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

| | |
|---|---|
| Contracting Party | Ethiopia |
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| Date of submission: | |

***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***

The report was developed through a participatory process involving relevant institutions and individuals. The steps taken included the involvement of key stakeholders and experts in initial consultative meetings and in the review of available documents. The report is the product of an inter-institutional effort involving a report drafting committee of five experts drawn from the main stakeholder institutions, namely, the Institute of Biodiversity Conservation and Research (IBCR), the Environmental Protection Authority (EPA) and the Ethiopian Wildlife Conservation Organization (EWCO). After successive meetings and consultations, the drafting committee developed a draft of the second National Communication Document. This draft was thoroughly discussed, amended, and enriched by the drafting committee in a number of meetings it convened for the purpose, and later edited by another editorial committee. It was then circulated to stakeholder governmental and non-governmental institutions for comments and the relevant comments were accommodated. Some details of the three stakeholder institutions, the representatives of which composed the drafting committed, are given below to show their relevance in the preparation of this second National Report.

Cognisant of the importance of and the gaps that exist in the national action for the conservation and sustainable utilisation of biological resources, the Ethiopian Government has taken an initiative to rectify the situation. In 1976, it established the Plant Genetic Resources Centre to conserve the genetic resources of crops and their wild relatives. In 1998, it passed a law to expand the focus to all genetic resources and upgraded the Centre to the present Institute of Biodiversity Conservation and Research (IBCR). The mandate of IBCR is research in, and implementation of, the conservation and sustainable utilisation of biological diversity, including plant, animal and microbial genetic resources. Ecosystem management is also recognised as one of the areas to be given high priority.

The Environmental Protection Authority (EPA) developed the Environmental Policy and the IBCR developed the National Policy on Biodiversity Conservation and Research consistent with the relevant provisions of the Environmental Policy. Both policy instruments have been approved by the government of Ethiopia and are thus federal in status. In order to guide it implement these policies, IBCR has also prepared a Biodiversity Conservation and Development Strategy and Action Plan with active participation of relevant stakeholders from Federal and National Regional Governments and non-government organizations as well as research and higher education institutions.

The plant genetic resources that IBCR deals with includes crop, horticultural, forage and aquatic plant genetic resources. The animal genetic resources include domestic animal, aquatic animal and terrestrial wild animal genetic resources. At the moment, microbial genetic resources are all handled together as a group. IBCR also focuses on research related to biological resources, viz. studies in ethnobiology, biotechnology and ecosystems.

The Environmental Protection Authority, which was established in 1995, has the following

responsibilities relevant to biodiversity:

- Prepare environmental protection policy and laws, and monitor and regulate their implementation;
- Develop and implement, and/or regulate the implementation of, an environmental impact assessment (EIA) system;
- Prepare standards for the protection of soil, water, and air as well as the biological systems they support, and ensure their implementation;
- Carryout studies required to combat desertification and create favourable conditions for their implementation.

EPA is also Ethiopia's GEF focal point.

The Ethiopian Wildlife Conservation Organization (EWCO) was established in 1964 within the Ministry of Agriculture, but it now has some degree of autonomy.

All federal matters concerning wildlife in Ethiopia come under the mandate of EWCO. It is the government agency responsible for establishing protected areas. It directly administers those protected areas that fall in more than one region. Their respective regional governments administer those areas that are entirely within single regions. These receive technical support from EWCO.

***Please provide information on any particular circumstances in your country that are relevant to understanding the answers to the questions in this report***

The biodiversity of Ethiopia is large even though not comparable to those of tropical rainforest areas. However the rate of endemism is high, estimated at around 12% for higher plants. Ethiopia is one of the most important countries in the world in terms of crop genetic diversity. Its population is largely rural (about 85 %) and its economy is largely based on agriculture. All recent governments have thus valued crop genetic diversity and the gene bank in IBCR is large and modern. The high awareness of the importance of Ethiopia's crop genetic diversity has made it easy to take initiatives in the conservation and sustainable use of biodiversity in general. The institutional development has, therefore, been good in comparison to the low level of overall scientific capacity and the availability of resources in the country.

***The COP has established programmes of work that respond to a number of Articles. Please identify the relative priority accorded to each theme and the adequacy of resources. This will allow subsequent information on implementation of each Article to be put into context. There are other questions on implementation of the programmes of work at the end of these guidelines.***

***Inland water ecosystems***

| | |
|---|---|
| 1 What is the relative priority for implementation of this work Programme in your country? | |
| a) High | |
| b) Medium | X |
| c) Low | |
| d) Not relevant | |
| 2. To what extent are the resources available adequate for meeting the obligations and recommendations made? | |
| a) Good | |
| b) Adequate | |
| c) Limiting | X |
| d) Severely limiting | |

***Marine and coastal biological diversity***

| | |
|---|---|
| 3 What is the relative priority for implementation of this work Programme in your country? | |
| a) High | |
| b) Medium | |
| c) Low | |
| d) Not relevant | X |
| 4. To what extent are the resources available adequate for meeting the obligations and recommendations made? | |
| a) Good | |
| b) Adequate | |
| c) Limiting | |
| d) Severely limiting | |

### *Agricultural biological diversity*

| 5. What is the relative priority for implementation of this work programme in your country? | |
|---|---|
| a) High | X |
| b) Medium | |
| c) Low | |
| d) Not relevant | |
| 6. To what extent are the resources available adequate for meeting the obligations and recommendations made? | |
| a) Good | |
| b) Adequate | X |
| c) Limiting | X |
| d) Severely limiting | |

### *Forest biological diversity*

| 7. What is the relative priority for implementation of this work programme in your country? | |
|---|---|
| a) High | |
| b) Medium | X |
| c) Low | |
| d) Not relevant | |
| 8. To what extent are the resources available adequate for meeting the obligations and recommendations made? | |
| a) Good | |
| b) Adequate | |
| c) Limiting | X |
| d) Severely limiting | |

### *Biological diversity of dry and sub-humid lands*

| 9 What is the relative priority for implementation of this work programme in your country? | |
|---|---|
| a) High | |
| b) Medium | X |
| c) Low | |
| d) Not relevant | |
| 10. To what extent are the resources available adequate for meeting the obligations and recommendations made? | |
| a) Good | |
| b) Adequate | |
| c) Limiting | X |
| d) Severely limiting | |

***Further comments on work programmes and priorities***

Ethiopia has 12 major river basins, 11 freshwater lakes, and a number of freshwater crater lakes**,** 9 saline lakes, and more than 10 major swamps. It has substantial inland water resources. For example, more than 85% of the water of the River Nile comes from Ethiopia. In order to make use of these resources, the government has developed an Integrated Water Resource Master Plan for each of 5 of the major river basins.

Ethiopia adopted a comprehensive and integrated water resources management policy in 1999. Moreover, the country is one of the Nile riparian countries that have developed a co-operative framework project to promote equitable allocation of water among them.

A project entitled *'Conservation and Sustainable Use of Biodiversity in the Rift Valley Lakes'* is under way to develop and implement a strategy and action plan in order to enhance biodiversity development, conservation and sustainable utilisation. It has two major components:

a) Strengthening the system of conservation areas.
b) Combining the goals of biodiversity development, conservation and production, and promoting the multiple uses of biodiversity.

Ethiopia is considered as one of the richest genetic resources centres in the world in terms of crop diversity. For example, the following crop plants, enset, arabica coffee, teff, niger seed, anchote, are known to have originated and been developed in Ethiopia. Local cultivars/farmers' varieties of several major crops important in other parts of the world, particularly durum and primitive wheats, barley, sorghum, field pea, faba bean and chickpea have been and are still being developed and used by smallholder farmers. The wild relatives of several of these crops are also found. Recognising the importance of conserving this biodiversity, IBCR has been collecting, conserving, evaluating, documenting and promoting the utilisation of this native crop germplasm.

The materials acquired by the gene bank in IBCR through collection, repatriation and donation over the years (circa 60,000 accessions of some 104 species) are being conserved using appropriate *ex situ* conservation practices taking into consideration the storage behaviour of the different species. The bulk of the accessions are of cereals and pulses and most of these (around 45,000 accessions) have been evaluated.

IBCR in co-operation with the governments of the Regional States and other stakeholders is preserving recalcitrant species, for example, arabica coffee, in field gene banks. The current field gene bank collections include *Coffea arabica* (4537 accessions), *Ensete ventricosum* (46 accessions), *Colocasia* spp. (80 accessions), *Zingiber officinale* (32 accessions), *Curcuma longa* (16 accessions), *Manihot esculenta* (6 accessions), *Coleus edulis* (14 accessions), *Dioscorea* spp. (30 accessions), *Ipomoea batatas* (7 accessions), *Allium cepa* (1 accession), *Allium sativum* (4 accessions). Likewise, through a novel approach to conservation of establishing Community Gene Banks (CGB) with local communities, over 400 samples of various farmers' varieties of major food crops are being conserved as well as multiplied and distributed to smallholders farmers who need them. There are 12 CGBs located across the country in 6 of the different agro-ecological zones.

Crop Conservation Associations (CCA) have also been established and it is expected that they will grow to form a major network of smallholder farmers in order to formally exchange genetic materials and information. In this process, the local farming communities and their farmers' varieties are linked with the existing more formal genetic resources initiative of IBCR.

The objective of the Ethiopian community-based on-farm crop *in situ* conservation is to support local farming communities in their efforts to maintain their crop genetic diversity, thereby reducing the burden on the formal sector of conserving crop diversity while at the same time supporting farmers in their production activities of providing food for their families and the country as a whole. The duty to conserve this crop diversity has hitherto been left to the millions of smallholder farmers.

Ethiopia's experience in the *in situ* maintenance of crop genetic diversity is characterised by a decentralised system with the broad-based participation of farmers and other groups, particularly the agricultural extension workers, the local administration and some NGOs.

Accessions of some of the major crops, e.g. cereals (wheat, barley, sorghum, tef), oil crops (niger seed, flax, sesame, rape seed, castor bean), and legumes (faba bean, field pea, chick pea, lentil, grass pea) are intensively used in the national crop improvement programme co-ordinated through the Ethiopian Agricultural Research Organization (EARO).

The financial, material and trained human resources available for the conservation and sustainable use of agricultural biodiversity are substantial though, considering the magnitude of the need for conservation, far from adequate. The resources available for the development of the conservation and sustainable use of the other, and main, components of Ethiopia's biodiversity is very low, and, in the case of some of the components, e.g. algae, lichens, most invertebrate animals except some groups of insects, it is virtually non existent.

The relative priority accorded to the biological diversity of the remaining forests is low as compared to agricultural biological diversity. The establishment of a Forest and Aquatic Plant Genetic Resources Department within IBCR and of a forest research department in EARO is a sign of commitment from the Government. On the other hand, new settlements in forest areas are still taking place and result in converting forestland into farmland and the removal of trees for fuel wood, building houses and the making of charcoal.

The few remaining high forests are threatened by pressure from investors who are converting the Moist Evergreen Montane Forests in the southwestern part of the country into commercial farms, particularly coffee and tea plantations, and the wood lots for processing the tea.

The frequent organisational restructuring of the administration of the forestry sector and the inadequate capacity at all levels of administration and management are among the major constraints in the development of forestry in Ethiopia. At present, the Ministry of Agriculture is responsible for the forestry sector. But that Ministry does not have even a clearly defined office for forestry. The disregard of forestry at the level of the regional state governments is comparable. The contribution of forestry to the economy of the country as

measured by GDP is underestimated at about 2.5%. One of the main reasons for the underestimation lies in the fact that the values of non-timber forest products such as forest coffee, gum arabic, honey and spices is credited to other sectors or enterprises, or not even recorded. As a result, the resources allocated to the forestry sector are very small, and even the few trained personnel are often misplaced and/or given inappropriate tasks. Given its socio-economic and ecological importance, forestry deserves much higher attention in terms of administrative status and resource allocation.

The attention given to biological diversity of dry and sub-humid lands is increasing. EARO has dedicated one directorate for dryland agricultural research across the country. The directorate has already developed strategies and action plans to utilise the biodiversity of the drylands sustainably and to mitigate problems related to dryland agricultural production.

## *Article 5: Co-operation*

| 11. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | | b) Medium | X | c) Low | |
| 12. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The fact that Ethiopia has ratified several environmental conventions, e.g. CBD and CITES, and bilateral agreements with Kenya, Sudan, Eritrea (before the war), Uganda and Tanzania (for the conservation and sustainable use of biodiversity in the Rift Valley), Sudan, Egypt, Rwanda, Burundi, Uganda and Kenya, (for the utilisation of River Nile) shows the priority afforded by Ethiopia to the implementation of this Article and its associated decisions.

| 13. Is your country actively co-operating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity? | |
|---|---|
| a) bilateral co-operation (please give details below) | X |
| b) international programmes (please give details below) | X |
| c) international agreements (please give details below) | X |

***Decision IV/4. Status and trends of the biological diversity of inland water ecosystems and options for conservation and sustainable use***

| 14. Has your country developed effective co-operation for the sustainable management of transboundary watersheds, catchments, river basins, and migratory species through bilateral and multilateral agreements? | |
|---|---|
| a) no | |
| b) yes - limited extent (please give details below) | X |
| c) yes - significant extent (please give details below) | |
| d) not applicable | |

***Decision IV/15. The relationship of the CBD with the CSD and biodiversity-related conventions, other international agreements, institutions and processes or relevance***

| 15. Has your country developed management practices for transboundary-protected areas? | |
|---|---|
| a) no | |
| b) yes - limited extent (please give details below) | |
| c) yes - significant extent (please give details below) | |
| d) not relevant | X |

***Decision V/21. Co-operation with other bodies***

| 16. Has your country collaborated with the International Biodiversity Observation Year of DIVERSITAS, and ensured complementarity with the initiative foreseen to be undertaken by the United Nations Educational, Scientific and Cultural Organization and the Secretariat of the Convention on Biological Diversity to increase scientific knowledge and public awareness of the crucial role of biodiversity for sustainable development? | |
|---|---|
| a) no | X |
| b) to a limited extent | |
| c) to a significant extent | |

***Decision V/27. Contribution of the Convention on Biological Diversity to the ten-year review of progress achieved since the United Nations Conference on Environment and Development***

| 17. Is your country planning to highlight and emphasise biological diversity considerations in its contribution to the ten-year review of progress since the Earth Summit? | |
|---|---|
| a) no | |
| b) yes | X |

*Further comments on implementation of the Article*

## Bilateral Co-operation

Ethiopia has signed a bilateral co-operation agreement with the government of the Sudan to extend the Sudanese Protected Area of Dindir into Ethiopia and include the Ethiopian Alaatish area. There was a joint initiative with Eritrea to conserve the few remaining populations of elephants along the common border on the west, although this has now faced a set back as a consequence of the Ethio-Eritrean war, which, fortunately has now ended.

An Arid Land Development Management Plan between Ethiopia and Djibouti is in the pipeline.

Other agreements of bilateral co-operation also exist, e.g.

a) The German Government through the German Technical Cooperation (GTZ) is supporting forest genetic resources conservation and other aspects of forestry development.
b) The Swedish International Development Agency is assisting Ethiopia in training programmes in forest development and conservation.

## International Agreements

Ethiopia is a Party to the Convention to Combat Desertification (CCD). It has developed an action plan for its implementation. Much of the implementation focuses on biodiversity, and it is consistent with the CBD. Ethiopia is also a signatory to the Ramsar Convention (Convention on Wetlands), the African-Eurasian Migratory Water Bird Agreement, the Convention on Migratory Species, and Lusaka Agreement on A Task Force for Co-operative Enforcement Operations Directed Against the Illegal Trade in Wild Fauna and Flora.

Ethiopia has ratified the Convention on International Trade in Endangered Species in wild fauna and flora (CITES) and it is receiving financial support for this from UNESCO. Ethiopia has also ratified the Protection of World Cultural and Natural Heritage Convention. EWCO is an institutional member of the World Conservation Union (IUCN).

These bilateral and international agreements of co-operation have provided some support to specific biodiversity conservation projects.

The CBD has influenced policy and action substantially and in general brought biological diversity concerns to the attention of various sectors that had hardly thought that their activities contributed positively or negatively to biological diversity conservation. The following are some examples in which this impact of the CBD is apparent.

a. the Environmental Policy
b. the Biodiversity Conservation and Development Strategy and Action Plan
c. community-based on-farm crop *in situ* conservation
d. the preparation of a national Biodiversity Strategy and Action Plan (BSAP) by IBCR
e. the preparation of the National Protected Areas Management Plan by EWCO
f. the assessment of Important Bird Areas (IBAs)

## *Article 6: General measures for conservation and sustainable use*

| | | | | | |
|---|---|---|---|---|---|
| 18 What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
| a) High | X | b) Medium | | c) Low | |
| 19. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X |
| d) Severely limiting | | | | | |

***Further comments on relative priority and on availability of resources***

Infrastructural and trained human capacity to effectively conserve, use and develop Ethiopia's biological resources is low. Inadequate organisation, co-ordination and decision-making mechanisms have been further compounding the problem. But the awareness of the problem is high, and steps have been, and are being, taken to reduce it. An environmental policy and a biodiversity conservation and development strategy are now in place, and there is now an institution, IBCR, mandated to spearhead the conservation and sustainable use of biodiversity. All major stakeholder institutions / organizations (more than 26 in number) and about 100 scientists and professionals from all over the country have participated in developing this process.

| | |
|---|---|
| 20. What is the status of your national biodiversity strategy (6a)? | |
| a) none | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) completed[1] | |
| e) completed and adopted [1] | |
| f) reports on implementation available | |
| 21. What is the status of your national biodiversity action plan (6a)? | |
| a) none | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) completed [2] | |
| e) completed and adopted [2] | |
| f) reports on implementation available | |
| 22. Do your national strategies and action plans cover all articles of the Convention (6a)? | |
| a) some articles only | |
| b) most articles | |
| c) all articles | |
| 23. Do your national strategies and action plans cover integration of other sectoral activity (6b)? | |
| a) no | |
| b) some sectors | |
| c) all major sectors | |
| d) all sectors | |

[1] Please provide information requested at the end of this guidelines.

***Further comments on implementation of this Article***

Implementation of a GEF-supported BSAP project commenced in 2000. Upon initiating the implementation of the project, two vital workshops involving the major stakeholders were organised in Addis Ababa. The first workshop was to establish a project Steering Committee (SC) and the second was to create a Planning Team (PT). A third subsequent meeting and a training workshop were organised to better prepare experts for the project's technical activities.

At subsequent meetings, the PT discussed the steps and procedures to be followed, and drafted the overall scope of the strategy and action plan, and then produced a stocktaking checklist of the issues to be covered. Teams of consultants are presently being established to undertake the stocktaking activities. This was scheduled to start in April 2001. Soon after the completion of the stocktaking activity, the first National Workshop will take place to be followed by workshops in the regions of the country.

Recognising the indispensable experiences of other Parties (countries), the Biodiversity Strategy and Action Plan project is making use of the Biodiversity Strategy and Action Plan documents of the Philippines, Jordan, Tanzania, Madagascar, Kenya, and others. It is envisaged that Ethiopia's Biodiversity Strategy and Action Plan will deal with issues of transboundary, bilateral, sub-regional, regional and global co-operation besides determining what should be done within the country.

