to use ground-based vegetation sampling to classify the remote sensing data, in order to map the current extent and predict invasive species that may then be used to address the ecological vulnerability of ecosystem. This study initially will focus on Ngorongoro Conservation Area, Serengeti National Park, and Ikorongo-Grumeti game reserves.

Project aims and objectives: The purpose of this study is to examine some of the landscape-scale ecological relationships by quantifying the extent and pattern of invasive/aggressive plant species and testing for substantive relationships with local landscape disturbance in the past.

Project rationale: The proposed study will be identifying and mapping IAP for the aim of appropriate measures to control or eradicate the problem, and will be used as a model to help conservation managers in the Serengeti ecosystem and in other protected areas in combating the IAP to take appropriate measures (e.g. through rapid response) to control or eradicate invasive plant species.

Project expected outputs: The proposed project aims to deliver the following

- Taxonomy identification of invasive alien plant species in the ecosystem
- Mapping the current spatial distribution of invasive plant species in the ecosystem
- Predicting the spatial distribution of invasive plant species in the ecosystem

Project duration: Two years project

Estimated overall budget: U\$ 23,585

Links to existing projects: There is a project in the Ngorongoro Conservation Area for eradicating the IAP species, and there is a proposed project between TAWIRI, Wildlife Division and Grumeti Reserves on the same issue, however, in both projects the mapping component is missing.

Possible co-funding sources: Lacking, see under suggested donors.

Possible executing institutions: The proposed project partners Tanzania Wildlife Research Institute (TAWIRI), Tanzania National Parks, Wildlife Division, and Grumeti Reserves.

Suggested donors: No funding has been secured yet; however, there is available man kindly contribution and resources from the proposed partners in Tanzania. However, partial funding of the proposed project can be requested from partners.



THE EFFECT OF THE INVASIVE PROSOPIS SPP ON INDIGENOUS PLANT-POLLINATOR INTERACTIONS IN LAKE BOGORIA NATIONAL RESERVE; WANJA KINUTHIA & CHRIS ODHIAMBO

Pollination and Food Security

Pollination is a valuable environmental service that is critical to fruit and seed production in flowering plants. The vast majority of plants rely on external vectors for pollination, such as wind or animal pollinators. Over one third of global food crops grown for human and livestock consumption are dependent on animal mediated pollination. Thus large-scale loss of pollination services would affect important components of food security. For instance, foods pollinated by animals especially vegetables and fruit supply a large proportion of essential micronutrients. Scarcity in supply of food rich in vitamins and mineral can lead to poor health among local communities. It is therefore essential to ensure steady production and the role of pollinators in food production and ecosystem service . Over the last decade, there has been a significant decline in pollinator populations leading to a 'global pollination crisis'. Any deterioration of pollination services will have an impact on the food security and livelihoods of many rural communities. Our proposal therefore aims to monitor pollinator populations in agro-ecosystems and to create awareness to improve food security, rural incomes and thus community livelihoods.

Aims & objectives

The aim of the project is to assess the impact of Prosopis spp on reproductive output of the indigenous acacia species in a semi-arid savanna.

The specific objectives will be to;

1) Determine pollinator diversity, abundance and visitation period on Prosopis spp vs the indigenous Acacia spp.

- 2) Assess seed quantity and quality in Prosopis spp and the indigenous Acacia spp
- 3) Develop public awareness manuals

Output

The expected outputs;

1) Complete checklist of pollinator species of Prosopis spp vs. Acacia spp.

