

*Please provide the following details on the origin of this report.*

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*Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.*

### **Summary**

This report has been prepared by Bernard Agwanda research scientist, (NMK) on behalf of Dr. Beatrice Khayota, country GTI contact, and assistant director Centre for Biodiversity, NMK and all on behalf of the country, Kenya. The information reflected here has been collected from different resource people working on various programs: Pollinator Initiative, RPSUD, EAFRINET, Ecotool and Marine and Wetlands; from Heads of Research departments: East African Herbarium, Invertebrates, Ornithology, and Mammalogy departments; from Institutions: Forestry Department (FD), Kenya wildlife services(KWS), NEMA and scientists from Kenyatta and Nairobi Universities.

Most of the information obtained are from indeliberate activities and not specifically designed for the GTI goals. Rather they are principally from programs and projects designed for other goals but feed to GTI operational objectives. Answers to some questions for instance, have been gathered by inference. For example gaps in taxonomic capacities have been identified by not finding expertise and specimen collection of the group. As reflected in the previous report contained in the proceedings of Kirstenbosch workshop, SA 2001, only higher plants and pollinator organisms have been assessed for capacity and fairly properly curated. The rest of the groups still lag behind in most aspects for the GTI operational objectives.

*The following are some of the materials that have been used to prepare this report:*

1. Ecotool workshop April-2005, Kisumu Kenya,
2. Invasive Species In E. Africa Proceedings of a workshop July, 1999, ICIPE-Nairobi Kenya, ICIPE Press 2000.
3. BioNet bulletins 2004 series,
4. African Pollinator Initiative Action Plan 2003
5. Proceedings of Darwin Initiative/EAFRINET workshop May 2000, Thika Kenya
6. Global Biodiversity Outlook
7. Mt. Elgon Regional Ecosystem Conservation Program report prepared for IUCN by NMK and Makerere University-2005.

*For guidance and clarification on the objectives the following resources were used:*

1. Implementing the GTI: Recommendation from DIVERSITAS core programme element3, UNEP/CBD/SBSTTA/4/INF6
2. The GTI; Using systematic Inventories to Meet Country and Regional Needs, American Museum of Natural History 2000
3. The GTI: documenting the Biodiversity of Africa: Proceeding of a workshop, Kirstenbosch, Cape Town S. Africa, Feb-March 2001
4. The GTI: Proposed programme of work(as part of the Convention's strategic plan), Note by the executive secretary SBSTTA/6/10/Annex

### **Key to some acronyms used**

|      |  |
|------|--|
| NMK  | National Museums of Kenya(GTI contact country institution) |
| NEMA | National Environmental Management Authority                |

|         |  |
|---------|--|
| RPSUD   | Research Program for Sustainable Use of Dryland Biodiversity |
| FD      | Forestry department  |
| KWS     | Kenya Wildlife services                                      |
| ECOTOOL | Ecological tools for Wetland management                      |
| S. A    | South Africa   |

**REPORT ON IMPLEMENTATION OF PROGRAMME OF WORK FOR THE  
GLOBAL TAXONOMY INITIATIVE**

**Programme of Work for the Global Taxonomy Initiative  
Annex to Decision VI/8**

***Operational Objective 1. Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention***

|   |   |
|---|---|
| 1. Has your country undertaken any taxonomic needs assessments and identified priorities in this regard?  |   |
| a) no (please specify the reasons)  |   |
| b) no, but assessment is under way  |   |
| c) yes, some needs assessments made (please provide details)  | X |
| d) yes, comprehensive assessments made (please provide details)   |   |
| Further comments on country-based taxonomic needs assessments and identification of priorities  |   |
| <p><i>Has your country undertaken any taxonomic needs assessments and priorities?</i></p> <p>c) Yes, some need assessment made</p> <p>Herbarium work is relatively well done. Most groups of plants vascular and non-vascular plants are covered. Taxonomic experts for plants have been identified and collection of herbarium materials properly curated at the East African Herbarium housed in National Museums of Kenya. Existing taxonomic expertise (staff) however is inadequate.</p> <p>Assessment on Invertebrates and birds have been done but mainly on the pollinators under pollinator initiative program. Others are covered in terms of collections but not well assessed in terms of capacity needs. The taxonomic need assessment for groups such as marine invertebrates, mammals, and some invertebrates and lower plants are largely undone. A plan is underway to search and call all experts to for a workshop to identify gaps and ways to fill them.</p> <p>The priorities identified so far are interim. The planned national workshop with the already known experts will help identify other experts, integrity of university collection and identify priorities and gaps</p> |   |
| 2. Has your country worked with other countries in the region to undertake regional taxonomic needs assessments and identify priorities in this regard?   |   |
| a) no (please specify the reasons)  |   |
| b) no, but some collaborative projects are being considered or planned  |   |
| c) yes, some activities undertaken (please provide details)   | X |
| d) yes, many activities undertaken (please provide details)   |   |
| Further comments on regional taxonomic needs assessment and identification of priorities  |   |