***Decision II/7 and Decision III/9 Consideration of Articles 6 and 8***

| | |
|---|---|
| 24. Is action being taken to exchange information and share experience on the national action planning process with other Contracting Parties? | |
| a) little or no action | |
| b) sharing of strategies, plans and/or case-studies | X |
| c) regional meeting | |
| 25. Do all of your country's strategies and action plans include an international cooperation component? | |
| a) no | X |
| b) yes | |
| 26. Are your country's strategies and action plans coordinated with those of neighboring countries? | |
| a) no | |
| b) bilateral/multilateral discussions under way | |
| c) coordinated in some areas/themes | X |
| d) fully coordinated | |
| e) not applicable | |
| 27. Has your country set measurable targets within its strategies and action plans? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) Programme in place | |
| e) reports on implementation available | |
| If a developing country Party or a Party with economy in transition -<br>28. Has your country-received support from the financial mechanisms for the preparation of its national strategy and action plan? | |
| a) no | |
| b) yes | X |
| If yes, which was the Implementing Agency (UNDP/UNEP/World Bank)? | UNDP |

### *Decisions III/21. Relationship of the Convention with the CSD and biodiversity-related conventions*

| 29. Are the national focal points for the CBD and the competent authorities of the Rasmar Convention, Bonn Convention and CITES co-operating in the implementation of these conventions to avoid duplication? | |
|---|---|
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |

### *Further comments on relative priority and on availability of resources*

EWCO and EPA have been working together for the ratification of the Ramsar Convention. Ethiopia is signatory to the Ramsar and Bonn Conventions and has signed and ratified CITES. EWCO and EPA are working together for the ratification and implementation of these conventions not yet ratified. Besides these EPA is working towards the ratification of the Rotterdam Convention on Prior Informed Consent, and the Convention on Persistent Organic Pollutants.

## *Article 7: Identification and monitoring*

| 30. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | X | c) Low | |
| 31. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The relative priority accorded to the implementation of Article 7, i.e., identification and monitoring of the components of biological diversity for their conservation and sustainable utilisation, is rated from medium to high. Several works aimed at the identification of biological resources have been carried out by various institutions and individuals. The 8-volume Flora of Ethiopia and Eritrea, covering the ferns, conifers and flowering plants, both indigenous and introduced, is being published by the National Herbarium of the Addis Ababa University. Four volumes are in print and include coverage of all monocotyledons (Vols 6 & 7), a first for any country in Sub-Saharan Africa. The three remaining volumes for plants are almost complete while Volume 8 will contain background information and the index to all volumes. The National Herbarium now holds over 72,000 collections covering most parts of the country and nearly 80% of the flora of higher plants. The Herbarium is developing a strategic plan to focus collecting expeditions on the more poorly know areas and groups of plants. It supports the Botany and Dryland Biodiversity streams in the graduate programme of the Department of Biology and offers an identification service. Other collections come in from collaboration with many institutions and individuals including IBCR, the Woody Biomass Project and the Forest Genetic Resources Conservation Project.

The Natural History Museum of the Addis Ababa University has collections of mammal skins and skulls, birds, some reptiles and amphibians, a few fish and a small number of butterflies and other arthropods. Birds are the best known of all animal groups in the country. The larger wild vertebrates found in the protected area system of the country have been identified and documented by EWCO. The Ethiopian Wildlife and Natural History Society (EWNHS) has an ongoing project with Bird Life International on the conservation of the Birds of Ethiopia. EWNHS has just secured funding from the Darwin Initiative to study the traditional sacred/conservation areas of the country around churches and mosques and other traditionally protected areas.

An Important Bird Area (IBA) project run by EWCO and EWNHS together with the international NGO, BirdLife International, is surveying the status of bird species including 2 doctoral studies on critical species. The Project is also developing plans for *in situ* conservation with local communities in selected IBA areas. EWNHS published a first inventory of the IBAs of Ethiopia in 1996.

The Addis Ababa University, IBCR, and IPGRI are collaborating to support an MSc programme for biology students whose thesis projects are monitoring the changes and management practices of the farmers in South Wello in the use of their own farmers' varieties of sorghum.

There has been very little work done on other groups of organisms, i.e. in the lower plants and animals, but especially in micro-organisms that are not pathogenic to humans, domestic animals or crops.

| | |
|---|---|
| 32. Does your country have an ongoing inventory programme at species level (7a)? | |
| a) minimal activity | |
| b) for key groups (such as threatened or endemic species) or indicators | X |
| c) for a range of major groups | X |
| d) for a comprehensive range of species | |
| 33. Does your country have an ongoing inventory programme at ecosystem level (7a)? | |
| a) minimal activity | |
| b) for ecosystems of particular interest only | |
| c) for major ecosystems | X |
| d) for a comprehensive range of ecosystems | |
| 34. Does your country have an ongoing inventory programme at genetic level (7a)? | |
| a) minimal activity | |
| b) minor programme in some sectors | |
| c) major programme in some sectors | X |
| d) major programme in all relevant sectors | |
| 35. Does your country have ongoing monitoring programmes at species level (7a)? | |
| a) minimal activity | X |
| b) for key groups (such as threatened or endemic species) or indicators | |
| c) for a range of major groups | |
| d) for a comprehensive range of species | |
| 36. Does your country have ongoing monitoring programmes at ecosystem level (7b)? | |
| a) minimal activity | |
| b) for ecosystems of particular interest only | X |
| c) for major ecosystems | |
| d) for a comprehensive range of ecosystems | |
| 37. Does your country have ongoing monitoring programmes at genetic level (7b)? | |
| a) minimal activity | X |
| b) minor Programme in some sectors | |
| c) major Programme in some sectors | |
| d) major Programme in all relevant sectors | |
| 38. Has your country identified activities with adverse affects on biodiversity (7c)? | |
| a) limited understanding | |
| b) threats well known in some areas, not in others | |
| c) most threats known, some gaps in knowledge | X |
| d) comprehensive understanding | |
| e) reports available | X |
| 39. Is your country monitoring these activities and their effects (7c)? | |
| a) no | X |
| b) early stages of Programme development | |
| c) advanced stages of Programme development | |
| d) programme in place | |

| | |
|---|---|
| e) reports on implementation available | |
| 40. Does your country co-ordinate information collected and management at the national level (7d)? | |
| a) no | |
| b) early stages of programme development | X |
| c) advanced stages of programme development | |
| d) programme in place | |
| e) reports on implementation available | |

***Decision III/10. Identification, monitoring and assessment***

| | |
|---|---|
| 41. Has your country identified national indicators of biodiversity? | |
| a) no | X |
| b) assessment of potential indicators underway | |
| c) indicators identified (if so, please describe below) | |
| 42. Is your country using rapid assessment and remote sensing techniques? | |
| a) no | |
| b) assessing opportunities | |
| c) yes, to a limited extent | X |
| d) yes, to a major extent | |
| e) reports on implementation available | |
| 43. Has your country adopted a 'step-by-step' approach to implementing Article 7 with initial emphasis on identification of biodiversity components (7a) and activities having adverse effects on them (7c)? | |
| a) no | |
| b) not appropriate to national circumstances | |
| c) yes | X |
| 44. Is your country co-operating with other Contracting Parties on pilot projects to demonstrate the use of assessment and indicator methodologies? | |
| a) no | X |
| b) yes (if so give details below) | |
| 45. Has your country prepared any reports of experience with application of assessment methodologies and made these available to other Contracting Parties? | |
| a) no | X |
| b) yes | |
| 46. Is your country seeking to make taxonomic information held in its collections more widely available? | |
| a) no relevant collections | |
| b) no action | |
| c) yes (if so, please give details below) | X |

***Decision V/7. Identification, monitoring and assessment, and indicators***

| | |
|---|---|
| 47. Is your country actively involved in co-operating with other countries in your region in the field of indicators, monitoring and assessment? | |
| a) no | X |
| b) limited co-operation | |
| c) extensive co-operation on some issues | |
| d) extensive co-operation on a wide range of issues | |
| 48. Has your country made available case studies concerning the development and implementation of assessment, monitoring and indicator programmes? | |
| a) no | X |
| b) yes - sent to the Secretariat | |
| c) yes - through the national CHM | |
| d) yes - other means (please specify) | |
| 49. Is your country assisting other Parties to increase their capacity to develop indicator and monitoring programme? | |
| a) no | X |
| b) providing training | |
| c) providing direct support | |
| d) sharing experience | |
| e) other (please describe) | |

***Further comments on implementation of this Article***

There are some ongoing inventory programmes at the species level. EWCO and the regional bureaus of agriculture of the regional state governments have been undertaking periodic inventories of endangered and endemic species of large mammals, particularly the Ethiopian Wolf, Walia Ibex, Mountain Nyala, and Elephant. The Addis Ababa University has been undertaking an inventory of higher plants and is publishing the Flora of Ethiopia. IBCR has published monographs for major field crops, namely durum wheat and field pea, and the preparation of monographs on faba bean (*Vicia faba*), grass pea (*Lathyrus sativus*), and sorghum (*Sorghum bicolor*) is being finalised.

The Forest Genetic Resources Conservation Project at the IBCR is undertaking an inventory of the woody plant diversity and socio-economic surveys in the major forest ecosystems. The Woody Biomass Inventory and Strategic Planning Project has an ongoing inventory programme to assess the woody biomass in woodlands, forests and agricultural land. EWCO undertakes periodic inventories of wildlife conservation areas to monitor ecosystem changes. The Addis Ababa University also undertakes research, including through graduate student thesis projects, which includes making inventories at the ecosystem level.

There is very limited work with regards to intraspecific genetic variation, but some studies have been undertaken by Addis Ababa University. There is no ongoing monitoring programme at the intraspecific genetic level.

The Ministry of Agriculture and some NGOs have been monitoring changes in forest cover at the ecosystem level. They use satellite imagery and aerial photographs to observe these changes.

The major threats to the biological resources of the country are known. However, we believe that the specifics of the processes by which some of the threats affect biodiversity are yet to be fully understood. There could be some undiscovered threats as well. There is no ongoing monitoring activity in this regard.

The Forest Genetic Resources Conservation Project of IBCR is compiling the available information on the forest resources of the country. A forest area database that enables the storage and retrieval of information on forest areas and woody plant species has been developed. The Ethiopian Wildlife Conservation Organization is also developing a database on the wild animal resources of Ethiopia.

A Medicinal Plants Project based in IBCR, which is supported by the World Bank and GEF, is developing indicators to monitor and evaluate changes to biodiversity with particular emphasis on medicinal plants.

Remote sensing techniques are used by some institutions in Ethiopia, including the Woody Biomass Inventory and Strategic Planning Project, the Ethiopian Mapping Authority, the Ministry of Agriculture, and some Universities. The International Livestock Research Institute (ILRI) has regular access to satellite information on vegetation cover changes.

Rapid assessment using remote sensing is also being carried out under the theme of the Ecogeographic Survey in IBCR to identify varieties/species of crops and other biological resources. This includes monitoring change and rates of change.

Several assessment methodologies are in use in the country. But these have not been consciously designed so the information generated can be shared among the institutions or with neighbouring countries.

There are several institutions with collections of specimens of biological materials, and there is keen interest in sharing the information with others. A Flora of Ethiopia and Eritrea is being published. The books are available for purchase by the public and can thus be obtained by any interested parties.

***Decisions on Taxonomy***

***Decision IV/1. Report and recommendations of the third meeting of SBSTTA [in part]***

| | |
|---|---|
| 50. Has your country carried out a national taxonomic needs assessment, and/or held workshops to determine natural taxonomic priorities? | |
| a) no | |
| b) early stages of assessment | |
| c) advanced stages of assessment | |
| d) assessment completed | X |
| 51. Has your country developed a national taxonomic action plan? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | X |
| d) action plan in place | |
| e) reports on implementation available | |
| 52. Is your country making available appropriate resources to enhance the availability of taxonomic information? | |
| a) no | |
| b) yes, but this does not cover all known needs adequately | X |
| c) yes, covering all known needs | |
| 53. Is your country encouraging bilateral and multilateral training and employment opportunities for taxonomists, particularly those dealing with poorly known organisms? | |
| a) no | |
| b) some opportunities | X |
| c) significant opportunities | |
| 54. Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? | |
| a) no | |
| b) some investment | X |
| c) significant investment | |
| 55. Is your country encouraging partnerships between taxonomic institutions in developed and developing countries? | |
| a) no | |
| b) yes - stated policy | |
| c) yes - systematic national programme | X |
| 56. Has your country adopted any international agreed levels of collection housing? | |
| a) no | |
| b) under review | |
| c) being implemented by some collections | X |
| d) being implemented by all major collections | |
| 57. Has your country provided training programmes in taxonomy? | |
| a) no | |
| b) some | X |
| c) many | |
| 58. Has your country reported on measures adopted to strengthen national capacity in taxonomy, to designate national reference centres, and to make information housed in collections available to countries of origin? | |
| a) no | X |
| b) yes - in the previous national report | |

| | |
|---|---|
| c) yes - via the clearing-house mechanism | |
| d) yes - other means (please give details below) | |
| 59. Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable? | |
| a) no | |
| b) under review | |
| c) yes for some institutions | X |
| d) yes for all major institutions | |
| 60. Has your country assisted taxonomic institutions to establish consortia to conduct regional projects? | |
| a) no | |
| b) under review | |
| c) yes - limited extent | X |
| d) yes - significant extent | |
| 61. Has your country given special attention to international funding of fellowships for specialist training abroad or for attracting international experts to national or regional courses? | |
| a) no | |
| b) under review | |
| c) yes - limited extent | X |
| d) yes - significant extent | |
| 62. Has your country provided programmes for re-training of qualified professionals moving into taxonomic-related fields? | |
| a) no | |
| b) some | X |
| c) many | |

### *Decisions V/9. Global Taxonomy Initiative: Implementation and Further Advance of the Suggestions for Action*

| | |
|---|---|
| 63. Has your country identified its information requirements in the area of taxonomy, and assessed its national capacity to meet these requirements? | |
| a) no | |
| b) basic assessment | X |
| c) thorough assessment | |
| 64. Has your country established or consolidated taxonomic reference centres? | |
| a) no | |
| b) yes | X |
| 65. Has your country worked to increase its capacity in the area of taxonomic research? | |
| a) no | |
| b) yes | X |
| 66. Has your country communicated information on programmes, projects, and initiatives for consideration as pilot projects under the Global Taxonomy Initiative to the Executive Secretary? | |
| a) no | X |
| b) yes | |
| 67. Has your country designated a national Global Taxonomy Initiative focal point linked to other national focal points? | |
| a) no | X |
| b) yes | |
| 68. Has your country participated in the development of regional networks to facilitate information sharing for the Global Taxonomy Initiative? | |
| a) no | |
| b) yes | X |
| ***If a developing country Party or Party with economy in transition -*** 69. Has your country sought resources through the financial mechanism for the priority actions identified in the decision? | |
| a) no | X |
| b) applied for unsuccessfully | |
| c) applied for successfully | |

### *Further comments on implementation of these decisions*

Taxonomy underpins all the other biological sciences, including agriculture, forestry, fisheries, breeding, genetics, bioprospecting, biotechnology, ecology, and conservation. The ability to identify organisms is fundamental to survival. During the first national workshop sponsored by EAFRINET/ BioNET-INTERNATIONAL and EARO, and held on 31 July 2000, participants discussed basic background issues related to building taxonomic capacity on small-bodied organisms in the country to support national programmes for sustainable development. They then establish an inter-institutional committee to develop a national strategy and action plan to develop the required taxonomic capacity.

The committee has developed a draft strategy and project proposal document. The organisms seen as requiring attention are viruses, bacteria, protozoa, algae, fungi, lichens, nematodes, insects, and other small invertebrates.

The Biology Department of the Addis Ababa University started botanical research in the 1950s when it was a department of the University College of Addis Ababa. It was in 1959 that it established its herbarium, now the National Herbarium. Botanical research has expanded steadily since 1980 when the Ethiopian Flora Project was started. Swedish support channelled through the Ethiopian Science and Technology Commission has been available to it since 1980. It has enjoyed valuable technical co-operation with the Department of Systematic Botany of Uppsala University in Sweden, the Botanical Museum, Copenhagen University, in Denmark, the Royal Botanic Gardens, Kew, in the UK and the Botanical Institute, Vienna University, in Austria. All this co-operation is still going on.

Now with 4 volumes (vols 2, 3, 6 & 7) in print, over half of all the known species (around 3,700 species in 174 families) of flowering plant (both indigenous and the better known introductions) have been published. Accounts of the remaining families are being finalized: ferns and confers for Vol 1 and the remaining 42 dicotyledon families for Vols 4 and 5. Volume 8 will contain background information and the consolidated index to all volumes.

A vital component in the building-up of the National Herbarium, and undoubtedly decisive in the context of sustainability, has been the training of human resources. The Herbarium now has a corps of well-trained taxonomic botanists and support personnel to sustain continued research and publishing on various aspects of botany if adequate financial resources are made available to continue employing the technical staff and cover the costs of infrastructure maintenance and the curation of specimens.

The number of specimens in the National Herbarium has increased from about 16,000 in 1980 to over 72,000 in 2001. The staff of the Herbarium, researchers in the Biology Department, and other researchers from institutions both inside Ethiopia and abroad carry out research on plants in Ethiopia utilising these specimens and other facilities provided by the National Herbarium.

The National Herbarium also provides plant identification services to development organizations and to researchers. The Ministry of Agriculture is the main user of these services, particularly in crop protection, bee keeping, the countrywide survey of woody biomass and forests, and the livestock research and development.

In addition to plant taxonomy and ecology, the Biology Department also offers regional masters training in Eastern Africa programmes in Arid Land Biosafety and Insect Biosytematics.

