



**Malawi Third Country Report
To the Convention on Biological Diversity (CBD)**

**Environmental Affairs Department
Ministry of Mines, Natural Resources and Environment**

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A. REPORTING PARTY

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Information on the preparation of the report

Box I.

Please provide information on the preparation of this report, including information on stakeholders involved and material used as a basis for the report.

This report was prepared based on information from the literature and stakeholder consultations.

Literature Search.

The objective of literature search was to obtain an overview of past and present activities on biodiversity conservation in Malawi. The results were used to prepare a preliminary report from which information gaps were identified. The preliminary report was also used to determine sources of the missing information. Some of the of the publications consulted is provided below.

Stakeholder consultations

The objective of the stakeholder consultations was to collect additional information and also to verify and or update information from literature. Stakeholders were consulted through personal contacts, group discussion and workshop. A total of 20 experts were consulted and these are listed below. In addition to this sections of the preliminary report were sent by email to experts to verify the information and to provide the missing information. Information from individual consultations was used to prepare the first draft report.

Consultations with the National Reporting Team

A national reporting team comprising six experts from the University of Malawi, Forestry Institute of Malawi, Environmental Affairs Department and the National Herbarium and Botanic Gardens of Malawi met twice to discuss the report. The first meeting concentrated on reviewing the first draft report. Comments from the meeting were incorporated into a second draft report which was presented at a national consultative workshop. A second meeting of the National Reporting Team was specifically convened to endorse (i.e. to verify that that all workshop recommendations and comments were incorporated into the final report).

National consultative workshop

The draft report was discussed at a stakeholders workshop attended by the National Biodiversity Committee, traditional leaders and the civil society. The workshop was convened in order to:

- a) Brief the participants on the NBSAP progress and obtain committees endorsement to submit the draft report to CBD Secretariat,
- b) Brief participants on the extent to which Malawi has implemented the Convention and obstacles encountered in the process,
- c) Present the third report and solicit their comments, contributions and endorsement,
- d) Discuss the mechanisms to be put in place to ensure that CBD decisions and programmes are followed up and implemented.

The workshop identified areas that required improvements and further recommended that a final report should be submitted upon incorporation of workshop recommendations.

The final report was endorsed by the consultative workshop, the national reporting team, and the Environmental Affairs Department.

Priority setting

Level of priority that Malawi accords to the implementation of various articles was based on the following criteria; availability of policy, legal and institutional framework, level of threats, level of diversity, and level of implementation in terms. This means articles that were perceived to be inadequately implemented were classed of low priority to Malawi. Similarly articles with inadequate legal and institutional framework were also classed as of low priority to Malawi.

List of major publications consulted

- Malawi Poverty Reduction Strategy Paper,
- Malawi Economic Growth Strategy,
- National Strategy for Sustainable Development,
- Natural Resources Policies and Laws e.g. NEP, EMA, National Forestry Policy, National Fisheries and Aquaculture Policy, National Parks and Wildlife Policy, Biosafety Acts.
- National Forestry Programme,
- Report on Policy, Legislation and Mechanisms for Access to and Benefit Sharing of Genetic Resources,

- National Biodiversity Strategy and Action Plan (including various NBSAP task force reports),
- National Environmental Action Plan
- State of Environment Report
- Malawi Second National Report to the CBD,
- Biodiversity Project Reports (e.g. SABONET, SADC BSP, Lake Malawi Biodiversity Programme, Transfrontier Conservation Project, National Adaptation Programme of Action for Climate Change).
- Government Reports, on Climate Change, Desertification.
- Strategic Tourism Development Plan in Malawi.

List of experts consulted

Agabu, Y, Environment Affairs Department,
 Bhima, R (PhD), Department of National Parks and Wildlife.
 Changadeya, W, Chancellor College,
 Chilima, C. (Dr.), Forestry Research Institute of Malawi
 Harawa, G, Environmental Affairs Department
 Kafere, D. Environmental Affairs Department
 Kainja, S. Water Partnerships
 Kamoto, T. Forestry Department
 Kampira, L, Environmental Affairs Department.
 Magombo, ZLK (PhD), National Herbarium and Botanic Gardens of Malawi,
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List of Acronyms

BVC - Beach Village Committees
 CBD – Convention on Biological Diversity
 CBNRM – Community Based Natural Resource Management
 COMPASS – Community Participation for Sustainable Resource Management in Malawi
 GTZ - German Agency for Technical Cooperation
 COP – Conference of Parties
 DFID – Department for International Development
 DNA – Deoxyribonucleic acid
 EAD – Environmental Affairs Department
 EIAs – Environmental Impact Assessments
 EMA – Environmental management Act
 EMF - Environment Management Fund
 ESCOM - Electricity Supply Commission of Malawi
 FEBCAP - Forest Ecosystems Biodiversity Conservation Action Plan
 FISNA - Forestry Invasive Species Network for Africa
 FRIM – Forestry Research Institute of Malawi
 GIS – Global Information System
 GMOs – Genetically Modified organisms
 GSPC - Global Strategy for Plant Conservation
 GTI – Global Taxonomy Initiative
 IDRC – International Development Research center
 IKS - indigenous knowledge systems
 IPR – Intellectual Property Rights
 IUCN – The World Conservation Union (International Union for the Conservation of Nature)
 MASAF – Malawi Society Action Fund
 MBERU – Molecular Biology and Ecology research Unit
 MDGs – Millennium Development Goals

MEET – Malawi Environmental Endowment Trust
MIPA – Malawi Investment Promotion Agency
MMCT – Mulanje Mountain Conservation Trust
NAPA – National Adaptation Programme of Action
NBSAP – National Biodiversity Strategy and Action Plan
NEAP – National Environmental Action Plan
NEP – National Environmental Policy
NGO – Non Governmental Organisation
NHBG - National Herbarium and Botanic Gardens of Malawi
NSSD – National Strategy For Sustainable Development
NUFU – Norwegian Science Council
PROTA – Plant Resources of Tropical Africa
SABONET – Southern Africa Botanical Network
SADC – Southern African Development Community
SOER – State of Environment
TFCA - Transfrontier Conservation Areas
UNESCO – United Nations Education, Scientific and Cultural Organisation
UNFCCC – United Nations Framework Convention on Climate Change
USAID – United States Agency for International Development
VFAs - Village Forestry Areas
WESM – Wildlife and Environmental Society of Malawi
WTO – World Trade Organisation
WWF – World Wildlife Fund for Nature
CURE - Coordination Unit for the Rehabilitation of the Environment

B. PRIORITY SETTING, TARGETS AND OBSTACLES

Box II.

Please provide an overview of the status and trends of various components of biological diversity in your country based on the information and data available.

Information presented here was extracted from Malawi's State of Environment Reports, National Environmental Action Plans, NBSAP and NBSAP task force reports (covering wild plants, microorganisms, wild and indigenous animals, ecosystems, domesticated and introduced plants and land use management) and other government documents and reports e.g. National Forestry Programme.

a) Ecosystems diversity

Two types of ecosystems are recognized in Malawi, terrestrial and aquatic. Terrestrial ecosystems are described based on the major vegetation types. According to White's classification, vegetation in Malawi may be perceived to comprise the following major vegetation types: i) Zambezian Woodland (Divided into miombo, mopane, and undifferentiated woodlands), ii) Transition woodland, iii) Deciduous forests and thickets, iv) Evergreen forest (subdivided into riparian, lowland, mid altitude and Afromontane rain forests), v) Undifferentiated Afromontane forests, such as *Hagenia abyssinica* forest, *Juniperus procera* forest, *Widdringtonia whytei* forest, vi) Afromontane Bamboo, vii) Afromontane evergreen bushland and thicket, viii) Afromontane shrubland.

In 1975 47% of Malawi was classed as forest but this was reported to have reduced to 28% in 2000. With the ever-increasing population and deforestation rate of 2% per annum, Malawi's forest cover is likely to reduce further. There has been extensive deforestation of Miombo woodlands outside protected areas for various reasons e.g. fuelwood for domestic purposes and curing of tobacco, charcoal production for supplying urban areas and clearing for gardens.

Most of the evergreen forests and montane grasslands occur in protected areas, such as Forest Reserves, National Parks and Wildlife Reserves. In areas with high human population some evergreen forests (e.g. Thyolo Mountain) have been clear felled because of encroachment for agricultural activities.

Mountain, mountain ranges, plateaux and hills dominate Malawi's topography. These mountains are important sources of water being sources of rivers and catchment areas. In addition to this most of the remaining biodiversity is on mountains such as Nyika, Mulanje, Zomba, etc. Due to population pressure and agricultural expansion there is extensive encroachment into mountains such that some such as Ndirande Forest Reserve have been completely deforested.

Aquatic ecosystems cover about 26% of the total surface area of Malawi (118,900 km²). Four major types of aquatic ecosystems are recognised: lakes, small water bodies, rivers, marsh and swamp systems. The lakes are the largest constituents of the water systems and most of these comprise the areas occupied by the four major lakes (Lakes Malawi, Malombe, Chilwa and Chiuta). Lake Malawi is the largest water body covering about 20% of Malawi's total area and the most significant water body in terms of fish production and diversity. The main threats to lakes in Malawi are sediment loads, nutrient inputs, pollutants and contaminants, all generated from anthropogenic activities.

Recent water quality studies on Lake Malawi indicate that sediment deposit from rivers that feed into the lake is on the increase and these reduce the habitat of the fish.

There are seven major river systems, the Songwe, South Rukuru, North Rukuru, Dwangwa, Bua, Linthipe and the Shire. Most rivers, for part of their length, flow through farmland and urban areas but for a few rivers some parts of the river systems flow through the protected areas. No river has any form of protection and many rivers are ecologically degraded by invasive species, sedimentation, cultivation and deforestation.

There are numerous marsh/swamp systems recorded in the country and these are associated with lake-shore basins, inland basins, river floodplains and inland valleys the most notable ones being Vwaza marsh, lake Chilwa wetland etc. These marshes are important habitats for waterfowl and large mammals but are heavily degraded mostly due to cultivation. The loss is very pronounced in the central region where over 60% of the marshes have been lost to winter cultivation.

b) Species diversity

Microorganisms

About 600 species of microorganisms have so far been documented (comprising viruses, bacteria and protozoa). Almost all virus species recorded in Malawi are associated with agricultural crops (42 species) and livestock (30 species). This also applies to bacteria most of which e.g. *Agrobacterium*, *Eiwinia*, *Pseudomonas*, *Xanthomonas* are known plant pathogens. Our knowledge of microorganisms in terms of numbers, uses, distribution and conservation status is limited.

Fungi

Only 500 species have been documented most of which are associated with major economic crops such as maize as pathogens. Some species especially mushrooms are a source of food and income to many rural communities.

Plants

A total of 160 bryophytes and 66 algal species (Lower plants) have been described. About 5,500 species of flowering plants have been described in Malawi of which about 4,000 species are dicotyledonous and 1,500 are monocotyledon. Of the total number only 261 are considered threatened, vulnerable, rare or endangered. Despite the high number of threatened species only eleven plant species have legal protection.

Invertebrates

The precise number of invertebrate species is not known but it is estimated that there are over 8,000 species, including more than 7,000 insect species. Amongst the better-studied taxa, the molluscs contain 47 endemic species from a total of 172 species. Eight species are listed by IUCN as either vulnerable e.g. *Bulinus nyassanus* (Planorbidae), or Endangered e.g. *Lanistes nasutus* (Ampullaridae). Approximately 173 species of nematodes have been described.

Vertebrates

Reptiles

There are 140 species of reptiles recorded in Malawi, represented in 22 families but little is known of their conservation status. Twelve species are thought to be endemic to Malawi. Distribution of these endemic species is poorly known and hence should be treated as under conservation threat.

Birds

About 648 species of birds from 78 families, comprising 456 residents, 94 intra-African migrants of regular occurrence, most of which probably breed in Malawi, plus 77 regular and 12 vagrants. Over a third of all bird species in Malawi are considered to be uncommon or rare and are of long-term conservation concern.

Fishes

The total number of species is estimated at 1,000 species in 12 families. This represents approximately 15% of the global total of freshwater species. Over 800 fish species are found in Lake Malawi alone although less than 250 species are described. Ninety-five percent of these species are endemic. The haplochromine cichlids are the most common fish group in Lake Malawi. With over 800 species the lake has the largest number and the most diverse communities of fresh water fish species in the world. Fish catches have declined from an average of 60,000 metric tons in the period of 1976-1990 to 49,000 metric tons in 1991-2001 mostly due to over fishing.

Mammals

About 188 mammal species from 37 families have been recorded in Malawi. Of these seven: *Lycan pictus* (African Wild Dog), *Acinonyx jubatus* (Cheetah), *Panthera leo* (Lion), *Loxodonta africana* (African Elephant), *Diceros bicornis* (Black Rhinoceros), *Paraxerus palliatus*, *Rhynchocyon cirnei* (Chequered Elephant-shrew) are listed in the 1996 IUCN Red List of Threatened Animals. Most of these animals are found in protected areas and their long-term survival outside protected areas could be problematic due to human activities such as poaching and habitat degradation.

c) Genetic diversity

Research on genetic characterization is rudimentary and so far fish, local cattle, yams and sweet potatoes have been characterized. Most of the genetic characterization is done at DNA laboratory at Chancellor college and is mostly part of student post graduate research.

Priority Setting

1. Please indicate, by marking an "X" in the appropriate column below, the level of priority your country accords to the implementation of various articles, provisions and relevant programmes of the work of the Convention.

Article/Provision/Programme of Work	Level of Priority		
	High	Medium	Low
a) Article 5 – Cooperation	x		
b) Article 6 - General measures for conservation and sustainable use	X		
c) Article 7 - Identification and monitoring		X	
d) Article 8 – <i>In-situ</i> conservation	X		
e) Article 8(h) - Alien species	X		
f) Article 8(j) - Traditional knowledge and related provisions			X
g) Article 9 – <i>Ex-situ</i> conservation	X		
h) Article 10 – Sustainable use of components of biological diversity	X		
i) Article 11 - Incentive measures		X	
j) Article 12 - Research and training		X	
k) Article 13 - Public education and awareness	X		
l) Article 14 - Impact assessment and minimizing adverse impacts	X		
m) Article 15 - Access to genetic resources		X	
n) Article 16 - Access to and transfer of technology		X	
o) Article 17 - Exchange of information			X
p) Article 18 – Scientific and technical cooperation			X
q) Article 19 - Handling of biotechnology and distribution of its benefits	x		
r) Article 20 - Financial resources			X
s) Article 21 - Financial mechanism		X	
t) Agricultural biodiversity		X	

u) Forest biodiversity	X		
v) Inland water biodiversity		x	
w) Marine and coastal biodiversity			N/A
x) Dryland and subhumid land biodiversity		X	
y) Mountain biodiversity	x		

Challenges and Obstacles to Implementation

2. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the provisions of the Articles of the Convention (5, 6,7, 8, 8h, 8j, 9, 10, 11,12, 13, 14, 15,16, 17, 18, 19 and 20)

3 = High Challenge

1 = Low Challenge

2 = Medium Challenge

0 = Challenge has been successfully overcome

N/A = Not applicable

Challenges	Articles																	
	5	6	7	8	8h	8j	9	10	11	12	13	14	15	16	17	18	19	20
a) Lack of political will and support	2	1	2	1	1	3	2	1	2	3	1	1	3	1	2	3	1	3
b) Limited public participation and stakeholder involvement	2	2	2	1	3	3	3	2	3	3	2	2	3	3	2	3	3	2
c) Lack of mainstreaming and integration of biodiversity issues into other sectors	2	1	3	2	2	3	3	2	3	3	1	2	3	3	2	3	3	2
d) Lack of precautionary and proactive measures	2	1	2	3	3	3	1	3	3	3	2	2	3	3	1	3	3	2
e) Inadequate capacity to act, caused by institutional weakness	3	2	2	3	3	3	2	3	3	3	2	2	3	3	3	3	3	3
f) Lack of transfer of technology and expertise	2	2	2	3	3	2	3	3	3	3	2	2	3	3	3	3	3	3
g) Loss of	1	1	1	2	1	2	1	2	2	1	1	1	3	3	1	3	N/a	3

traditional knowledge																		
h) Lack of adequate scientific research capacities to support all the objectives	2	3	3	2	3	3	3	3	3	3	2	3	3	2	3	3	3	3
i) Lack of accessible knowledge and information	2	3	3	2	2	3	2	3	3	3	2	3	3	3	3	3	3	3
j) Lack of public education and awareness at all levels	2	3	2	2	3	3	2	3	3	3	2	2	3	2	3	3	3	2
k) Existing scientific and traditional knowledge not fully utilized		3		2	3	3	2	3	3	3	3	2	3	2	3	3	3	3
l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	2	1	2	2	2	3	2	3	3	1	3	2	3	2	2	3	3	3
m) Lack of financial, human, technical resources	2	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
n) Lack of economic incentive measures	2	2	1	2	1	3	3	3	3	3	2	3	3	3	3	3	3	3
o) Lack of benefit-sharing	2	1	1	2	1		2	3	3	1	1	2	3	3	3	3	3	3
p) Lack of synergies at national and international levels	3	2	2	2	2	3	1	2	3	3	1	1	3	3	3	3	3	2
q) Lack of horizontal cooperation among stakeholders	2	2	1	2	1	3	2	2	1	1	1	2	1	1	2	3	2	3
r) Lack of effective partnerships	3	2	2	3	2	2	2	2	3	3	2	2	2	2	3	3	3	3
s) Lack of engagement of scientific	2	2	3	2	3	3	2		2	3	2	3	3	3	3	3	3	3

community																		
t) Lack of appropriate policies and laws	2	2	3	1	3	3	1	2	3	3	3	1	3	1	3	3	1	1
u) Poverty	3	1	1	3	1	1	1	3	3	1	1	1	3	3	2	3	1	3
v) Population pressure	1	1	1	3	1	1	1	3	1	1	1	1	1	1	-	N/a	1	3
w) Unsustainable consumption and production patterns	2	2	1	2	1	2	2	3	2	1	2	1	2	3	1	3	2	2
x) Lack of capacities for local communities	2	2	2	2	3	2	2	3	3	3	3	2	3	2	2	3	3	3
y) Lack of knowledge and practice of ecosystem-based approaches to management	2	1	2	2	3	2	2	2	3	3	3	3	3	2	2	3	2	3
z) Weak law enforcement capacity	2	2	2	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3
aa) Natural disasters and environmental change	1	2	1	1	1	1	2	2	1	1	1	3	1	1	1	3	1	1
bb) Others (please specify) lack of priority list of endangered species							3											

2010 Target

The Conference of the Parties, in decision VII/30, annex II, decided to establish a provisional framework for goals and targets in order to clarify the 2010 global target adopted by decision VI/26, help assess the progress towards the target, and promote coherence among the programmes of work of the Convention. Parties and Governments are invited to develop their own targets with this flexible framework. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box III.