|   |   |
|---|---|
| c) Yes, some activities undertaken<br>Under different/parallel programs: Eafrinet(BOZONET), Pollinator initiative and various research departments in National Museums of Kenya, with regional partners such as Makerere University of Uganda and Daresalaam University, capacities and infrastructure for taxonomic development in East Africa are being assessed. Eafrinet covered networking of some experts; Pollinator initiative covered pollinator animals but mainly insects.<br>There is however, a need to design and undertake a specific regional assessment, in order to complete all the groups more comprehensively and expeditiously. |   |
| 3. Is your country involved in any activities as part of a global taxonomic needs assessment?   |   |
| a) no   | X |
| b) yes (please provide details)   |   |
| Further comments on the involvement in the activities for the global taxonomic needs assessment   |   |
| No : though we intend to use Eafrinet for regional and global networking  |   |
| 4. Is your country undertaking any activities of public education and awareness to promote the implementation of the programme of work for the GTI?   |   |
| a) no   |   |
| b) yes, some programmes developed and some activities undertaken (please provide details)   | X |
| c) yes, comprehensive programmes developed and many activities undertaken (please provide details)  |   |
| Further comments on public education and awareness programmes and activities  |   |
| b) Yes some activities from parallel programs/projects: Nature Kenya-IBA& Bat-watching, program, Invertebrate Department of National Museums of Kenya GTI program, Pollinator Initiative; .<br>No specific and deliberate program has been developed for this. Instead we have depended on other running program to pursue this   |   |

***Operational objective 2. Provide focus to help build and maintain the systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge***

|  |   |
|--|---|
| 5. Is your country working to strengthen global and regional capacity building to support access to and generation of taxonomic information <sup>1</sup> ? |   |
| a) no (please specify the reasons)   |   |
| b) no, but some programmes under development   |   |
| c) yes, limited capacity building (please provide details)   | X |
| d) yes, significant capacity building (please provide details)   |   |
| Further comments on global and regional capacity building to support access to and generation of taxonomic information                                     |   |

<sup>1</sup> Responses to question 5 are expected to focus on, but not limited to (a) human capacity building; (b) infrastructure capacity building.

c) yes limited capacity building. NMK has been training parataxonomists. One was sent for Taxonomic training in Belgium

East African Herbarium works closely with KEW, London. There are also plans for mammals section of NMK to collaborate with Royal Institute of Natural Sciences, Belgium, Invertebrate Department of NMK working with Tervuren Museum, Belgium; DBL-Danida-Denmark; Alexander Koenig Museum, Germany, and Ornithology department sharing information with Birdlife International.

6. Is your country working with other countries to create and/or strengthen the networks for regional cooperation in taxonomy?

|   |   |
|---|---|
| a) no   |   |
| b) no, but consultation is under way  |   |
| c) no, but some plans and programmes are under development                            |   |
| d) yes, some activities undertaken for this purpose (please provide details)          | X |
| e) yes, comprehensive activities undertaken for this purpose (please provide details) |   |

Further comments on strengthening of existing networks for regional cooperation in taxonomy

d) Yes some activities undertaken

The activities are managed by other programs; EAfrinet, Pollinator Initiative and now defunct Eastern Arc scientists Network. Through BIOTA NMK and some other Kenyan institutions collaborate with Alexander Koenig Museum and other relevant institutions Through Mt. Elgon Regional Ecosystem Program (MERECP) implemented by IUCN National Museums of Kenya is working with Makerere University. Sub-regional programs such the Research Programme on Sustainable Use of Dryland Biodiversity (RPSUD) have also helped to set up regional joint relevant activities and networks.

***Operational objective 3. Facilitate an improved and effective infrastructure/system for access to taxonomic information, with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity***

7. Is your country involved in the development of a coordinated global taxonomy information system, in particular the infrastructure to access digitized data/information?

|  |   |
|--|---|
| a) no  | X |
| b) no, but some plans are being considered               |   |
| c) yes, to a limited extent (please provide details)     |   |
| d) yes, to a significant extent (please provide details) |   |

Further comments on involvement in the development of a coordinated global taxonomy information system

a) No

Some areas such floral data information in East African Herbarium is closely sharing information with KEW, London. Invertebrate department, NMK is currently digitizing its data information to share with BIOTA institutions in Germany.