2) Document seed production of Prosopis and Acacia

3 a) Publicity manuals/booklets

3 b) Reports and publications in peer review journals

Duration

Two years

Estimated overall budget

	Item	USD
1	Transport (Car Hire)	19000
2	Equipment and consumables	10000
3	Accommodation and Subsistence	20000
	(2 scientist, 1 student and 2 technicians)	
4	Literature search	2000
5	Reports	1000
6	Papers	3000
7	Publicity Booklets/Manuals	5000
8	Community Workshops	4000
9	Meetings/Conference	10000
10	Communication	5000
11	Miscellaneous (10% total)	6900
	Total	85900

Links to existing projects

UNEP/GEF-funded Global Pollination Project

"Conservation and Management of Pollinators for Sustainable Agriculture through an Ecosystem Approach") in Kenya

Possible co-funding sources

1) UNEP/GEF-funded Global Pollination Project
 2) ASARECA
 3) UVIMA data basing component
 4) BIOTA Pollination Component

Possible executing institutions

Lead institution: National Museums of Kenya (NMK), *Collaborating institutions:* KARI, Ministry of Agriculture and Livestock Development

Suggested donors IDRC, SIDA, CIDA, Rockefeller foundation, USAID

Participating countries/region/sub-region.

Start with Kenya Phase II extend to Tanzania



THE TAXONOMIC INFRASTRUCTURE TO SUPPORT INVASIVE SPECIES MANAGEMENT: BUILDING THE SHORT-TERM AND LONG-TERM SOLUTIONS: CHRIS LYAL

Introduction

Invasive species (IAS) are a major issue in Africa as elsewhere. In a recent global taxonomic needs assessment in the context of IAS, Smith et al (2008) identified taxonomic needs not only at the user level but also at two levels above that, in the institutions that deliver the taxonomic information required, and in the policy / supervisory level above that. The challenge to be addressed in this project is to deliver taxonomic information and support in a timely manner in the short term, and also to build a sustainable infrastructure to deliver it in the long-term, capitalizing on the knowledge gained and contacts made in short-term solutions.

Many parts of Africa lack the requisite access to specialists who can provide requisite taxonomic advice or identifications sufficiently rapidly to meet the needs of intercepting, monitoring or identifying Invasive Species. These species, by their nature, will not appear in handbooks, guides and collections, should they even exist, of the countries or districts in which they are found, making their identification more difficult than that of indigenous species. Provision of information from outside Africa is difficult because, among other reasons, the specialists may be difficult to contact or may not have time to identify the specimens. To solve this problem in the short term communication with international specialists must be facilitated and their ability to respond to calls for assistance improved, but in the long term the capacity throughout Africa must be improved and the reliance on more distant specialists reduced whilst maintaining contacts.

It is important to clarify what is meant by 'capacity'. This includes i) skilled staff; ii) collections of specimens, literature, DNA, information etc; iii) communications links to obtain information; iv) economic stability to ensure the work can be carried out; v) workflow management to ensure suitably rapid response.

The aims of the project are therefore:

- 1. Build a rapid-response identification and information-provision system using African and global expertise, facilitated through a European exchange.
- 2. Build human capacity in Africa through training and distance mentoring.
- 3. Build information bank on invasives identified (including literature, DNA sequences, specimens, images, web pages), ensuring access throughout African partners.
- 4. Build cost-effective identification and information system in Africa, maximizing involvement of current actors, with the aim of phasing out European and other information supply and replacing it with support.

It must be emphasized that no part of this project is intended to replace current information and identification services operating in Africa, but the project will seek to involve them as partners if moved beyond the current concept phase.

Outline Programme of Work

Phase 1: Review of current capacity and building project team

This will start before any proposal is submitted, and will continue with decreasing intensity. The current activity and actors must be the foundation on which any additional capacity is built. Moreover, new systems work best if they are adopted as part of the workflow of existing actors, and thus current workflow is important to understand. If capacity for any groups or environmental sector is adequate, it will be enhanced but not supplanted. The review will take place both within African partners and outside Africa, particularly Europe, the latter making use of the EDIT project



and CETAF, in both of which the Natural History Museum is a partner. The information-sharing system of GISIN and GBIF will be evaluated to ensure maximum interoperability of any informatics system built.