Goal 1	Promote the conservation of the biological diversity of ecosystems, habitats and biomes.		
Target 1.1	At least ten percent of each of the world's ecological regions effectively conserved		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
<p>Most vegetation types in Malawi fall within the WWF Miombo Ecoregion. The Whole of Lake Malawi and its watershed is part of the Rift Valley Ecoregion. Both the Miombo Ecoregion and Rift Valley Ecoregion are represented in the Protected Areas Network implying that their conservation is provided for in the Forestry and National Parks Acts and policies.</p> <p>As an active member of the WWF Miombo ecoregion Malawi has through consultative process identified four areas of biodiversity significance (Kasungu, Lower Shire/ Western Escarpment, Eastern Rift / Upper Shire, Zimba/Nkhotakota) and strategies for conservation and sustainable use are being developed. A baseline study of the Lower Shire/Western Escarpment area of biological significance is underway. It is envisaged that through the Miombo Ecoregion Programme a biologically diverse and ecologically functional miombo ecoregion that meets and sustains human needs and development through the sustainable use of natural resources and landscape will be achieved. Malawi is also part of the Afromontane ecoregion of forest biodiversity through Nyika Plateau and Mulanje mountain which are important ecosystem for a wide range of biological resources.</p> <p>Although not specifically responding to target 1.1, the NBSAP Priority action 1, which provides for creation of an enabling policy framework that would promote conservation of species, habitats and ecosystems that are important but not represented in the existing protected area networks or are vulnerable, fragile or are at risk of irreversible loss or decline of biodiversity would provide strategic guidance for the conservation of miombo woodland outside the protected areas.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		x	
b) Inland water		x	
c) Marine and coastal		x	
d) Dry and subhumid land		x	

e) Forest		x	
f) Mountain		x	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>NBSAP Strategy 1.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands.</p> <p>NBSAP Strategy 2.1.1 - Promote protection of the existing network of aquatic protected areas and initiate programmes to provide legal protection to other aquatic habitats.</p> <p>The Forest Ecosystems Biodiversity Conservation Action Plan (FEBCAP) - and Malawi's National Forestry Programme have provisions for the enhancement of the conservation of ecosystems and habitats through community participation, adherence to EIAS, improved monitoring and law enforcement, transboundary management.</p> <p>NSSD strategic objective 2 (theme 3) - reverse the loss of biodiversity and restore biodiversity in degraded areas; Strategy 2.1, reverse biodiversity loss (includes the following actions; i - monitor trends in biodiversity, ii – develop action plans to halt biodiversity loss, iii – establish protected areas of biodiversity significance); strategy 2.2, restore biodiversity in degraded areas (includes the following actions, i – promote small stock and the domestication of wild animals, ii – carry out afforestation using indigenous trees, iii – reintroduction of extinct plants and animals by establishing woodlots, botanic gardens, and conservation sanctuaries.</p> <p>NEAP Strategy 9.4 (for biodiversity sector) – enhance forest rehabilitation programmes.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>The whole of Malawi is part of the WWF Miombo Ecoregion Programme. Through this initiative Malawi has prioritized four areas of biodiversity significance and these include; Kasungu; lower Shire/ Western Escarpment; Eastern Rift / upper Shire, and Mzimba/Nkhotakota. These areas were selected based on a number of criteria which include habitat for endemic and rare species, level of biological diversity, socio economic importance. With support from WWF Southern Africa Regional Office baseline studies are being conducted in the Lower Shire Area of Biodiversity Significance. Results of this study will form basis for formulation of conservation strategies and action plans.</p>			
V) Please provide information on indicators used in relation to this target.			
<p>NEAP Action 1.1.4 indicator (for forestry sector) – Forest, village forest areas, plantations, fragile areas, riverine areas conserved.</p>			
VI) Please provide information on challenges in implementation of this target.			
<p>Low capacity, low or inadequate collaboration between stakeholders and lack of survey to identify areas of the ecoregions that require immediate protection are some of the challenges. A good proportion of the miombo ecoregion is in the customary land and has suffered serious deforestation due to agricultural expansions and settlements. Conservation of the ecological regions shall always be challenged by poverty which forces people to rely on natural resources for a living often leading to unsustainable use of resources.</p>			
VII) Please provide any other relevant information.			

Box IV.

Target 1.2	Areas of particular importance to biodiversity protected		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
<p>But Malawi's Protected Area Network includes areas of particular importance to biodiversity such as Nyika national Park, Mulanje Forest Reserve (which are also part of Afromontane Ecoregion of forest biodiversity). Although Protected Areas were not originally established as biodiversity conservation areas, they are the only place where a wide range of biodiversity (plants, invertebrates, vertebrates, micro organisms, fungi) are represented and protected.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		x	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>NBSAP Strategy 1.1.1 - enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands.</p> <p>NSSD Strategy 2.2 (Theme 3) - restore biodiversity in degraded areas, and strategic aim c, reintroduction of extinct plants and animals by establishing woodlots, botanic gardens, plant museums, and conservation sanctuaries.</p> <p>Fisheries action plan strategic objective 12 - provide information regarding proposed forest areas for fisheries reserves, breeding sites and sanctuaries with a view of developing management plans for effective management for fisheries resources.</p> <p>NEAP Strategy 9.15 (for biodiversity) – provides strategic actions to facilitate community participation in the identification of areas of special interest and plan for conservation.</p>			
IV) Please provide information on current status and trends in relation to this target.			

Through the WWF Miombo Ecoregion Programme areas of biological diversity significance have been identified and measures are being put in place to develop conservation strategies and action plans.

The Fisheries Department has identified lake Malombe, the eastern arm of lake Malawi and interconnection between lake Malawi and Malombe as areas of particular importance for *Tilapia* species. In this regard the department has designated fish sanctuaries and negotiations are underway to gazette them as protected areas. This will bring to five aquatic protected areas in Malawi (in addition to lake Malawi national park, Vwaza Game Reserve and a section of lake Malombe that extends into Liwonde National park).

Lake Chilwa wetland has been identified as an important bird area and as a result with support from the Danish Hunters Association communities are being involved to identify and protect breeding sites for migratory birds. These breeding sites have since been designated bird sanctuaries. The wetland is also a Ramsar site.

Mulanje mountain being one of the areas of high biological diversity was declared a UNESCO Mulanje Biosphere Reserve in 2004 and is also being considered for a World Heritage Status.

V) Please provide information on indicators used in relation to this target.

Management plans, Bye-laws, Natural Resources Management Associations.

VI) Please provide information on challenges in implementation of this target.

Inadequate capacity, low collaboration between sector dealing with natural resource management; inadequate policy harmonization of the major challenges to the implementation of this target; inadequate data and information on the extent of biodiversity occurring in various habitats and ecosystems which may be used to make sound decisions as to which to be conserved.

VII) Please provide any other relevant information.

Box V.

Goal 2	Promote the conservation of species diversity		
Target 2.1	Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
NBSAP has strategies that will facilitate action to increase the population and distribution ranges of rare and threatened species and prevent additional one from becoming threatened (NBSAP Strategy 1.3.1.). Similarly the NSSD has also strategic actions to reverse the loss of biodiversity and restore biodiversity in degraded areas (theme 3, strategic objective 2).			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	

b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>Fisheries strategic objective 10 - effectively influence research and development in cage culture, small water bodies and aquaculture to reduce over dependence on capture fisheries.</p> <p>NBSAP Strategy 1.3.1 - increase the population and distribution ranges of rare and threatened terrestrial species and prevent additional ones from becoming threatened.</p> <p>NBSAP Strategy 2.3.1 - increase the population and distribution ranges of rare and threatened aquatic species and prevent additional ones from becoming threatened.</p> <p>NEAP Strategy 10.6 (biodiversity) – has provisions for reintroduction of animals in some areas through translocation of animals into protected areas.</p> <p>NSSD strategic objective 2 - regarding thematic area 3 has strategic action that will promote activities that will reverse biodiversity loss and restore of biodiversity in degraded areas.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>Chambo (<i>Tilapia</i>) Restoration Strategic Plan developed by the Department of Fisheries has provision for establishment of fish sanctuaries in lakes Malawi and Malombe as a conservation measure. The process is underway to develop bylaws for the protection of fish sanctuaries.</p> <p>Rhinos went extinct in Malawi but these were reintroduced in Liwonde National park in 1993 and to date the park has 10 rhinos. The objective of the programme was to protect the rhino population in southern Africa from poaching and inbreeding.</p> <p>The population of Mulanje Cedar, restricted to Mulanje Mountain is reported to be declining due to a number of factors such as bush fires, invasive species and illegal harvesting. Mulanje Mountain Conservation Trust (MMCT) in collaboration with the Forestry Department have embarked on a restoration programme of the mountain especially the outer burnt slopes and has embarked on a comanagement arrangement with communities where communities will be allowed to harvest some forestry products including dead cedar wood, and removal of invasive species.</p> <p>Population of Nyala (restricted to Lengwe National Park) has been reported to be declining mostly due to climate change (erratic rainfall patterns) and poaching. As conservation measure the department of National Parks has reintroduced Nyala in Majete game reserve and in Sucoma Ranch and Kuti Range.</p>			
V) Please provide information on indicators used in relation to this target.			
NEAP indicator for strategy 10.6 and 10.10 - 3 animal and 3 plant species introduced in five years			
VI) Please provide information on challenges in implementation of this target.			

Inadequate capacity (human, infrastructure and financial), Unavailability of priority list of target species requiring immediate conservation measures, limited data and lack of knowledge of the conservation status of other biodiversity components (e.g. microorganisms, invertebrates, fungi) and the major constraints.

VII) Please provide any other relevant information.

Box VI .

Target 2.2	Status of threatened species improved		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
Although not formulated in response to the above target, on going <i>in situ</i> and <i>ex situ</i> programmes some of which include the following are contributing to the implementation of the above target:			
a) <i>Ex situ</i> conservation of Aloes, Orchids, all protected tree species in the National Botanic Gardens;			
b) Short term collection and storage of rare of threatened forest trees by the National Tree Seed Center (Forestry Research Institute of Malawi), National Plant Genetic Resource Centre in collaboration with the Millennium Seed Bank Project ;			
c) <i>In situ</i> conservation of wild animals, plants and other biodiversity components in National Parks and Forestry Reserves, and <i>in situ</i> conservation of cichlids of lake Malawi in Lake Malawi National Park.			
d) As part of management criteria the National Parks has introduced and or increased population of zebras, buffalos, hart beast and antelopes in Liwonde NP.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			

b) Yes, into national biodiversity strategy and action plan	x
c) Yes, into sectoral strategies, plans and programmes	x
Please provide details below.	
NBSAP Strategy 1.3.1 - Increase the population and distribution ranges of rare and threatened species and prevent additional ones from becoming threatened.	
NBSAP Strategy 2.3.1 - Increase the population and distribution ranges of rare and threatened aquatic species and prevent additional ones from becoming threatened.	
NEAP Strategy 4.4 (Biodiversity Sector) – Discourage commercial use of rare species.	
NEAP Strategy 4.11 (Biodiversity Sector) – Reintroduction of extinct plants by establishing woodlots, botanic gardens, plant museums and conservation sanctuaries.	
NEAP Strategy 10.10 (for Biodiversity sector) - Promote the reintroduction of endangered species.	
IV) Please provide information on current status and trends in relation to this target.	
<p>Preliminary assessment of threatened plant species was conducted during the NBSAP process. A total of 37 were identified to be threatened due to human activities, of these only 11 have legal protection. Considering that Orchids and Aloes are listed in CITES Red Data List, the actual number of plant species is actually more than 37. Strategic action to promote inclusion of all threatened species on the list of legally protected species has been provided in the NBSAP.</p> <p>Assessment of conservation status of biodiversity components in national parks is an on going activity. Assessment results are used to make conservation decisions, i.e. where to move animals to other areas in order to protect the vegetation including farmers' crops.</p> <p>The Fisheries Department also periodically monitors conservation status of economic fish species in Malawi and based on the status develops conservation measures.</p> <p>Assessment of the conservation status of less known components of biodiversity such as fungi, invertebrates, microorganisms etc has not been done.</p>	
V) Please provide information on indicators used in relation to this target.	
NEAP strategy 4.3 (Biodiversity sector) indicator: licenses, border control regulations.	
NEAP strategy 4.8 (Biodiversity sector) indicator: List and photographs of threatened species, appended list of threatened plant species.	
NEAP indicator for strategy 10.10 – 3 animal and 3 plant threatened species conserved.	
VI) Please provide information on challenges in implementation of this target.	
Lack of a comprehensive list of threatened species, their distribution range, and threats; lack of guidelines for the management and conservation of threatened species; low human capacity; inadequate policy and legislation targeting threatened and rare species are some of the constraints.	
VII) Please provide any other relevant information.	

Box VII.

Goal 3	Promote the conservation of genetic diversity		
Target 3.1	Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
<p>NSSD strategies, targets and actions regarding agriculture (4.2.1.1) have strategic actions to achieve increases in the generation, adaptation and adoption of new and improved varieties of plants and animals (strategic 2.1).</p> <p>NBSAP Priority action 6 - collect and maintain genetic resources in gene banks, botanic gardens, national parks, herbaria, museums and zoos and promote reintroduction in <i>ex situ</i> and <i>ex situ</i> conservation of priority, rare or endangered taxa.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>The following NBSAP strategies pertaining to sustainable use of genetic resources will facilitate implementation of this target:</p> <p>Strategy 3.1.1 - Building on past experience design, develop and implement <i>in situ</i> and <i>ex situ</i> agricultural diversity conservation programmes with full participation and involvement of local communities.</p> <p>Strategy 3.1.2 - Enhance human and research capacity on conservation and sustainable use of agrobiodiversity</p> <p>Strategy 3.2.1 - Develop appropriate guidelines, methodologies and procedures and technologies that</p>			

fully utilise the concepts of ecosystems approach and enhance sustainable use of forest biological diversity.

Strategy 3.2.2 - Develop and implement mechanisms to prevent and mitigate the adverse effects of forest fires on biological diversity

Strategy 3.2.3 - Enhance conservation of forest biological diversity through promotion of sustainable use of resources.

Strategy 3.3.1 - Promote sustainable harvesting and management of Malawi's fish resources especially chambo, and heavily exploited and under exploited fish species through implementation of relevant strategies and action plans.

Strategy 3.4.1 - Raise the awareness of the importance of promoting conservation and sustainable use of biological resources as sources of livelihood to poor Malawians.

Strategy 3.5.1 - Develop guidelines and strengthen existing procedures, policies and law to promote and regulate bioprospecting

Strategy 3.6.1 - Study sectoral policies and legislation and as far as possible integrate considerations of sustainable use into sectoral policies and if necessary develop an enabling and comprehensive policy on sustainable use of biological diversity

Strategy 3.7.1 - Promote and support interdisciplinary research on all aspects of sustainable use of biological resources and make the information available to biodiversity users.

Strategy 3.8.1 - Promote indigenous knowledge systems (IKS) for sustainable management and use of biodiversity.

IV) Please provide information on current status and trends in relation to this target.

Collection, storage and characterization of crops are on going activities of the National Plant Genetic Resources Center. Currently 200 accessions representing 50 crop species are being maintained by the center.

Threatened socio economically important plant species especially those with medicinal values are collected and conserved *ex situ* in the botanic garden and medicinal gardens managed by Traditional Healers Associations.

National Tree Seed Center collects and stores on short terms basis rare and threatened tree species. The center in collaboration with the Millennium Seed Bank is collecting seeds of indigenous, rare, threatened and economically important species for long term storage.

The Ministry of Agriculture through research stations also collects and maintains on short term genetic resources that are used in breeding programmes.

Bunda College of Agriculture recently collected and is maintaining local breeds of cattle (Malawi zebu), chickens, goats, pigs and ducks.

A great number of genetic resources are conserved *in situ* in forest reserves, national parks and on farm.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Inadequate financial, human and infrastructure capacities; lack of enabling and harmonized policy and institutional framework for genetic diversity conservation; inadequate knowledge of the extent of genetic diversity of Malawi; and over-dependence on subsistence agriculture (based on a few crops).

VII) Please provide any other relevant information.

Box VIII .

Goal 4	Promote sustainable use and consumption.		
Target 4.1	Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
The NSSD in theme 3 (Strategy 1.6) and NBSAP strategies regarding sustainable use and access and benefit sharing have provisions to facilitate implementation of this target.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
NSSD Strategy 1.6 (theme 3) - promotes the implementation of the Bonn guidelines on access and benefit sharing of genetic resources.			
NBSAP Strategy 3.4.1 - Raise the awareness of the importance of promoting conservation and sustainable use of biological resources as sources of livelihood to poor Malawians.			
NBSAP Strategy 3.5.1 - Develop guidelines and strengthen existing procedures, policies and law to promote and regulate bioprospecting.			
NBSAP Strategy 4.2.1 - Develop binding framework to regulate access to genetic resources and the sharing of the benefits by integrating the procedures and guidelines for access to and collection of genetic resources into EMA 1996.			

NBSAP Strategy 4.3.1 - Promote community participation, public awareness and capacity building of state actors and the private sector on access and benefit sharing.

NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems.

IV) Please provide information on current status and trends in relation to this target.

Community Based Natural Resource Management provided for in fisheries, forestry, and national parks policies and acts are providing mechanisms for ensuring that natural products are derived from sources that are sustainably managed.

Access to commercially important species by foreign investors is controlled to some extent by the Guidelines for access to genetic resources where access is only possible upon provisions of a collection permit. The guidelines prohibit collection of rare and threatened species.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Low capacity to enforce and monitor implementation of the regulation and guidelines on access to and collection of genetic resources; inadequate institutional and policy framework on bioprospecting; unavailability of policy guidelines on sustainable use of genetic resources.

VII) Please provide any other relevant information.

Box IX.

Target 4.2	Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
Revised policies for Forestry, Fisheries and National Parks sectors now include a strong community participation component. Through their involvement unsustainable use of fish, wildlife and forestry resources is minimized.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	

e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>NBSAP theme on sustainable use of biological resources - (Agrobiodiversity, forest biodiversity, mountain biodiversity, fish, and wildlife) has clear strategies that promote sustainable use of components of biodiversity through development of enabling policies and legislation, promotion of community participation and awareness.</p> <p>National Forestry Programme strategy 4.4 - (to support community based forest management) has actions that will facilitate community empowerment to responsibly and have ownership to use forestry resources sustainably.</p> <p>Fisheries Action Plan strategic objective 1- include strategies and actions that will contribute to reduction in unsustainable harvesting of fish through promotion of the participation of local communities and the private sector in fisheries conservation and management, promotion of sustainable utilization, planned harvesting and regeneration of fish by local communities and Beach Village Committees.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>Community Based Natural Resource Management programmes in forestry, fisheries, wildlife (through VFAs, BVCs and WMA) are promoting sustainable consumption of biological resources. For example the GTZ funded project on sustainable use of forest in Kammwamba has led to sustainable use of indigenous fruits trees such as <i>Tamarindus indica</i> (bwemba, tamarind), <i>Adansonia digitata</i> (malambe). Income generating activities which include bee keeping, guinea fowl rearing have reduced the over reliance on forest products for a living.</p>			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
<p>Inadequate sectoral coordination, inadequate knowledge of the importance of biological diversity to the economic development and livelihood of the people, inadequate enabling policy and institutional framework to promote and regulate sustainable use of biological resources, and poverty are the major constraints for the implementation of this target.</p>			
VII) Please provide any other relevant information.			

Box X.