## *Article 8: In situ Conservation [excluding Articles 8h and 8j]*

| 70. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |
| 71. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

As the country has many unique habitats that are inhabited by diverse species of plants and animals, many of which are endemic and some endangered, it has given due consideration to their conservation and has dedicated a considerable area of its land for their *in situ* conservation. The resources available for meeting the needs of conservation obligations, however, are limited because of:

a) inadequacy of trained human resources;
b) inadequacy of transportation facilities;
c) inadequacy of budget allocations;
d) landuse conflicts between protected area management and local communities. The regulations and restrictions detailed in the existing legislation are not fully implemented, perhaps because the rural people lack sufficient knowledge of the laws and regulations, but more importantly because these areas were protected without soliciting the support of the local communities, and often through antagonising them by simply trying to keep them out of the protected areas without making alternative resources available.

| 72. Has your country established a system of protected areas which aims to conserve biological diversity (8a)? | |
|---|---|
| a) system under development | |
| b) national review of protected areas coverage available | X |
| c) national protected area systems plan in place | |
| d) relatively complete system in place | |
| 73. Are there nationally adopted guidelines for the selection, establishment, and management of protected areas (8b)? | |
| a) no | X |
| b) no, under development | |
| c) yes | |
| d) yes, undergoing review and extension | |
| 74. Does your country regulate or manage biological resources important for the conservation of biological diversity with a view to ensuring their conservation and sustainable use (8c)? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) programme or policy in place | X |
| e) reports on implementation available | |

| | |
|---|---|
| 75. Has your country undertaken measures that promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings (8d)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) reasonably comprehensive measures in place | |
| 76. Has your country-undertaken measures that promote environmentally sound and sustainable development in areas adjacent to protected areas (8e)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) reasonably comprehensive measures in place | |
| 77. Has your country undertaken measures to rehabilitate and restore degraded ecosystems (8f)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |
| 78. Has your country undertaken to promote the recovery of threatened species (8f)? | |
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) compressive measures in place | |
| 79. Has your country undertaken measures to regulate, manage, or control the risks associated with the use and release of living modified organisms resulting from biotechnology (8g)? | |
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 80. Has your country attempted to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components (8i)? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) programme or policy in place | |
| e) reports on implantation available | |
| 81. Has your country developed and maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations (8k)? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) legislation or other measures in place | |

| | |
|---|---|
| 82. Does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity (81)? | |
| a) no | |
| b) under review | |
| c) yes, to a limited extent | X |
| d) yes, to a significant extent | |
| ***If a developed country Party –***<br>1. Does your country co-operate in providing financial and other support for *in situ* conservation particularly to developing countries (8m)?<br><br>***If a developing country Party or Party with economy in transition -***<br>84. Does your country receive financial and other support for *in situ* conservation (8m)? | |
| a) no | |
| b) yes (if so, please give details below) | X |

### *Decision II/7. Consideration of Articles 6 and 8 of the Convention*

| 85. Is action being taken to share information and experience on implementation of this Article with other Contracting Parties? | |
|---|---|
| a) little or no action | |
| b) sharing of written materials and/or case-studies | X |
| c) regional meetings | X |

### *Further comments on implementation of this Article*

Ethiopia has designated a considerable areas of its land for protection, depending on the size and conditions of the biological resources contained as national parks (number 9), sanctuaries (8), game reserves (4), controlled hunting areas (18) or wetlands (3). Many of the regions have also closed off large tracts of land for rehabilitation and biodiversity regeneration.

There are no nationally adopted guidelines for the selection and establishment of a protected area. The selection is based on internationally recognised guidelines. Some of these protected areas have management plans in place, but weaknesses in implementation exist.

There is a newly drafted National Biodiversity Policy for the conservation of all biological resources. There are also newly revised draft wildlife laws. When finalised and implemented these instruments are expected to go a long way to ensure the conservation and sustainable use of biological resources.

Some of the protected areas are ecosystems that had been degraded in the past, and the animals or plants in them had been threatened. For example, the Mountain Nyala and the Ethiopian Wolf in the Bale Mountains National Park were highly threatened with extinction. Although the conditions for the Ethiopian Wolf have not changed much, the Mountain Nyala population has recovered considerably.

Ethiopia has put in place some legislation to utilise its wildlife and forest resources sustainably. One of the ways wildlife is utilised is through sport hunting with the aim of benefiting the local people and earning much needed foreign currency for the country.

There are also some forests in the country that claim to be managed for sustainable timber production.

The types of forest management in use or proposed are:

a) integrated forest development and utilization e.g. at Tiro–Boter Bacho;
b) joint forest management between the local community and some NGOs, e.g. in use at Chilimo and Butajira;
c) establishment of state forest enterprises, e.g. in use at the Addis Ababa fuel wood plantation and the Munessa–Shashemane industrial plantation;
d) development of ecotourism with direct sharing of responsibilities and benefits with the local forest communities, e.g. Dodola–Adaba Forest Management Project;
e) leasing the forest to environmentally-oriented NGOs and farming communities — proposed but not yet tried out.

Ethiopia receives limited financial support from some international NGOs, particularly World Wide Fund for Nature (WWF), African Wildlife Fellowship (AWF), London Zoological Society, Wildlife Conservation International, and some intergovernmental organizations, e.g. the European Union (EU), GEF, for its *in situ* conservation activities.

WWF, through financial support from the Government of the Netherlands, is implementing a conservation project in the Harenna Forest, a high priority forest area in Bale (south-east Ethiopia).

The AWF, Zoological Society of London, Wildlife Conservation International, Borne Free and IUCN's Species Survival Commission are engaged in the Ethiopian Wolf Status Survey and Conservation Action Plan.

There are also several GEF- and UNDP-funded projects that support conservation.

Ethiopia played an active role in the negotiations on the Biosafety Protocol. The African group maintained its initiative in this, and Ethiopia ended up as the chief negotiator of the Like-Minded Group. The country has also taken a lead role in developing a model biosafety law upon which African countries can base their national laws, and in launching an initiative for the region to develop a mechanism of co-operation to achieve the uniformity of implementation of national biosafety laws.

## *Article 8/h Alien species*

| | | | | | |
|---|---|---|---|---|---|
| 86. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
| a) High | X | b) Medium | | c) Low | |
| 87. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Ethiopia participated in a regional workshop on invasive species in Eastern Africa which was held at the Nairobi headquarters of the International Center of Insect Physiology and Ecology (ICIPE) on 5-6 July 1999. The workshop brought together relevant professionals from Ethiopia, Kenya, Tanzania, and Uganda to discuss invasive species, increase awareness, and produce a preliminary survey of invasive species in Eastern Africa. Ethiopia has taken some steps to strengthen research and research links on invasive species, support regional efforts to control invasive species, build capacity and develop invasive species control programmes. However, financial resources to support invasive species control efforts are scarce.

| | |
|---|---|
| 88. Has your country identified alien species introduced? | |
| a) no | |
| b) only major species of concern | X |
| c) only new or recent introductions | |
| d) a comprehensive system tracks new introductions | |
| e) a comprehensive system tracks all known introductions | |
| 89. Has your country assessed the risks posed to ecosystems, habitats, or species by the introduction of these alien species? | |
| a) no | |
| b) only some alien species of concern have been assessed | X |
| c) most alien species have been assessed | |
| 90. Has your country undertaken measure to prevent the introduction of, control, or eradicate those alien species, which threaten ecosystems, habitats, or species? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |

***Decision IV/1. Report and recommendations of the third meeting of SBSTTA***

| | |
|---|---|
| 91. Is your country collaborating in the development of projects at national, regional, sub-regional, and international levels to address the issue of alien species? | |
| a) little or no action | |
| b) discussion on potential project under way | X |
| c) active development of new projects | |
| 92. Does your national strategy and action plan address the issue of alien species? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |

***Decision V/8. Alien species that threaten ecosystems, habitats, or species***

| | |
|---|---|
| 93. Is your country applying the interim guiding principles for prevention, introduction, and mitigation of impacts of alien species in the context of activities aimed at implementing article 8(h) of the Convention, and in the various sectors? | |
| a) no | |
| b) under consideration | X |
| c) limited implementation in some sectors | |
| d) extensive implementation in some sectors | |
| e) extensive implementation in most sectors | |
| 94. Has your country submitted case studies to the Executive Secretary focusing on thematic assessments? | |
| a) no | |
| b) in preparation | X |
| c) yes | |
| 95. Has your country submitted written comments on the interim guiding principles to the Executive Secretary? | |
| a) no | X |
| b) yes | |
| 96. Has your country given priority to the development and implementation of alien invasive species strategies and action plans? | |
| a) no | |
| b) yes | X |
| 97. In dealing with the issue of invasive species, has your country developed or involved itself in mechanisms for international co-operation, including the exchange of best practices)? | |
| a) no | |
| b) trans-boundary co-operation | |
| c) regional co-operation | X |
| d) multilateral co-operation | X |
| 98. Is your country giving priority attention to geographically and evolutionarily isolated ecosystems in its work on alien invasive species? | |
| a) no | |
| b) yes | X |
| 99. Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species? | |
| a) no | |
| b) yes | X |

| | |
|---|---|
| 100. Has your country developed effective education, training, and public-awareness measures concerning the issue of alien species? | |
| a) no | |
| b) some initiatives | X |
| c) many initiatives | |
| 101. Is your country making available the information, which it holds on alien species through the CHM? | |
| a) no | |
| b) some information | X |
| c) all available information | |
| d) information available though other channels (please specify) | |
| 102. Is your country providing support to enable the Global Invasive Species Programme to fulfil the tasks outlined in the decision and its annexes? | |
| a) no | |
| b) limited support | X |
| c) substantial support | |

***Further comments on implementation of this Article***

From the results of the preliminary survey made in Ethiopia, Kenya, Tanzania, and Uganda, 38 different invasive species have been reported. These species consist of 21 plants, 5 vertebrates, 9 insects, 1 invertebrate, and 2 micro-organisms. Ethiopia has experienced the impacts of invasive species and in some cases the infrastructure necessary to control such species is also present, but there is too little knowledge, and the measures for monitoring and control are severely limited.

The Ministry of Agriculture, with the assistance of the FAO, is developing a framework for integrated pest management (IPM) to become part of the overall pest control strategy for the country. This is in support of a programme to rid Ethiopia of a large stockpile of obsolete pesticides. Already some NGOs are working with regional bureaus of agriculture to promote IPM.

A multilateral co-operation project among EARO, ICIPE, ICARDA, and the University of Vermont (USA) has been developed to work in the area of IPM for developing a programme in Ethiopia with emphasis on entomo-pathogenic fungi for major native pests. This research also includes invasive species in its research strategy.

## *Article 8j: Traditional knowledge and related provisions*

| 103. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 104. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Ethically, Ethiopia is diverse with over 70 languages spoken. The many nations and smaller ethnic groups have their distinctive cultural, agricultural and technological practices. They all develop, maintain, and use their biological resources. For example, one of the most widely cultivated food crops in Ethiopia is enset which is represented only by wild species in other part of the tropics, and all the cultivated varieties (68 of them recognised so far) are grown only in Ethiopia. It is easy to note that the local people spend a great amount of time in their fields caring for their crops and animals and, especially the woman, also breeding them. They have accumulated much more knowledge of the detailed nature of their own biological resources than have most scientists. It is also easy to understand that researchers can save time and trouble by building on what local people have already learned over the years. Ethiopia, therefore, maintains that, because community knowledge has already been tried out in the field, innovations based on this knowledge are most likely to be sustainable. However, although, these and other special values of community knowledge in the collection, conservation and utilisation of biological resources is well recognised in Ethiopia, little by way of resources is deployed to attempt any comprehensive work in this area.

| 105. Has your country undertaken measures to ensure that the knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity are respected, preserved, and maintained? | |
|---|---|
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 106. Is your country working to encourage the equitable sharing of benefits arising from the utilisation of such knowledge, innovations, and practices? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | X |
| d) programme or policy in place | |

***Decision III/4 and Decision IV/9. Implementation of Article 8(j)***

| 107. Has your country developed national legislation and corresponding strategies for the implementation of Article 8(j)? | |
|---|---|
| a) no | |
| b) early stages of development | |

| | |
|---|---|
| c) advanced stages of development | X |
| d) legislation or other measures in place | |
| 108. Has your country supplied information on the implementation of Article 8(j) to other Contracting Parties though media such as the national report? | |
| a) no | |
| b) yes - previous national report | |
| c) yes - CHM | |
| d) yes - other means (please give details below) | X |
| 109. Has your country submitted case studies to the Executive Secretary on measures taken to develop and implement the Convention's provisions relating to indigenous and local communities? | |
| a) no | |
| b) yes | X |
| 110. Is your country participating in appropriate working groups and meetings? | |
| a) none | |
| b) some | X |
| c) all | |
| 111. Is your country facilitating the active participation of representatives of indigenous and local communities in these working groups and meetings? | |
| a) no | |
| b) yes | X |

***Decision V/16. Article 8(j) and related provisions***

| | |
|---|---|
| 112. Has your country reviewed the programme of work specified in the annex to the decision, and identified how to implement those tasks appropriate to national circumstances? | |
| a) no | |
| b) under review | |
| c) yes (please provide details) | X |
| 113. Is your country integrating such tasks into its ongoing programmes, taking into account the identified collaboration opportunities? | |
| a) no | |
| b) not appropriate to national circumstances | |
| c) yes - to a limited extent | X |
| d) yes - to a significant extent | |
| 114. Is your country taking full account of existing instruments, guidelines, codes and other relevant activities in the implementation of the programme of work? | |
| a) no | |
| b) not appropriate to national circumstances | |
| c) yes - to a limited extent | |
| d) yes - to a significant extent | X |
| 115. Has your country provided appropriate financial support for the implementation of the programme of work? | |
| a) no | |
| b) not appropriate to national circumstances | |
| c) yes - to a limited extent | X |
| d) yes - to a significant extent | |
| 116. Has your country fully incorporated women and women's organizations in the activities undertaken to implementation the programme of work contained in the annex to the decision and other relevant activities under the Convention? | |
| a) no | |
| b) yes | X |
| 117. Has your country taken measures to facilitate the full and effective participation of indigenous and local communities in the implementation of the Conventions? | |
| a) no | |
| b) not appropriate to national circumstances | |
| c) yes - to a limited extent | X |
| d) yes - to a significant extent | |
| 118. Has your country provided case studies on methods and approaches concerning the preservation and sharing of traditional knowledge, and the control of that information by indigenous and local communities? | |
| a) no | |
| b) not relevant | |
| c) yes - sent to the Secretariat | |
| d) yes - through the national CHM | |
| e) yes - available through other means (please specify) | X |
| 119. Does your country exchange information and share experiences regarding national legislation and other measures for the protection of the knowledge, innovations and practices of indigenous and local communities? | |
| a) no | |

| | |
|---|---|
| b) not relevant | |
| c) yes - through the CHM | |
| d) yes - with specific countries | |
| e) yes - available through other means (please specify) | X |
| 120. Has your country taken measures to promote the conservation and maintenance of knowledge, innovations, and practices of indigenous and local communities? | |
| a) no | |
| b) not relevant | |
| c) some measures | X |
| d) extensive measures | |
| 121. Has your country supported the development of registers of traditional knowledge, innovations and practices of indigenous and local communities, in collaboration with these communities? | |
| a) no | |
| b) not relevant | |
| c) development in progress | X |
| d) register fully developed | |
| 122. Have representatives of indigenous and local community organizations participated in your official delegation to meetings held under the Convention on Biological Diversity? | |
| a) not relevant | |
| b) not appropriate | |
| c) yes | X |
| 123. Is your country assisting the Secretariat to fully utilise the clearing-house mechanism to co-operate closely with indigenous and local communities to explore ways that enable them to make informed decision concerning release of their traditional knowledge? | |
| a) no | |
| b) awaiting information on how to proceed | |
| c) yes | X |
| 124. Has your country identified resources for funding the activities identified in the decision? | |
| a) no | |
| b) not relevant | |
| c) partly | |
| d) fully | X |

***Further comments on implementation of this Article***

Community knowledge gives insight into the fundamentals of biological resources management. Ethiopia is predominantly rural and its economy is largely based on agriculture. It is known for its biological diversity and the associated community knowledge, innovations, practices and technologies on the biological resources are crucially important in the maintenance and utilisation of this biological diversity. Its cultures and social norms are largely shaped by this community biological lore.

Recognising the historical contribution of Ethiopia's local communities to the conservation, development and sustainable utilisation of genetic resources, it is necessary to respect

and encourage it in order to promote economic and social development. It is also necessary to protect the rights of the local communities to their knowledge and technologies associated with genetic resources and to promote their continuing application with the approval and the sharing of benefits with these communities.

To this end, Ethiopia together with the Organization of African Unity (OAU) has developed a model law[2] for regulating access to biological resources and for enforcing the protection of the rights of local communities to their knowledge, technologies innovations and practices, and their biological resources in line with Article 8j. This model law was adopted by the OAU summit that took place in Ouagadougou in June 1998 and it is now in the process of being domesticated by OAU member countries. Ethiopia's national law based on it is being finalised prior to submission to the Chamber of Deputies (Parliament).

The Ethnobiology Department of IBCR has been studying the role of women in the development, maintenance and sustainable utilisation of biological resources with emphasis on food crops and cosmetic plants. Likewise, the Forest Department of IBCR has established a 'focus group' that works on gender issues. The Prime Minister's Office has a Department of Women's Affairs and all ministries and large agencies have their respective Departments of Women's Affairs. One of their main aims is the improvement of the conditions of rural women, inevitably in their role as managers and conservers of biological diversity, and as generators and users of the associated biological knowledge.

Through a co-ordination mechanism linking EARO, IBCR and the Addis Ababa University, Ethiopia has been interacting and exchanging information with the International Society of Ethnobiology. The Eighth International Congress of the International Society of Ethnobiology will take place in Ethiopia in the year 2002.

Some measures have been taken to support the Ethiopian National Traditional Medicine Preparation and Therapy Association in recording medical knowledge, innovations and practices of healers in local communities. The Association is housed in the premises of IBCR and gets some supports from it. Some individual healers who are also members of the Association have signed mutually agreed contracts with the Ethiopian Health and Nutrition Institute (EHNI) of the Ministry of Health to release their medical knowledge.

A considerable amount of research has been carried out by the Institute of Ethiopian Studies (IES) and the Sociology / Anthropology Departments of Addis Ababa University, including the use of biological resources, particularly plants, by the various ethnic societies of the country. These data are available in the extensive library of IES and a limited number of corroborating specimens are in the National Herbarium.

[2] The full title is: African Model Law for the Protection of the Rights of Local Communities, Farmers and Plant Breeders, and for the Regulation of Access to Biological Resources

## *Article 9 Ex situ Conservation*

| 125. What is the relative priority afforded to implementation of this Article and the associated decision by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 126. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The relative priority accorded to *ex situ* conservation of field crops is high whereas inadequate priority is accorded to other plant, forest, animal, and microbial genetic resources. IBCR was established in 1976 as a plant genetic resources centre to collect, conserve, utilise, and document the country's plant genetic resources. Over 60,000 accessions of over 104 species of crops, including cereals, pulses, and others have been collected and conserved in cold storage facilities. Species with recalcitrant seeds, e.g. arabica coffee, are conserved as living collections in field gene banks. The mandate of IBCR has recently been expanded to include forest, animal, and microbial genetic resources. The International Livestock Research Centre (ILRI) also holds collections of plant genetic materials, particularly of forage species.

| 127. Has your country adopted measures for the *ex situ* conservation of components of biological diversity native to your country (9a)? | |
|---|---|
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | |
| d) comprehensive measures in place | X |

| 128. Has your country adopted measures for the *ex situ* conservation of components of biological diversity originating outside your country (9a)? | |
|---|---|
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |

| 129. If the answer to the previous question was yes, is this being done in active collaboration with organizations in the other country (9a)? | |
|---|---|
| a) no | |
| b) yes | X |

| 130. Has your country established and maintained facilities for the *ex situ* conservation of and research on plants, animals, and micro-organisms that represent genetic resources native to your country (9b)? | |
|---|---|
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |

| | |
|---|---|
| 131. Has your country established and maintained facilities for the *ex situ* conservation of and research on plants, animals, and micro-organisms that represent genetic resources originating elsewhere (9b)? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |
| 132. If the answer to the previous question was yes, is this being done in active collaboration with organizations in the other countries (9a)? | |
| a) no | |
| b) yes | X |
| 133. Has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions (9c)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) compressive measures in place | |
| 134. Has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex situ* conservation purposes so as not to threaten ecosystems and *in situ* populations of species (9d)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |
| ***If a developed country Party -***<br><br>135. Has your country co-operated in providing financial and other support for *ex situ* conservation and in the establishment and maintenance of *ex situ* conservation facilities in developing countries (9e)?<br><br>***If a developing country Party or Party with economy in transition -***<br><br>136. Has your country received financial and other support for *ex situ* conservation and in the establishment and maintenance of *ex situ* conservation facilities (9e)? | |
| a) no | |
| b) yes | X |

***Further comments on implementation of this Article***

*Ex situ* measures that are relevant and appropriate for the Ethiopian condition are in place for crop plant species. Such measures include cold room storage and field genebanks (live collections).