Phase 2: Interim provision of information and identifications

This will fill gaps in current coverage by making use of experts in institutions both within Africa and outside, particularly Europe. An exchange will be set up to capture requests for information and identifications and direct them to the appropriate supplier. This will involve an office but a virtual system will be built to supplement it and to investigate to determine how effective it is. As a part of this virtual system an invasive species 'scratchpad' will be set up, facilitating collaborative work, sharing of information, images and data, and providing a mechanism for rapid publication both in scientific journals and as web pages

The identification system will only work if the suppliers have an economic model to support it. This might involve payment per identification (as is generally the case currently) but other benefits to those organizations and individuals will be sought, including authorship of invasive species web pages, authorship of joint or single-author papers on the species discovered, agreed Performance Indicator supply (e.g. identifications performed, economic significance, user-base). Partners will be encouraged to seek economic sustainability for the activity and share lessons learned.

Phase 3: Capacity-building

Training will be provided by expert partners in the project in identification techniques. This might include training courses (delivered in appropriate countries), distance learning through the Internet, and one-to-one mentoring. A component of the project will be fellowships in partner organizations.

Provision of guides created as a part of the identification process. Each guide is likely to be multiauthor.

Provision of voucher specimens to all countries within the partnership so that local and national collections can be built up.

Provision of DNA barcode sequences through BOLD and other suitable mechanisms. Barcodes will be captured as a matter of course in the identification process.

As capacity is built partnerships between non-African and African partners will be fostered, with the intent that the work will be passed from one to the other.

Building a sustainable system within Africa will require a sustainable business plan, and this will be developed with African partners during the project. For this reason the cost-effectiveness of any identification or information provided will be evaluated through the project, as evidence to support business cases, to determine the most cost-effective means of information provision, and to evaluate how (and if!) the information bank build makes the work cheaper and more efficient.



INTEGRATED INVASIVE SPECIES MANAGEMENT AND PROTECTED AREAS DEVELOPMENT: MELCKZEDECK OSORE & SOUD JUMAH

Aims & objectives

Enhance the integration of invasive species management and development of Protected Areas of Zanzibar.

Objectives

- Assess the identity, distribution, abundance and impact of invasive species in PAs
- q Review the policy and legislation on patterning the management of invasive species.
- q Digitizing the taxonomic information and create a comprehensive database for invasive species and PAs.
- q Develop guidelines that would institute the manner to which the invasive species will be monitored, maintained or eradicated
- q Improve the capacity of the institution and personnel participating in management of invasive species and general plant and animal taxonomy.
- q Create awareness on management strategies.
- q Improve skills and capabilities in the management of plantations, coral rag forests and coastal resources base including mangrove ecosystems and islets.

Outputs

- q List of invasive species established
- q The damage caused by invasive species and its coverage in the PAs is identified
- q The socio-economic and environmental impact of invasive species to PAs identified
- q The comprehensive database of invasive species in relation to other ecological resources base is established
- q The list of institutions and personnel participating in invasive species management is established
- q The standards, tools and guidelines on managing invasive species developed
- ^q The capacity of participating institutions and personnel in invasive species management and general taxonomy is enhanced
- q Awareness at different level is increased
- q The management strategies including monitoring and eradication of invasive species is developed and implemented
- g Survey report and map of all PAs and their associated invasive species developed

The Project duration

The project will be accomplished in two years

The estimated overall budget

Approximately US \$ 100,000

Links to existing projects

Marine Coastal Environment Management Project (MACEMP) that supports the management of coastal resources including mangroves and eradication of fruits flies and Indian house crows in Zanzibar.



Coastal Forest Project that support development of protected areas in Zanzibar. This is estimated to start next year. Other small activities include butterflies farms at Pete.