However, our databases for other groups are still largely not completely digitized and are hard to share. We are developing a proposal to fundraise to help identification of collection gaps and digitization of ecosystem based database.

**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**

|   |   |
|---|---|
| 8. Has your country made any taxonomic studies and inventories at the national level, which provide a basic assessment of forest biological diversity, in particular in areas under current threat for habitat conversion, or of high conservation value?   |   |
| a) no (please provide the reasons)  |   |
| b) no, but some programmes are under development  |   |
| c) yes, some studies and inventories made (please provide details)  |   |
| d) yes, comprehensive studies and inventories made (please provide details)   | X |
| Further comments on taxonomic studies and inventories made for a basic assessment of forest biological diversity  |   |
| <p>d) Yes; some studies and inventories made:<br/>           Studies are on-going and the scale is determined by available funding resources and the project goals. The studies are therefore restricted to specific groups and ecosystem/habitat. The information in terms of checklists and species status continues to accrue from these individual studies and inventories. The groups which are significantly covered are birds, higher plants some invertebrates and some large mammals.<br/>           Priorities have been set for less known groups and in less studied/threatened habitats. The discovery of endemics, threatened species have been the baseline for increased protection of concerned ecosystem or habitats by the government.</p> |   |
| 9. Has your country undertaken any taxonomy-related activities relating to marine and coastal biodiversity, in particular taxonomic work related to identification of ballast water organisms and monitoring health of mangrove systems through their invertebrate fauna?   |   |
| a) no   |   |
| b) not applicable   |   |
| c) no, but some programmes are under development  |   |
| d) yes, some activities undertaken (please provide details)   |   |
| e) yes, many measures undertaken (please provide details)   |   |
| Further comments on taxonomy-related activities identified in the programme of work on marine and coastal biodiversity  |   |
| <p>No yet in the recent times:<br/>           Due to limited of resources and inadequate expertise this one of the poorly studied ecosystem.</p>  |   |
| 10. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on dry and sub-humid lands biodiversity, in particular identification of key indicator taxa like lichens?  |   |

|  |   |
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| a) no (please provide reasons and plans for improvement)   |   |
| b) not applicable  |   |
| c) no, but some programmes are under development   |   |
| d) yes, some activities undertaken (please provide details)  | X |
| e) yes, many activities undertaken (please provide details)  |   |
| Further comments on taxonomic support for implementing the programme of work on dry and sub-humid lands biodiversity   |   |
| d) Yes some activities undertaken, but not by the government per ce. Researchl Program for Sustainable Use of Dryland Biodiversity(RPSUD) has helped in gathering biodiversity information in arid and semi arid. From this program and other projects we are gradually getting a regional biodiversity information, though very little on indicator species |   |
| 11. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on inland waters biodiversity, in particular regional guides to freshwater fish and invertebrates as an input to ecosystem monitoring for river and lake health?  |   |
| a) no  |   |
| b) no, but some programmes are under development   |   |
| c) yes, some activities undertaken (please provide details)  | X |
| d) yes, many activities undertaken (please provide details)  |   |
| Further comments on taxonomic support for the implementation of the programme of work on inland waters biodiversity  |   |
| c) Yes: some activities undertaken through NMK wetland program, individual research programs and through ECOTOOL program which is seeking to develop management tools for wetlands in East Africa.   |   |
| 12. Has your country undertaken any taxonomy-related activities identified in the programme of work on agricultural biodiversity as well as relevant activities identified in the International Pollinator Initiative and the International Soil Biodiversity Initiative?  |   |
| a) no  |   |
| b) no, but some activities are being planned   |   |
| c) yes, some activities undertaken (please provide details)  | X |
| d) yes, comprehensive activities undertaken (please provide details)   |   |
| Further comments on taxonomy-related activities for the implementation of the programme of work on agricultural biodiversity   |   |
| c) yes: some activities undertaken.<br>Under pollinator initiative program, an inventory of pollinator organisms and pollinator plants is currently carried out.<br>Through Kenya Natural Resources & Indigenous Knowledge (KENRIK) program in NMK we are collecting information on agro-biodiversity resources and use dynamics                             |   |
| 13. Is your country developing any taxonomic support for the implementation of the programme of work on mountain biodiversity, in particular identification of biodiversity components unique to mountain ecosystems?  |   |
| a) no  |   |