Target 4.3	No species of wild flora or fauna endangered by international trade		
I) National target: Has a national target been established corresponding to the global target above?			
a) No		b) Yes, the same as the global target	
c) Yes, one or more specific national targets have been established	x		
Please provide details below.			
Malawi has several pieces of legislation regulating international trade and these include:			
<p>Investment Promotion Act - the Act that establishes the Malawi Investment Promotion Agency (MIPA). It provides for investment in manufacturing, agriculture, mining, fisheries, tourism, forestry and other productive sectors as may be determined. Although the Act promotes the investment in natural resource utilization but no reference is made on the need to protect the environment or natural resources</p>			
<p>Malawi Bureau of Standards Act - this Act provides for the promotion of standardization of commodities and of the manufacture, production, processing or treatment thereof.</p>			
<p>Control of Goods Act – the Act, among other things, controls the imports and exports of goods to and from Malawi respectively and has provisions for establishment of regulations prohibiting the import and export of goods, restricting the sale, distribution and dealing with goods.</p>			
<p>The Customs and Excise Act - Under the Act no goods may be imported or exported contrary to any written law and if goods are imported contrary to customs laws, they are liable to forfeiture. However, at present there is no list of the restricted or prohibited goods.</p>			
<p>The Environment Management Act (1996) - the Act contains a number of provisions that may have significant effects on trade such as control of the importation of alien plants species and access to or the exportation of any component of the biological diversity of Malawi.</p>			
<p>The Biosafety Act (2002) - this Act provides for the safe management of biotechnological activities. Under Section 17 of the Act, no person may import, develop, produce or use genetically modified organisms (GMOs) without a license. The Act therefore seeks to protect the environment, human or plant and animal life from the dangers of biotechnology.</p>			
<p>The National Parks and Wildlife Act (1992) - the Act provides for imports and exports of wildlife and wildlife products regulations. This Act makes specific reference to the control of imports and export of wildlife or products thereof in order to assist in management of wildlife resources or conservation efforts that may be subject to international, regional, or bilateral agreement. In line with this provision Malawi implements the trade restrictions under the Convention on International Trade in Endangered Species.</p>			
<p>The Fisheries Conservation and Management Act (1997) – The Act regulates commercial fishing through a licensing and these regulations may impose significant fish trade restrictions while at the same time ensuring sustainable utilization of the available fish stocks.</p>			
<p>The Forestry Act (1997) - Under the Act, a license is required to cut, take, fell destroy, collect and to remove forest produce. The Act has provisions for establishing regulations imposing restrictions on imports, exports, and re-exports of certain types of forest produce. No such regulations have been made.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details

a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>NSSD theme 3, strategy 1.3 - Promote synergy between CBD and Trade Agreement/Intellectual Property Rights. This includes a specific strategic aim to legislate against Trade in endangered species.</p> <p>The NBSAP partially includes provisions for protecting biodiversity against international trade through inclusion of strategies for regulation and promotion of bioprospecting (strategy 3.5.1) and Intellectual Property rights (Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems).</p> <p>NEAP Strategy 8.4 (Biodiversity Sector) – includes strategic actions to control trafficking of fauna and flora.</p>			
IV) Please provide information on current status and trends in relation to this target.			
Access to genetic resources is currently regulated by Procedures and Guidelines for Access and Collection of Genetic Resources but the guidelines are not legally binding. Recognizing the inadequacy of the regulation to regulate international trade Malawi is in the process of developing legally binding Access and Benefit Sharing regulations.			
V) Please provide information on indicators used in relation to this target.			
ABS regulations			
VI) Please provide information on challenges in implementation of this target.			
Inadequate capacity to implement and monitor compliance with the procedures and guidelines for access to genetic resources and the general regulatory regime is inadequate since there is no mechanism for monitoring use of genetic resources once approval has been granted for research or collection of samples; lack of understanding of CITES regulations (currently traders approach the department for exportation of animal specimens and not plants and as such most threatened plant species are illegally exported).			
VII) Please provide any other relevant information.			

Box XI .

Goal 5	Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.		
Target 5.1	Rate of loss and degradation of natural habitats decreased		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
<p>NSSD theme 3, Objective 2 includes strategic actions that aim at reversing the loss of biodiversity and restoring biodiversity in degraded areas by establishing mechanisms for monitoring trends in biodiversity, developing actions to halt biodiversity loss and by establishing protected areas of biodiversity significance.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>NBSAP Strategy 1.1.1 and 2.1.1 - Promote protection of the existing network of terrestrial and aquatic protected areas and initiate programmes to provide legal protection to ecosystems and habitats on private and customary land.</p>			
<p>NBSAP Strategy 1.2.1 and 2.2.1 - Restore areas of degraded habitats and ecosystems and support initiatives and programmes that have priority in conservation and sustainable use of biodiversity.</p>			
<p>National Land Policy: Policy Element 9.0 - Environmental management: By providing strategic and policy direction on such issues as urban management of solids and liquid wastes, protection of sensitive areas, agricultural resources conservation and land use, community forests and woodlands management over dependence of fuel wood the policy was putting in place measures to reduce land</p>			

degradation and improve and or maintain land quality.

National Forestry Programme strategic objective 4.9 - (Manage forest reserves) has provision to bring forest reserves into effective management for sustainable use through integrated land use systems.

NEAP strategic objective on habitat protection and conservation (Objective 9, Biodiversity sector) – includes strategic action that will led to reduction in rate of loss and degradation of natural habitats.

IV) Please provide information on current status and trends in relation to this target.

High population growth rate has resulted in increased pressure on land for agricultural expansions and settlements, and hence reducing habitats for some important biodiversity.

Government efforts to improve food security have resulted in extensive and uncontrolled cultivation in wetlands and this has resulted in reduced aquatic biodiversity and ecosystems.

With support from World Bank, an assessment of the forest resources and land use mapping was undertaken. Results of the study were used to identify areas requiring rehabilitations and protection and as a result the Forestry department embarked on a programme to rehabilitate areas that were affected by Mozambican refugees (refuge camps) and other heavily degraded forest reserves such as Ndirande, Thyolo etc.

V) Please provide information on indicators used in relation to this target.

165 village natural resources management committees formed, 6, bee keeping clubs formed, 18 village forest areas formed, Cichlid sanctuaries established in Lake Malawi.

VI) Please provide information on challenges in implementation of this target.

Over dependence on subsistence agriculture has resulted in land degradation.

Extreme poverty is forcing the people to depend on natural resource endowment as a source of livelihoods for short-term gains.

Land shortage especially in the southern region coupled with high population growth rate is exerting pressure on land leading to cultivation in the marginal lands.

Inadequate coordination sometimes has resulted in conflicting approaches to natural resource management.

Inadequate resources

VII) Please provide any other relevant information.

Box XII.

Goal 6	Control threats from invasive alien species.	
Target 6.1	Pathways for major potential alien invasive species controlled	
I) National target: Has a national target been established corresponding to the global target above?		
a) No		
b) Yes, the same as the global target		
c) Yes, one or more specific national targets have been established		x
Please provide details below.		
NSSD strategic objective 2.4 (for theme 3) - has provisions for controlling invasive alien species		

through establishing programmes and research programmes on best practices to control alien invasive species.

NBSAP Priority Action 7 - Develop methodologies to monitor, prevent and arrest the spread of invasive species in shared ecosystems, including early detection and coordinated management efforts at the community, national and regional levels.

Targets - Policy guidelines and regulations for management of invasive species are developed and implemented by 2006.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

a) No	
b) Yes, into national biodiversity strategy and action plan	x
c) Yes, into sectoral strategies, plans and programmes	x

Please provide details below.

The NBSAP has the following provisions regarding management of invasive species:

Strategy 6.1.1 - Develop a fair, balanced and objective nation-wide invasive species management plan to facilitate coordination and cooperation among agencies but mindful of the fact that there are many frequently competing public and private interests.

Strategy 6.1.2 - Develop mechanisms to prevent the introduction and establishment of new invasive species and identify current and potential conditions that promote introduction of new invasive species.

Strategy 6.1.3 - Develop cost effective invasive species management programmes.

Strategy 6.2.1 - Promote awareness of the threat to biological diversity and related ecosystem goods and services posed by invasive species.

Strategy 6.3.1 - Enhance and facilitate coordinated research and monitoring of invasive alien species.

Strategy 6.4.1 - Review relevant policies, legislation and institutions and as appropriate adjust or develop enabling policies, legislation and institutions.

Forest Ecosystems Biodiversity Conservation Action Plan component 2 (Management of alien invasive species) - has the following two strategies; a) develop mechanisms for effective monitoring of invasive species, b) and enhance information and knowledge dissemination on alien invasive species, which have strategic actions to promote management of invasive species.

The Fisheries and Aquaculture Policy (2001) - has provisions for prohibiting the introduction of exotic species and also has the mandate to monitor and control the spread of aquatic weeds specially water hyacinth using biological control. Similarly the wildlife policy mandates the wildlife sector to maintain the eco-

logical and aesthetic quality of protected areas by preventing and controlling among other things introduction of exotic plants and animals.

IV) Please provide information on current status and trends in relation to this target.

There is no single government department that is charged with the control and management of invasive species in Malawi. There is also no single policy framework that specifically addresses the control, prevention, eradication and management of invasive species. Issues of invasive species are covered in sectoral policies and legislation dealing with biodiversity.

The Plant Protection Act, 1970 (Cap. 64:01) and the Noxious Weed Act, 1970 (Cap. 64:02) have provisions to prevent the introduction of alien weeds, invertebrate and microbial pests and provide for the eradication of pests, diseases and weeds that are destructive to plants and other habitats. These Acts further prevent the importation, culturing, distribution, selling and exportation of any plant forms and growth media such as rooting compost and soil without an official permit issued by the National Plant Protection Services. Unfortunately, the Acts are seriously outdated.

There exist no invasive species programme and current management programme such as those on Mulanje Mountain, Shire River are responding to already established invasive species.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Current programmes are uncoordinated, none cost effective and do not give priority to prevention of introductions of invasive species.

Institutional framework and policies that would have facilitated control and spread of potentially invasive species within Malawi and between its neighbours are not available. This is compounded by unavailability of guidelines and procedures for risk assessment, economic and social impact assessment that are required as part of the evaluation process before a decision is made on whether or not to authorize a proposed introduction.

Unavailability of a designated organisation to coordinate invasive species programmes means that sectoral activities, such as fisheries, agriculture, forestry, horticulture, ground and air transportation, construction projects, landscaping, ornamental aquaculture, tourism and game-farming which are potential sources of unintentional introductions of alien invasive species are very often not subjected to rigorous study and assessments.

Lack of comprehensive inventory of invasive species and their impacts on the environment.

VII) Please provide any other relevant information.

Box XIII.

Target 6.2		Management plans in place for major alien species that threaten ecosystems, habitats or species	
I) National target: Has a national target been established corresponding to the global target above?			
a) No		x	
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
<p>A programme for the management of water hyacinth was supported in the Fisheries Department with financial support from the DFID but this has not been sustained. Current management plans on invasive species appear to be ad hoc and often targeting already established invasive species.</p> <p>Mulanje Mountain Conservation Trust has a programme to eradicate invasive species on Mulanje Mountain.</p>			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan		x	
c) Yes, into sectoral strategies, plans and programmes		x	
Please provide details below.			
<p>NBSAP strategic objective 6.1 - Develop a fair, balanced and objective nation-wide invasive species management plan to facilitate coordination and cooperation among agencies but mindful of the fact that there are many frequently competing public and private interests.</p> <p>NSSD strategic 2.4a (for theme 3) - establish a programme to control invasive species.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>Status of invasive species including a preliminary inventory was undertaken as an activity of the SABSP project. The study recommended development of a comprehensive management plan for invasive species. In response to this recommendation, the Department of Environmental Affairs is in the process of developing of regulations (including management plans) for invasive species in Malawi.</p>			

V) Please provide information on indicators used in relation to this target.
VI) Please provide information on challenges in implementation of this target. Inadequate institutional framework to coordinate invasive species programmes; and inadequate financial and human capacities.
VII) Please provide any other relevant information.

Box XIV.

Goal 7	Address challenges to biodiversity from climate change, and pollution.		
Target 7.1	Maintain and enhance resilience of the components of biodiversity to adapt to climate change		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
National Adaptation Programme of Action (NAPA) identified provisions that will ensure that biodiversity components (forestry, fisheries, agriculture, wildlife) adapt to climate change			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			

NAPA identified the following potential adaptation option to climate change in agriculture, forestry and fisheries (major biodiversity sectors):

a) Option for adapting to Climate Change in agriculture

Changes in land use (proposes measures and or options includes changes in cultivated land are a, changes in crop types, Changes in crop location. .

Changes in crop management strategies; proposed measures include; use of irrigation water and fertilizers, Use of improved high performance varieties: control of pests, parasites, weeds and diseases, soil drainage and erosion control.

Limiting greenhouse gas emissions.

b) Options for adaptation to climate change in fisheries included adoption sound of agricultural practices and building a capacity for a fish-retrenching program, fish gene banks to maintain genetic diversity of the fish population.

c) Potential adaptation options in the forestry sector include cultivation of drought resistant species, storage of seed of drought resistant species and improved forest management.

NSSD section 4.2.1.4 has provisions that promote implementation of the UN Framework Convention on Climate Change (UNFCCC). These include:

Objective 1 - Provide effective weather and climate disaster early warning and enhance awareness, uptake and response by the general public,

Objective 2 - Provide reliable weather and climate information and advisors for use in agricultural production, industrial production and water resource management,

Objective 3 - take a leading role in the implementation of the United Nations Framework Convention on Climate Change.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

(From SOER 2002) Reduced emissions of carbon dioxide, nitrogen oxides, Methyl bromide, reduced methyl bromide imports, reduced incidences of draught.

VI) Please provide information on challenges in implementation of this target.

Inadequate institutional, policy and infrastructural framework, inadequate human capacity, limited funds.

VII) Please provide any other relevant information.

Box XV.

Target 7.2		Reduce pollution and its impacts on biodiversity	
I) National target: Has a national target been established corresponding to the global target above?			
a) No		x	
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
The Department of Environmental Affairs in response to EMA and EIA requirements has developed environmental standards, whose principle objective is minimizing pollution by recommending acceptable levels of pollutants for development projects.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes		x	
Please provide details below.			
City Assemblies have regulations that include environmental standards that developers should comply with.			
Environmental Standards that are being developed in response to EMA and EIA requirements also contain minimum acceptable levels of pollutants that should be observed by all developers.			
NEAP Strategic Objective 8 (Biodiversity Sector) – has strategic actions to control noise pollution at the work place.			
IV) Please provide information on current status and trends in relation to this target.			
Increased incidents of isolated air pollution have been reported over Nchenga Coal Mine in Rumphi.			
Deforestation has resulted in increased soil erosion resulting in increased nutrient loads in the aquatic systems.			
Malawi has put in place strategies to mitigate against depletion of the Ozone layer such as Methyl Bromide Phasing out programme.			
Greenhouse gases emissions have been assessed in accordance with requirements of UNFCCC, which			

recorded an increase in the emissions.
V) Please provide information on indicators used in relation to this target.
Reduced noise in industries through the use of sound proofing equipments; landfills, sewage treatment plants.
VI) Please provide information on challenges in implementation of this target.
Inadequate capacity, inadequate human and infrastructure capacity, uncoordinated pollution control programmes, inadequate policy and legal harmonization.
VII) Please provide any other relevant information.

Box XVI .

Goal 8	Maintain capacity of ecosystems to deliver goods and services and support livelihoods.		
Target 8.1	Capacity of ecosystems to deliver goods and services maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
NBSAP Priority Action 1 - Create an enabling policy framework that would promote conservation of species, habitats and ecosystems that are important but not represented within the existing protected area networks or are vulnerable, fragile or are at risk of irreversible loss or decline of biodiversity.			
Targets - Biodiversity hotspots including lakes and wetlands, mountains and terrestrial habitats and ecosystems outside the protected areas network are identified, characterized and protected by 2010, will ensure that ecosystems will continue to deliver their goods and services.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x

c) Yes, into sectoral strategies, plans and programmes	x
Please provide details below.	
<p>The following NBSAP Strategies and actions provided under themes on terrestrial and aquatic ecosystems have actions that will facilitate effective development and management of habitat and restoration of ecosystems to a healthy functioning state.</p> <p>Strategy 1.1.1 and 2.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands.</p> <p>Strategy 1.2.1 and 2.2.1 - Restore areas of degraded habitats and ecosystems and support initiatives and programmes that have priority in conservation and sustainable use of biodiversity.</p> <p>Strategy 1.3.1 and 2.3.1 - Increase the population and distribution ranges of rare and threatened species and prevent additional ones from becoming threatened.</p> <p>Strategy 1.4.1 and 2.4.1 - Enhance the knowledge base of Malawians on the extent of biodiversity and promote sound decision making in biodiversity conservation.</p> <p>Strategy 3.2.1 - Develop appropriate guidelines, methodologies and procedures and technologies that fully utilise the concepts of ecosystems approach and enhance sustainable use of forest biological diversity.</p> <p>The existing Forestry, National Parks and land Policies also provide policy guidance to ensure that ecosystems remain in a health functioning state.</p> <p>NEAP strategy 9.8 (Biodiversity sector) – Introduce co management of biodiversity in both terrestrial and aquatic habitats.</p>	
IV) Please provide information on current status and trends in relation to this target.	
On going management programmes in protected areas and in fisheries sector are facilitating implementation of this target.	
V) Please provide information on indicators used in relation to this target.	
Laws on protected areas enforced.	
VI) Please provide information on challenges in implementation of this target.	
Lack of understanding of the ecosystems approach means that programmes fail to address issues of sustainable ecosystems management adequately. In addition to this the existing sectoral policies require harmonization and strong coordinating institution. The capacity of Malawi to implement ecosystems programme is compounded by lack of information regarding the status of ecosystems of Malawi especially their rate of degradation.	
VII) Please provide any other relevant information.	

Box XVII.

Target 8.2		Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained	
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established		x	
Please provide details below.			
NBSAP Priority Action 6 - Collect and maintain genetic resources in gene banks, botanic gardens, national parks, herbaria, museums and zoos, and promote re-introduction, <i>in-situ</i> and <i>ex-situ</i> conservation of priority, rare, or endangered taxa.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan		x	
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
<p>The NBSAP thematic area on sustainable use of genetic resources has a special focus on conservation of biological resources that support the livelihoods of the people such as agricultural biodiversity, forestry resources, fisheries, wildlife and none woody forestry products including traditional medicine. The following are some of the relevant strategies:</p> <p>Strategy 3.1.1 - Building on past experience, design, develop and implement <i>in situ</i> and <i>ex situ</i> agricultural diversity conservation programmes with full participation and involvement of local communities.</p> <p>Strategy 3.1.2 - Enhance human and research capacity on conservation and sustainable use of agrobiodiversity</p> <p>Strategy 3.2.3 - Enhance conservation of forest biological diversity through promotion of sustainable use of resources.</p> <p>Strategy 3.3.1 - Promote sustainable harvesting and management of Malawi's fish resources especially chambo, and heavily exploited and under exploited fish species through implementation of relevant strategies and action plans.</p> <p>Strategy 3.4.1 - Raise the awareness of the importance of promoting conservation and sustainable use of biological resources as sources of livelihood to poor Malawians.</p> <p>Strategy 3.6.1 - Study sectoral policies and legislation and as far as possible integrate considerations</p>			

of sustainable use into sectoral policies and if necessary develop an enabling and comprehensive policy on sustainable use of biological diversity

Strategy 3.8.1 - Promote indigenous knowledge systems (IKS) for sustainable management and use of biodiversity.