Possible co-funding sources

UNDP and the Global Biodiversity Facility (GBF)

Possible executing institutions

Western Indian Ocean Marine Science Association (WIOMSA), Department of Commercial Crops, Fruits and Forests (DCCFF), Zanzibar Fisheries Department Department of Environment

Local NGOs include the Society for Natural Resources Conservation and Development, Tanzania Foresters Association (TAF), Zanzibar Zoological Society and Zanzibar Farmers and Fishermen Association (ZAFIDE) **Participating countries**

The participating countries: Tanzania, Kenya and Uganda

MAINSTREAMING PRO-POOR URBAN AND RURAL COMMUNITY FOREST CONSERVATION TO RESTORE MANGROVES ECOSYSTEM: MELCKZEDECK OSORE & SOUD JUMAH

Goal

To improve pro-poor community conservation to reduce deforestation and degradation in Zanzibar's protected areas and mangroves ecosystem, and sensitize income activities that will provide direct and equitable incentives to communities to conserve forest resources and utilize them sustainably.

Objectives

- Encourage ownership by involving the local communities in promoting good forest governance that will facilitate sustainable and equitable forest conservation and management of community forest areas;
- Conduct survey of selected community forests to document their potential conservation status;
- Work with the local communities to prepare policy and legal tools that will help to manage their designated community forest areas;
- ^q Up-scale the use of alternative energy sources including improvement of production and utilization to wood fuel technology so as to reduce pressure on demand of wood fuel;
- Promote incentives by supporting environmentally friendly alternative income activities in conservation initiatives;
- G Support the local coastal communities to develop a leakage avoidance/reduction strategy and community-based monitoring to assess effectiveness of this strategy
- q Design and implement monitoring and evaluation systems to assess progress against expected results and objectives of the project.
- q Clarify and formalize land and forest tenure arrangements for women and men in the communities undertaking pro-poor community forest management (COFMA)

Outputs

- q Comprehensive data base on the resources base of various community forests, including the available flora and fauna with their conservation status established.
- Replicable, equitable and cost effective training modules, manuals and related support materials produced to reduce degradation and deforestation and to control leakage.
- Awareness on good forest governance, and advocacy processes raised, with particular emphasis on social equity, and experience/lessons disseminated to a wider audience.
- q Local Community Management Plan (for COFMA) developed for community adjacent to PAs
- q Local communities practicing forest conservation initiatives in selected communities trained
- q Gender sensitive COFMA manual for Zanzibar are developed
- Gender differentiated institutional capacity assessment of leading institution and selected local government organization and CSOs/NGOs to identify strengths, weaknesses and capacity gaps related to pro-poor gender equitable COFMA are conducted and training plan designed accordingly
- Publications (guidelines, peer-reviewed publications and articles in local newspapers) to document and disseminate experiences and lessons learnt within Zanzibar and to the wider international audience
- g Business plan established for all community adjacent to PAs to support conservation initiatives

The Project duration

The Project will be accomplished within four years



The estimated overall budget

US \$ 150,000

Links to existing projects

- The project is associated with the different activities implemented under the Marine Coastal Environment Management Project (MACEMP)
- q The Project of Good forest governance. Implemented under NFP in selected villages.
- q UVIMA project implemented by EAFRINET

Possible co-funding sources

WIOMSA through the MASMA Programme, UNDP, FAO etc

Possible executing institutions

WIOMSA, DCCFF, Fisheries Department, and the Department of Environment. The relevant Nongovernment organisations including Society for Natural Resources Conservation and Development (SONARECOD), Tanzania Foresters Association (TAF), Zanzibar Zoological Society (ZAZOSO), Ngezi-Vumawimbi Natural resources Conservation Organisation (NGENARECO) and Jozani-Chwaka Bay Conservation Association (JECA).

Suggested donors

UNDP, SwedBio, Global Biodiversity Facility, GBIF, etc.