|  |   |
|--|---|
| b) no, but some programmes are under development   |   |
| c) yes, limited support (please provide details)   | X |
| d) yes, significant support (please provide details)   |   |
| Further comments on taxonomic support for the implementation of the programme of work on mountain biodiversity   |   |
| <p>c) Yes</p> <p>Checklists are gradually being developed from different studies targeting different groups. Most mountains in Kenya have forests, often moist and are protected by the government as a forest reserve and or game park. Under Kenya Indigenous Forest conservation program (1991), checklists were developed and human activities. Various studies particularly on plants and birds have since then improved on the checklist and status of various species. Soil Biodiversity also conducted a regional training workshop at NMK on taxonomic capacity building recently</p> |   |
| 14. Has your country developed taxonomic support for the implementation of the programme of work on protected areas?   |   |
| a) no  |   |
| b) no, but some programmes are under development   |   |
| c) yes, some programmes in place and are being implemented (please provide details)  | X |
| d) yes, comprehensive programmes are being implemented (please provide details)  |   |
| Further comments on taxonomic support provided to the implementation of the programme of work on protected areas   |   |
| <p>c) Yes</p> <p>Moral support has been given by state agents managing the protected areas: Forestry Department and Kenya Wildlife Services. The two agents also compile reports from researchers which they make available to subsequent researchers. This has helped to develop a near-comprehensive checklist of biodiversity and various activities affecting it.</p> <p>Endemics and threatened species have also been identified from such studies.</p>  |   |

***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***

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| 15. Has your country taken any measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing? |  |
| a) no   |  |
| b) no, but some programmes are under development  |  |
| c) yes, some measures taken (please provide details)  |  |
| d) yes, comprehensive measures taken (please provide details)   |  |
| Further comments on the measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing         |  |

|   |   |
|---|---|
| Not yet: though a bill in parliament seeking to find ways of equitably sharing biological resources in parks and reserves. Apparently this is due to public pressure and it precedes inventory  |   |
| 16. Has your country developed taxonomic support to address the issues of invasive alien species?   |   |
| a) no   |   |
| b) no, but relevant policy and programme under development  |   |
| c) yes, some policies and programmes in place (please provide details)  | X |
| d) yes, comprehensive policies and programmes in place (please provide details)   |   |
| Further comments on taxonomic support to address the issues of invasive alien species   |   |
| c) Yes: but very basic support structure based on traditional control of importation or exportation of plants and live animals. Much more is required as has been highlighted in the 1999 Nairobi regional Workshop hosted by ICIPE (Lyons E E & Miller E, 2000: Invasive species in E. Africa proceedings. ICIPE science Press, Nairobi) |   |
| 17. Has your country developed taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities in accordance with Article 8(j) and related provisions?   |   |
| a) no   |   |
| b) not applicable   |   |
| c) no, but some programmes are under development  | X |
| d) yes, some activities undertaken but a system is not in place yet (please provide details)  |   |
| e) yes, a taxonomic information system in place (please provide details)  |   |
| Further comments on the taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities  |   |
| c) Yes: Some activities though NMK's Kenyan Natural Resource and Indigenous Knowledge Program and Seed for Life some activities have helped to harness Indigenous Knowledge especially on plant food and medicine resources   |   |
| 18. Has your country undertaken any taxonomy-related activities that support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators?  |   |
| a) no   |   |
| b) no, but some programmes are under development  |   |
| c) yes, some programmes in place (please provide details)   |   |
| d) yes, comprehensive programmes in place (please provide details)  |   |
| Further comments on programmes and activities to support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators   |   |

Yes: through different programs and projects checklists for specific ecosystems e.g. moist, dry lowland forests, wet lands have been developed for some taxon groups. Tana River project and Taita Biodiversity Project are examples of projects which have focused in details specific ecosystems.

*If your country wishes to provide additional information on implementation of this programme of work, please do so in the following space*

Concluding Remark

Apparently all the operational objectives can not be realized in projects or programs specifically designed for them. This is because of limited resources available. However, they can be gradually and not spontaneously realized through a combination different running projects and programs, and specially designed activities or projects.

Pollinator Initiative, EAFRINET, RPSUD, SEED FOR LIFE ECOTOOL, and various projects undertaken by National Museum of Kenya and other institutions have become rich information source for realizing the operational objectives. The challenge to the GTI focal point contact therefore, is to collate synthesize, reorganize and disseminate.

Some objectives are fundamental in realizing GTI main objective and require deliberate and special approach. This includes assessment of needs and capacities both national and regional, and on data informational sharing. As a country focal point we are planning a national workshop to include the known experts who will help identify needs and priority areas, make strategies for capacity building and design policy for equitable sharing of information and biodiversity resources. To us this will help us realize CBD and GTI goals

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