IV) Please provide information on current status and trends in relation to this target.

Agricultural biodiversity especially of the local crops is being collected, characterized and maintained by the National Plant Genetic Resources Center. Government research stations also have short-term storage facilities of breeding material.

Bunda College of Agriculture maintains a limited number of indigenous animals mainly local cattle (Malawi zebu), goats, pigs and chickens.

Although a high proportion of Malawians rely on traditional medicine collection and *ex situ* conservation of widely used species is not wide spread. Most medicinal plants are unsustainably harvested by traditional healers.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Forest reserves were primarily created to conserve soil and water since most of them are catchments for major water bodies. Conservation of other forms of biodiversity appears to be secondary since no efforts were made to ensure moderate representation of species diversity in forest reserves.

Erosion of genetic diversity within domesticated, cultivated and wild and harvested species is widespread and is largely due to among other things preference to improved varieties. Programmes to characterise, protect and multiply the remaining varieties, breeds and strains are not available.

Current agrobiodiversity programmes do not include conservation of pollinators and soil flora and fauna upon which the agricultural diversity is dependent.

Although there appear to be potential for bioprospecting especially from medicinal plants, bioprospecting is unregulated and can encourage unsustainable use.

There is general lack of a streamlined policy and legislative framework that clearly articulates strategies on how biological resources can be used sustainably.

Research to investigate the relationship between conservation and sustainable use of biological resources including valuation of biological resources is rudimentary. This is constrained by inadequate human and infrastructure capacity. This inadequate research capacity means that information is either unavailable, inadequate or is scattered about and is not in the format easily accessible by the users. This unavailability of information may affect sound decisions on sustainable use of biological diversity.

VII) Please provide any other relevant information.

Box XVIII.

Goal 9	Maintain socio-cultural diversity of indigenous and local communities.		
Target 9.1	Protect traditional knowledge, innovations and practices		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
The NBSAP has a number of strategies addressing this target.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
NBSAP Strategy 3.5.1 - Develop guidelines and strengthen existing procedures, policies and laws to promote and regulate bioprospecting.			
NBSAP Strategy 3.8.1 - Promote indigenous knowledge systems (IKS) for sustainable management and use of biodiversity.			
NBSAP Strategy 4.1.1 - Identify relevant working IK practices, raise their value, and integrate them into conservation activities.			
NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems			
Forest Ecosystems Biodiversity Conservation Action Plan (component 4) - has provisions for integration of indigenous knowledge in forest management through among other things documenting indigenous knowledge systems, developing legislation for the protection of indigenous knowledge, ensuring that the rural communities' wealth of information regarding biodiversity and ecology is respected and taken into account.			

IV) Please provide information on current status and trends in relation to this target.

Traditional Knowledge systems exist amongst the local communities and they range from knowledge on traditional farming systems, traditional crop and animal improvement, traditional healing systems, traditional uses of natural resources, and traditional benefit sharing systems. These innovations and practices however have not been documented except traditional healing systems. Traditional Healers are the most organised traditional knowledge systems. Through their associations they have in close collaboration with scientists participated in the drafting of a code of ethics for traditional health practitioners, traditional medicine policy and a Traditional Health Practitioners Bill. The Policy provides for conservation of biodiversity and preservation of indigenous knowledge and also seeks to protect IPRs of individuals and institutions involved in research and development.

Traditional knowledge, innovations and practices shall also be protected by the Access and Benefit Sharing regulations which are currently being developed.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Inadequate and or lack of policies, legislation and institutional framework for the protection of indigenous knowledge; inadequate human capacity to implement the existing policies; inadequate understanding of the value or importance of indigenous knowledge; inadequate information and data on indigenous knowledge systems.

VII) Please provide any other relevant information.

Box XIX.

Target 9.2	Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	

c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
<p>Science and Technology Policy for Malawi (2002) paragraph 3.4.13 - provision for protection of indigenous knowledge, beneficial rights and Rights of Origin. Strategies for achieving this include promotion of indigenous knowledge, which is known and proven through its dissemination and communication, establishing appropriate incentives that promote the generation and utilization of indigenous knowledge, and developing appropriate legislation that protects the rights and origin of indigenous knowledge systems and national genetic resources.</p> <p>NBSAP strategy 4.3.1 - provides for awareness raising of the importance of access and benefit sharing and especially emphasizes duties and responsibilities of traditional leaders the local communities and, especially those adjacent to biodiversity hotspots on access and benefit sharing and the importance of their participation in ABS programmes.</p> <p>NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems.</p> <p>NSSD Strategy 1.7 (for theme 3) - Promote traditional systems to conserve biodiversity.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>The current Patent Act does not adequately provide for the protection of indigenous knowledge. In recognition of this inadequacy Malawi is currently drafting a Traditional Healers Bill. The bill will also promote issues of IPR. The Ministry of Agriculture is also drafting the Plant Breeders Bill, which has provisions for protection of indigenous knowledge, and sharing of benefits arising from the use of farmers' innovations. To ensure that the Bill adequately addresses issues of indigenous knowledge the bill should in as far as possible integrate requirements of regional instruments such as the African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (the Model Legislation).</p>			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
<p>Lack of policy, law and institutional framework coupled with inadequate capacity are the major challenges, inadequate awareness on the importance of traditional knowledge.</p>			
VII) Please provide any other relevant information.			

Box XX.

Goal 10	Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.		
Target 10.1	All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
But the NBSAP adequately includes strategies for the implementation of this target under section four (Traditional Knowledge, Access and Benefit Sharing).			
NBSAP Priority Action 5 – Develop and gazette regulations on Access and Benefit sharing.			
Targets - Regulation(s) on Access and Benefit Sharing developed and gazetted by 2007.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
NBSAP Strategy 3.5.1 - Develop regulations and strengthen existing procedures, policies and laws to promote and regulate bioprospecting.			

NBSAP Strategy 4.2.1 - Develop binding framework to regulate access to genetic resources and the sharing of the benefits by integrating the procedures and guidelines for access to and collection of genetic resources into EMA 1996.

NBSAP Strategy 4.3.1 - Promote community participation, public awareness and capacity building of state actors and the private sector on access and benefit sharing.

NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights regimes.

Forestry Ecosystems Biodiversity Conservation and Action Plan (Component 3) - Develop Access and benefit Sharing Mechanisms.

IV) Please provide information on current status and trends in relation to this target.

Access to genetic resources is guided by Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi (Revised 2002) and Procedures and Guidelines for the Conduct of Research in Malawi (Revised 2002). These guidelines are inadequate because they have not been promulgated into rules or regulations under the existing legislation. In most cases access has been through a front i.e. funded projects.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

- Lack of capacity to interpret CBD decisions has resulted in failure to operationalise the work programme on access and benefit sharing.
- Lack of policy and institutional framework has resulted in illegal access to genetic resources.

VII) Please provide any other relevant information.

Box XXI .

Target 10.2	Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources	
I) National target: Has a national target been established corresponding to the global target above?		
a) No		x
b) Yes, the same as the global target		
c) Yes, one or more specific national targets have been established		
Please provide details below.		
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).		

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			X
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
<p>NBSAP Strategy 3.5.1 - Develop regulations and strengthen existing procedures, policies and laws to promote and regulate bioprospecting.</p> <p>NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights regimes.</p>			
IV) Please provide information on current status and trends in relation to this target.			
<p>The private sector has exported medicinal plants to neighbouring countries, Europe and the Far East. But due to lack of Benefit Sharing regulations benefits have never been shared equitably with the people (i.e. the exporters have been the only beneficiaries).</p>			
V) Please provide information on indicators used in relation to this target.			
<p>VI) Please provide information on challenges in implementation of this target.</p> <p>Lack of capacity to regulate bioprospecting and to monitor illegal access, lack of a comprehensive Access and Benefit law and IPR, and inadequate awareness and understanding of TRIPS.</p>			
VII) Please provide any other relevant information.			
<p></p>			

Box XXII.

Goal 11	Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention.		
Target 11.1	New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
Malawi being a developing country has been mostly a recipient of donor support to implement provisions of the Conventions.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			x
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
But in recognition of the fact that most biodiversity programmes are donor funded Malawi identified mechanisms to promote wise use of development assistance as a priority. Malawi therefore considers development and implementation of regulations and code of conduct for wise use of development aid by 2007 as a priority (NBSAP Priority Action 14) .			
The NBSAP further in recognition of the declining external support for biodiversity programme included strategies that would promote or facilitate establishment of alternative financing mechanisms that minimize resource expenditure such as Biodiversity Trust Funds (Strategy 10.4.3) .			
NSSD strategic aim 1.7b (for theme 3) , Promote innovation and sustainable funding mechanisms for biodiversity conservation and wise use. The targets associated with this strategy by 2005 include: innovative and sustainable funding mechanisms for biodiversity conservation, establishment of environmental fund, and establishment of community managed projects.			

IV) Please provide information on current status and trends in relation to this target.

To supplement on donor support Malawi has three well established financing mechanisms. The Malawi Environmental Endowment Trust (MEET), Mulanje Mountain Conservation Trust and the Environment Management Fund. See Article 20 for details.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Inadequate capacity and institutional framework to follow up on CBD decisions and develop project proposals that respond to CBD decisions and programmes, inadequate information exchange and sharing.

VII) Please provide any other relevant information.

Box XXIII.

Target 11.2

Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4

I) National target: Has a national target been established corresponding to the global target above?

a) No	x
b) Yes, the same as the global target	
c) Yes, one or more specific national targets have been established	

Please provide details below.

N/A

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and

strategies?	
a) No	
b) Yes, into national biodiversity strategy and action plan	X
c) Yes, into sectoral strategies, plans and programmes	X
Please provide details below.	
<p>The following strategies will provide mechanisms for access to technologies: NBSAP Strategy 9.2.1 - Develop, consolidate and share existing and new biodiversity information, methods, technologies and management experiences.</p> <p>NBSAP Strategy 9.3.1 - Develop and review existing policy and legislation on exchange and sharing of biodiversity scientific knowledge, technologies and management practices.</p> <p>Science and technology policy element 3.4.3 - regarding Technology development and transfer has the following relevant strategy: Strategy 3.4.3.2 - Monitor imported technologies by establishing national capacities to screen technology agreements, search and select imported technology, negotiate, bargain and acquire the technology; adapt the technology and diffuse the technologies.</p>	
IV) Please provide information on current status and trends in relation to this target.	
<p>Issues of technology transfer in relation to Biodiversity are relatively new and as such the trends and status have not been assessed.</p>	
V) Please provide information on indicators used in relation to this target.	
.	
VI) Please provide information on challenges in implementation of this target.	
<p>Inadequate capacity to access information on appropriate technologies and apply them to Malawi conditions; technological needs of Malawi in relation to the implementation of the CBD has not been assessed.</p>	
VII) Please provide any other relevant information.	

Global Strategy for Plant Conservation (GSPC)

The Conference of the Parties, in decision VI/9, annex, adopted the Global Strategy for Plant Conservation. Parties and Governments are invited to develop their own targets with this flexible framework. The Conference of the Parties considered the Strategy as a pilot approach for the use of outcome oriented targets under the Convention. In decision VII/10, the Conference of the Parties decided to integrate the targets into the reporting framework for the Third National Reports. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box XXIV.

Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	<input type="checkbox"/>
b) No	<input checked="" type="checkbox"/>
Please specify	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	<input checked="" type="checkbox"/>
b) No	<input type="checkbox"/>
Please specify	
The following NBSAP strategy and action have provisions for development of plant checklists.	
NBSAP Strategy 1.4.1 - Enhance the knowledge base of Malawians on the extent of biodiversity and promote sound decision making in biodiversity conservation. Action: Develop appropriate methods for collection, documentation, identification, and classification; promote production of inventories and checklists.	
III) Current status (please indicate current status related to this target)	

Various checklists are available some of which include the following:

- Pteridophyta collected in Malawi, with a preliminary checklist of the Orders Psilotales and Lycopodiales (Berrie 1981)
- A First Checklist of the Herbaceous Flora of Malawi (Binns 1968)
- An annotated checklist of the macrophytes of the Shire River, Malawi, with reference to potential aquatic weeds (Blackmore et al 1989).
- Systematic list of Nyika botanical collections (Brummitt 1973)
- Annotated list of plants collected in Lengwe National Park, Malawi (Hall-Martin et al 1980)
- Wild Flowers of Malawi (Moriarty 1975)
- Trees of Malawi (Pullinger et al 1982)
- Introduction to the Common Trees of Malawi (Shorter 1989)
- Useful Plants of Malawi (Williamson 1975)
- Plants of the Nyika Plateau (Burrow and Willis 2005).
- Checklists of medicinal plants have been prepared through various initiatives but these have never been consolidated into a national checklist of medicinal plants of Malawi.
- IUCN Red Data List for Southern African Plants
- A checklist of indigenous agricultural crops and germplasm (National Plant Genetic Resource Centre)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

An electronic database of the herbarium collections in the National herbarium is being developed and this has potential for being used to develop an up to date checklist of plants of Malawi.

Germplasm Database developed at National Plant Genetic Resource Centre, Chitedze

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

With support from the SABONET Project the herbarium collections at the National Herbarium (MAL) was databased. This together with information from the literature including Flora Zambesiaca were used to prepare a preliminary national checklist.

1800 Accessions in germplasm database.

VI) Constraints to achieving progress towards the target

Inadequate human and infrastructure capacities to compile and check the nomenclature of the names, inadequate of up to date taxonomic literature, inadequate funding.

VII) Any other relevant information

Box XXV.

Target 2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

x

Please specify

IUCN Red data List

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
<p>The following strategy and action have provisions for assessments of conservation status of plants of Malawi.</p> <p>NBSAP Strategy 1.3.1 - Increase the population and distribution ranges of rare and threatened species and prevent additional ones from becoming threatened. Action: Undertake surveys and assessments to identify and document threatened species and revise the red data list for Malawi and Malawi's list of protected plants.</p>	
III) Current status (please indicate current status related to this target)	
<p>A task force to assess the trends and the status of indigenous and domesticated plants of Malawi was set up during the NBSAP process and a preliminary assessment of the conservation status of most vascular plants was done. The assessment discovered that most plants are threatened due to habitat degradation, unsustainable use and policy inadequacy.</p> <p>With support from SABONET a preliminary assessment of conservation status of some plants was conducted and the resulted were part of the IUCN Southern Africa Red Data List. The results shows that approximately 261 species are considered threatened, vulnerable, rare or endangered. But despite the high level of threatened species only eleven have legal protection.</p>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
Additional plants that also require legal protection has been produced and the list of protected plants will be updated as soon as Act the process to revise the current Plant Protected is initiated.	
VI) Constraints to achieving progress towards the target	
Limited human capacity to undertake an assessment of the conservation status of plant species and inadequate financial resources.	
VII) Any other relevant information	

Box XXVI.

Target 3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
<p>The Biodiversity Support Programme funded by Government of Norway is undertaking a biodiversity study of Nyika National park, and seeks to develop conservation models based on GIS techniques.</p> <p>MMCT has an Ecological Monitoring Programme where biodiversity parameters such as species diversity, conservation status, human activities are monitored in permanent ecological plots. Results of the study will be used to develop models for plant conservation and sustainable use.</p>	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
<p>The NBSAP has the following provisions to facilitate implementation of this target.</p> <p>NBSAP Strategy 3.7.1 - Promote and support interdisciplinary research on all aspects of sustainable use of biological resources and make the information available to biodiversity users.</p>	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
<p>Inadequate research capacity, poor institutional collaboration, limited institutional interest, lack of coordination of activities, lack of political will.</p>	
VII) Any other relevant information	

Box XXVII.

Target 4. At least ten percent of each of the world's ecological regions effectively conserved.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
No national target has been established but NSSD strategy 2.8 (for theme 3) on promotion of biodiversity hot spot area management whose aim is to establish ecological networks may be relevant. The targets associated with this strategy include: creation of various types of network elements, including protected areas, corridors and sustainable use area.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
Forest Ecosystems Biodiversity Conservation Action Plan - if fully implemented will contribute to the conservation of the Miombo Ecoregion and the since most of the forest reserves are in the miombo woodlands.	
NBSAP Strategy 1.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands. Although Malawi has no wetlands management policy the existing Lake Chilwa Wetland Management plan is facilitating sustainable management of the wetland in accordance with Ramsar convention.	
III) Current status (please indicate current status related to this target)	
Forestry Department and the Department of National Parks and Wildlife are contributing to the conservation of the miombo ecological region through management of the protected areas. The departments are also contributing to the IUCN Afromontane Ecoregions of Forest Biodiversity (Mulanje Forest Reserve and Nyika National Park).	
As a member of the Miombo Ecoregion Programme Malawi has through a consultative process identified areas of biological significance and with support from WWF baseline data for some of the areas are being collected. The data will be used to formulate management strategies for effective conservations for each area.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Baseline studies in some areas of biodiversity significance for Miombo Ecoregion started.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
Ecoregion Management Plans for each of the area of biological significance.	
VI) Constraints to achieving progress towards the target	
Low capacity to enforce the law and implement the relevant policies, encroachment into protected areas due to poverty, agricultural expansions, non-compliance, high population pressure, lack of alternative sustainable livelihoods and lack of political will.	
VII) Any other relevant information	

Box XXVIII.

Target 5. Protection of fifty percent of the most important areas for plant diversity assured.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
<p>Approximately 28% of the total land area of Malawi is under forest cover. Of these about 11% is national parks and wildlife reserves, 10% are gazetted forest reserves and the remaining 7% is natural woodlands on customary land. Currently there are about 82 gazetted forest reserves and 5 National Parks and 4 Wildlife reserves. The protected areas cover a wide range of habitats ranging from closed forests to wetlands and aquatic habitats e.g. Lake Malawi National Park. Protected areas such as Nyika National Park, Zomba and Mulanje mountains and Lake Malawi are considered areas of high biological diversity. This means that the existing extensive protected areas network already include most important areas of high plant diversity.</p>	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
<p>NBSAP Strategy 1.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands.</p> <p>NEAP Strategy 8.8 (regarding the biodiversity sector) has strategic actions to promote conservation of protected areas.</p> <p>NEAP Strategy 9.15 (regarding the biodiversity sector) – identify areas of special interest and plan for conservation.</p> <p>National Forestry Programme strategy 4.9 – has provisions for enhance management of forest reserves some of which include, enforcement of EIA requirements.</p> <p>MMCT programme and activities are promoting sustainable management of the mountain as a whole and as such MMCT is complementing efforts by the Forest Department to conserve the mountain which is also an areas of high biological diversity.</p>	
III) Current status (please indicate current status related to this target)	
See paragraph I above.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Although not undertaken in response to this target the recent policy reforms in natural resource management (to align sector policies with NEP) resulted in improved protection of protected areas.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
Formation of Village Forestry Areas; formalization of 'proposed' forest reserves;	

VI) Constraints to achieving progress towards the target	
Low capacity to enforce the law, and land shortage (which often leads to encroachment into protected areas), inadequate policy harmonization.	
VII) Any other relevant information	

Box XXIX.