IBCR and ILRI hold collections of exotic plant species in their genebanks. These materials are being characterised and evaluated for possible use in breeding programmes. Both institutions collaborate with international organizations including ICRISAT for finger millet and sorghum, ICARDA for barley, wheat, and pulse, and ITTA for various crops.

The Ethiopian gene bank at IBCR is one of the 15 largest holders of nationally-based

collections of plant genetic resources in the world. As indicated under questions #125 and 126, Ethiopia's experience in conservation has so far been in cold room storage and live collections in field gene banks. *Ex situ* facilities to handle animal and microbial genetic resources are yet to be developed. As indicated under questions # 125, 126, 128, and 129, IBCR and ILRI also hold plant genetic resources collections that originated outside of Ethiopia. They do this in close collaboration with ICRISAT, ICARDA, and IITA. There are some limited facilities for research on plant, animal, and microbial genetic resources.

Some measures are in place for the rehabilitation and/or restoration of species and varieties into their original habitats. Examples are:

a) increasingly areas are being closed off and protected from animal grazing and uncontrolled harvesting by local authorities, including local communities, in various parts of the country, particularly in the northern and central parts. Closed off areas enable the regeneration of threatened plant and animal species;
b) the restoration of farmer's varieties in central Ethiopia, under a project supported by GEF, has successfully reintroduced the original farmers' varieties to the farming communities which used to cultivate them; and
c) the effort to translocate some populations of the threatened Swayne's Hartebeest from Sinkile Sanctuary to Awash and Nechisar National Parks.

These examples are mentioned as an effort to re-establish species in their original habitats and save them from becoming extinct. The attempt has succeeded in Nechisar National Park, but failed in Awash National Park.

There have been some attempts to establish crocodile and ostrich farms in order to deflect economic attention away from natural populations. These farms have also the commercial purposes of obtaining more crocodiles and ostriches at the required times and conditions.

The establishment of the first gene bank at the Genetic Resource Centre in 1976 was financed by the German Government. At present, IBCR is constructing an additional gene bank for forest genetic resources also with financial support from the German Government. Some limited funds have also been secured from the German Government through GTZ for the establishment of *ex situ* plantations to save threatened forest plant species.

## *Article 10: Sustainable use of components of biological diversity*

| 137. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 138. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Ethiopia is a signatory to a number of multilateral environmental agreements and it has developed strategies and laws to deal with the dangers faced by biological resources.

| 139. Has your country-integrated consideration of the conservation and sustainable use of biological resources into national decision making (10a)? | |
|---|---|
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | X |
| d) programme or policy in place | |
| e) review of implementation available | |
| 140. Has your country adopted measures relating to the use of biological resources that avoid or minimise adverse impacts on biological diversity (10b)? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 141. Has your country put in place measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements (10c)? | |
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 142. Has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced (10d)? | |
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 143. Does your country actively encourage cooperation between government authorities and the private sector in developing methods for sustainable use of biological diversity (10e)? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |

| | |
|---|---|
| d) programme or policy in place | |
| e) review of implementation available | |

### *Decisions IV/15. Relationship of the Convention with the Commission on Sustainable Development and biodiversity–related conventions*

| | |
|---|---|
| 144. Has your country submitted to the Secretariat information on tourism and its impacts on biological diversity, and efforts to effectively plan and mange tourism? | |
| a) no | X |
| b) yes – previous national report | |
| c) yes – case-studies | |
| d) yes – other means (please give details below) | |
| 145. Has your country submitted to the Secretariat information on biodiversity-related activities of the CSD (such as SIDS, oceans, seas and freshwater resources, consumption and production patterns)? | |
| a) no | X |
| b) yes – previous national report | |
| c) yes – correspondence | |
| d) yes – other means (please give details below) | |

### *Decision V/24. Sustainable use as a cross-cutting issue*

| | |
|---|---|
| 146. Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity? | |
| a) no | |
| b) assessment of potential indicators underway | X |
| c) indicators identified (if so, please describe below) | |
| 147. Has your country assisted other Parties to increase their capacity to implement sustainable use practices, programmes, and policies at regional, national, and local levels, especially in pursuit of poverty alleviation? | |
| a) no | X |
| b) not relevant | |
| c) to a limited extent | |
| d) to a significant extent (please provide details) | |
| 148. Has your country developed mechanisms to involve the private sector and indigenous and local communities in initiatives on sustainable use, and in mechanisms to ensure that indigenous and local communities benefit from such sustainable use? | |
| a) no | |
| b) mechanisms under development | X |
| c) mechanism in place (please describe) | |
| 149. Has your country identified areas for conservation that would benefit through the sustainable use of biological diversity and communicated this information to the Executive Secretary? | |
| a) no | |
| b) yes | X |

### *Decision V/25. Biological diversity and tourism*

| | |
|---|---|
| 150. Has your country based its polices, programmes and activities in the field of sustainable tourism on an assessment of the inter-linked between tourism and biological diversity? | |
| a) no | |
| b) to a limited extent | X |
| c) to a significant extent | |
| 151. Has your country submitted case-studies on tourism as an example of the sustainable use of biological diversity to the Executive Secretary? | |
| a) no | X |
| b) yes | |
| 152. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Year of Ecotourism? | |
| a) no | |
| b) yes | X |
| 153. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Year of Mountains? | |
| a) no | X |
| b) yes | |
| 154. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Coral Reef Initiative? | |
| a) no | X |
| b) yes | |
| 155. Has your country established enabling policies and legal frameworks to complement voluntary efforts for the effective implementation of sustainable tourism? | |
| a) no | |
| b) to a limited extent | X |
| c) to a significant extent (please describe) | |

***Further comments on implementation of this Article***

The constitution has stipulated clearly that the use of all natural resources, especially the use of renewable natural resources, is to be made sustainable. But the implementation is limited due to inadequacy of financial resources and trained personnel.

There are many customary practices that contribute to biological diversity conservation. For example, bee keeping and forest coffee production by the local communities in and around the forests in Southwest Ethiopia are instrumental in the conservation of some of the trees in these forests. The trees are used to keep beehives, and to provide pollen and nectar to bees as well as to give shade to the coffee. The transhumant pastoralists in the lowlands of eastern Ethiopia prohibit the hunting of wild animals with the exhortation that, for every animal hunted, at least one cow will die.

The government has developed various incentive programmes and some NGOs are assisting in these to rehabilitated degraded forests and agricultural lands. For instance, food-for-work programmes practised in Ethiopia mainly by the World Food Programme and some NGOs are usually used for tree planting and soil conservation measures to fight land degradation.

Furthermore, the practice of allowing long fallow periods between successive growing seasons, the traditional rotations of cereals-pulses-oil crops, use of animal manure and mulches, and the use of exclosures to keep out animal and human activity are some of the traditional measures farmers have used to retain soil fertility and improve the general environment. Some of these measures are also being advocated by the agricultural extension services. These measures have been found to be successful in many parts of the country.

EARO is the main agricultural research institution in the country. It has a department that deals with research on indigenous knowledge and its importance for sustainable development and its benefits in local communities. The fact that EARO has biological diversity conservation components in all its departments indicates the importance the organisation has attached to conservation.

Tourism day was celebrated under the theme of ecotourism. There was a one-day workshop involving relevant stakeholders. There was also a visit to one of the ecotourism sites. There is a project on developing ecotourism in the Gondar and Simien National Park areas in the Northwest and a smaller but quite effective network of lodges for ecotourism in the Dodola-Adaba Forest on the western side of the Bale National Park in the South.

## *Article 11: Incentive measures*

| 156. What is the relative priority afforded to implementation of this Article and the associated decision by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | | b) Medium | X | c) Low | |
| 157. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The Environmental Policy of Ethiopia states that the major part of any benefit obtained from conservation efforts should be channelled back to the respective local comminutes involved in the conservation system. EWCO has proposed a new law that would allow about 85% of the revenue that accrues from the controlled hunting of wildlife to be allocated to the development of the respective local communities.

Identifying market strategies, market bottlenecks, and socio-economic conditions that might negatively affect the sustainable use of biodiversity under *in situ* conservation and recommending appropriate marketing channels both nationally and internationally, and establishing a market monitoring system are essential for the sustainability of the *in situ* conservation especially of agrobiodiversity. At present, therefore, IBCR is undertaking a comprehensive study of market and non-market incentives to help farmers participating in its on-farm *in situ* conservation programme.

| 158. Are programmes in place to identify and ensure the adoption of economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity? | |
|---|---|
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) programme in place | |
| e) review of implementation available | |
| 159. Do these incentives, and the programmes to identify them and ensure their adoption, cover the full range of sectoral activities? | |
| a) no | |
| b) some sectors | X |
| c) all major sectors | |
| d) all sectors | |

### *Decision III/18. Incentive measures*

| | |
|---|---|
| 160. Has your country reviewed legislation and economic polices to identify and promote incentives for the conservation and sustainable use of components of biological diversity? | |
| a) no | |
| b) review in progress | X |
| c) some reviews complete | |
| d) as far as practically possible | |
| 161. Has your country ensured the development of mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into plans, polices and programmes and other relevant areas, *inter alia*, national accounting systems and investment strategies? | |
| a) no | |
| b) early stages of identifying mechanisms | X |
| c) advanced stages of identifying mechanisms | |
| d) mechanisms in place | |
| e) review of impact of mechanisms available | |
| 162. Has your country developed training and capacity building programmes to implement incentive measures and promote private-sector initiatives? | |
| a) no | X |
| b) planned | |
| c) some | |
| d) many | |
| 163. Has your country incorporated biological diversity considerations into impact assessment as a step in the design and implementation of incentive measures? | |
| a) no | X |
| b) yes | |
| 164. Has your country shared experience on incentive measures with other Contracting Parties, including making relevant case-studies available to the Secretariat? | |
| a) no | X |
| b) yes – previous national report | |
| c) yes – case-studies | |
| d) yes – other means (please give details below) | |

***Decision IV/10. Measures for implementing the Convention [in part]***

| | |
|---|---|
| 165. Is your country actively designing and implementing incentive measures? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) measures in place | |
| e) review of implementation available | |
| 166. Has your country identified threats to biological diversity and underlying causes of biodiversity loss, including the relevant actors, as a stage in designing incentive measures? | |
| a) no | |
| b) partially reviewed | X |
| c) thoroughly reviewed | |
| d) measures designed based on the reviews | |
| e) review of implementation available | |
| 167. Do the existing incentive measure take account of economic, social, cultural, and ethical valuation of biological diversity? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 168. Has your country developed legal and policy frameworks for the design and implementation of incentive measures? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) frameworks in place | |
| e) review of implementation available | |
| 169. Does your country carry out consultative processes to define clear target-oriented incentive measures to address the underlying causes of biodiversity loss? | |
| a) no | |
| b) processes being identified | X |
| c) processes identified but not implemented | |
| d) processes in place | |
| 170. Has your country identified and considered neutralising perverse incentives? | |
| a) no | X |
| b) identification programme under way | |
| c) identified but not all neutralized | |
| d) identified and neutralized | |

### *Decision V/15. Incentive measures*

| | |
|---|---|
| 171. Has your country reviewed the incentive measures promoted through the Kyoto Protocol to the UN Framework Convention on Climate Change? | |
| a) no | X |
| b) yes | |
| 172. Has your country explored possible ways and means by which these incentive measures can support the objectives of the Convention on Biological Diversity in your country? | |
| a) no | X |
| b) under consideration | |
| c) early stages of development | |
| d) advanced stages of development | |
| e) further information available | |

### *Further comments on implementation of this Article*

The study on market and non-market incentives that is taking place includes:

- survey on existing networks and trends;
- study on the availability of seed, current status and level of informal seed exchange systems;
- survey of utilisation of farmers' varieties at the farm and consumer level (local, national, and international);
- identifying special consumer products that utilise farmers' varieties at national and international levels;
- conducting economic feasibility studies, including the possible negative social and cultural impacts of marketing products of farmers' varieties;
- studying the incentives that the communities themselves obtain for conserving farmers' varieties;
- providing appropriate recommendations for promoting the existing effective incentives for growing farmers' varieties;
- developing mechanisms for marketing products of farmers' varieties; and
- recommending new incentives if the need becomes apparent from the study.

EWCO is also currently reviewing its legislation to improve the existing and create new incentives for the local communities in the conservation of wildlife. The considerations include providing money in cash, implementing development projects, etc.

Consultative processes are in place to define clear target-oriented incentive measures. These include the consultations between EWCO and local communities attempting to create positive attitudes and a balance between cutting down trees and replanting and/or undertaking other conservation/maintenance measures. There are some cultural and ethical values of the local communities, which are now recognised by the formal sector in forest conservation. For example, in forests in the Southwest, some tree species are earmarked and individual members of the local communities have user rights over these trees for the purpose of hanging beehives. This type of non-intrusive ownership is now

recognised and respected by the formal sector, and it acts as an incentive to help protect forests.

Climate change and global warming issues have attracted some attention in Ethiopia. Through the Environment Protection Authority and the National Meteorological Services Agency, some projects are in place to monitor and protect the environment from pollution. However, it should be pointed out that, in global terms, these are mere gestures since the amount of fossil fuel used in Ethiopia is very small indeed!

## *Article 12: Research and training*

| 173. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 174. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The Government of Ethiopia accords a high priority to research and training. The expanding of the scope and the upgrading of the organisational structure of EARO and IBCR shows the attention being given to conservation and research in biological resources. Both institutions have developed strategies and action plans that focus on research and training.

Needs assessment in trained human resources has been carried out in both biodiversity and agriculture. EWCO has a Wildlife Health and Research Team as part of its recent development. However, in general, the necessary resources for research and training are limiting.

Several universities and colleges have training programmes in agricultural and/or biological sciences of relevance to the conservation and sustainable use of biological resources. Of these, the Addis Ababa University has postgraduate programmes in biology at both M.Sc. and Ph.D. levels. Likewise, the Alemaya University of Agriculture has M.Sc. degree programmes in agricultural sciences and it is currently introducing Ph.D. level programmes as well.

| 175. Has your country established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components (12a)? | |
|---|---|
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | X |
| d) programmes in place | X |

| 176. Has your country provided support to other Parties for education and training in measures for the identification, conservation, and sustainable use of biological diversity (12a)? | |
|---|---|
| a) no | X |
| b) yes | |

| 177. Does your country promote and encourage research, which contributes to the conservation and sustainable use of biological diversity (12b)? | |
|---|---|
| a) no | |
| b) yes – limited extent | |
| c) yes – significant extent | X |

| | |
|---|---|
| 178. Does your country promote and co-operate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources (12c)? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| ***If a developed country Party*** – <br><br> 179. Does your country's implementation of the above activities take into account the special needs of developing countries? | |
| a) no | |
| b) yes, where relevant | |

***Further comments on implementation of this Article***

The Department of Biology of the Addis Ababa University has a strong team of plant taxonomists teaching and carrying out taxonomic research, mostly on higher plants. The teaching goes up to the Ph.D. level. Though less developed, animal taxonomy is also well established in both teaching and research.

Biological diversity is becoming an area of interest also in other universities and colleges. Several graduate students sponsored by IBCR have been working on thesis projects that have relevance to the identification, conservation, and sustainable use of biological resources. Nevertheless, financial and other resources are limiting, and the work being done is much less than the country's biodiversity requires.

This is particularly so in lower plants and animals, and even in the small sized higher animals. These have no relevant teaching or research programmes in any institution in Ethiopia.

Ethiopia promotes and encourages research that contributes to the conservation and sustainable use of biological diversity. The Ethiopian Science and Technology Commission provides limited funding to support research in any area. Often the projects are on biological resources. However, this does not go far in meeting the needs.

## *Article 13: Public education and awareness*

| 180. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |
| 181. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

The government has given a high priority to the implementation of this article and made resources available, but due to the fact that Ethiopia is geographically a vast land and the population is large while it is economically very poor, the resources the government is allocating to educate the people is totally inadequate. Therefore, there is need for a lot more assistance than is available at present.

The Environmental Policy of Ethiopia has environmental education as one of its main elements. Consistent with the Policy, EPA has established an Environmental Education Department. The celebration of 'Environment Day' every year on June 5, which is co-ordinated by EPA, also helps in awareness raising.

| 182. Does your country promote and encourage understanding of the importance of, and the measures required for, the conservation of biodiversity (13a) through media? | |
|---|---|
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 183. Does your country promote and encourage understanding of the importance of, and the measures required for, the conservation of biodiversity (13a) through the inclusion of this topic in education programmes? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes - significant extent | |
| 184. Does your country co-operate with other States and international organizations in developing relevant educational and public awareness programmes (13b)? | |
| a) no | |
| b) yes - limited extent | |
| c) yes - significant extent | X |

***Decision IV/10. Measures for implementing the convention [part]***

| | |
|---|---|
| 185. Are public education and awareness needs covered in the national strategy and action plan? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 186. Has your country allocated appropriate resources for the strategic use of education and communication instruments at each phase of policy formulation, implementation, and evaluation? | |
| a) limited resources | X |
| b) significant but not adequate resources | |
| c) adequate resources | |
| 187. Does your country support initiatives by major groups that foster stakeholder participation and that integrate biological diversity conservation matters in their practice and education programmes? | |
| a) no | |
| b) yes | X |
| 188. Has your country integrated biodiversity concerns into education strategies? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | |
| d) yes | X |
| 189. Has your country made available any case-studies on public education and awareness and public participation, or otherwise sought to share experiences? | |
| a) no | |
| b) yes | X |
| 190. Has your country illustrated and translated the provisions of the Convention into any local language to promote public and awareness raising of relevant sectors? | |
| a) not relevant | |
| b) still to be done | X |
| c) under development | |
| d) yes | |
| 191. Is your country supporting local, national, sub-regional and regional education and awareness programmes? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| ***If a developing country Party or Party with economy in transition –***<br><br>192. When requesting assistance through the GEF, has your country proposed projects that promote measures for implementing Article 13 of the Convention? | |
| a) no | |
| b) yes | X |

### *Decision V/17. Education and public awareness*

| 193. Does your country support capacity building for education and communication in biological diversity as part of the national biodiversity strategy and action plans? | |
|---|---|
| a) no | |
| b) limited support | |
| c) yes (please give details) | X |

### *Further comments on implementation of this Article*

Most biological diversity related institutions have some biological diversity education or awareness components in their activity matrices. Some of these institutions have good audio-visual aids.