PROJECT TITLE: BUILDING CAPACITY IN ORDER TO MINE DATA FROM BOTANICAL COLLECTIONS IN ORDER TO MONITOR CHANGES IN ALIEN INVASIVE SPECIES AND POSSIBLE CLIMATE CHANGE: ESTHER RAMPHO

<u>Aims and objectives:</u> To initiate capacity in order to be able to:

- Improve the integrity of databased collections while adding the collections not yet databased and linking all data. This includes starting with alien invasive to provide data on these plants such as growth-form as an indicator for invasiveness.
- Show the spread of alien invasives.
- Use the botanical data sets collected over a few centuries (1 052 623 databased specimens from Herbaria and 961 434 from FSA region) to estimate the rate of possible climate change. This includes monitoring the presence or absence of species over time.
- Map the dominant species / rarest species for all biomes / centres of endemism looking for patterns.
- Ground truth old photographs to indicate life expectancy of plants together with age and growth rate.
- Map the expansion /contraction of Karoo using botanical data base.

Duration: Three years, April 2010-March 2013 Estimated budget: \$ 100 000.00 Links to existing projects:

- Climate Change.
- Global Invasive Species Programme.
- Management of protected areas.

Project linkage to national priorities, action plans and programmes:

In terms of the National Environmental Management: Biodiversity Act (Number 10 of 2004) (NEMBA), SANBI is mandated to perform certain functions in Biosystematics (see Table 1 below). These functions typically relate to biosystematics research, taxonomy, collections management, data basing and the dissemination of biodiversity information. This mandate is recognized as part of the strategic priorities for SANBI as set out in the Corporate Strategic Plan (CSP).

	Primary function from Act
11 (a)	Monitor and report regularly to the Minister on:
	(i) biodiversity
	(ii) conservation status of all threatened or protected species and listed ecosystems; and
	(iii) status of all listed invasive species
11(c)	Act as an advisory and consultative body on matters relating to biodiversity to organs of
	state and other biodiversity stakeholders
11(d)	Co-ordinate and promote the taxonomy of South Africa's biodiversity
11(f)	Establish , manage, control and maintain herbaria and collections of dead animals
11(g)	Must establish research facilities



	Primary function from Act
11 (h)	May establish, maintain, protect and preserve collections of plants in herbaria
11 (i)	Establish, maintain, protect and preserve collections of animals and micro-organisms
11 (j)	Collect, generate, process, co-ordinate and disseminate information about biodiversity and
	sustainable use of indigenous biological resources and maintain databases
11 (k)	Regulate and provide services to public at the gardens, herbaria and other places under
	SANBI control
11 (l)	Undertake and promote research on indigenous biodiversity and its sustainable use
11 (p)	Advise the Minister on any matter regulated in terms of this Act, including
(i),	(i) implementation of this Act and any international agreements affecting biodiversity which
(iv)	are binding on the Republic
	(iv) the management and conservation of biological diversity
50	The Minister must promote research done by SANBI and other institutions on biodiversity
	conservation, including the sustainable use, protection and conservation of indigenous
	biological resources

<u>Possible co-funding sources:</u> GEF, UNDP, BioNET International. <u>Participating countries/region/sub-region:</u> South Africa & SADEC region.



DEVELOPMENT OF AN IDENTIFICATION GUIDE FOR ALIEN WEEDS AND INVASIVE PLANTS FOR EAST AFRICA: ARNE WITT

Aims & objectives: There are currently no comprehensive and/or collated lists of invasive or potentially invasive plant species in Ethiopia, Tanzania, Kenya, Rwanda, Burundi or Uganda. Not one of these countries has an Identification Guide to assist people, who want to make a contribution to alien invasive plant species inventories, in identifying these species. Data provided by people in the field will also allow policymakers and others to monitor the expansion of existing invasions and implement management strategies. An Identification Guide will also contribute to the detection of new invasions leading to the increased probability of their early eradication.

Invasive Alien Species (IAS) have been identified as one of the main drivers of biodiversity loss and pose a significant threat to food security globally. These impacts will be exacerbated by global warming because IAS posses traits favoured by the predicted climate changes. Managing IAS to protect biodiversity and enhance food production have therefore become global imperatives. It is widely recognized that the main barriers to effective IAS management in Africa are the lack of effective policies, unavailability of critical information, shortage of capacity and inadequate implementation of prevention and control.