Target 6. At least thirty percent of production lands managed consistent with the conservation of plant diversity.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
This target is partly provided for in the following strategies NBSAP Strategy 1.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands. NBSAP Strategy 1.2.1 - Restore areas of degraded habitats and ecosystems and support initiatives and programmes that have priority in conservation and sustainable use of biodiversity. NBSAP Strategy 2.1.1 - Promote protection of the existing network of aquatic protected areas and initiate programmes to provide legal protection to other aquatic habitats. NBSAP Strategy 2.2.1 - Restore degraded aquatic habitats and ecosystems and support initiatives and programmes that have priority in sustainable use of aquatic biodiversity.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
The National Land Policy (2001) - has policy guidance for attitude and practices that adversely impact land based resource management such as; a) urban management of solid and liquid wastes, b) protection of sensitive areas, c) agricultural resource conservation and land use, d) community forests and woodlands management, e) over-dependence on fuel wood, f) forestation programs, g) coordination of multiple land use, h) water resources and wetlands, i) lakeshore environment management, j) and mining minerals.	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Integration of environmental concerns into the national land policy.	

V) Progress made towards target (please specify indicators used to monitor progress towards the target)
VI) Constraints to achieving progress towards the target Inadequate awareness, lack of appropriate incentives for plant biodiversity and conservation, inadequate coordination and capacity to implement the policy.
VII) Any other relevant information

Box XXX.

Target 7. Sixty percent of the world's threatened species conserved <i>In-situ</i>.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	x
b) No	
Please specify	
<p>An assessment of the conservation status of plants of Malawi during the NBSAP observed that all the known threatened species are represented in Malawi's protected areas network but their populations are declining. This means that the following strategies provided in the National Forestry Programme to some extent provide mechanisms to ensure that threatened species continue to be conserved <i>in situ</i> in Protected Areas.</p> <p>NFP 4.2 - Optimize policy influence on forests and livelihoods NFP 4.3 - Build local forest governance through decentralization NFP 4.4 - Support Community based forest management NFP 4.6 - Strengthen forest extension NFP 4.9 - Manage forest reserves.</p>	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	

NBSAP Strategy 1.1.1 - Enhance the existing network of protected areas and initiate programmes to protect the remnants of important habitats and ecosystems on private and customary lands

NBSAP Strategy 1.3.1 - Increase the population and distribution ranges of rare and threatened species and prevent additional ones from becoming threatened. This strategy include actions that will promote identification and documentation of threatened species and revision the red data list for Malawi and Malawi's list of protected plants).

Forest Ecosystems Biodiversity Conservation Action Plan (Component 1, Conservation of forest ecosystems) - has strategic actions for management of forest reserves, adoption of multi-sectoral approach to ecosystem management, and promotion of cross border management of forest ecosystems.

NEAP Strategy 10.10 (regarding the biodiversity sector) – includes strategic actions that will promote and facilitate reintroduction of endangered species in their natural habitats.

The Ministry of Agriculture and Food Security has an on going programme to promote on farm conservation of land races and indigenous crops.

Threaten plant species are conserved *in situ* in the protected area networks (Forestry Reserves and National Parks).

The Plant Protection Act promotes conservation of threaten species *in situ*.

III) Current status (please indicate current status related to this target)

A total of 241 plant species are included in the Malawi Red Data List as being threatened. The lists does not include all Orchids and Aloes most of which are threatened. This means that the number of threatened species may be more than 241 species.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

Refer to III above.

VI) Constraints to achieving progress towards the target

Inadequate knowledge of the number of threatened plants, their distribution and population size; lack of institutional and policy framework for the management of threatened plant species are among the constraints for achieving this target.

VII) Any other relevant information

Box XXXI.

Target 8. Sixty percent of threatened plant species in accessible <i>Ex-situ</i> collections, preferably in the country of origin, and 10 percent of them included in recovery and restoration programmes.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
However the following on going <i>ex situ</i> conservation programme are contributing to the implementation of this target.	
a) Threatened Plants Programme initiated during the SABONET project contributed to the collection and introduction in the botanic gardens of such species as Aloes (30 species), orchids (about 11 species), and rare medicinal plants	
b) The National Plant Genetic Resource Center collects and stores on long term basis seeds for cultivated and wild relatives of cultivated crops.	
c) The National Tree Seed Center, collect and stores on short term basis threatened and rare indigenous trees species. In collaboration with the Millennium Seed Bank Project the Tree Seed Center has so far collected seeds of 200 species.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
NBSAP Priority Action 6 - Collect and maintain genetic resources in gene banks, botanic gardens, national parks, herbaria, museums and zoos, and promote re-introduction, <i>in-situ</i> and <i>ex-situ</i> conservation of priority, rare, or endangered taxa.	
Targets: Databases of genetic resources are created and published by 2009.	
III) Current status (please indicate current status related to this target)	
See paragraph I above	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
Collect and conserve all known threatened species of Malawi in the National Plant Genetic Resource Centre and National Tree Centre.	
VI) Constraints to achieving progress towards the target	

A comprehensive list of threatened species of Malawi and their distributional range is not available.

Lack of institutional, policy and legal framework to guide and coordinate activities related to *ex situ* conservation of plant species.

Inadequate human and financial capacity.

VII) Any other relevant information

Box XXXII.

Target 9. Seventy percent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained.

I) Has your country established national target corresponding to the above global target?

- a) Yes
- b) No

x

Please specify

The National Plant Genetic Center, National Tree Seed Center, Government Research Stations have the mandate to collect and conserve all crops including their wild relatives. To date the Plant Genetic Resource Center has approximately 2000 accessions of 50 crop species grown in Malawi.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

- a) Yes
- b) No

x

Please specify

NBSAP Strategy 3.1.1 - Building on past experience design, develop and implement *in situ* and *ex situ* agricultural diversity conservation programmes with full participation and involvement of local communities.

NBSAP Strategy 3.1.2 - Enhance human and research capacity on conservation and sustainable use of agrobiodiversity.

NBSAP Strategy 3.8.1 - Promote indigenous knowledge systems (IKS) for sustainable management and use of biodiversity.

NBSAP Strategy 4.1.1 - Identify relevant working IK practices, raise their value, and integrate them into conservation activities.

National Plant Genetic Resources Centre is mandated to collect and conserve crop land races and document indigenous knowledge related to them.

III) Current status (please indicate current status related to this target)

Approximately 50 crop species (almost all known crops grown in Malawi) are conserved on long term basis at the National Plant genetic Resource Center. The sample size of each crop species is of enough quantity to allow reintroduction of crops.

The National Tree Seed Centre maintain a viable collection of all threatened trees of Malawi. This when combined with seed collection maintained by the NHBG, agricultural research stations means that more than 70 percent of crop species grown in Malawi are under conservation of some sort.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)
V) Progress made towards target (please specify indicators used to monitor progress towards the target)
2000 accessions representing 50 crop species are conserved ex situ at the National Plant Genetic Resources Centre. This represents 70% of crop species grown in Malawi.
VI) Constraints to achieving progress towards the target
In adequate infrastructure and human capacity to collect and maintain the collections, inadequate financial resources, inadequate appreciation of the importance of the value of ex situ conservation of crops.
VII) Any other relevant information

Box XXXIII.

Target 10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	

NBSAP Strategy 6.1.1 - Develop a fair, balanced and objective nation-wide invasive species management plan to facilitate coordination and cooperation among agencies but mindful of the fact that there are many frequently competing public and private interests.

NBSAP Strategy 6.1.2 - Develop mechanisms to prevent the introduction and establishment of new invasive species and identify current and potential conditions that promote introduction of new invasive species.

NBSAP Strategy 6.1.3 - Develop cost effective invasive species management programmes.

NBSAP Strategy 6.2.1 - Promote awareness of the threat to biological diversity and related ecosystem goods and services posed by invasive species.

NBSAP Strategy 6.3.1 - Enhance and facilitate coordinated research and monitoring of invasive alien species.

NBSAP Strategy 6.4.1 - Review relevant policies, legislation and institutions and as appropriate adjust or develop enabling policies, legislation and institutions.

NSSD Strategy 2.4 (for theme 3) - has provisions for controlling invasive species such as establishing a programme to control invasive alien species and establishing research programmes on best technology to control alien invasive species.

Forest Ecosystems Biodiversity Conservation Action Plan (Component 2) - control and management of alien invasive species.

III) Current status (please indicate current status related to this target)

Recent study of invasive species supported by SABSP strongly recommended development of management plans for invasive species.

MMCT has a programme that is involving communities to eradicate invasive species found on Mulanje Mountain.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

All sectoral policies dealing with biodiversity now have provisions for management of invasive species in line with requirements of NEP and EMA.

The Department of Environmental Affairs recognizing the current policy and institutional inadequacies is in the process of developing regulations and management plans for invasive species.

An expert group has been established to provide guidance to the Department of Environmental Affairs on the management of invasive species.

Malawi is benefiting from FISNA (Forestry Invasive Species Network for Africa) through sharing of information that enhance Malawi's capacity to detect and eradicate invasive species in forestry.

Ministry of Agriculture and Food Security has a programme to control and eradicate lager grain borer using biological control methods.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

Due to limited resources control and management of invasive species is restricted to a few invasive species. In addition to this there is scientific uncertainty about the environmental, social and economic risk posed by a potentially invasive alien species and as a result those adequately studied are targeted. This has often resulted in delayed or postponement of eradication and control of invasive species.

Management programmes are uncoordinated, and often emphasize on eradication than prevention of introductions. With the current weak quarantine measures it means that introductions are not adequately checked.

Institutional framework and policies that would have facilitated control and reduce spread of potentially invasive species within Malawi and between its neighbours are currently not available.

Unavailability of a designated organisation to coordinate invasive species programmes means that sectoral activities, such as fisheries, agriculture, forestry, and horticulture are very often not subjected to rigorous study and assessments.

Lack of an effective overall coordinating institution on invasive species management.

VII) Any other relevant information

Box XXXIV.

Target 11. No species of wild flora endangered by international trade.

I) Has your country established national target corresponding to the above global target?

- a) Yes
- b) No

x

Please specify

The NSSD recognizes the effects of trade on biodiversity and as such plans by 2010 to adopt legislations to regulate or legislate against trade in endangered species (theme 3 strategy 1.3a, establish cooperative process between CBD and WTO, strategy 1.3b legislate against trade in endangered biodiversity/species).

Malawi has various instruments that regulation international trade and these include the Investment Promotion Act, Malawi Bureau of Standards, Control of Goods Acts, The Customs and Excise Act, EMA, National Park and Wildlife Act, Forestry Act and the Fisheries Conservation and Management Act.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

- a) Yes
- b) No

x

Please specify

NBSAP Strategy 3.5.1 - Develop guidelines and strengthen existing procedures, policies and laws to promote and regulate bioprospecting.

NBSAP Strategy 4.2.1 - Develop binding framework to regulate access to genetic resources and the sharing of the benefits by integrating the procedures and guidelines for access to and collection of genetic resources into EMA 1996.

NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems.

NBSAP Strategy 10.4.2 - Develop markets for the agricultural and natural resource products (including non timber and wildlife products).

Department of National Parks and Wildlife under Cites is mandated to regulate trade on endangered species.

III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Policies and legislation regulating international trade have been highlighted in goal 4.3. The problem is that these policies and acts are not harmonized.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
Lack of harmonization between sectoral policies and laws which have provisions for international trade, inadequate understanding of the mechanisms and instruments regulating international trade, uncoordinated issuing of collection and expert permits, ineffective monitoring and non compliance.	
VII) Any other relevant information	

Box XXXV.

Target 12. Thirty percent of plant-based products derived from sources that are sustainably managed.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	x
b) No	
Please specify	
NEP 2004 section 4.12 provides policy guidelines for sustainable use of biodiversity.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	

NBSAP strategic objective 3.5 - has provisions promoting sustainable use of plant genetic resources through development of regulations for bioprospecting.

NBSAP Strategy 4.2.1 - Develop binding framework to regulate access to genetic resources and the sharing of the benefits by integrating the procedures and guidelines for access to and collection of genetic resources into EMA 1996.

NBSAP Strategy 4.3.1 - Promote community participation, public awareness and capacity building of state actors and the private sector on access and benefit sharing.

NBSAP Strategy 4.4.1 - Promote and regulate access to biodiversity and equitable sharing of benefits arising from the use of biodiversity through provision of Intellectual Property Rights systems.

NEP 2005 section 4.12 includes strategies to facilities sustainable use of biodiversity.

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

Science and Technology Policy (2001) - has policy element for developing Intellectual Property Rights regimes as a measure to promote sustainable use of biological resources.

Procedures and Guidelines for Access and Collection of Genetic Resources - provides preliminary controls to ensure that only sources that are sustainably managed are used in bioprospecting. Malawi is however developing regulations that will regulate access to genetic resources.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

Progress towards sustainable use of biological resources requires political will to create an enabling environment. Despite the existence of a number of multisectoral policies, laws and regulations that in one way or another deal with sustainable use of biological resources, lack of a streamlined policy and legislative framework (or a cross-cutting biodiversity policy) that clearly articulates strategies on how biological resources can be used. Inadequate human capacity to enforce the law and implement the policies is also affecting effective implementation of this target. The existing regulations and outdated and ineffective to adequately monitor illegal access to genetic resources and unsustainable harvesting of resources. Lack of guidelines and procedures on sustainable harvesting of natural resources.

VII) Any other relevant information

Box XXXVI.

Target 13. The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
But the Objective 2 of the NSSD (theme 3) has strategies to reverse the loss of biodiversity and restore biodiversity in degraded areas through activities such as monitoring biodiversity trends, developing and implementing action plans to halt biodiversity loss and establishing protected areas of biodiversity significance.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
The following actions provided in the NBSAP strategies will facilitate implementation of this target:	
<ul style="list-style-type: none"> a) developing and implementing <i>in situ</i> and <i>ex situ</i> agricultural diversity conservation programmes with full participation and involvement of local communities; b) enhancing human and research capacity on conservation and sustainable use of Agrobiodiversity, c) developing appropriate guidelines, methodologies and procedures and technologies that fully utilise the concepts of ecosystems approach and enhance sustainable use of forest biological diversity. d) developing and implementing mechanisms to prevent and mitigate the adverse effects of forest fires on biological diversity, e) enhancing the conservation of forest biological diversity through promotion of sustainable use of resources, f) raising the awareness of the importance of promoting conservation and sustainable use of biological resources as sources of livelihood to poor Malawians, g) reviewing and study relevant sectoral policies and legislation and develop an integrated policy on sustainable use of biological diversity that take into consideration issues of common property rights, h) promoting and supporting interdisciplinary research on all aspects of sustainable use of biological resources and make the information available to biodiversity users, and i) promoting indigenous knowledge systems (IKS) for sustainable management and use of biodiversity. 	
III) Current status (please indicate current status related to this target)	
Community natural resource management in forestry and national parks promotes sustainable use of plant resources.	
Access to genetic resources by foreign investors is controlled by procedures and guidelines for collection of genetic of resources. These guidelines are ineffective such that, some plant resources especially medicinal plants, curios are exported illegally.	
Indigenous knowledge related to conservation of plant resources has not been adequately documented. This means that the knowledge may be lost due to death if not documented.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	

Procedures and Guidelines for access and collection of genetic resources adopted in 2002 discourage illegal and unsustainable harvesting of genetic resources. The initiative by the department of environmental affairs to promulgate the regulations into law is a right step towards halting the current decline of plant resources. Currently Malawi is developing regulation for Access and benefit sharing to provide for protection of indigenous knowledge and control of access to genetic resources and benefit sharing.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

Inadequate policy, law and institutional framework to guide and regulate access to plant resources, indigenous knowledge and innovations; and inadequate human capacity to enforce the current regulations; inadequate coordination among the institutions providing licenses for collection of plant resources are the major constraints to achieving this target.

VII) Any other relevant information

Box XXXVII .

Target 14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

x

Please specify

No target corresponding to the above has been established. However, the Government of Malawi in 1996 put in place a National Environmental Education and Communication Strategy whose main objective is to raise public consciousness to the complexity of natural resources management at all levels. By putting in place the environmental education programme, the Government of Malawi identified environmental education as a key tool to achieving sustainable environmental management and development.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

x

Please specify

NBSAP Strategy 8.1.1 - Raise the appreciation of the communities on the value of biodiversity in sustaining life.

NBSAP Strategy 8.2.1 - Strengthen communities and the private sector to participate as equal partners in biodiversity conservation and sustainable use.

NBSAP Strategy 8.3.1 - Promote and strengthen the teaching of biodiversity in Malawi's education system.

III) Current status (please indicate current status related to this target)

Following the adoption of the National Environmental Education and Communication Strategy various environmental programmes were established. These programmes cover a wide range of subjects including plants.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

Adoption in 1996 of the National Environmental Education and Communication Strategy. The strategy provided strategic guidelines for revisions of school curriculum to include environmental issues and development of environmental education programmes by NGOs and government departments (Refer to Article 13 for more details).

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

Inadequate understanding of the importance of plant diversity; over emphasis on agricultural crops; inadequate information and data on useful plants of Malawi.

VII) Any other relevant information

Box XXXVIII.

Target 15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

x

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

x

Please specify

The following priority actions and their related targets as provided in the NBSAP will facilitate implementation of the target:

NBSAP Priority Action 9 - Strengthen human and infrastructure development in scientific institutions including government agencies, agricultural research stations, fisheries and forestry research units, University of Malawi, Gene Banks, MBERU to identify and monitor GMOs, and train staff on precautionary principle, gene transformation and GMO identification.

Targets - Equipment for GMOs work is identified and acquired; staff is recruited and adequately trained by 2010.

NBSAP Priority action 18 - Develop human, institutional and national capacities to identify, monitor and manage biodiversity through training for target groups in relevant courses including taxonomy, natural resources management, biodiversity assessment and ethnobiology.

Targets - Diplomas, certificates, BSc and MSc degrees in Biodiversity management are established and fully functional in universities and other natural resource management training institutions by 2010; relevant posts (e.g. taxonomists, ecologists, geneticists) and training opportunities are identified and implemented by 2010.

NBSAP Priority action 19 - Instill a biodiversity culture in the youth of Malawi and local communities by developing guidelines on environmental education and curricula for schools and establishment of in-service training programmes for teachers.

Targets - Curricula and guidelines for primary and secondary schools are developed and fully implemented. Training needs and institutions for teachers are identified, prioritized and promoted; guidelines for community participation and education for environmental and natural resources management are developed and fully implemented by 2006.