The media (radio, television, press) give coverage to matters pertaining to biological diversity conservation. Environmental concerns, including those related to biological diversity, are included in school curricula.

The Ministry of Agriculture has a Public Relations and Education Department. EWCO has a well-organised and equipped public education section assisted by WWF, JICA, NZS, LZS, AWF, IUCN, and some other NGOs.

IBCR provides facilitates for research and field work to some Ph.D. students of Addis Ababa University. In addition, it has a well-organised audio-visual unit for the training of farmers, visiting elementary and high school students and other groups.

Various NGOs are involved in education and awareness raising activities related to biological resources. Among them, the work carried out by the EWNHS is outstanding. Its activities cover many schools.

Co-operation with external institutions, e.g. the Wildlife Clubs of Kenya, the IUCN's Education Commissions, have helped in the increase of awareness on biological diversity.

## *Article 14: Impact assessment and minimising adverse impacts*

| | | | | | |
|---|---|---|---|---|---|
| 194. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
| a) High | X | b) Medium | | c) Low | |
| 195. To what extent are the resources available adequate for meting the obligations and recommendations made? | | | | | |
| a) Good | | b) Adequate | | c) Limiting | X |
| d) Severely limiting | | | | | |

***Further comments on relative priority and on availability of resources***

The requirements for the sustainability of development and the recognition of environmental rights are enshrined in the Constitution. The Environmental Policy of Ethiopia has taken Environmental Impact Assessment (EIA) as one of the cross sectoral polices that must be implemented. Accordingly, an EIA law has been drafted, thoroughly discussed, and approved by the Environmental Protection Council. The final approval of the law by the Council of Ministers followed by the Parliament is expected to be effected soon.

Anticipating the legislation, the Environmental Impact Statements (EIS) of development projects submitted to the Ethiopian Investment Authority are being sent voluntarily to the Environmental Protection Authority for review prior to the approval of the projects. Accordingly, the Environmental Protection Authority reviewed 53 projects between 1998 and 2000.

Since Ethiopia is one of the least developed countries, it faces huge economic problems. Therefore, its capacity to implement the article is very limited owing to financial and technical constraints.

| | |
|---|---|
| 196. Is legislation in place requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity (14 (1a))? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | X |
| d) legislation in place | |
| e) review of implementation available | |
| 197. Do such environmental impact assessment procedures allow for public participation (14 (1a))? | |
| a) no | |
| b) yes –limited extent | |
| c) yes - significant extent | X |
| 198. Does your country have mechanisms in place to ensure that the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account (14 (1b))? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | X |
| d) fully compliant with current scientific knowledge | |

| | |
|---|---|
| 199. Is your country involved in bilateral, regional and/or multilateral discussion on activities likely to significantly affect biological diversity outside your country's jurisdiction (14 (1c))? | |
| a) no | |
| b) yes – limited extent | |
| c) yes – significant extent | X |
| 200. Is your country implementing bilateral, regional, and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction (14 (1c))? | |
| a) no | |
| b) no, assessment of options in progress | |
| c) some completed, others in progress | |
| d) yes | X |
| 201. Has your country mechanisms in place to notify other States of cases of imminent or grave danger or damage to biological diversity originating in your country and potentially affecting those States (14 (1d))? | |
| a) no | X |
| b) early stages of development | |
| c) advanced stages of development | |
| d) mechanisms in place | |
| e) no need identified | |
| 202. Has your country mechanisms in place to prevent or minimise danger or damage originating in your State to biological diversity in other States or in areas beyond the limits of national jurisdiction (14 (1d))? | |
| a) no | X |
| b) early stages of development | |
| c) advanced stages of development | |
| d) fully compliant with current scientific knowledge | |
| e) no need identified | |
| 203. Has your country national mechanisms in place for emergency response to activities or events, which present a grave, and imminent danger to biological diversity (14 (1e))? | |
| a) no | X |
| b) early stages of development | |
| c) advanced stages of development | |
| d) mechanisms in place | |
| 204. Has your country encouraged international co-operation to establish joint contingency plans for emergency responses to activities or events which present a grave and imminent danger to biological diversity (14(1e))? | |
| a) no | |
| b) yes | X |
| c) no need identified | |

***Decision IV/10. Measures for implementing the Convention [in part]***

| | |
|---|---|
| 205. Has your country exchanged with other Contracting Parties information and experience relating to environmental impact assessment and resulting mitigating measures and incentives schemes? | |
| a) no | |
| b) information provided to the Secretariat | |
| c) information provided to other Parties | |
| d) information provided on the national CHM | X |
| 206. Has your country exchanged with other Contracting Parties information on measures and agreements on liability and redress applicable to damage to biological diversity? | |
| a) no | |
| b) information provided to the Secretariat | X |
| c) information provided to other Parties | X |
| d) information provided on the national CHM | X |

***Decision V/18. Impact assessment, liability and redress***

| | |
|---|---|
| 207. Has your country integrated environmental impact assessment into programmes on thematic areas and on alien species and tourism? | |
| a) no | |
| b) partly integrated | X |
| c) fully integrated | |
| 208. When carrying out environmental impact assessment does your country address loss of biological diversity and the interrelated socio-economic, cultural and human-health aspects relevant to biological diversity? | |
| a) no | |
| b) partly | |
| c) fully | X |
| 209. When developing new legislative and regulatory frameworks, does your country have in place mechanisms to ensure the consideration of biological diversity concerns from the early stages of the drafting process? | |
| a) no | |
| b) in some circumstances | X |
| c) in all circumstances | |
| 210. Does your country ensure the involvement of all interested and affected stakeholders in a participatory approach to all stages of the assessment process? | |
| a) no | |
| b) yes – in certain circumstances | |
| c) yes – in all cases | X |
| 211. Has your country organised expert meetings, workshops and seminars, and/or training, educational, and public awards programmes and exchange programmes in order to promote the development of local expertise in methodologies, techniques and procedures for impact assessment? | |
| a) no | |
| b) some programmes in place | X |
| c) many programmes in place | |
| d) integrated approach to building expertise | |

| | |
|---|---|
| 212. Has your country carried out pilot environmental impact assessment projects, in order to promote the development of local expertise in methodologies, techniques, and procedures? | |
| a) no | X |
| b) yes (please provide further details) | |
| 213. Does your country use strategic environmental assessments to assess not only the impact of individual projects, but also their cumulative and global effects, and ensure the results are applied in the decision making and planning processes? | |
| a) no | X |
| b) to a limited extent | |
| c) to a significant extent | |
| 214. Does your country require the inclusion of development alternatives, mitigation measures and consideration of the elaboration of compensation measures in environmental impact assessment? | |
| a) no | |
| b) to a limited extent | |
| c) to a significant extent | X |
| 215. Is national information available on the practices, systems, mechanisms, and experiences in the area of strategic environmental assessment and impact assessment? | |
| a) no | X |
| b) yes (please append or summarise) | |

***Further comments on implementation of this Article***

In the past, the environment did not feature in Ethiopia's development agenda. Project evaluation and decision-making mechanisms focused on short-term technical feasibility and on economic benefits. Past development practices did not anticipate, eliminate or mitigate potential environmental problems early in the planning process. This has resulted in a situation in which the country now experiences a seriously degrading land. Further development has the potential to damage the land further and exacerbate the situation by adding pollution to the existing problem of land degradation

In order to ensure that future developments in Ethiopia are sustainable, it has been recognised that EIA is one of the effective tools to safeguard the environment. This tool facilitates the inclusion of the characteristics of sustainability into development.

This has been recognised in the Constitution and incorporated as one of the cross sectoral policies in the Environmental Policy of Ethiopia. Some of the elements of the EIA policy which are relevant to the implementation of the CBD are:

- to ensure that EIA considers not only physical and biological impacts but also addresses social, socio-economic, political and cultural conditions;
- to ensure that public and private sector development programmes and projects recognise environmental impacts early and incorporate their containment into the development design process;
- to recognise that public consultation is an integral part of EIA and ensure that EIA procedures make provisions for both an independent review and public comment

before consideration by decisions makers.

EPA has developed general and sectoral EIA guidelines. They are in use only on a voluntary basis because the legislation process has not yet been finalised. Even thus, however, all owners of large projects are using them largely because they realise that it is better to do so now than to have to invest again when the EIA law comes into force in order to comply with it. These guidelines have given due consideration to the sustainable use and conservation of biological diversity and to the integration of socio-economic, cultural and human health aspects related to biological diversity. They have also given adequate provisions for the involvement of interested and affected stakeholders at all stages of the development of the project's assessment process.

The sectoral guidelines include those for agriculture, industry, mining, transport, dams and reservoirs, tanneries, textile mills, hydropower, irrigation and settlements. When preparing these guidelines, some South African expertise was used, resulting also in information sharing. In addition, the EIA systems of the World Bank, the Netherlands, Norway and other countries were reviewed while preparing the guideline.

Ethiopia has ratified the CITES Convention and is also a signatory of the Lusaka Agreement. There are some biodiversity projects resulting from international co-operation. For example, the *Conservation and Sustainable Use of the Rift Valley Lakes Biodiversity Resources*, which is being implemented by Ethiopia, Kenya and Tanzania, and the *Sustainable Integrated Management of Transboundary Environmental Resources*, which is starting to be implemented by Ethiopia and Djibouti.

In the course of developing the EIA guidelines a series of workshops, seminars, and short training courses were organised for experts drawn from Federal and Regional National State institutions.

With Ethiopia as the convenor, the African Group in the negotiations of the Biosafety Protocol developed an African position text on liability and redress to the chairman of the negotiations. The CBD Secretariat and the parties involved in the negotiations have this African submission on liability and redress as a component of the African Submission of a draft Protocol. Ethiopia is currently incorporating the ideas into its own environmental laws. To this end, it has been obtaining information on how some parties handle liability and redress following environmental damage.

## *Article 15: Access to genetic resources*

| 216. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 217. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Since this article of the Convention is very important for biodiversity-rich developing countries, Ethiopia has given a high priority to its implementation. The genetic resources of the country are an invaluable wealth and an essential resource that has to be conserved and sustainably used for national and global benefits. To this effect, a proclamation to regulate access to genetic resources and the associated community knowledge, innovations, practices and technologies has been drafted.

The complexity of implementing this article and the resources required constitute, however, a difficult challenge. The major challenge arises from the fact that it is very easy in these times of great mobility for individuals to get unauthorised and unnoticed access. This is because even one tiny seed is sufficient to take a genetic resource anywhere. The problems can obviously be solved only when importing and exporting countries unite to regulate access and enforce benefit-sharing schemes.

| 218. Has your country endeavoured to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties (15(2))? | |
|---|---|
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 219. Is there any mutual understanding or agreement in place between different interest groups and the State on access to genetic resources (15(4))? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 220. Has your country an open participation planning process, or any other process in place, to ensure that access to resources is subject to prior informed consent (15(5))? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) processes in place | |
| 221. Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties (15(6))? | |
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |

| 222. Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and the benefits arising from the commercial and other uses of genetic resources with any Contracting Party providing such resources (15(7))? | |
|---|---|
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | |
| d) comprehensive measures in place | X |
| If so, are these measures | |
| a) Legislation | X |
| b) Statutory policy or subsidiary legislation | |
| c) Policy and administrative measures | |

***Decision II/11 and Decision III/15. Access to genetic resources***

| | |
|---|---|
| 223. Has your country provided the Secretariat with information on relevant legislation, administrative and policy measures, participatory processes and research programmes? | |
| a) no | |
| b) yes, within the previous national report | |
| c) yes, through case-studies | |
| d) yes, through other means (please give details below) | X |
| 224. Has your country implemented capacity-building programmes to promote successful development and implementation of legislative, administrative and policy measures and guidelines on access, including scientific, technical, business, legal and management skills and capacities? | |
| a) no | |
| b) some programmes covering some needs | X |
| c) many programmes covering some needs | |
| d) programmes cover all perceived needs | |
| e) not perceived need | |
| 225. Has your country analysed experiences of legislative, administrative and policy measures and guidelines on access, including regional efforts and initiatives, for use in further development and implementation of measures and guidelines? | |
| a) no | |
| b) analysis in progress | X |
| c) analysis completed | |
| 226. Is your country collaborating with all relevant stakeholders to explore, develop and implement guidelines and practices that ensure mutual benefits to providers and users of access measures? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 227. Has your country identified national authorities responsible for granting access to genetic resources? | |
| a) no | |
| b) yes | X |
| 228. Is your country taking an active role in negotiations associated with the adaptation of the International Undertaking on Plant Genetic Resources for Food and Agriculture? | |
| a) no | |
| b) yes | X |

***Decision V/26. Access to genetic resources***

| | |
|---|---|
| 229. Has your country designated a national focal point and one or more competent national authorities to be responsible for access and benefit-sharing arrangements or to provide information on such arrangements? | |
| a) no | |
| b) yes | X |
| c) yes, and Executive Secretary notified | |
| 230. Do your county's national biodiversity strategy, and legislative, administrative or policy measures on access and benefit sharing contribute to conservation and suitable use objectives? | |
| a) no | |
| b) to a limited extent | X |
| c) to a significant extent | |
| ***Parties that are recipients of genetic resources***<br><br>231. Has your country adopted administrative or policy measures that are supportive of efforts made by provider countries to ensure that access to their genetic resources is subject to Articles 15, 16 and 19 of the Convention? | |
| a) no | |
| b) other arrangements made | |
| c) yes | X |
| 232. Does your country co-operate with other Parties in order to find practical and equitable solutions supportive of efforts made by provider countries to ensure that access to their genetic resources is subject to Articles 15, 16 and 19 of the Convention, recognising the complexity of the issue, with particular consideration of the multiplicity of prior informed consent considerations? | |
| a) no | |
| b) yes (please provide details) | X |
| 233. In developing its legislation on access, has your country taken into account and allowed for the development of a multilateral system to facilitate access and benefit-sharing in the context of the International Undertaking on Plant Genetic Resources? | |
| a) no | |
| b) legislation under development | |
| c) yes | X |
| 234. Is your country co-ordinating its positions in both the convention on Biological Diversity and the International Undertaking on Plant Genetic Resources? | |
| a) no | |
| b) taking steps to do so | |
| c) yes | X |
| 235. Has your country provided information to the Executive Secretary on user institutions, the market for genetic resources, non-monetary benefits, new and emerging mechanisms for benefit sharing, incentive measures, clarification of definitions, *sui generis* systems and 'intermediaries'? | |
| a) no | X |
| b) some information provided | |
| c) substantial information provided | |

| | |
|---|---|
| 236. Has your country submitted information on specific issues related to the role of intellectual property rights in the implementation of access and benefit-sharing arrangements to the Executive Secretary? | |
| a) no | X |
| b) yes | |
| 237. Has your country provided capacity-building and technology development and transfer for the maintenance and utilisation of *ex situ* collections? | |
| a) no | |
| b) yes to a limited extent | |
| c) yes to a significant extent | X |

***Further comments on implementation of this Article***

Despite limitations in resources to undertake immediate measures to minimise the rate of loss of biological diversity, Ethiopia is making all possible efforts, including the formulation of policies and laws, for the conservation and sustainable use of its genetic resources. Strategies have been designed to effect the conservation to the genetic variation within and among species of domesticated and wild flora and fauna within natural and human-managed ecosystems. A National Biodiversity Conservation and Research Policy has been formulated.

Ethiopia has drafted a law to regulate access to genetic resources and its associated community knowledge, innovations, practices and technologies, and to protect the rights of local communities. The objective of this proclamation is to ensure that the genetic resources of the country are conserved, developed and sustainably used; the community knowledge, innovations, practices and technologies of local communities on the conservation and use of genetic resources are respected; and the benefits derived from the use of genetic resources, and community knowledge, innovations, practices and technologies are fairly and equitably shared by the state and local communities. This draft proclamation includes among others:

- conditions of access - (basic conditions of access, and conditions for denying access);
- obligations during access;
- procedures of access - (prior informed consent, export permit, access to information, etc.); and
- equitable sharing of the benefits derived from the use of genetic resources.

The competent national authority for access and benefit sharing arrangements and for information on such arrangements is IBCR. The objectives of the national biodiversity conservation and research policy include, among others:

- to assert national sovereignty over genetic resources and develop mechanisms that would ensure the effective control of the movement and management of genetic resources;
- to ensure that Ethiopian's biological resources are conserved, developed, managed and sustainably utilised;
- to encourage and support the continuation of the role of local communities in

biodiversity conservation and development; and

- to ensure that local farming communities share the benefits that accrue from the use of indigenous germplasm.

One of the objectives of the policy is to 'create a functional and efficient organisational structure and inter-institutional linkage to facilitate co-operative action and co-ordination in biodiversity conservation and development, and to promote international and regional co-operation in biodiversity conservation and development'. Ethiopia has acquired genetic materials for food crop improvement purposes from various international organizations, e.g. CIMMYT, ICARDA, ICRISAT, IITA. Conversely, the Consultative Group on International Agricultural Research (CGIAR) and many national gene banks (particularly in developed countries) hold many germplasm collections from Ethiopia.

Ethiopia served as the chief negotiator of the Like Minded Group (LMG) in the negotiations for the Cartagena Protocol on Biosafety. Ethiopia has signed the Cartagena Protocol on Biosafety and is preparing to ratify it.

Furthermore, a national biotechnology policy and strategy has been drafted to facilitate the implementation of Articles 15, 16, and 19.

Ethiopia co-operated with the OAU to prepare an *African Model Law on Safety in Biotechnology*. EPA is now adapting this model law into a draft national law.

Ethiopia has a major Gene Bank of global importance with a large crop germplasm collection. This collection is actively utilised by national research and academic institutions, NGOs, and others. The country has also established joint research activities with some international organizations including ICARDA, ICRISAT, IPGRI, ILRI, IITA. The areas of co-operation include evaluation of genetic material, collaborative research, experience sharing, information exchange, etc.