Policymakers, planners and managers need information on the alien plant species present and their current status, but there is little such information available. This makes it impossible to assess the impacts that invasive plant species may be having on a particular country's biodiversity, pasture/crop production, water resources and human health. The lack of tools to identify these invasive plants means that those who could be collecting this information are unable to do so. To this end it is proposed that an authoritative Guide to the Identification of Alien Weeds and Invasive Plants in East Africa be developed. It will include information on invasive plants in Ethiopia, Kenya, Tanzania, Rwanda, Burundi and Uganda. Surveys be undertaken to determine which invasive and potentially invasive species are present in each country and how they can be identified. This will also provide baseline information for decision makers.

Outputs:

- The majority of invasive plant species localities (infestations) recorded in Ethiopia, Kenya, Tanzania, Rwanda, Burundi, and Uganda;
- Data on all localities made available to all stakeholders to allow for the production of distribution maps;
- The development of an Alien Weeds and Invasive Plants Identification Guide for East Africa;
- Increased awareness amongst all stakeholders and beneficiaries as to the invasive plants present in the region and the threats that they pose to economic development,
- Information will contribute to the management of invasive plants in the region and as a result contribute to poverty alleviation and food security.

Duration: 18 months

Estimated overall budget: US\$110 000.00

Links to existing projects: The GEF/UNEP Project, "Removing Barriers to Invasive Plant Management in Africa" is active in Uganda, Ethiopia, Ghana, and Zambia. In each country an enabling policy environment is being promoted through establishment of appropriate institutional arrangements to ensure that IAS strategies are mainstreamed; stakeholder awareness of IAS issues is being raised and access to necessary information provided; prevention and control programmes are being established, including ecosystem management plans at pilot sites where IAS threaten biodiversity;



and capacity for sustainable IAS management is being built. Lessons learnt will be disseminated for replication in other countries in Africa. Some IAS surveys have been undertaken in Ethiopia and Uganda and casual IAS surveys have already been undertaken in Tanzania and Kenya and the information collated.

Possible co-funding sources: NPPO's

Possible executing institutions: CABI in collaboration with NPPO's

Suggested donors: FAO, GEF, USAID, CBD, SWEDBIO, DANIDA, International Companies active in region.

Participating countries/region/sub-region: Ethiopia, Kenya, Tanzania, Burundi, Rwanda, Uganda.



Appendix D. Workshop Evaluation

Fifteen evaluation forms were submitted anonymously at the end of the workshop. The results, summarized below, comprise of quantitative summaries and verbatim comments.

Responses to the workshop evaluation form

WORKSHOP UTILITY, OBJECTIVES AND EXPECTATIONS							
Wee the werkshen useful to you?	Yes	Maybe	No	No response			
was the workshop useful to you?	14	1	0	0			
What was the most useful part of the workshop for you?							
Chris and Junko's and Silvia's presentations							
Presentations of individual concept notes and the discus	sion sessions						
Presentations by organisers (particularly logframe work)	and that of othe	er colleagues					
All were useful but mostly presentations on donor expect	ations						
Learning more about GEF and funding opportunities							
Various presentations, especially the logframe							
Logframe analysis							
Logical framework work							
Project development appraisal by Chris and others							
Project proposal evaluation							
Helping people test their proposals							
Breakout session to fine tune the proposals							
Project concept note formulation							
Other people's proposals							
Other people's mistakes							
The roles of taxonomy in invasives management							
I have met more partners working on IAS. Thus I saw a l	oetter idea of th	e work done on l	AS in Africa	9			
Networking							
Discussions with individuals							
What was the least useful part of the workshop for ye	ou? (10 no res	ponses)					
None							
Everything was very useful							
GTI background							
CBD background							
Time to await slide presentations							
,							
How would you rate the event overall?	Excellent	Fair	Poor	No response			
	14	1	0	0			
	Fully met	Nearly met	Not met	No			
Were your expectations met?		inourly mor		response			
	14	1	0	0			
Was the objective of the workshop met?	10	1	0	1			
Any comments on the achievement of the workshop objectives?							
Exceeded the expectations							
Putting meat to our draft proposals							
I think the workshop improved some clarity in project write	ing						
Learned a lot about project development and collaboration	ons						
The workshop was good, in neat time! Emphasis should be given to project cycle management							