III) Current status (please indicate current status related to this target)

Different Government Departments and Organisations including NGOs have human capacity enhancement programmes. The exact number of people that have been trained can not be determined but available information show that people have been trained at different levels. For example under SABONET, the Biodiversity Support Programme, Norwegian Science Council (NUFU) and WWF Russell E Train programme the follow capacity building has been supported, MEET not less than 20 people from NHBG, Bunda College of Agriculture, Chancellor College, EAD, Forestry have been trained in various aspects of plants sciences ranging from taxonomy, environmental law, biotechnology, biodiversity conservation, forestry, plant breeding, plant physiology to environmental education.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

Although not adopted in response to this strategy the Environmental Education and Awareness Strategy has promoted the environmental sciences and natural resources management in Malawi.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

Inadequate financial resources and qualified staff to teach plant sciences in schools;

VII) Any other relevant information

Box XXXIX.

Target 16. Networks for plant conservation activities established or strengthened at national, regional and international levels.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
Malawi is an active member of regional network such as SABONET, FISNA (Forest Invasive Species Network for Africa) which is currently chaired by FRIM and Plant Resources of Tropical Africa (PROTA) whose regional office for Southern Africa is based at NHBG.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
NBSAP Strategy 11.2.1 - Promote effective cooperation and support for the conservation and sustainable use of biological conservation between governments of the SADC region and beyond.	
NBSAP Strategy 11.3.1 - Promote collaborative studies between institutions in conservation and sustainable use of biological resources	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Malawi is a signatory to regional protocols such as SADC protocol on Wildlife Conservation and Law Enforcement, Protocol on Environmental, Protocol of unshared water systems.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
Inadequate collaboration of national institutions; inadequate access to information: inadequate financial support for electronic networking.	
VII) Any other relevant information	

Box XL.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) This section has demonstrated that Malawi has to a larger extent integrated biodiversity concerns into national strategies, policies and programmes. This means that Malawi has contributed to the implementation of goal 1.5 of the strategic plan for the Convention.
- b) Malawi has put in place programmes that are contributing to the implementation of various goals of the 2010 targets.
- c) Although Malawi has not developed targets corresponding to any of the GSPC targets most of the targets are addressed in the NBSAP and most of the targets were implemented through the SABONET project.
- d) The NBSAP actions are designed to ensure environmental sustainability. Measures to ensure sustainable use and benefit sharing will contribute towards poverty reduction. Thus contributing to Goals 1 and 7 of the MDGs.
- e) Inadequate human capacity; inadequate understanding on the importance of plants in socio economic development; unavailability of national targets corresponding to the global targets; inadequate policy harmonization are some of the impediments for the implementation of this target.

Ecosystem Approach

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. At its second meeting, the Conference of the Parties has affirmed that the ecosystem approach is the primary framework for action under the Convention (decision II/8). The Conference of the Parties, at its fifth meeting, endorsed the description of the ecosystem approach and operational guidance and recommended the application of the principles and other guidance on the ecosystem approach. The seventh meeting of the Conference of the Parties agreed that the priority at this time should be facilitating implementation of the ecosystem approach. Please provide relevant information by responding to the following questions.

3. ?¹ Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6? (decision V/6)

a) No

¹ Please note that all the questions marked with ? have been previously covered in the second national reports and some thematic reports.

b) No, but application is under consideration	
c) Yes, some aspects are being applied	x
d) Yes, substantially implemented	

4. ? 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? (decision V/6)

a) No	
b) No, but development is under consideration	x
c) Yes, practical expressions have been developed for applying some principles of the ecosystem approach	
d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach	

5. Is your country strengthening capacities for the application of the ecosystem approach, and providing technical and financial support for capacity-building to apply the ecosystem approach? (decision V/6)

a) No	
b) Yes, within the country	x
c) Yes, including providing support to other Parties	

6. ? Has your country promoted regional cooperation in applying the ecosystem approach across national borders? (decision V/6)

a) No	
b) Yes, informal cooperation (please provide details below)	x
c) Yes, formal cooperation (please provide details below)	

Further comments on regional cooperation in applying the ecosystem approach across national borders.

Malawi is participating in two regional programmes that are applying principles of ecosystems approach and these are Zambezi River Basin Catchment Project and the Transfrontier Conservation Project between Malawi and Zambia. Zambezi River Basin Project is a regional project covering approximately eight countries.

7. Is your country facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach? (decisions VI/12 and VII/11)

a) No	
b) No, some programmes are under development	
c) Yes, some programmes are being implemented (please provide details below)	x
d) Yes, comprehensive programmes are being implemented (please provide details below)	

Further comments on facilitating the exchange of experiences, capacity building, technology transfer

and awareness raising to assist with the implementation of the ecosystem approach.

Malawi and Mozambique have initiated a process to develop a transboundary wetland management plan of the Lake Chilwa watershed which will have an integrated approach to wetland management.

8. Is your country creating an enabling environment for the implementation of the ecosystem approach, including through development of appropriate institutional frameworks? (decision VII/11)

a) No	
b) No, but relevant policies and programmes are under development	
c) Yes, some policies and programmes are in place (please provide details below)	x
d) Yes, comprehensive policies and programmes are in place (please provide details below)	

Further comments on the creation of an enabling environment for the implementation of the ecosystem approach.

The National Environmental Policy has provisions for ecosystems approach to natural resource management. However in line with NEP, only the water management policy appear to promote and integrated approach to natural resources management.

C. ARTICLES OF THE CONVENTION

Article 5 – Cooperation

9. ? Is your country actively cooperating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity?

a) No	
b) Yes, bilateral cooperation (please give details below)	x
c) Yes, multilateral cooperation (please give details below)	x
d) Yes, regional and/or subregional cooperation (please give details below)	x
e) Yes, other forms of cooperation (please give details below)	

Further comments on cooperation with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biodiversity.

Bilateral cooperation between Malawi and Zambia on management of Nyika and Kasungu National Parks. Through this arrangement MoUs between Malawi and Zambia were signed in 2004 to implement management plans for Transfrontier Conservation Areas (TFCA).

As a member of SADC Malawi has been involved in a number of regional initiatives such as SADC Biodiversity Support Programme, SADC wetland management project, Zambezi Basin Project.

10. Is your country working with other Parties to develop regional, subregional or bioregional mechanisms and networks to support implementation of the Convention? (decision VI/27 A)

a) No	
b) No, but consultations are under way	
c) Yes, some mechanisms and networks have been established (please provide details below)	x
d) Yes, existing mechanisms have been strengthened (please provide details below)	

Further comments on development of regional, subregional or bioregional mechanisms and networks to support implementation of the Convention.

Malawi as an active member of the Southern Africa Biodiversity Support Programme is involved in developing subregional mechanisms and networks for implementation of the Convention with particular focus on implementation of invasive species and access and benefit sharing requirements. The project is also facilitating a regional forum to formulate regional stand to the forthcoming COP.

Malawi through the Southern Africa Botanical Network acquired human and infrastructure for the implementation of the Convention. In addition to this Malawi is a member of SAFRINET of the BioNet International. Through these initiatives Malawi has developed enough human capacity to be able to implement some CBD obligations.

With support from the Trans frontier Project Malawi and Zambia are in the process of developing management plans for shared conservation areas in Nyika, Vwaza and Kasungu National Parks.

11. Is your country taking steps to harmonize national policies and programmes, with a view to optimizing policy coherence, synergies and efficiency in the implementation of various multilateral environment agreements (MEAs) and relevant regional initiatives at the national level? (decision VI/20)

a) No	
b) No, but steps are under consideration	
c) Yes, some steps are being taken (please specify below)	x
d) Yes, comprehensive steps are being taken (please specify below)	

Further comments on the harmonization of policies and programmes at the national level.

Malawi in 1996 developed a cross cutting environmental policy, the National Environmental Policy (NEP) and enacted the Environmental Management Act (EMA) that aimed at providing a legal framework for the regulation and establishment of sustainable environment utilization practices. To facilitate implementation of NEAP Malawi in 1998 developed an Environmental Support Programme (ESP) whose objective was to integrate environmental concerns into socio-economic development. In keeping with the requirement of the NEP and the EMA, Malawi undertook an environmental policy reform through which old legislation and policies pertaining to the conservation and sustainable use of biological diversity (such as Forestry Policy, National Parks and Wildlife policy, Fisheries and Aquaculture policy, Water and Land policies) were reviewed and harmonized.

Box XLI.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Through cooperation with the Millennium Seed Bank, SABONET, SADC Plant genetic Resources Centre, Transfrontier Conservation Project and Bark harvesting project Malawi has managed to conserve and put in place sustainable conservation measures for threatened species such as Rhinos. This cooperation is also contributing to target 1.6 of the Strategic Plan for the Convention.
- b) Malawi involvement in ex situ conservation project such as the Millennium Seed Bank Project and SADC Genetic Resources Project are directly contributing to Goal 3 of the 2010 targets.
- c) Limited financial resources, poverty and inadequate capacity are some of the problems.

Article 6 - General measures for conservation and sustainable use

12. Has your country put in place effective national strategies, plans and programmes to provide a national framework for implementing the three objectives of the Convention? (Goal 3.1 of the Strategic Plan)

a) No	
b) No, but relevant strategies, plans and programmes are under development	
c) Yes, some strategies, plans and programmes are in place (please provide details below)	x
d) Yes, comprehensive strategies, plans and programmes are in place (please provide details below)	

Further comments on the strategies, plans and programmes for implementing the three objectives of the Convention.

Malawi has developed strategies and actions for biodiversity conservation. Whose overall goal is to conserve, protect and manage by the year 2020 all forms of life for all people with full participation of all stakeholder, and to use the biodiversity sustainably and where benefits accrue to share them fairly and equitably.

The strategy established four goals, which highlight Malawi's commitment for biodiversity conservation, and sustainable use at the national, regional and international levels. The following as the four goals:

- actively protect, conserve and maintain protected areas, mountains and species within them; promote restoration of degraded and vulnerable ecosystems and habitats and recovery of rare and threatened species.
- enhance and improve biodiversity knowledge base through research; strengthen and build human and infrastructure capacity for effective information dissemination and research.
- promotes sustainable use through enhanced agricultural production through active protection and management of agricultural biodiversity and support initiatives that encourage fair and equitable sharing of benefits arising from the use of the genetic resources.
- enhance community understanding and appreciation of biodiversity, and support coordinated community action to conserve and sustainably use biodiversity.

Guided by these goals, the strategy identified a total of 192 actions and 20 priority actions which are grouped into the following eleven themes: terrestrial biodiversity; aquatic biodiversity; sustainable use of genetic resources; Indigenous Knowledge, access and benefit sharing, biotechnology; biodiversity policies and legislation; community participation; information, knowledge and capacity; incentive measures; invasive species; and Malawi's role in global biodiversity conservation.

The above summary shows that the NBSAP attempted to put in place strategies for most articles and thematic areas relevant to Malawi. The strategy therefore will provide policy guidance for the implementation of the Convention.

The Government in response to the CBD requirements put in place relevant policies and legislation (e.g. EMA, NEP) to guide implementation of biodiversity conservation activities. In line with NEP and EMA government also put in place an environmental policy reform process through which sectoral policies and Acts (in Forestry, Fisheries, Agriculture, Land Resources, Wildlife) were revised.

13. ? Has your country set measurable targets within its national strategies and action plans? (decisions II/7 and III/9)

a) No	
b) No, measurable targets are still in early stages of development	
c) No, but measurable targets are in advanced stages of development	
d) Yes, relevant targets are in place (please provide details below)	x
e) Yes, reports on implementation of relevant targets available (please provide details below)	

Further comments on targets set within national biodiversity strategies and action plans.

The NBSAP has 192 actions. Recognizing that not all actions may not be implemented at once only 20 actions were prioritized. Each priority action has an associated target as follows:

Priority Action 1 - Create an enabling policy framework that would promote conservation of species, habitats and ecosystems that are important but not represented within the existing protected area networks or are vulnerable, fragile or are at risk of irreversible loss or decline of biodiversity.

Targets - Biodiversity hotspots including lakes and wetlands, mountains and terrestrial habitats and ecosystems outside the protected areas network are identified, characterized and protected by 2010.

Priority Action 2 - Develop and effectively manage restoration programmes and initiatives to restore vulnerable/fragile habitats and ecosystems to a healthy functioning state.

Targets - Degraded habitats and ecosystems especially wetlands are identified and restored following comprehensive ecosystems restoration programmes by 2008.

Priority Action 3 - Promote enforcement and compliance to policy, legislation and international conventions.

Targets - Policy, legislation and other international instruments ratified and promulgated by 2007.

Priority Action 4: Promote the involvement of the local communities, local leaders and NGOs in decision making regarding the management of biological diversity and ecosystems through village natural resources management committees.

Targets - Village natural resource management committees established in all districts by 2007.

Priority Action 5 - Revise and gazette the Procedures and Guidelines for Access to and Collection of Genetic Resources in Malawi and the Procedures and Guidelines for the conduct of Research in Malawi under the Environment Management Act.

Targets - Regulation(s) on Access and Benefit Sharing developed and enacted in parliament by 2007.

Priority Action 6 - Collect and maintain genetic resources in gene banks, botanic gardens, national parks, herbaria, museums and zoos, and promote re-introduction, *in-situ* and *ex-situ* conservation of priority, rare, or endangered taxa.

Targets - Databases of genetic resources are created and published by 2009.

Priority Action 7 - Develop methodologies to monitor, prevent and arrest the spread of invasive species in shared ecosystems, including early detection and coordinated management efforts at the community, national and regional levels.

Targets - Policy guidelines and regulations for management of invasive species are developed and implemented by 2006.

Priority Action 8 - Implement the Biosafety Act and develop and implement a broad-based biotechnology policy.

Targets - Sectoral plans for the implementation of the biosafety act are developed and implemented by 2010; relevant departments and institutions have identified and trained staff in handling, monitoring and identification of GMOs.

Priority Action 9 - Strengthen human and infrastructure development in scientific institutions including government agencies, agricultural research stations, fisheries and forestry research units, University of Malawi, Gene Banks, MBERU to identify and monitor GMOs, and train staff on precautionary principle, gene transformation and GMO identification.

Targets - Equipment for GMOs work is identified and acquired; staff is recruited and adequately trained by 2010.

Priority Action 10 - Assess and identify available incentive measures important for biodiversity conservation, sustainable use as well as benefit sharing and promote the adoption of best practices.

Targets - Incentive measures identified and implemented by 2008

Enhance and Maintain Partnerships

Priority action 11 - Promote the involvement of the local communities, local leaders, the private sector and NGOs in decision-making regarding the management of biological diversity and ecosystems through community based natural resources management communities.

Targets - Guidelines and regulation for establishing and managing village natural resource management areas are developed and implemented; community natural resource management areas identified and managed by 2010.

Priority action 12 - Promote joint management of biodiversity and ecosystems along national boundaries for the management of shared biological resources.

Targets - Cross border management committees are established along shared natural resources; guidelines for cross border management of natural resources developed and implemented.

Priority action 13 - Promote the participation of different government agencies and collaboration with international organisations to fulfill Malawi's obligations to the CBD and related treaties and protocols.

Targets - Establish and promote multisectoral committees on natural resources management at local, district and national levels by 2005.

Priority action 14 - Promote mechanisms for wise use of development assistance.

Targets - Regulations and code of conduct for use of development aid are developed and implemented by 2005.

Priority action 15 - Provide strategic direction and guidance to review and harmonize relevant policies and legislation and ensure that policy and legislation are in line with the Convention on Biological Diversity and other international conventions.

Targets - Sectoral policies are revised to incorporate biodiversity issues by 2008.

Priority action 16 - Establish alternative financing mechanisms that will minimize resource expenditure and encourage close collaboration between sectors.

Targets - Biodiversity Trust funds are established and fully operational; guidelines for establishing biodiversity working groups are developed and implemented by 2008.

Priority action 17 - Promote enforcement and compliance to policy, legislation and international convention through the creation and empowerment of an independent Environmental Protection Agency.

Targets - Environmental Protection Agency is established and operational by 2007.

Priority action 18 - Develop human, institutional and national capacities to identify, monitor and manage biodiversity through training for target groups in relevant courses including taxonomy, natural resources management, biodiversity assessment and ethnobiology.

Targets - Diplomas, certificates, BSc and MSc degrees in Biodiversity management are established and fully functional in universities and other natural resource management training institutions by 2010; relevant posts (e.g. taxonomists, ecologists, geneticists) and training opportunities are identified and implemented by 2010.

Priority action 19 - Instill a biodiversity culture in the youth of Malawi and local communities by developing guidelines on environmental education and curricula for schools and establishment of in-service training programmes for teachers.

Targets - Curricula and guidelines for primary and secondary schools are developed and fully implemented. Training needs and institutions for teachers are identified, prioritized and promoted; guidelines for community participation and education for environmental and natural resources management are developed and fully implemented by 2006.

Priority action 20 - Establish and provide capacity for operationalizing the national CHM and strengthen and implement the existing CHM institutional structure, and develop national biodiversity databases.

Targets - Policy guidelines on biodiversity information management are developed and/or reviewed; regulations and guidelines on biodiversity information standards and on access and benefit sharing of biodiversity information developed by 2006.

14. Has your country identified priority actions in its national biodiversity strategy and action plan? (decision VI/27 A)

a) No	
b) No, but priority actions are being identified	
c) Yes, priority actions identified (please provide details below)	x

Further comments on priority actions identified in the national biodiversity strategy and action plan.

Malawi has limited resources and low capacity to adequately implement all 192 actions identified in the NBSAP. In this regard 20 were prioritized, giving priority to those that address existing gaps and inadequacies in Malawi's biodiversity management and those that would contribute more towards achieving national biodiversity goals and policies.

Priority actions are presented in question 13 above

15. Has your country integrated the conservation and sustainable use of biodiversity as well as benefit sharing into relevant sectoral or cross-sectoral plans, programmes and policies? (decision VI/27 A)

a) No	
b) Yes, in some sectors (please provide details below)	
c) Yes, in major sectors (please provide details below)	x
d) Yes, in all sectors (please provide details below)	

Further information on integration of the conservation and sustainable use of biodiversity and benefit-sharing into relevant sectoral or cross-sectoral plans, programmes and policies.

Major sectors such as forestry, fisheries, wildlife and agriculture have incorporation provisions for community participation in natural resource management programme. This approach has empowered communities through co management arrangements through Village Forestry Areas (VFAs), Beach Village Committees (BVCs), wildlife management areas, leading to sustainable use of biological resources.

The Forest Ecosystems Biodiversity conservation plan included provisions for sustainable use of forest resources through community participation and establishment of benefit sharing mechanisms.

The Fisheries Action Plan (1999-2004) - has provisions to enable participation of local communities and the private sector in fisheries conservation and management, promoting sustainable utilization, planned harvesting and regeneration of fish by local communities and Beach Village Committees.

16. Are migratory species and their habitats addressed by your country's national biodiversity strategy or action plan (NBSAP)? (decision VI/20)

a) Yes	
b) No	X

I) If **YES**, please briefly describe the extent to which it addresses

(a) Conservation, sustainable use and/or restoration of migratory species	
(b) Conservation, sustainable use and/or restoration of migratory species' habitats, including protected areas	
(c) Minimizing or eliminating barriers or obstacles to migration	
(d) Research and monitoring for migratory species	
(e) Transboundary movement	

II) If **NO**, please briefly indicate below

(a) The extent to which your country addresses migratory species at national level	Migratory species especially birds are addressed by the lake Chilwa Management Plan. Lake Chilwa is a Ramsar site and an important habitat for migratory birds. To ensure effective protection of the bird, communities with support from Danish Hunters Association communities have identified bird sanctuaries. Community management plans for the bird sanctuaries are being developed.
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(b) Cooperation with other Range States since 2000

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Biodiversity and Climate Change

17. Has your country implemented projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use? (decision VII/15)

a) No	
b) No, but some projects or programs are under development	
c) Yes, some projects have been implemented (please provide details below)	x

Further comments on the projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use.