## *Article 16: Access to, and Transfer of Technology*

| 238. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 239. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Ethiopia, like other developing countries, cannot benefit as much from modern technological advances as it would like. It needs technological improvements to tackle its serious problem of poverty. Therefore, the implementation of this article is strongly supported by the Ethiopian government as it provides an avenue for capacity development.

| 240. Has your country taken measures to provide or facilitate access for and transfer to other Contracting Parties of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment (16(1))? | |
|---|---|
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |
| 241. Is your country aware of any initiatives under which relevant technology is transferred to your country on concessional or preferential terms (16(2))? | |
| a) no | X |
| b) yes (please give brief details below) | |
| 242. Has your country taken measures so that Contracting Parties which provide genetic resources are provided access to and transfer of technology which makes use of those resources, on mutually agreed terms (16(3))? | |
| a) not relevant | |
| b) relevant, but no measures | |
| c) some measures in place | X |
| d) potential measures under review | X |
| e) comprehensive measures in place | |
| If so, are these measures | |
| a) Legislation | |
| b) Statutory policy or subsidiary legislation | |
| c) Policy and administrative arrangements | X |
| 243. Has your country taken measures so that the private sector facilitates access to joint development and transfer of relevant technology for the benefit of government institutions and the private sector of developing countries (16(4))? | |
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | X |

| | |
|---|---|
| d) comprehensive measures in place | |
| If so, are these measures | |
| a) Legislation? | |
| b) Statutory policy and subsidiary legislation? | |
| c) Policy and administrative arrangements? | X |
| 244. Does your country have a national system for intellectual property right protecting (16(5))? | |
| a) no | |
| b) yes | X |
| 245. If yes, does it cover biological resources (for example, plant species) in any way? | |
| a) no | X |
| b) yes – limited extent | |
| c) yes – significant extent | |

***Decision III/17. Intellectual property rights***

| | |
|---|---|
| 246. Has your country conducted and provided to the Secretariat case studies of the impact of intellectual property rights on the achievement of the Convention's objectives? | |
| a) no | X |
| b) some | |
| c) many | |

***Further comments on implementation of this Article***

Ethiopia is an agrarian country. Low agricultural productivity caused by complex factors including past neglect of the smallholder sector, poor infrastructure coupled with recurrent droughts, land degradation, and the low level of industrial development is contrasted with the expanding needs of a growing urban population. These challenges have to be met if Ethiopia is to feed its people optimally and to give them the opportunity for better standards of living. Therefore, it becomes essential to seek ways of stimulating agricultural production.

Developing and/or adopting appropriate technologies to tackle these problems can have a role to play in this. Biotechnology may become one such technology that can help tackle these existing and other emerging problems. However, as has already been recognised by the Cartagena Protocol on Biosafety, developing countries, including Ethiopia, are aware of that their low capacity to deal with the inherent risks modern biotechnology exacerbates its inherent risks. Hence, Ethiopia needs to be cautious in the use of modern biotechnology.

Since modern biotechnological inputs are, on the whole, patented by large transnational corporations with their head offices in industrialized countries, dependence for food production on genetically modified seed would remove control of this vital agricultural input from the level of the farming community in rural Ethiopia to the level of the board rooms in the cities of North America and Europe. It is counter intuitive to assume that such a removal of local control of agriculture would improve local food production. Even if Ethiopia were to use modern biotechnology in its agriculture, therefore, it must protect itself from such a remote control of its most important sector, and develop its own modern biotechnology endogenously.

## *Article 17: Exchange of information*

| 247. What is the relative priority afforded to implementation of this article and the associated decision by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 248. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Ethiopian has given a priority to the exchange of information with the rest of the world. To this effect, environmental information is recognised by the Environmental Policy of Ethiopia as essential for environmental protection and for the sustainability of development. An Environmental Information Centre has been established within EPA. It is the national focal institution for the UNEP-Global Environmental Information Exchange Network (INFOTERRA). However, the facilities for obtaining and exchanging information as yet are minimal.

The mandates of the Environmental Information Centre established within EPA are, among others, to:

- establish an environmental information system and database, and ensure information exchange;
- establish an environmental information referral service that directs users to the sources of the information;
- update the environmental information data on a continuous basis; and
- provide environmental information to users.

| 249. Has your country taken measures to facilitate the exchange of information from publicly available sources (17(1))? | |
|---|---|
| a) no measures | |
| b) restricted by lack of resources | |
| c) some measures in place | X |
| d) potential measures under review | |
| e) comprehensive measures in place | |
| ***If a developed country Party –***<br><br>250. Do these measures take into account the special needs of developing countries (17(1))? | |
| a) no | |
| b) yes – limited extent | |
| c) yes – significant extent | |

| 251. If so, do these measures include all the categories of information listed in Article 17(2), including technical, scientific and socio-economic research, training and surveying programmes, specialised knowledge, repatriation of information and so on? | |
|---|---|
| a) no | |
| b) yes – limited extent | |
| c) yes – significant extent | |

## *Article 18: Technical and scientific co-operation*

| 252. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 253. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Technical and scientific co-operation has been encouraged. Accordingly, there are a number of eastern African regional project initiatives funded or presented for funding to GEF and other funding organizations. At the country level, scientific and technical co-operation in biological resources is maintained among academic, research and development institutions namely, EARO, IBCR, Universities, Ethiopian Science and Technology Commission (ESTC), EPA, Ministry of Agriculture (MoA), Ministry of Water Research (MoWR). There are also projects of international co-operation in research and training among Eastern African countries.

| 254. Has your country taken measures to promote international technical and scientific co-operation in the field of conservation and sustainable use of biological diversity (18(1))? | |
|---|---|
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |
| 255. Do the measures taken to promote co-operation with other Contracting Parties in the implementation of the Convention pay special attention to the development and strengthening of national capabilities by means of human resources development and institution building (18(2))? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes- significant extent | |
| 256. Has your country encouraged and developed methods of co-operation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention (18(4))? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) methods in place | |
| 257. Does such co-operation include the training of personal and exchange of experts | |
| a) no | |
| b) yes - limited extent | X |
| c) yes – significant extent | |

| | |
|---|---|
| 258. Has your country promoted the establishment of joint research programmes and other joint ventures for the development of technologies relevant to the objectives of the Convention (18(5))? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |

***Decision II/3, Decision III/4 and Decisions IV/2. Clearing House Mechanism***

| | |
|---|---|
| 259. Is your country co-operating in the development and operation of the Clearing House Mechanism? | |
| a) no | |
| b) yes | X |
| 260 Is your country helping to develop national capabilities through exchanging and disseminating information on experiences and lessons in implementing the Convention | |
| a) no | |
| b) yes – limited extent | X |
| c) yes - significant extent | |
| 261. Has your country designated a national focal point for the Clearing-House Mechanism? | |
| a) no | |
| b) yes | X |
| 262. Is your country providing resources for the development and implementation of the Clearing House Mechanism? | |
| a) no | |
| b) yes, at the national level | X |
| c) yes, at national and international levels | |
| 263. Is your country facilitating and participating in workshops and other expert meetings to further the development of the CHM at international levels? | |
| a) no | |
| b) participation only | X |
| c) supporting some meetings and participating | |
| 264. Is your CHM operational? | |
| a) no | |
| b) under development | X |
| c) yes (please give details below | |
| 265. Is your CHM linked to the Internet | |
| a) no | |
| b) yes | X |
| 266. Has your country established a multi-sectoral and multi-disciplinary CHM steering committee or working groups at the national level? | |
| a) no | X |
| b) yes | |

***Decision V/14. Scientific and technical co-operation and the clearing house mechanisms (Article 18)***

| 267. Has your country reviewed the priorities identified in Annex I to the decision, and sought to implement them? | |
|---|---|
| a) not reviewed | X |
| b) reviewed but not implemented | |
| c) reviewed and implemented as appropriate | |

***Further comments on implementation of this Article***

Various levels of international co-operation are evident in Ethiopia involving activities in the area of development and environment. Multilateral and bilateral funding consisting of loans and grants as well as technical assistance make this possible. In the realm of multilateral co-operation, the most prominent actors are the European Economic Commission (EEC), Global Environmental Facility (GEF), United Nations Development Programme (UNDP), the World Bank, and UNIDO. Among bilateral co-operation, the most prominent are Sweden, Norway, Finland, Germany, The Netherlands, The United Kingdom, Italy, Ireland.

The Ethiopian National Biodiversity Conservation and Research Policy objectives aims, among others, to 'recognise, foster and augment traditional methods and the knowledge of local communities relevant to the conservation, development and sustainable use of biodiversity'.

There are several ongoing programmes of various institutions contributing to the establishment of efficient mechanisms for gathering, dissemination and application of research and development results and technologies for biodiversity conservation. The country has a National Science and Technology Policy, which, among others, aims to promote technical and scientific co-operation in the area of biodiversity conservation, research, and technology transfer. EPA has a department dedicated to environmental information.

IBCR is the national focal point for the Biodiversity Clearing House Mechanism. When IBCR has fully developed this mechanism it will link up with the Clearing House Mechanisms of other countries and make all this information available to users from those countries. Reciprocally, users in Ethiopia will have access to information generated in those countries.

## *Article 19: Handling of biotechnology and distribution of its benefits*

| 268. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 269. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | X | d) Severely limiting | |

***Further comments on relative priority and on availability of resources***

Modern biotechnology promises to be useful even though this promise has not materialised to any significant degree. On the other hand, modern biotechnology may prove to be very harmful. Therefore, if it is to develop usefully, the risks involved with it should be prevented. It is for this reason that Ethiopia has given high priority to signing the Cartagena Biosafety Protocol and is preparing to ratify it. Moreover, Ethiopia has helped the OAU to draft an *African Model Law on Safety in Biotechnology* and, based on this model law, is developing its own national law. The country has also prepared a draft National Biotechnology Policy and Strategy.

| 270. Has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties who provide the genetic resources for such research (19(1))? | |
|---|---|
| a) no measures | |
| b) some measures in place | X |
| c) potential measures under review | |
| d) comprehensive measures in place | |
| If so, are these measures: | |
| a) Legislation | |
| b) Statutory policy and subsidiary legislation | |
| c) Policy and administrative measures | |

| 271. Has your county taken all practicable measures to promote and advance priority access on a fair and equitable basis by Contracting Parties to the results and benefits arising from biotechnologies based upon genetic resources provided by those Contracting Parties (19(2))? | |
|---|---|
| a) no measures | |
| b) some measures in place | |
| c) potential measures under review | X |
| d) comprehensive measures in place | |

***Decision IV/3. Issues related to biosafety and Decision V/1. Work Plan of the Intergovernmental Committee for the Cartagena Protocol on Biosafety***

| 272. Is your country a Contracting Party to the Cartagena Protocol on Biosafety? | |
|---|---|
| a) not a signatory | |
| b) signed, ratification in progress | X |
| c) instrument of ratification deposited | |

***Further comments on implementation of this Article***

Biotechnology is one of the priority areas identified in the National Science and Technology Policy of Ethiopia issued in 1993. Accordingly, a draft national biotechnology policy has been prepared and its approval by the Government is pending. The general objective of the draft policy is to promote biotechnology development and to use it, taking due measures to meet safety concerns to overcome important social, economic, and environmental problems with the view to improving the quality of life.

The Carategna Biosafety Protocol and the Draft National Legislation in Biotechnology have rigorous provisions on risk assessment and risk management to ensure human and biodiversity health and environmental integrity as well as socio-economic wellbeing. The owners of biotechnology, like the owners of any other technology, should be held liable for any harm inflicted and they should compensate for any damage caused.

There should also be an effective international law to prevent the use of biotechnology to build trans-sectoral and trans-geographical corporate monopolies that control all the steps starting at the laboratory and extending all the way to the retail shop. This new monopolization process can not be fully tackled at the national level alone.

There is a lot of hatred of people of different ethnic and/or cultural origin. Ethiopia is worried that such hatred which has in the past motivated attempts to exterminate those hated, may continue to do so more effectively with the application of genetic engineering to ethnic warfare. Such abuse of genetic engineering requires a co-operative globally co-ordinated system of vigilance to prevent it from ever occurring.

Building a national capacity for biotechnology and sustaining its development is a challenge which Ethiopia is convinced is worth taking with appropriate caution.

A preliminary assessment carried out by the Ethiopian Science and Technology Commission (ESTC) showed that modern biotechnology related R&D activities are limited both in number and scope. They consist of scattered efforts of individuals in higher education and research institutions.

## *Article 20: Financial resources*

| 273. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| a) High | X | b) Medium | | c) Low | |

| 274. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | | d) Severely limiting | X |

***Further comments on relative priority and on availability of resources***

Ethiopia, being one of the least developed countries in the world, is highly dependent on the willingness of donors to give financial support for the implementation of this Convention. The country has not benefited from GEF funding as much as it could have done primarily because of the low level of initiative taken so far. A low level of awareness on the workings of the complex GEF funding mechanism has also contributed to this. Neither is funding from other bilateral and multilateral organizations very high.

| 275. Has your country provided financial support and incentives in respect of those national activities which are intended to achieve the objectives of the Convention (20(1))? | |
|---|---|
| a) no | |
| b) yes – incentives only | |
| c) yes – financial support only | X |
| d) yes – financial support and incentives | |

***If a developed country Party*** -

| 276. Has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfil the obligations of the Convention, as agreed between you and the interim financial mechanism (20(2))? | |
|---|---|
| a) no | |
| b) yes | |

***If a developing country Party or Party with economy in transition*** –

| 277. Has your country received new and additional financial resources to enable you to meet the agreed full incremental costs of implementing measures which fulfil the obligations of the Convention (20(2))? | |
|---|---|
| a) no | |
| b) yes | X |

| | |
|---|---|
| ***If a developed country Party*** – | |
| 278. Has your country provided financial resources related to implementation of the Convention through bilateral, regional, and other multilateral channels (20(3))? | |
| ***If a developing country Party or Party with economy in transition*** – | |
| 279. Has your country used financial resources related to implementation of the Convention from bilateral and other multilateral channels (20(3))? | |
| a) no | |
| b) yes | X |

***Decision III/6. Additional financial resources***

| | |
|---|---|
| 280. Is your country working to ensure that all funding institutions (including bilateral assistance agencies) are striving to make their activities more supportive of the Convention? | |
| a) no | |
| b) yes – limited extent | X |
| c) yes – significant extent | |
| 281. Is your country co-operating in any efforts to develop standardised information on financial support for the objectives of the Convention? | |
| a) no | X |
| b) yes (please attach information) | |

***Decision V/11. Additional financial resources***

| | |
|---|---|
| 282. Has your country established a process to monitor financial support to biodiversity? | |
| a) no | |
| b) procedures being established | X |
| c) yes (please provide details) | |
| 283. Are details available of your country's financial support to national biodiversity activities? | |
| a) no | |
| b) not in a standardised format | X |
| c) yes (please provide details) | |
| 284. Are details available of your country's financial support to biodiversity activities in other countries? | |
| a) not applicable | X |
| b) no | |
| c) not in a standardised format | |
| d) yes (please provide details) | |
| ***Developed country Parties*** – | |
| 285. Does your country promote support for the implementation of the objectives of the Convention in the funding policy its bilateral funding institutions and those of regional and multilateral funding institutions? | |
| a) no | |
| b) yes | |

| ***Developing country Parties*** – | |
|---|---|
| 286. Does your country discuss ways and means to support implementation of the objectives of the Convention in its dialogue with funding institutions? | |
| a) no | |
| b) yes | X |
| 287. Has your country compiled information on the additional financial support provided by the private sector? | |
| a) no | X |
| b) yes (please provide details) | |
| 288. Has your country considered tax exemptions in national taxation systems for biodiversity-related donations? | |
| a) no | |
| b) not appropriate to national conditions | |
| c) exemptions under development | |
| d) exemptions in place | X |

***Further comments on implementation of this Article***

In Ethiopia, environmental projects constitute a major part of international co-operation. Projects in the fields of wildlife, biodiversity and forest conservation are being implemented in the country. The most active actors in multilateral co-operation are the World Bank, UNDP, UNIDO and EEC while for bilateral co-operation they are Sweden, Norway, Finland, Ireland, Germany, the Netherlands, the United Kingdom, Italy, and Ireland.

Ethiopia is getting financial support from various multilateral and bilateral sources. These projects are monitored *as per* the respective mutually agreed scheme in the respective project documents. For instance, the UNDP and the Ministry of Economic Development and Co-operation (MEDAC) have jointly prepared guidelines for National Execution of UNDP assisted programmes in Ethiopia, of which biodiversity is one of the major sectors. Ethiopia has also developed a set of draft guidelines for GEF funded projects.

## *Article 21: Financial mechanisms*

| 289. What is the relative priority afforded to implementation of this Article and the associated decisions by your country? | | | | | |
|---|---|---|---|---|---|
| A) High | X | b) Medium | | c) Low | |

| 290. To what extent are the resources available adequate for meeting the obligations and recommendations made? | | | | | | | |
|---|---|---|---|---|---|---|---|
| a) Good | | b) Adequate | | c) Limiting | | d) Severely limiting | X |

***Further comments on relative priority and on availability of resources***

Being a Party to CBD and UNFCCC, Ethiopia is eligible for access to GEF funds. However, the country has so far one full GEF project and five PDF level projects only. Hence, it is categorised among the few least benefiting countries. This has constrained the implementation of the Convention.

| 291. Has your country worked to strengthen existing financial institutions to provide financial resources for the conservation and sustainable use of biological diversity? | |
|---|---|
| a) no | X |
| b) yes | |

***Decisions III/7. Guidelines for the review of the effectiveness of the financial mechanism***

| 292. Has your country provided information on experiences gained through activities funded by the financial mechanism? | |
|---|---|
| a) not effective | |
| b) no, although there are activities | X |
| c) yes, within the previous national report | |
| d) yes, through case-studies | |
| e) yes, through other means (please give details below) | |

***Further comments on implementation of this Article***

The GEF was set up in 1992 to help developing countries focus on four major environmental problems of which loss of biodiversity is one. It also provides financial grants for investment projects, technical assistance, and research. However, it has been learnt from experience that GEF support is unpredictable and getting approval is very difficult and time consuming. Nevertheless, approved GEF projects are smoothly implemented, due to the fact that flexibility of implementation is one of the good traits of GEF support.

## *Article 23: Conferences of the Parties*

| 293. How many people from your country participated in each of the meetings of the Conference of the Parties? | |
|---|---|
| a) COP 1 (Nassau) | 2 |
| b) COP 2 (Jakarta) | 1 |
| c) COP 3 (Buenos Aires) | 3 |
| d) COP 4 (Bratislava) | 3 |
| e) COP 5 (Nairobi) | 6 |

***Decision I/6, Decision II/10, Decision III/24, and Decision IV/17. Finance and budget***

| 294. Has your country paid all of its contributions to the Trust Fund? | |
|---|---|
| a) no | |
| b) yes | X |

***Decision IV/16 (in part). Preparation for meetings of the Conference of the Parties***

| 295. Has your country participated in regional meetings focused on discussing implementation of the Convention before any meetings of the conference of the Parties? | |
|---|---|
| a) no | |
| b) yes (please specify which) | X |
| ***If a developed country Party –***<br><br>296. Has your country funded regional and sub-regional meetings to prepare for the COP, and facilitated the participation of developing countries in such meetings? | |
| a) no | |
| b) yes (please provide details below) | |

***Decision V/22. Budget for the programme of work for the biennium 2001-2002***

| 297. Did your country pay its contribution to the core budget (By Trust Fund) for 2001 by 1st January 2001? | |
|---|---|
| a) yes in advance | |
| b) yes on time | |
| c) no but subsequently paid | X |
| d) not yet paid | |
| 298. Has your country made additional voluntary contributions to the Trust Funds of the Convention? | |
| a) yes in the 1999-2000 biennium | |
| b) yes for the 2001-2002 biennium | |
| c) export to do so for the 2001-2002 biennium | |
| d) no | X |

## *Article 24: Secretariats*

| 299. Has your country provided direct support to the Secretariat in terms of seconded staff, financial contributions for Secretariat activities, etc.? | |
|---|---|
| a) no | X |
| b) yes | |

***Further comments on implementation of this Article***

| No further comment |
|---|

## *Article 25: Subsidiary body on scientific, technical, and technological advice (SBSTTA)*

| 300. How many people from your country participated in each of the meetings of SBSTTA? | |
|---|---|
| a) SBSTTA I (Paris) | |
| b) SBSTTA II (Montreal) | |
| c) SBSTTA III (Montreal) | |
| d) SBSTTA IV (Montreal) | 1 |
| e) SBSTTA V (Montreal) | |

***Further comments on implementation of this Article***

| No further comment. |
|---|

## *Article 26: Reports*

| 301. What is the status of your first national report? | |
|---|---|
| a) Not submitted | X |
| b) Summary report submitted | |
| c) Interim/draft report submitted | |
| d) Final report submitted | |
| If b), c) or d) , was your report submitted: | |
| by the original deadline of 1/1/98 (Decisions III/9)? | |
| by the extended deadline of 31/12/98 (Decision IV/14)? | |
| later (please specify date) | |

***Decision IV/14 National reports***

| 302. Did all relevant stakeholders participate in the preparation of this national report, or in the compilation of information used in the report? | |
|---|---|
| a) no | |
| b) yes | X |
| 303. Has your country taken steps to ensure that its first and/or second national report(s) is/are available for use by relevant stakeholders? | |
| a) no | |
| b) yes | X |
| If yes, was this by | |
| a) informal distribution? | |
| b) publishing the report? | |
| c) making the report available on request? | X |
| d) posting the report on the Internet? | |

***Decision V/19. National reporting***

| 304. Has your country prepared voluntary detailed thematic reports on one or more of the items for in-depth consideration at an ordinary meeting of the parties, following the guidelines provided? | |
|---|---|
| a) no | |
| b) yes – forest ecosystems | X |
| c) yes – alien species | |
| d) yes – benefit sharing | |

***Further comments on implementation of this Article***

This national report has been prepared by involving the major stakeholders for the implementation and monitoring of the CBD. The draft was then widely distributed for comments before it was finalised. The final report will be distributed to pertinent governmental and non-governmental organizations.