LOGISTICS						
	Excellent	Fair	Poor	No response		
Facilities	7	6	1	1		
Workshop organisation	13	1	0	1		
Quality of pre-workshop information & preparation	11	3	0	1		
Duration of workshop	11	3	0	1		
	Yes	Maybe	No	No response		
Did you have any language difficulties?	0	0	11	4		
Did you encounter any problems with regard to travel arrangements, payments, accommodation arrangements, etc.?	2	0	9	4		

CLOSING COMMENTS

Should there be repeat workshops of this nature? Do you have any suggestions for such future workshops?

Yes

Yes - need to be repeated

Yes - it helps to meet often and check with each other

Yes but with more preparations / notification of participants of their proposals beforehand

Yes - different regions

Yes, More focused on actual projects being achieved. i.e. DRAFT PROPOSALS

Provide as a model of well-written concept note (of course) including a good model of logical framework

Yes - do discuss and work more proposals on taxonomy

Yes - focusing on system-wide application to biodiversity conservation

Yes - another project development workshop focusing on climate change Yes - in addition to helping in proposal writing may also provide information on current funders and global trends in taxonomy and biodiversity

Yes to promote the development of projects on control and biocontrol and prevention of IAS

Everything was perfectly organised

Involve more donors

Any other comments?

There is the need to do it again to see the development process of the projects developed

It would have been useful to make participants aware of proposals to be reviewed - to provide opportunity for regional / institution consultations and merging

Food quality during lunch time has to be improved. Indeed, most of the participants had diarrhoea problems during the second night of the workshop

Create network and exchange information

The workshop also provided opportunities fro networking with colleagues in the same field both African and those from outside Africa

Congratulations to John, to BioNET, CBD and the National Museums of London and UK, well done to the Kenyan local organisations



Appendix E: Useful References and Websites

The Global Taxonomy Initiative

Guide to the Global Taxonomy Initiative, 2008, CBD Technical Series No 30, 105pp. Published by the Secretariat of the Convention on Biology Diversity. See <u>http://www.cbd.int/gti/</u>

GEF links

GEF Homepage www.gefweb.org

GEF Country Support Programme (CSP) Knowledge Facility for GEF Focal Points <u>www.gefcountrysupport.org</u>

GEF RAF http://www.gefweb.org/interior_right.aspx?id=82

Links to relevant BioNET resources

H. Davies, N. King and R. Smith (eds.), 2004, Taxonomy: targeting invasives. BioNET-INTERNATIONAL. ISBN 0-9538748-2-6:

http://www.bionet-intl.org/opencms/opencms/resourceCentre/library/library.jsp

Smith, R.D., Aradottir, G.I., Taylor, A. and Lyal, C. (2008) Invasive species management – what taxonomic support is needed? Global Invasive Species Programme, Nairobi, Kenya. <u>http://www.gisp.org/publications/reports/index.asp</u>

GISIN Links

Technical documentation: http://www.gisin.org

Reports and publications: http://www.gisinetwork.org/pubs.html

Results of Needs Assessment Survey: <u>http://www.gisinetwork.org/pubs.html</u>

Project development guidelines circulated to participants in advance of the workshop

BioNET Secretariat (2009). Guidelines for project development for the participants in the project development workshop for the Global Taxonomy Initiative. BioNET-Secretariat, Egham, Surrey, UK.

Links to other project development resources are contained in the above publication.