Malawi has Mitigation abatement analysis Report and NAPA Report that incorporate biodiversity conservation and sustainable use.

18. Has your country facilitated coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification? (decision VII/15)

a) No	
b) No, but relevant mechanisms are under development	
c) Yes, relevant mechanisms are in place (please provide details below)	x

Further comments on the coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the UNFCCC and the UNCCD.

Through the National Action Programme for the UN Convention to Combat Desertification (UNCCD) which is being implemented through eight components (e.g. food security, water resources management and development, renewable energy, deforestation, environmental management, indigenous knowledge systems and technologies).

Through the NSSD which has provisions for implementing mitigating climate change.

Through NAPA which contains options for adaptations for climate change in forestry, fisheries and agriculture.

Box XLII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Enabling policies and legislation on natural resources management such as NEP and EMA. Sectoral policies and legislations are now in line with requirements of CBD.
- b) Realignment of sectoral policies has facilitated integration of biodiversity concerns into plans and programmes and thus contributing to the implementation of target 3.6 of the Strategic Plan of the Convention. This has also facilitated implementation of ex situ, in situ conservation of threatened species, development of management plans for invasive species, development of regulations for Access and benefit Sharing. These activities directly contribute to a number of targets of the 2010 targets, GSPC and the Millennium Development Goals.
- c) Poverty, limited financial resources, inadequate capacity are some of the constraints.

Article 7 - Identification and monitoring

19. ? On Article 7(a), does your country have an ongoing programme to identify components of biological diversity at the genetic, species, ecosystem level?

a) No	
b) Yes, selected/partial programmes at the genetic, species and/or ecosystem level only (please specify and provide details below)	x
c) Yes, complete programmes at ecosystem level and selected/partial inventories at the genetic and/or species level (please specify and provide details below)	

Further comments on ongoing programmes to identify components of biodiversity at the genetic, species and ecosystem level.

The National Herbarium has since its establishment in the early 1930s collected and identified plants of Malawi. To date the National Herbarium has over 100,000 specimens represented in over 5500 species.

The Fisheries Research Center also collects and identifies fish of Malawi. Over 1000 species have been identified of which about 500 species are housed at the museum in Monkey Bay. The Fisheries Department in collaboration with foreign institutions such as University of Hull has studied genetic diversity of some fish species of Lake Malawi. Genetic variation of four species of fish (*Oreochromis* and *Lenthrinops* group) was undertaken as part of Lake Malawi Ecology Project.

Most of the present collections (mostly insects) were collected between 1930 and 1980. Presently, the major invertebrate collections, each containing 10,000-20,000 specimens, are housed with the Bvumbwe Agriculture Research Station; the Department of Biology, Chancellor College and the Forest Research Institute of Malawi.

Genetic variation studies have been limited to fish, Malawi zebu, Dairy breeds (local cattle) and a few plants such as yams and sweet potatoes. Although these were part of student research work they have provided useful information which can be used to make conservation decisions. For example, the Malawi zebu project has identified areas (of the northern region) that appear to have the highest genetic diversity of Malawi zebu.

The MMCT project collects and documents all biodiversity components found on the Mulanje Mountain.

The Museums of Malawi has an on going programme to collect, identify and document all vertebrates and invertebrates of Malawi.

20. ? On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes?

a) at ecosystem level (please provide percentage based on area covered)	x
b) at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group)	x
c) at genetic level (please indicate number and focus of monitoring programmes)	x

Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level.

The Department of Forestry has on going monitoring of Forest Reserves. For example, Satellite Remote Sensing Project which was conducted in 1991 to assess the changes that had occurred to the Malawi's forest resources as well as land use patterns between 1972/73 and 1990/91 period indicated that the extent of miombo woodlands had declined drastically by 44%.

The Department of Fisheries monitors species composition and abundance in all waters of Malawi and from these monitoring activities the department is able to develop management plans for specific species. For example after noting the decline in fish catches in Lake Malawi, the department developed and is implementing the Chambo strategy.

Through the Ecological Monitoring Programme MMCT monitors species composition and diversity, human disturbance and ecological functions.

The Department of National Parks has an ongoing monitoring programme of all biodiversity components occurring in national parks and results of monitoring activities form basis for wildlife management decisions (i.e. decision to introduce a species in one national park may be based on declining populations of that species).

21. ? On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity?

a) No	
b) Yes, invasive alien species (please provide details below)	x
c) Yes, climate change (please provide details below)	x
d) Yes, pollution/eutrophication (please provide details below)	x
e) Yes, land use change/land degradation (please provide details below)	x
f) Yes, overexploitation or unsustainable use (please provide details below)	x

Further comments on monitoring programmes on key threats to biodiversity.

The Forestry Department is the only sector that has a systematic monitoring programmes on invasive species. The department collects surveillance data (frequency and distribution, ecological preference of most forestry invasive species) and the information is used in monitoring of some of the following invasive species, *Aleurothrixus plocosis* (in citrus fruit trees), *Monoinchelus tanagoe* (in cassava), *Prostephanis truncatus* (which attacks stored grain), *Tetramychnis evancea* (which attacks tomatoes and potatoes) (iii) *Cinara cupressi*, *Eulachnus rileyi* and *Pineus boernerii* (conifer aphids which attack Mulanje cedar and other conifer trees, *Chilo partellus* (the spotted stem borer).

Climate change monitoring programmes have focused on monitoring of green house gasses and use of Ethyl Bromide. The use of Methyl Bromide has since been phased out. The Meteorological Department collects climate data, which is used to predict weather patterns.

Pollution especially from industrial and domestic wastes are ongoing activities of City Assemblies and

the Malawi Bureau Standards.

The Department of Fisheries has an on going programme to monitor fish production in Lake Malawi and though this monitoring programme it was established that fish landings have reduced considerably over the past decade. This has also been basis for strategic plan of action for the conservation and sustainable use of Chambo.

22. ? On Article 7 (d), does your country have a mechanism to maintain and organize data derived from inventories and monitoring programmes and coordinate information collection and management at the national level?

a) No	
b) No, but some mechanisms or systems are being considered	
c) Yes, some mechanisms or systems are being established	x
d) Yes, some mechanisms or systems are in place (please provide details below)	
e) Yes, a relatively complete system is in place (please provide details below)	

Further information on the coordination of data and information collection and management.

Information from herbarium specimens has been databased during the SABONET project and the database has potential to be used in developing checklists. Information on specimen labels (plants, fish specimens, museum specimens and invertebrates) are not in a format that can be easily understood by users but a limited number of checklists are available. Plans are underway to repackage the information and disseminate it through the clearing house mechanisms.

PROTA (Plant Resources of Tropical Africa) a databasing initiative whose main objective is to improve availability of information about the plants of tropical Africa through print and electronic media. The National Herbarium and Botanic gardens of Malawi being a Prota regional office for southern Africa is actively involved in collection of information for the database.

The State of Environment Reports has comprehensive data on various biodiversity components. The information is updated periodically.

The National Plant Genetic Resources Centre has an electronic database of all the collections.

23. ? Does your country use indicators for national-level monitoring of biodiversity? (decision III/10)

a) No	
b) No, but identification of potential indicators is under way (please describe)	x
c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)	
d) Yes, a relatively complete set of indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)	

Further comments on the indicators identified and in use.

Number of inventories, biodiversity databases, number of species (as presented in the State of Environment Report as a bench mark and basis for future monitoring).

Box XLIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Outcomes include various inventories that have been developed over the past years. The inventories may not be perfect but they are a starting point for a national flora. This also contributes to GSPC target on creating inventory of plants.
- b) Species identifications are mostly done in collaboration with foreign institutions and by collaborating with regional and international institutions Malawi is actually contributing to the implementation of goal 1.6 of the strategic plan.
- c) Biodiversity Country studies whose results input into the NBSAP produced inventories on various components of biodiversity. These results are foundation for the implementation of strategy 1.4.1 of the NBSAP on increasing the knowledge base on the extent of biodiversity.
- d) Inadequate human and institutional capacity, and lack of funding are the major constraints

Decisions on Taxonomy

24. ? Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1)

a) No	x
b) No, but a plan is under development	
c) Yes, a plan is in place (please provide details below)	
d) Yes, reports on implementation available (please provide details below)	

Further information on a plan to implement the suggested actions as annexed to decision IV/1.

The decision on CBD has not been operationalised in Malawi in the sense that a programme to implement the programme wasn't developed and no institution was identified to spearhead the implementation of the GTI. This is despite Malawi's active participation in the organisation the GTI workshop for Africa that was held in South Africa in 2002.

25.? Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (decision IV/1)

a) No	
b) Yes (please provide details below)	x

Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections.

The National Herbarium and Botanic Gardens of Malawi is the national focal point for plant biodiversity. Through the SABONET project human and infrastructure capacity (e.g. databasing equipment and skills, herbarium cabinets, literature) were improved. By 2007 the NHBG will have trained a total of seven scientists in plant taxonomy.

Through the lake Malawi Biodiversity Project the Department of Fisheries trained and provided necessary infrastructure to collect and maintain fish collections. The Museums of Malawi and University of Malawi are also investing in human and infrastructure capacities necessary for basic taxonomic work. Despite these efforts however taxonomic work is affected by inadequate of personnel, infrastructure, funding. In addition to this plant taxonomy appear to have fairly adequate human and infrastructure capacity than the zoological taxonomy.

26.? Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1)

a) No	
b) Yes (please provide details below)	x

Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research.

Plant taxonomy is taught at undergraduate and graduate levels at the University of Malawi (Faculty of Sciences, Chancellor College and Bunda College of Agriculture) as part of modules in general biology. At Mzuzu University plant taxonomy is taught as part of modules in Forestry.

Current training programme has a bias on systematic botany than on zoological systematics.

27.? Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable? (decision IV/1)

a) No	
b) No, but steps are being considered	
c) Yes, for some institutions	x
d) Yes, for all major institutions	

28.*² Is your country collaborating with the existing regional, subregional and global initiatives, partnerships and institutions in carrying out the programme of work, including assessing regional taxonomic needs and identifying regional-level priorities? (decision VI/8)

a) No	
b) No, but collaborative programmes are under development	
c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments)	x
d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification)	

Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification.

- The National Herbarium and Botanic Gardens of Malawi has historical linkages with Kew Herbarium, in addition to south African herbaria such as the Pretoria herbarium.
- The Museum of Malawi has collaborative links with regional institutions especially in South Africa.
- The Fisheries Department also collaborates with the University of Hull in fish taxonomy.

29.* Has your country made an assessment of taxonomic needs and capacities at the national level for the implementation of the Convention? (annex to decision VI/8)

a) No	
b) Yes, basic assessment made (please provide below a list of needs and capacities identified)	x
c) Yes, thorough assessment made (please provide below a list of needs and capacities identified)	

Further comments on national assessment of taxonomic needs and capacities.

Needs assessments in taxonomy was undertaken as part of SABONET activities. Another assessment was undertaken to input into the GTI workshop for Africa that was held in Cape Town South Africa.

30.* Is your country working on regional or global capacity building to support access to, and generation of, taxonomic information in collaboration with other Parties? (annex to decision VI/8)

a) No	
b) Yes, relevant programmes are under development	x

² The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries that have submitted such a report do not need to answer these questions unless they have updated information to provide.

c) Yes, some activities are being undertaken for this purpose (please provide details below)	
d) Yes, many activities are being undertaken for this purpose (please provide details below)	
Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties.	
As an active member of SABONET Malawi contributed to taxonomic information through herbarium specimen database, exchange of herbarium specimens and literature.	
Malawi also in collaboration with other countries in Tropical Africa is compiling a database of plant of tropical Africa.	
Malawi is also a member of the Species Plantarum Project whose main aim is to produce a flora of the world.	

31. * Has your country developed taxonomic support for the implementation of the programmes of work under the Convention as called upon in decision VI/8? (annex to decision VI/8)	
a) No	x
b) Yes, for forest biodiversity (please provide details below)	
c) Yes, for marine and coastal biodiversity (please provide details below)	
d) Yes, for dry and sub-humid lands (please provide details below)	
e) Yes, for inland waters biodiversity (please provide details below)	
f) Yes, for mountain biodiversity (please provide details below)	
g) Yes, for protected areas (please provide details below)	
h) Yes, for agricultural biodiversity (please provide details below)	
i) Yes, for island biodiversity (please provide details below)	
Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.	

32. * Has your country developed taxonomic support for the implementation of the cross-cutting issues under the Convention as called upon in decision VI/8?	
a) No	x
b) Yes, for access and benefit-sharing (please provide details below)	
c) Yes, for Article 8(j) (please provide details below)	
d) Yes, for the ecosystem approach (please provide details below)	
e) Yes, for impact assessment, monitoring and indicators (please provide details below)	
f) Yes, for invasive alien species (please provide details below)	
g) Yes, for others (please provide details below)	

Further comments on the development of taxonomic support for the implementation of the cross-cutting issues under the Convention.

Article 8 - *In-situ* conservation

[excluding paragraphs (a) to (e), (h) and (j)]

33. ? On Article 8(i), has your country endeavored to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components?

a) No	
b) No, but potential measures are being identified	
c) Yes, some measures undertaken (please provide details below)	x
d) Yes, comprehensive measures undertaken (please provide details below)	

Further comments on the measures taken to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components.

Natural Resources Management Policies have recently been revised and these have facilitated establishment of community based natural resources management programmes and thus providing enabling environment to ensure compatibility between sustainable use and conservation of biological diversity.

34. ? On Article 8(k), has your country developed or maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations?

a) No	
b) No, but legislation is being developed	
c) Yes, legislation or other measures are in place (please provide details below)	x

Further information on the legislation and/or regulations for the protection of threatened species and populations.

Malawi has a number of enabling policies and legislation for the protection of threatened species some of which include the following:

- The National Environmental Policy (NEP) and the Environment Management Act (EMA)
- The National Forestry Policy (1996) supported by the Forestry Act (1997)
- The National Fisheries and Aquaculture Policy (NFAP), which is supported by the Fisheries Conservation and Management Act (1997).
- The National Wildlife Policy (NWP) which is supported by the National Parks and Wildlife Act [1992]
- National Land Resources Management Policy and Strategy adopted in 2000
- Plant Protection Act 1969. The plant protection Act has provisions for the eradication of pests and diseases and prevent the introduction and spread of pests and diseases destructive to plants.

35. ? On Article 8(l), does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity?

a) No	
b) No, but relevant processes and categories of activities being identified	
c) Yes, to a limited extent (please provide details below)	x
d) Yes, to a significant extent (please provide details below)	

Further comments on the regulation or management of the processes and categories of activities identified by Article 7 as having significant adverse effects on biodiversity.

The NBSAP identified poverty, high population growth rate, pollution, invasive species, and deforestation as some of the factors, which have adverse effects on biological diversity. All sectoral policies (forestry, fisheries, national parks and wildlife, agriculture) and the Environmental Management Act have important provisions to address these categories.

Box XLIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation

- a) The outcome of the implementation of this article is the enforcement of in situ conservation of forestry, fisheries, wildlife and agricultural resources.
- b) Community participation has promoted on farm conservation of crops and animals, establishment of village forests, and community policing especially in national parks. This has resulted in reduced poaching and increased wildlife populations. By involving communities in conservation Malawi is contributing to the implementation of target 4.3 of the Strategic Plan for the Convention.
- c) Measures put in place for the protection of threatened species are important for the implementation of target 2.2 of 2010 target.
- d) Inadequate capacity and inadequately harmonized policies and legislation are the major constraints

Programme of Work on Protected Areas (Article 8 (a) to (e))

36. Has your country established suitable time bound and measurable national-level protected areas targets and indicators? (decision VII/28)

a) No (please specify reasons)	
b) No, but relevant work is under way	
c) Yes, some targets and indicators established (please provide details below)	x

d) Yes, comprehensive targets and indicators established (please provide details below)	
Further comments on targets and indicators for protected areas.	
Some indicators regarding management of forest reserves were provided in the SOER 2002, increase in total forest areas, number of gazetted forest reserves, reduced encroachment and deforestation, reduces numbers of forest fires.	

37. Has your country taken action to establish or expand protected areas in any large or relatively unfragmented natural area or areas under high threat, including securing threatened species? (decision VII/28)

a) No	
b) No, but relevant programmes are under development	x
c) Yes, limited actions taken (please provide details below)	
d) Yes, significant actions taken (please provide details below)	

Further comments on actions taken to establish or expand protected areas.

Over 90% of the population relies on subsistence agriculture. Due to population growth rate (estimated to be 2.2%) land for cultivation is becoming scarce leading to cultivation in marginal lands and encroachment into protected areas. This has forced Malawi to concentrate more on the protection of the existing protected areas than on creating new protected areas.

The fisheries department has identified three sites (southern arm of lake Malawi, Lake Malombe, and interconnection between lake Malawi and Malombe) as important areas for fish (especially chambo, tilapia species). The department has initiated the process to zone these areas as protected areas and negotiations are underway to develop by laws for the management of the proposed fish sanctuaries. If adopted as protected areas, the areas under protected waters will increase and thus reducing the immediate threat to aquatic biodiversity.

Lake Chilwa wetland an internationally recognized important bird habitat is a protected area. In order to accord migratory birds some protection, important bird sites have been identified and by laws are being developed for their conservation.

38. Has your country taken any action to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas? (decision VII/28)

a) No	
b) Not applicable	
c) No, but relevant actions are being considered	
d) Yes, limited actions taken (please provide details below)	x
e) Yes, significant actions taken (please provide details below)	

Further comments on actions taken to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas.

Most aquatic ecosystems are not protected except southern part of Lake Malawi, Vwaza Marsh, part of Lake Malombe (as part of Liwonde National Park). Lake Malawi National Park was established in 1984 as part of the Government Policy to conserve part of the lake biome, with particular reference to rocky shore habitats and its specialised fish communities. The park was declared a UNESCO World Heritage Site in 1984.

Lake Chilwa is a Ramsar site and was designated as a wetland of international importance for waterfowl

habitat in 1997 but is not a protected area. There are no immediate plans to gazette the wetland or part of it either as forestry reserve or a national park. However through a Danish funded project communities have identified bird sanctuaries which will be protected using by laws.

39. Has your country identified and implemented practical steps for improving the integration of protected areas into broader land and seascapes, including policy, planning and other measures? (decision VII/28)

a) No	x
b) No, but some programmes are under development	
c) Yes, some steps identified and implemented (please provide details below)	
d) Yes, many steps identified and implemented (please provide details below)	

Further comments on practical steps for improving integration of protected areas into broader land and seascapes, including policy, planning and other measures.

40. Is your country applying environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas? (decision VII/28)

a) No	
b) No, but relevant EIA guidelines are under development	
c) Yes, EIA guidelines are applied to some projects or plans (please provide details below)	
d) Yes, EIA guidelines are applied to all relevant projects or plans (please provide details below)	x

Further comments on application of environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas.