**National Report on the Forest Biological Diversity**
The thematic report was prepared in response to the request of the Secretariat of the CBD. The preparation of the report was co-ordinated by EPA and involved the Ministry of Agriculture, IBCR, and the Forestry Directorate of EARO

This thematic report on forest biological diversity has been submitted to the Executive Secretary of CBD before May 15/2001.

***Decision V/6. Ecosystem approach***

| | |
|---|---|
| 305. Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6? | |
| a) no | |
| b) under consideration | X |
| c) some aspects are being applied | |
| d) substantially implemented | |
| 306. Is your country developing practical expressions of the ecosystem approach for national policies and legislation and for implementation activities, with adaptation to local, national, and regional conditions, in particular in the context of activities developed within the thematic areas of the Convention? | |
| a) no | |
| b) under consideration | X |
| c) some aspects are being applied | |
| d) substantially implemented | |
| 307. Is your country identifying case studies and implementing pilot projects that demonstrate the ecosystem approach, and using workshops and other mechanisms to enhance awareness and share experience? | |
| a) no | |
| b) case-studies identified | |
| c) pilot projects underway | X |
| d) workshops planned/held | X |
| e) information available through CHM | |
| 308. Is your country strengthening capacities for implementation of the ecosystem approach, and providing technical and financial support for capacity building to implement the ecosystem approach? | |
| a) no | |
| b) yes within the country | X |
| c) yes including support to other parties | |

| 309. Has your country promoted regional co-operation in applying the ecosystem approach across national borders? | |
|---|---|
| a) no | |
| b) informal co-operation | |
| c) formal co-operation (please give details) | X |

***Inland water ecosystems***

***Decision IV/4. Status and trends of the biological diversity of inland water ecosystems and options for conservation and sustainable use***

| 310. Has your country included information on biological diversity in wetlands when providing information and reports to the CSD, and considered including inland water biological diversity issues at meetings to further the recommendations of the CSD? | |
|---|---|
| a) no | X |
| b) yes | |
| 311. Has your country included inland water biological diversity considerations in its work with organizations, institutions and conventions affecting or working with inland water? | |
| a) no | |
| b) yes | X |
| ***If a developing country Party or Party with economy in transition -***<br><br>312. When requesting support for projects relating to inland water ecosystems from the GEF, has your country given priority to identifying important areas for conservation, preparing and implementing integrated watershed catchment and river basin management plans, and investigating processes contributing to biodiversity loss? | |
| a) no | |
| b) yes | X |
| 313. Has your country reviewed the programme of work specified in Annex 1 to the decision, and identified priorities for national action in implementing the programme? | |
| a) no | |
| b) under review | X |
| c) yes | |

***Decision V/2. Progress report on the implementation of the programme of work on the biological diversity of inland water ecosystems (implementation of decision IV/4)***

| | |
|---|---|
| 314. Is your country supporting and/or participating in the River Basin Initiative? | |
| a) no | |
| b) yes | X |
| 315. Is your country gathering information on the status of inland water biological diversity? | |
| a) no | |
| b) assessments ongoing | X |
| c) assessments completed | |
| 316. Is this information available to other Parties? | |
| a) no | |
| b) yes - national report | |
| c) yes - through the CHM | |
| d) yes - other means (please give details below) | X |
| 317. Has your country developed national and/or sectoral plans for the conservation and sustainable use of inland water ecosystems? | |
| a) no | |
| b) yes - national plans only | |
| c) yes - national plans and major sectors | X |
| d) yes - national plans and all sectors | |
| 318. Has your country implemented capacity-building measures for developing and implementing these plans? | |
| a) no | |
| b) yes | X |

***Decision III/21. Relationship of the Convention with the CSD and biodiversity-related conventions***

| | |
|---|---|
| 319. Is the conservation and sustainable use of wetlands, and of migratory species and their habitats, fully incorporated into your national strategies, plans and programmes for conserving biological diversity? | |
| a) no | |
| b) yes | X |

***Further comments on implementation of these decisions and the associated programme of work***

**305. Forest Genetic Resources Conservation**

Ethiopia is endowed with diverse ecosystems and correspondingly diverse flora and fauna. The Ethiopian flora contains around 7000 species of higher plants, out of which about 800 are endemic. The total number of woody plant species is estimated to be about 1000, out of which about 300 are tree species. Reliable information on the extent, distribution, species diversity and rate of depletion of the forest resource of Ethiopia is very limited. There are no accurate data on the stand dynamics that indicate growth rates and ecological interactions.

The conservation strategy of Ethiopia sets out principles, guidelines and strategies for the effective management of the environment, including biodiversity resources.

Consistent with this, Ethiopia has launched a Forest Genetic Resources Conservation Project to compile available information on indigenous trees and shrubs, and to produce a dendrology manual and a database. The project focuses on *in situ* conservation, mainly in nature conservation areas, natural and undisturbed forest ecosystems without any management, and disturbed forest ecosystems conserved under a certain degree of management. This approach of the project partially fulfils the ecosystem approach of the CBD. In addition to this, there are also some small projects on participatory joint forest management in the natural forests found in different parts of the country. These ventures try to provide for forest products required by the local communities from the natural forest while at the same time conserving the forest genetic resources.

**309, 314, 315. Regional co-operation has been initiated for GEF funding including the following:**

There is a programme of co-operation among the 10 countries in the Nile basin. This programme comprises activities to create a co-ordination mechanism and an enabling environment for the implementation of shared visions through action on the ground. It includes five broad themes: co-operation; confidence building and stakeholder involvement; socio-economic, environmental and sectoral analysis; development and investment planning; and applied training. This co-operative framework is supported by UNDP.

Another example of a regional project involving Ethiopia is the Conservation and Sustainable Use of Biodiversity in the Rift Valley Lakes (Ethiopia, Kenya and Tanzania). The goal of the project is to enhance biodiversity conservation and sustainable utilisation within the Rift Valley Lakes and Wetlands along the Great African Rift Valley. The major components of the project are establishing and strengthening systems for the conservation of areas or ecosystems at risk, and the sustainable utilisation by combining the goals of biodiversity conservation, production and the promotion of various forms of multiple uses.

The government of Ethiopia has embarked upon a programme for integrated development of the national water resources. To realise this, the preparation of master plans for the integrated development of 12 river basins in the country has been launched. One of the objectives of the master plans is the conservation and sustainable utilisation of biodiversity resources in inland water ecosystems and their vicinities. So far, integrated and comprehensive water resources development master plans have been prepared for 5 river basins: namely, Omo-Gibe, Baro-Akobo, Abay (Blue Nile), Tekeze and Mereb.

A draft Water Resources Management and Utilisation Regulation has also been prepared and distributed to various concerned government institutions for comment. Currently, the Ministry of Water Resources is preparing the water sector development strategy and programme, which is the basis for implementing the water resource management policy.

Ethiopia is rich in bird species — it supports 9% of the world's 9,700 bird species. With the objective of enhancing biodiversity conservation in Ethiopia, a GEF funded project — implemented through African NGO–Government Partnerships — for sustainable biodiversity conservation in Important Bird Areas of Ethiopia is being implemented in

| |
|---|
| Ethiopia and in 9 other African countries. |

### *Marine and coastal biological diversity*
### *Decision II/10 and Decision IV/5. Conservation and sustainable use of marine and coastal biological diversity*

| | |
|---|---|
| 320. Does your national strategy and action plan promote the conservation and sustainable use of marine and coastal biological diversity? | |
| a) no | X |
| b) yes - limited extent | |
| c) yes - significant extent | |
| 321. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems? | |
| a) no | X |
| b) early stages of development | |
| c) advanced stages of development | |
| d) arrangements in place | |
| 322. Has your country provided the Executive Secretary with advice and information on future options concerning the conservation and sustainable use of marine and coastal biological diversity? | |
| a) no | X |
| b) yes | |
| 323. Has your country undertaken and/or exchanged information on demonstration projects as practical examples of integrated marine and coastal area management? | |
| a) no | X |
| b) yes - previous national report | |
| c) yes - case-studies | |
| d) yes - other means (please give details below) | |
| 324. Has your country programmes in place to enhance and improve knowledge on the genetic structure of local populations of marine species subjected to stock enhancement and/or sea-ranching activities? | |
| a) no | X |
| b) programmes are being developed | |
| c) programmes are being implemented for some species | |
| d) Programmes are being implemented for many species | |
| e) not a perceived problem | |
| 325. Has your country reviewed the programme of work specified in an annex to the decision, and identified priorities for national action in implementing the programme? | |
| a) no | X |
| b) under review | |
| c) yes | |

### *Decision V/3. Progress report on the implementation of the programme of work on marine and coastal biological diversity (implementation of decision IV/5)*

| | |
|---|---|
| 326. Is your country contributing to the implementation of the work plan on coral bleaching? | |
| a) no | X |

| | |
|---|---|
| b) yes | |
| c) not relevant | |
| 327. Is your country implementing other measures in response to coral bleaching? | |
| a) no | X |
| b) yes (please provide details below) | |
| c) not relevant | |
| 328. Has your country submitted case-studies on the coral bleaching phenomenon to the Executive Secretary? | |
| a) no | X |
| b) yes | |
| c) not relevant | |

***Further comments on implementation of these decisions and the associated programme of work***

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| Since 1991, Ethiopia has become a land-locked country. Therefore, this article is not relevant to Ethiopia. |

***Agricultural biological diversity***

***Decision III/11 and Decision IV/6. Conservation and sustainable use of agricultural biological diversity***

| | |
|---|---|
| 329. Has your country identified and assessed relevant ongoing activities and existing instruments at the national level? | |
| a) no | |
| b) early stages of review and assessment | |
| c) advanced stages of review and assessment | |
| d) assessment completed | X |
| 330. Has your country identified issues and priorities that need to be addressed at the national level? | |
| a) no | |
| b) in progress | |
| c) yes | X |
| 331. Is your country using any methods and indicators to monitor the impacts of agricultural development projects, including the intensification and extension of production systems, on biological diversity? | |
| a) no | |
| b) early stages of development | X |
| c) advanced stages of development | |
| d) mechanisms in place | |
| 332. Is your country taking steps to share experiences addressing the conservation and sustainable use of agricultural biological diversity? | |
| a) no | |
| b) yes - case-studies | |
| c) yes - other mechanisms (please specify) | X |
| 333. Has your country conducted case-studies on the issues identified by SBSTTA: i) pollinators, ii) soil biota, and iii) integrated landscape management and farming systems? | |
| a) no | X |
| b) yes - pollinators | |
| c) yes - integrated landscape management and farming systems | |
| 334. Is your country establishing or enhancing mechanisms for increasing public awareness and understanding of the importance of the sustainable use of agro-biodiversity components? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | X |
| d) mechanisms in place | |
| 335. Does your country have national strategies, programmes and plans which ensure the development and successful implementation of policies and actions that lead to sustainable use of agro-biodiversity components? | |
| a) no | |
| b) early stages of development | |
| c) advanced stages of development | |
| d) mechanisms in place | X |

| | |
|---|---|
| 336. Is your county promoting the transformation of unsustainable agricultural practices into sustainable production practices adapted to local biotic and abiotic conditions? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |
| 337. Is your country promoting the use of farming practices that not only increase productivity, but also arrest degradation as well as reclaim rehabilitate, restore and enhance biological diversity? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |
| 338. Is your country promoting mobilisation of farming communities for the development, maintenance and use of their knowledge and practices in the conservation and sustainable use of biological diversity? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |
| 339. Is your country helping to implement the Global Plan of Action for the Conservation and Sustainable Utilisation of Plant Genetic Resources? | |
| a) no | |
| b) yes | X |
| 340. Is your country collaborating with other Contracting Parties to identify and promote sustainable agricultural practices and integrated landscape management? | |
| a) no | |
| b) yes | X |

***Decision V/5. Agricultural biological diversity: review of phase I of the programme of work and adoption of a multi-year work programme***

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|---|---|
| 341. Has your country reviewed the programme of work annexed to the decision and identified how you can collaborate in its implementation? | |
| a) no | |
| b) yes | X |
| 342. Is your country promoting regional and thematic co-operation within this framework of the programme of work on agricultural biological diversity? | |
| a) no | |
| b) some co-operation | X |
| c) widespread co-operation | |
| d) full co-operation in all areas | |
| 343. Has your country provided financial support for implementation of the programme of work on agricultural biological diversity? | |
| a) no | X |
| b) limited additional funds | |
| c) significant additional funds | |
| ***If a developed country Party -***<br><br>344. Has your country provided financial support for implementation of the programme of work on agricultural biological diversity, in particular for capacity building and case-studies, in developing countries and countries with economies in training? | |
| a) no | |
| b) yes within existing co-operation programme(s) | |
| c) yes, including limited additional funds | |
| d) yes, with significant additional funds | |
| 345. Has your country supported actions to raise public awareness in support of sustainable farming and food production systems that maintain agricultural biological diversity? | |
| a) no | |
| b) yes, to a limited extent | X |
| c) yes, to a significant extent | |
| 346. Has your country co-ordinated its position in both the Convention on Biological Diversity and the International Undertaking on Plant Genetic Resources? | |
| a) no | |
| b) taking steps to do so | |
| c) yes | X |
| 347. Is your country a Contracting Party to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade? | |
| a) not a signatory | X |
| b) signed - ratification in process | |
| c) instrument of ratification deposited | |
| 348. Is your country supporting the application of the Executive Secretary for observer status in the Committee on Agriculture of the World Trade Organizations? | |
| a) no | |
| b) yes | X |

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|---|---|
| 349. Is your country collaborating with other parties on the conservation and sustainable use of pollinators? | |
| a) no | X |
| b) yes | |
| 350. Is your country compiling case studies and implementing pilot projects relevant to the conservation and sustainable use of pollinators? | |
| a) no | X |
| b) yes (please provide details) | |
| 351. Has information on scientific assessments relevant to genetic use restriction technologies been supplied to other contracting parties through media such as the Clearing-House Mechanism? | |
| a) not applicable | X |
| b) no | |
| c) yes - national report | |
| d) yes - through the CHM | |
| e) yes - other means (please give details below) | |
| 352. Has your country considered how to address generic concerns regarding such technologies as genetic use restriction technologies under international and national approaches to the safe and sustainable use of germplasm? | |
| a) no | |
| b) yes - under consideration | |
| c) yes - measures under development | X |
| 353. Has your country carried out scientific assessments on *inter alia* ecological, social and economic effects of genetic use restriction technologies? | |
| a) no | X |
| b) some assessments | |
| c) major programme of assessments | |
| 354. Has your country disseminated the results of scientific assessments on *inter alia* ecological, social and economic effects of genetic use restriction technologies? | |
| a) no | X |
| b) yes - through the CHM | |
| c) yes - other means (please give details below) | |
| 355. Has your country identified the ways and means to address the potential impacts of genetic use restriction technologies on the *in situ* and *ex situ* conservation and sustainable use, including food security, of agricultural biological diversity? | |
| a) no | X |
| b) some measures identified | |
| c) potential measures under review | |
| d) comprehensive review completed | |
| 356. Has your country assessed whether there is a need for effective regulations at the national level with respect to genetic use restriction technologies to ensure the safety of human health, the environment, food security and the conservation and sustainable use of biological diversity? | |
| a) no | X |
| b) yes - regulation needed | |
| c) yes - regulation not needed (please give more details) | |

| | |
|---|---|
| 357. Has your country developed and applied such regulations taking into account, *inter alia,* the specific nature of variety-specific and trait-specific genetic use restriction technologies? | |
| a) no | X |
| b) yes - developed but not yet applied | |
| c) yes - developed and applied | |
| 358. Has information about these regulations been made available to other contracting parties? | |
| a) no | X |
| b) yes - through the CHM | |
| c) yes - other means (please give details below) | |

***Further comments on implementation of these decisions and the associated programme of work***

Ethiopia has recognised that conservation and development of Agricultural Biodiversity in particular and its genetic resources in general is unlikely to succeed without a national commitment through an appropriate national policy. To this effect, the National Biodiversity Conservation and Research Policy has been formulated.

Ethiopia is considered as one of the richest crop genetic resources centres in the world. Crop plants e.g. arabica coffee, teff, enset, anchote, niger seed (noug) are known to have originated in Ethiopia. Local cultivars/farmers' varieties of several major crops, e.g. wheat, barley, sorghum, field pea, faba bean, chick pea, cowpea, flax, castor bean and wild relatives of some of the world's important crops are abundant in Ethiopia. This actually, but even more so potentially, useful crop genetic resource is under constant threat of depletion.

Recognising the importance of conserving biodiversity in general and agro-biodiversity in particular, IBCR collects, conserves, evaluates, documents and promotes the utilisation of crop germplasm occurring in Ethiopia. The major activities being carried out by the Institute are:

- **Collection and Conservation**

  Systematic crop germplasm collections have been undertaken in all administrative regions of the country, covering a wide range of agro-ecological conditions. Both, *ex situ* and *in situ* strategies of conservation are followed.

- **Characterisation and Evaluation**

  Characterisation and preliminary evaluation on basic morpho-agronomic characteristics have been made on about 70% of the collections (around 45,000 accessions) since the establishment of the IBCR Gene Bank. Additional evaluation of characters such as nutritional value and reaction to certain important diseases has also been undertaken on some of the crop germplasm accessions.

- **Utilization**

  About 2000 germplasm accessions of various crop species are distributed to researchers and academic and development institutions annually. Since the establishment of the IBCR Gene Bank, over 30,000 accessions of about 25 crop species have been distributed.

- **Research**

  Various research activities have been carried out by the Institute to determine the potentialities of farmers' varieties. These include studies on soil acidity tolerance, chemical composition, drought tolerance and diversity studies. Research is carried out in collaboration with other institutions, particularly EARO, the Universities, and other research institutions.

- **Community based *in situ* conservation initiative**

  A project entitled *A Dynamic Farmer-Based Approach to the Conservation of Ethiopia's Plant Genetic Resources* funded by the GEF was initiated in 1994. It addresses a neglected aspect of plant diversity; that of indigenous crop varieties maintained by farmers in dynamic agro-ecosystems.

The gaps and constraints for agro-biodiversity conservation are:

- insufficient knowledge on the existing crop genetic diversity in the country;
- research gaps on resource assessment and diversity analysis, economic and sustainable conservation, and crop germplasm utilisation;
- inadequacy of trained personnel;
- insufficient facilities to effectively collect, conserve, evaluate and facilitate the utilisation of these genetic resources; and
- an inadequate national information system for genetic resources conservation and development.

The Conservation Strategy of Ethiopia has provisions concerning agro-biodiversity conservation. The major ones are:

- to base, where possible, increased agricultural production on sustainably improving and intensifying existing farming systems by developing and disseminating technologies which are biologically stable, appropriate under the prevailing environmental and socio-cultural conditions for farmers, economically viable and environmentally beneficial;
- to ensure that given the heterogeneous environment of the Ethiopian highlands, agricultural research and extension have a stronger focus on farming and landuse systems, and support an immediate strengthening of effective traditional land management systems;
- to shift the emphasis in crop breeding from single line plant varieties and animal breeds to multiple lines involving as many different but adapted lines as possible in order to increase both elasticity in adapting to environmental variations, and resistance

to pests and disease;

- to safeguard the integrity of the soil and to protect its physical and biological properties through management practices for the production of crops and livestock which pay particular attention to the proper balance in amounts of chemical and organic fertilisers including green manures, farmyard manures and compost.

One of the sectoral guidelines prepared by the Environmental Protection Authority (EPA) for the Environmental Impact Assessment (EIA) is Agriculture, and one of the salient issues addressed in the guidelines is crop husbandry. Under this theme, the guidelines have given due emphasis to agro-biodiversity conservation. The major issues considered are fertilizer and pesticide uses, mechanisation, poor farming practices, importation of seeds and plants, importation of genetically modified foods and plants, encroachment into the natural environment, barrier effects of cultivated land, etc.

IBCR hosts the National Traditional Medicine Preparation and Therapy Association. This association, with others, is playing a pivotal role in creating awareness throughout the regions concerning Biodiversity Conservation.

The Crop Genetic Resources (CGR) Conservation and Research Programme of IBCR has the overall goal of contributing towards increasing production, improving nutritional value of foods, and providing raw materials to industry through conservation and sustainable utilisation of CGR.

One of the major implementing strategies of the Crop Genetic Resources Conservation and Research Programme of IBCR is the involving of the community for the successful conservation and sustainable utilisation of CGR. In order to realise this IBCR has formulated strategies and is implementing them. The strategies are to:

- build awareness on the values of genetic resources through formal education and informal community participation;
- promote active participation of the farming communities in CGR conservation and management;
- formulate a working mechanism with relevant research, academic and development institutions under the co-ordination of the IBCR to undertake research on development and utilisation of CGR;
- establish a formal link and integrate efforts with relevant programmes of national, regional and local governments for effective conservation and sustainable utilisation of CGR;

The major objectives of the programme are to:

- promote the collection, characterisation and evaluation, documentation and scientific study of crop genetic resources;
- conserve crop genetic resources and their wild/weedy relatives using both *ex situ* and *in situ* strategies;
- provide germplasm to national crop improvement programmes aimed at the development of such characters as higher yield, better quality, resistances to biotic and

abiotic stresses, etc;

- promote community participation in CGR activities and support traditional germplasm conservation systems; and
- create a functional national CGR networking system among institutions and regions.

The country is supporting the role of the FAO Global Plan of Action and is active in the negotiation to revise the International Undertaking on Plant Genetic Resources for Food and Agriculture (the IU).

There are some projects that are relevant to agro-biodiversity conservation. These projects are financed by the GEF and other donors, and are found at different stages of development.

EARO has embarked upon a project entitled *Conserving of Biodiversity to Develop Integrated Pest Management (IPM) in Ethiopia with emphasis on Entomopathogenic Fungi*. The goal of this project is to conserve Ethiopia's natural heritage of insect killing fungi and incorporate them into agricultural production practices that are environmentally sound and sustainable.

Currently, crops are produced with minimal inputs because of the farming systems emphasise heterogeneity and thus minimise pests. The early introduction of IPM will enable farmers to continue with existing sound practices and adopt new strategies that reduce future reliance on agricultural chemicals as economic conditions improve and global pressures increase. Hopefully, this will make it possible to avoid entrapment on the 'pesticide treadmill'. The project recognises that a systems approach to agricultural crop production is multifaceted involving more than just pest management. The primary co-operator in this research project, the University of Vermont, has established links with several international centres including ICARDA (The International Center for Agricultural Research in the Dry Areas) and ICIPE (The International Center for Insect Physiology and Ecology).

The Ministry of Agriculture, with support from the FAO, is developing a framework for promoting IPM. This is to complement the ongoing FAO Project to remove more than 1500 tonnes of obsolete pesticides from Ethiopia.

With regard to integrated landscape management, Ethiopia is collaborating with different bilateral and multilateral organizations in the area of soil and water conservation, forestry, watershed management, etc.

In addition to the Crop Genetic Resources Conservation and Research Programme, IBCR has drafted a National Biodiversity and Research Programme of which the former is a more detailed treatment of a part. The major programme areas identified are:

- Plant Genetic Resources Conservation and Research Programme, which includes crop, horticultural, forage, forest and aquatic plants
- Animal Genetic Resources
- Microbial Genetic Resources

- Ecosystem Conservation and Research
- Ethnobiology
- Biotechnology

The National Programme has also addressed the promotion of regional and thematic co-operation. Ethiopia has taken initiatives and participated actively in international fora concerning biosafety.

Since no experiments with genetically engineered plants have been allowed, the issues surrounding the use of genetic use restriction technologies do not apply in Ethiopia.

***Forest biological diversity***

***Decision II/9 and Decision IV/7. Forest biological diversity***

| | |
|---|---|
| 359. Has your country included expertise on forest biodiversity in its delegations to the Inter-governmental Panel on Forests? | |
| a) no | |
| b) yes | X |
| c) not relevant | |
| 360. Has your country reviewed the programme of work annexed to the decision and identified how you can collaborate in its implementation | |
| a) no | |
| b) under review | X |
| c) yes | |
| 361. Has your country integrated forest biological diversity considerations in its participation and collaboration with organizations, institutions and conventions affecting or working with forest biological diversity? | |
| a) no | |
| b) yes - limited extent | |
| c) yes - significant extent | X |
| 362. Does your country give high priority to allocation of resources to activities that advance the objectives of the Convention in respect of forest biological diversity? | |
| a) no | X |
| b) yes | |
| ***For developing country parties and Parties with economies in transition***<br><br>363. When requesting assistance through the GEF, is your country proposing projects which promote the implementation of the programme of work? | |
| a) no | |
| b) yes | X |

***Decision V/4. Progress report on the implementation of the programme of work for forest biological diversity***

| | |
|---|---|
| 364. Do the actions that your country is taking to address the conservation and sustainable use of forest biological diversity conform with the ecosystem approach? | |
| a) no | |
| b) yes | X |
| 365. Do the actions that your country is taking to address the conservation and sustainable use of forest biological diversity take into consideration the outcome of the fourth session of the Intergovernmental Forum on Forests? | |
| a) no | |
| b) yes | X |
| 366. Will your country contribute to the future work of the UN Forum on Forests? | |
| a) no | |
| b) yes | X |
| 367. Has your country provided relevant information on the implementation of this work programme? | |
| a) no | |
| b) yes - submission of case-studies | |
| c) yes - thematic national report submitted | X |
| d) yes - other means (please give details below) | |
| 368. Has your country integrated national forest programmes into its national biodiversity strategies and action plans applying the ecosystem approach and sustainable forest management? | |
| a) no | |
| b) yes - limited extent | X |
| c) yes - significant extent | |
| 369. Has your country undertaken measures to ensure participation by the forest sector, private sector, indigenous and local communities and non-governmental organizations in the implementation of the programme of work? | |
| a) no | |
| b) yes- some stakeholders | X |
| c) yes - all stakeholders | |
| 370. Has your country taken measures to strengthen national capacities, including local capacities, to enhance the effectiveness and functions of forest protected area networks, as well as national and local capacities for implementation of sustainable forest management, including restoration? | |
| a) no | |
| b) some programmes covering some needs | X |
| c) many programmes covering some needs | |
| d) programmes cover all perceived needs | |
| e) no perceived need | |
| 371. Has your country taken measures to implement the proposals for action of the Intergovernmental Forum on Forests and the Inter-governmental Panel on Forests on valuation of forest goods and services? | |
| a) no | X |
| b) under consideration | |
| c) measures taken | |

***Biological diversity of dry and sub-humid lands***
***Decision V/23. Consideration of options for conservation and sustainable use of biological diversity in dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems***

| | |
|---|---|
| 372. Has your country reviewed the programme of work annexed to the decision and identified how you will implement it? | |
| a) no | |
| b) under review | X |
| c) yes | |
| 373. Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? | |
| a) no | |
| b) to a limited extent | X |
| c) to a significant extent | |
| 374. Is your country fostering co-operation for the regional or sub-regional implementation of the programme among countries sharing similar biomes? | |
| a) no | |
| b) to a limited extent | X |
| c) to a significant extent | |

***Further comments on implementation of these decisions and the associated programme of work***

Senior forest experts from EPA have participated in some of the meetings of the panel on forests and in workshops on forests.

Ethiopia also participated in a workshop entitled '*Special Expert Consultation on International Arrangements and Mechanisms to promote the management, conservation and sustainable development of all types of forests*'. The workshop was held in Nairobi, Kenya, with the objective of developing an African position on forests for submission to the UN Commission on Sustainable Development (CSD) at its eighth session in April 2000.

In 1998, a project entitled *Forest Genetic Resources Conservation* was launched in the IBCR with the major objectives of:

- developing a strategy for the conservation of Ethiopia's forest genetic resources;
- creating awareness in the public and in the Government;
- establishing and maintaining a gene bank and *ex situ* stands for the conservation of threatened indigenous trees and shrubs; and
- establishing and managing suitable *in situ* conservation sites.

Among the 58 Forest Priority Areas already identified in Ethiopia, some have been inventoried for their biodiversity and biomass. Socio-economic studies have also been made on them. The result of these surveys will be issued and used for *in situ* conservation efforts.

Ethiopia has created links with various countries, which are directly or indirectly promoting the conservation of forest genetic resources. It is a member of the sub-Saharan Forest Genetic Resources Network (SAFORGEN). The country is a founding member of both AFORNET (African Forestry Research Network), AFREA (Association of Forestry Research Institutions in Eastern Africa) and AFRENA–ECA (Agro-forestry Research Network in Eastern and Central Africa.

Ethiopia has formulated a Forestry Action Program (EFAP). This Program includes forest development, conservation and sustainable utilisation components. The purpose of EFAP is three-fold: first, it provided a review of the forestry sub-sector and its linkages to the agricultural sector and, as a whole, to the environment. Second, it identifies an investment programme to maximise the forest sector's contribution to economic development, and third, it provides a forum for involving and co-ordinating donor assistance in support of the implementation of the forestry investment programme. Regional Forestry Action Programmes, based on the EFAP, have also been formulated by five of the regional states.

The draft National Biodiversity Conservation and Research Programme has taken forest plant genetic resource conservation as one of its programme areas.

There are various joint forest conservation and development initiatives which are being undertaken by NGOs. These projects involve the local communities in the conservation and development of forests, and give a fair share of benefits to the local communities.

The country has also developed two strategic plans of relevance namely, the National Forestry Research Strategic Plan, and the Research Strategy on the Conservation and Sustainable Utilisation of Forest Genetic Resources in Ethiopia. Both strategies provide for the participation of NGOs and local communities.

Ethiopia has developed a conservation strategy at federal level. The regional states have also prepared their own conservation strategies more detailed in those sectors of importance to them. Tree genetic resource conservation figures prominently in all of them.

The presence of many endemic species of plants and animals adds importance to the conservation efforts.

Having assessed the resource base and constraints encountered, strategies have been developed for the conservation and sustainable use of biological diversity in the dryland, arid and semi-arid, grassland and savannah ecosystems.

Ethiopia being a party to the Convention on Combating Desertification (CCD), has prepared a National Action Plan to Combat Desertification, which is in conformity with the Conservation Strategy of Ethiopia and thus, understandably, focuses much on the conservation and sustainable use of biological resources.

***Decision V/20. Operations of the Convention***

| | |
|---|---|
| 375. Does your country take into consideration gender balance, involvement of indigenous people and members of local communities, and the range of relevant disciplines and expertise, when nominating experts for inclusion in the roster? | |
| a) no | |
| b) yes | X |
| 376. Has your country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention? | |
| a) no | |
| b) to a limited extent | |
| c) to a significant extent | X |
| 377. Has your country undertaken a review of national programmes and needs related to the implementation of the Convention and, if appropriate, informed the Executive Secretary? | |
| a) no | |
| b) under way | X |
| c) yes | |

***Please use this box to identify what specific activities your country has carried out as a DIRECT RESULT of becoming a Contracting Party to the Convention, referring back to previous questions as appropriate***

I. The following GEF-funded National Projects are initiated and found at differing levels of implementation.
   1. A Dynamic Farmer-Based Approach to the Conservation of Ethiopian Plant Genetic Resources.
   2. Ethiopia's National Biodiversity Strategy and Action Plan (PDF-B).
   3. Establishment of wildlife protected areas system in Ethiopia.
   4. Conservation and Sustainable Use of Medicinal Plants Project.
   5. A project to enhance conservation in important bird areas of Ethiopia through NGO-Government partnerships.

II. The following GEF-funded regional projects are at different stages of development

   1. Conservation and sustainable use of biodiversity resources in the Rift Valley Lakes.
   2. Nile Basin initiative-wide shared vision
   3. Sustainable integrated management of transboundary environmental resources on south western Djibouti and north eastern Ethiopia
   4. Development of the National Biosafety framework.

III. The Ethiopian delegates have actively participated in various biodiversity related negotiations. They prepared the first draft of the African submission for a draft Biosafety Protocol. The unity created through this has been used to develop an African Model Law on Safety in Biotechnology for Africa under the auspices of the OAU.

The Ethiopian delegation has also played a leading role in uniting the African Group in the negotiations on the Revision of the International Undertaking on Plant Genetic Resources for Food and Agriculture, and in making it possible to develop a common position.

Ethiopia supported the OAU in the development of a model law an access to biological resources, and the protection of Community Rights. This was adopted by the Ministerial Council, followed by the summit of Heads of State and Government of the OAU in Ouagadougou, Burkina Faso, in June 1998. Many countries, including Ethiopia, are now using this model law as the basis for their national laws.

***Please use this box to identify joint initiatives with other Parties, referring back to previous questions as appropriate***

A) The following GEF projects area result of joint initiatives with various Parties:

1. Conservation and sustainable use of biodiversity resources in the Rift Valley Lakes.
2. A project to enhance conservation in Important Bird Areas of Ethiopia, through NGO–Government partnerships
3. Nile basin initiative-wide shared vision
4. Sustainable integrated management of transboundary environmental resources in South Western Djibouti and North Eastern Ethiopia

B)

1. Biosafety Protocol effectively negotiated
2. Biosafety Model Law for Africa drafted and a standing committee consisting of representatives from each subregion of Africa created to oversee its implementation.
3. An African model law on access to biological resources and the protection of Community Rights adopted by the OAU.
4. A common African position defined for the negotiation on the revision of the International Undertaking.

***Please use this box to provide any further comments on matters related to national implementation of the Convention***

The implementation of the Convention has been incorporated into the Conservation Strategy and the Biodiversity Conservation and Research Policy and Action Plan of the country, the Environmental Policy of Ethiopia and the Action Plan to Combat Desertification, and the Biodiversity Conservation Development Strategy.

***The wording of these questions is based on the Articles of the Convention and the decisions of the conference of the Parties. Please provide information on any difficulties that you have encountered in interpreting the wording of these questions***

We did not face any significant problem of interpreting the wording of these questions.

***If your country has completed its national biodiversity strategy and action plan (NBSAP), please give the following information:***

| | | | |
|---|---|---|---|
| Date of completion: | | Not yet completed | |
| If the NBSAP has been adopted by the Government | | | |
| By which authority? | | | |
| On what date? | | | |
| If the NBSAP has been published please give | | | |
| Title: | | | |
| Name and address of publisher: | | | |
| ISBN: | | | |
| Price (if applicable): | | | |
| Other information on ordering: | | | |
| If the NBSAP has not been published | | | |
| Please give full details of how copies can be obtained: | | | |
| If the NBSAP has been posted on a national website | | | |
| Please give full URL: | | | |
| If the NBSAP has been lodged with an Implementing Agency of the GEF | | | |
| Please indicate which agency: | | | |
| Has a copy of the NBSAP been lodged with the Convention Secretariat? | | | |
| Yes | | No | |

***Please provide similar details if you have completed a biodiversity country study or another report or action plan relevant to the objectives of this convention***

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|---|
| **Conservation Strategy of Ethiopia** |

The Conservation Strategy of Ethiopia (CSE) takes a holistic view of the natural, human-made and cultural resources, their use and abuse, and seeks to integrate these into a coherent framework for policies, strategies and investment plans related to the environment. The conservation and sustainable use of biodiversity as well as the prevention of land degradation and the rehabilitation of degraded lands is a major part of the CSE, as well as the Environmental Policy of Ethiopia, which emanated from it.

**Ethiopian Forestry Action Programme**

The Ethiopian Forestry Action Programme (EFAP) deals with forest development, conservation and sustainable utilisation. EFAP is a national effort towards conserving, developing, managing and sustainably utilising Ethiopia's forest resources. It is consistent with the CSE; it is a more detailed treatment of a component of the CSE

**National Action Plan (NAP) to Combat Desertification**

The NAP focuses on land degradation in the arid, semi-arid and dry subhumid areas of Ethiopia. It deals with land degradation starting with the treatment set out in the CSE but giving it more detail and formulating it in such a way as to satisfy the requirements of the Convention to Combat Desertification. Obviously, the conservation and sustainable use of biodiversity are at the heart of the strategy to prevent land degradation, and stop and reverse desertification.

**National Biodiversity and Research Programme**

It is suggested that this programme is also highlighted here.

***Please provide details of any national body (e.g. national audit office) that has or will review the implementation of the Convention in your country.***