All projects are required by the Environmental Management Act section 24 to undergo environmental impact assessments. In line with EMA, EIA guidelines were developed in 1997.

41. Has your country identified legislative and institutional gaps and barriers that impede effective establishment and management of protected areas? (decision VII/28)

a) No	
b) No, but relevant work is under way	
c) Yes, some gaps and barriers identified (please provide details below))	x
d) Yes, many gaps and barriers identified (please provide details below)	

Further comments on identification of legislative and institutional gaps and barriers that impede effective establishment and management of protected areas.

An assessment of policies and legislation dealing with protected areas (2002) revealed that the Forestry Act appear not to have been adequately harmonized with the Environmental Management Act particularly with regards to issues relating to declaration and revocation of forest reserves and environmental impact assessments. There is also need to harmonize the Forestry Act with Land Act, the Electricity Act, the Local Government Act and National Parks and Wildlife since their provisions affect

directly or otherwise forestry issues. For example the Local Government Act gives powers to local authorities to carry out reforestation programmes and manage forests in their jurisdiction without the involvement of the Forestry Department.

The National Parks and Wildlife Act has provision to declare any piece of land or water within Malawi a national park or wildlife reserve, the act is silent on whether the communities should be consulted before an area is declared a national park. The national parks and wildlife policy has provisions for community participation but it would appear that the Act did not include provisions for encouraging and promoting community participation in wildlife management. As long as communities do not see the benefits of the park, they will resist creation of a new one.

42. Has your country undertaken national protected-area capacity needs assessments and established capacity building programmes? (decision VII/28)

a) No	
b) No, but assessments are under way	x
c) Yes, a basic assessment undertaken and some programmes established (please provide details below)	
d) Yes, a thorough assessment undertaken and comprehensive programmes established (please provide details below)	

Further comments on protected-area capacity needs assessment and establishment of capacity building programmes.

But assessment is underway through the National Self Assessment programme.

43. Is your country implementing country-level sustainable financing plans that support national systems of protected areas? (decision VII/28)

a) No	
b) No, but relevant plan is under development	
c) Yes, relevant plan is in place (please provide details below)	x
d) Yes, relevant plan is being implemented (please provide details below)	

Further comments on implementation of country-level sustainable financing plans that support national systems of protected areas.

There are three sustainable funding mechanisms, Malawi Environmental Endowment Trust (MEET), Mulanje Mountain Conservation Trust (MMCT) and the Environment Management Fund (EMF).

MEET is a non profit making independent institution that derives its funding from capital investment trust fund and from donors and provides a sustainable source of financing for conservation and natural resource management.

MMCT is an endowment based organisation facilitating the awareness, conservation, research and responsible management of biodiversity of Mulanje Mountain Forest Reserve. MMCT funds micro projects. EMF is an innovative, sustainable funding mechanism that is funded through levies from electricity, water, forestry products etc. The EMF will focus on supporting on local level natural resources management programmes.

44. Is your country implementing appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance? (decision VII/28)

a) No	
b) No, but relevant methods, standards, criteria and indicators are under development	x
c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below)	
d) Yes, some national methods, standards, criteria and indicators developed and in use and some international methods, standards, criteria and indicators in use (please provide details below)	

Further comments on methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance.

Box XLV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Most protected areas are in miombo woodlands. This directly contributes to goal target 4 of the GSPC on protection of 10% of ecological regions. In addition, on going programme in Forestry and National Parks (e.g. community management) directly contribute to implementation of CBD articles and work programmes on Protected Areas, thus contribution to the implementation of the Strategic Plan of the Convention.
- b) Inadequate human capacity, inadequate financial resources, lack of coordination between various stakeholders and lack of private sector participation are some of the constraints.

Article 8(h) – Alien species

45. Has your country identified alien species introduced into its territory and established a system for tracking the introduction of alien species?

a) No	
b) Yes, some alien species identified but a tracking system not yet established	x
c) Yes, some alien species identified and tracking system in place	
d) Yes, alien species of major concern identified and tracking system in place	

46. ? Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?

a) No	
b) Yes, but only for some alien species of concern (please provide details below)	x
c) Yes, for most alien species (please provide details below)	

Further information on the assessment of the risks posed to ecosystems, habitats or species by the introduction of these alien species.

Invasive species survey supported by the SABSP observed that studies to assess the impacts of such invasive species as water hyacinth, Mexican mesquite (*Prosopis* sp), pines, Himalayan raspberry *Azolla nillotica*, and forestry invertebrates have been assessed as part of various projects but no effort has been made to consolidate the information into one publication.

Risks to the productivity of forest plantations (death of trees, growth retardation, competition), degradation of water catchment areas as a result of forest invasion have been assessed and established for some alien invasive species such as the conifer aphids.

47. ? Has your country undertaken measures to prevent the introduction of, control or eradicate, those alien species which threaten ecosystems, habitats or species?

a) No	
b) No, but potential measures are under consideration	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to prevent the introduction of, control or eradicate those alien species that threaten ecosystems, habitats or species.

Some management programmes have been reported in agriculture, fisheries, and forestry. The Department of Fisheries since the 1990s been implementing water hyacinth *Eichhornia crassipes* control programmes which outlined the best possible measures to control or eradicate the weed.

Biological control has been promoted especially in the control of water hyacinth. For example specific natural enemies (such as the mite *Orthogalumna terebrantis*; *Eccritotarsus catarinnsis*; *Niphograptus albigutlalis*; *Neochetina eichhornia* and *Neochetina bruchi*.insects) have been introduced for the long-term suppression of the water hyacinth.

Major alien invasive invertebrate species have largely been agricultural and forestry pests. For instance, the accidental invasion of the alien cassava mealybug (*Phenacoccus manihoti*) in the Malawian cassava agroecosystem in the mid1980s led to the recruitment of a diverse range of parasitoids and predators. A similar situation was observed with the advent of the neotropical cassava green mite (*Mononychellus tanajoa*) that also attracted a diverse range of predatory mites most of which were indigenous.

In the forestry ecosystem, there have recently been an accidental introduction of four conifer aphid pest species; the cypress aphid (*Cinara cupressivora*) in1986, the pine woolly aphid (*Pineus boernerii*) in 1984, the pine needle aphid (*Eulachnus rileyi*) in 1984 and the giant pine aphid (*Cinara pinivora*) in 2001 which have caused various levels of damage and economic losses to conifer trees. A classical biological control program using imported natural control agents has been instituted on all the three aphid species and now their populations are under control.

The Plant Protection Act, 1970 and the Noxious Weed Act, 1970 have provisions for the prevention of the introduction of alien weeds, invertebrate and microbial pests and provide for the eradication of pests, diseases and weeds that are destructive to plants and other habitats. These Acts further prevent the importation, culturing, distribution, selling and exportation of any plant forms and growth media such as rooting compost and soil without an official permit issued by the National Plant Protection Services. Unfortunately, the Acts are seriously outdated, considering that there exists a wider range of alien

invasive species today than what was recognized when the Acts were drafted.

48. ? In dealing with the issue of invasive species, has your country developed, or involved itself in, mechanisms for international cooperation, including the exchange of best practices? (decision V/8)

a) No	
b) Yes, bilateral cooperation	
c) Yes, regional and/or subregional cooperation	x
d) Yes, multilateral cooperation	

49. ? Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species? (decision V/8)

a) No	
b) Yes (please provide details below)	x

Further comments on the use of the ecosystem approach and precautionary and bio-geographical approaches in work on alien invasive species.

Community participation in management of invasive species at Mulanje Mountain.

Fisheries department involved communities and other stakeholders in eradication of water hyacinth.

50. Has your country identified national needs and priorities for the implementation of the Guiding Principles? (decision VI/23)

a) No	x
b) No, but needs and priorities are being identified	
c) Yes, national needs and priorities have been identified (please provide below a list of needs and priorities identified)	

Further comments on the identification of national needs and priorities for the implementation of the Guiding Principles.

With support from the SABSP an assessment of user needs for databases, standards, and guidelines on invasive species the following which may be perceived as the starting point for identifying needs and priorities for the implementation of guiding principles on invasive species were recommended.

- Develop adequate knowledge about the magnitude of invasive species in Malawi through research (i.e. research on distribution; impacts; methods for detection, assessment, management and control methods).
- Harmonize and review sectoral policies and laws and or establish new ones to adequately address issue of invasive species.
- Develop an action plan with strategies, which should emphasize on ecosystems rather than a single invasive (an action plan with a holistic approach would promote an integrated approach to problem analysis and articulation and implementation of responses).
- Identify an institution, which should be given a clear mandate, as a secretariat for coordinating all efforts regarding invasive species.

- A locally relevant database should be created based on local experiences and existing structures elsewhere in order to promote information exchange.

Based on these recommendations the Department of Environmental Affairs is in the process of developing regulation and management plans for invasive species.

51. Has your country created mechanisms to coordinate national programmes for applying the Guiding Principles? (decision VI/23)

a) No	
b) No, but mechanisms are under development	x
c) Yes, mechanisms are in place (please provide details below)	

Further comments on the mechanisms created to coordinate national programmes for implementing the Guiding Principles.

But an expert working group on invasive species has been established and their following are some of their responsibilities.

- Identify training needs of different national stakeholders on invasive species.
- Identify potential national centers of Excellence on invasive species.
- Contribute to the development of teaching materials on invasive species at the Center of Excellence and deliver some of the lectures.
- Identify the types of invasive species information that should be included on the invasive species database.
- Input into the development of regional Programme outputs on invasive species.
- Mainstream invasive species issues into the national agenda.

The mandate of the working group may be expanded to coordinate implementation of the Guiding Principles.

52. Has your country reviewed relevant policies, legislation and institutions in the light of the Guiding Principles, and adjusted or developed policies, legislation and institutions? (decision VI/23)

a) No	
b) No, but review under way	x
c) Yes, review completed and adjustment proposed (please provide details below)	
d) Yes, adjustment and development ongoing	
e) Yes, some adjustments and development completed (please provide details below)	

Further information on the review, adjustment or development of policies, legislation and institutions in light of the Guiding Principles.

An attempt has been made to include issues of invasive species in some sectoral policies. For example in the processing of aligning sectoral policies with the NEP the fisheries policy included provisions for prohibiting the introduction of exotic species and also has the mandate to monitor and control the spread of aquatic weeds specially water hyacinth using biological and other control measures in collaboration with communities and the private sector. Similarly the wildlife policy mandates the wildlife sector to maintain the ecological and aesthetic quality of protected areas by preventing and controlling among other things introduction of exotic plants animals.

The Plant Protection Act and Noxious Weed Act are still outdated.

53. Is your country enhancing cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species? (decision VI/23)

a) No	
b) No, but potential coordination mechanisms are under consideration	x
c) Yes, mechanisms are in place (please provide details below)	

Further comments on cooperation between various sectors.

The government is collaborating with the Electricity Supply Commission of Malawi (ESCOM) in controlling and eradicating water hyacinth and other weeds in shire river. The Mulanje Mountain Conservation Trust (MMCT), amongst its various strategic programs, has embarked on the physical removal of invasive species such as *Pinus patula* and Himalayan raspberry *Rubus ellipticus*.

54. Is your country collaborating with trading partners and neighboring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries? (decision VI/23)

a) No	
b) Yes, relevant collaborative programmes are under development	
c) Yes, relevant programmes are in place (please specify below the measures taken for this purpose)	x

Further comments on collaboration with trading partners and neighboring countries.

Through FISNA, linkages are being established at national and regional level to enhance cooperation on prevention, early detection and eradication/control of invasive species. Through the SADC Secretariat, further linkages are being developed to establish regional collaboration for invasive species in all sectors.

55. Is your country developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)? (decision VI/23)

a) No	
b) No, but programmes for this purpose are under development	
c) Yes, some activities for developing capacity in this field are being undertaken (please provide details below)	x
d) Yes, comprehensive activities are being undertaken (please provide details below)	

Further information on capacity development to address threats of invasive alien species.

EIA guidelines include elements of risk assessments and associative mitigating measures for all most threats to the environment including invasive species.

56. Has your country developed financial measures and other policies and tools to promote activities to reduce the threats of invasive species? (decision VI/23)

a) No	x
b) No, but relevant measures and policies are under development	
c) Yes, some measures, policies and tools are in place (please provide details below)	
d) Yes, comprehensive measures and tools are in place (please provide details below)	

Further comments on the development of financial measures and other policies and tools for the promotion of activities to reduce the threats of invasive species.

But the following financing mechanisms are already supporting activities aimed at reducing the threats of invasive species.

MMCT an endowment-based organisation is currently supporting eradication and management of invasive species on Mulanje mountain.

Guided by the Environmental Management Funds, which is based on users' pays and polluter pays policy, the Electricity Supply Commission of Malawi is supporting programmes to reduce the impact of water weeds in Shire River.

Box XLVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Awareness raising has improved community participation in invasive species programmes in fisheries, forestry and national parks resulting in reduced incidences of invasive species. Active implementation of invasive species programme has necessitated compilation of a comprehensive list of invasive species.
- b) Invasive species issues have been integrated into national programmes and plans, thus contributing to the implementation of target 1.5 of the Strategic Plan for the Convention.
- c) By providing for strategies on invasive species in the NBSAP Malawi has directly contributed to Goal 3 of the strategic plan, Goal 6 of the 2010 global targets.
- d) Absence of a coordinated effort, lack of financial support and other resources, as well as the shortage of well-trained manpower in the area are some of the constraints.

Article 8(j) - Traditional knowledge and related provisions

GURTS

57. Has your country created and developed capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies?

a) No	x
b) No, but some programmes are under development	
c) Yes, some programmes are in place (please provide details below)	
d) Yes, comprehensive programmes are in place (please provide details below)	

Further comments on capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities and other relevant stakeholders to effectively participate in decision-making processes related to GURTs.

Status and Trends

58. Has your country supported indigenous and local communities in undertaking field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities? (decision VII/16)

a) No	x
b) No, but support to relevant studies is being considered	
c) Yes (please provide information on the studies undertaken)	

Further information on the studies undertaken to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities, and priority actions identified.

Akwé:Kon Guidelines

59. Has your country initiated a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé:Kon Guidelines into national legislation, policies, and procedures?

a) No	x
b) No, but review is under way	
c) Yes, a review undertaken (please provide details on the review)	

Further information on the review.

60. Has your country used the Akwé:Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities? (decision VII/16)

a) No	x
b) No, but a review of the Akwé: Kon guidelines is under way	
c) Yes, to some extent (please provide details below)	
d) Yes, to a significant extent (please provide details below)	

Further information on the projects where the Akwé:Kon Guidelines are applied.

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Capacity Building and Participation of Indigenous and Local Communities

61. Has your country undertaken any measures to enhance and strengthen the capacity of indigenous and local communities to be effectively involved in decision-making related to the use of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity? (decision V/16)

a) No	
b) No, but some programmes being developed	x
c) Yes, some measures taken (please provide details below)	
d) Yes, comprehensive measures taken (please provide details below)	

Further information on the measures to enhance and strengthen the capacity of indigenous and local communities.

Following adoption of the National Environmental Policy, which seeks to promote sustainable social and economic development through among other things enhanced public and political awareness and understanding of the need for sustainable environmental protection, conservation and management, sectoral policies affecting biodiversity such as the Forestry; Fisheries and Aquaculture; and the National Parks and Wildlife policies were amended to include provisions that encourage community participation. To enhance public awareness and compliance, the government in 1996 put in place a national environmental education and communication strategy whose main objective is to raise public consciousness to the complexity of natural resources management at all levels. In response to these instruments the Government in collaboration with NGOs mostly through CBNRM activities provide various training programme on conservation and sustainable use of natural resources.

62. Has your country developed appropriate mechanisms, guidelines, legislation or other initiatives to foster and promote the effective participation of indigenous and local communities in decision making, policy planning and development and implementation of the conservation and sustainable use of biodiversity at international, regional, subregional, national and local levels? (decision V/16)

a) No	
b) No, but relevant mechanisms, guidelines and legislation are under development	
c) Yes, some mechanisms, guidelines and legislation are in place (please provide details below)	x

Further information on the mechanisms, guidelines and legislation developed.

The Forestry Department in 2003 adopted a policy of Community Based Forestry Management, which is a supplementary to the National Forestry Policy. Through this policy the department has promoted co management arrangement through village committees.

Similarly Fisheries and National Parks and Wildlife policies were revised to include provisions for community participation in decision-making through Village Beach Committees and Wildlife Management Areas respectively.

The Local Government policy has provisions for promotion of community participation through Village Committees. In line with this policy the Department of Environmental Affairs in 2001 developed a strategy for the decentralization of Environmental Management. The strategy includes participation of local communities in decision-making through Village Development Committees.

63. Has your country developed mechanisms for promoting the full and effective participation of indigenous and local communities with specific provisions for the full, active and effective participation of women in all elements of the programme of work? (decision V/16, annex)

a) No	
b) No, but relevant mechanisms are being developed	
c) Yes, mechanisms are in place (please provide details below)	x

Further comments on the mechanisms for promoting the full and effective participation of women of indigenous and local communities in all elements of the programme of work.

The Decentralization Policy and National Gender Policy have strong recommendations for women participation at all levels of decision making through community groups.

Support to implementation

64. Has your country established national, subregional and/or regional indigenous and local community biodiversity advisory committees?

a) No	
b) No, but relevant work is under way	
c) Yes	x

65. Has your country assisted indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention?

a) No	
b) Yes (please provide details about the outcome of meetings)	x

Further information on the outcome of regional meetings.

Some NGOs such the Wildlife and Environmental Society have supported participation of local leaders to international CBD meetings (e.g. Chief Mblewa at COP6), at NBSAP sensitization meetings and other natural resources policy meetings. Through local community groups the Department of Environmental Affairs through its outreach programmes have sensitization local communities on CBD requirements.

66. Has your country supported, financially and otherwise, indigenous and local communities in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives?

a) No	
b) Yes, to some extent (please provide details below)	x
c) Yes, to a significant extent (please provide details below)	

Further information on the support provided.

Wildlife and Environmental Society of Malawi has supported communities around Sendwe Hill (once heavily degraded but now restored through community initiative), Lilongwe District produce Management Plans for the Hills.

Through IFAD funded Project (Rural Livelihood Project) communities are encouraged to produce Village Development management Plants which also include aspects of natural resources.

Box XLVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Some of the impacts of this article is the active participation of local leaders in policy dialogue related to biodiversity conservation.
- b) CBNRM established as a result of community empowerment are contributing to well being of communities and thus contributing to poverty reduction as required by MDG number one regarding halving people affected by poverty.
- c) By promoting community participation in biodiversity conservation Malawi is directly contributing to the implementation of goal 4.1 of the Strategic Plan for the Convention and Goal 9 of 2010 target.
- d) Inadequate understanding of Indigenous Knowledge systems coupled with low capacity is the major constraints.

Article 9 - *Ex-situ* conservation

67. ? On Article 9(a) and (b), has your country adopted measures for the *ex-situ* conservation of components of biological diversity native to your country and originating outside your country?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures adopted for the *ex-situ* conservation of components of biodiversity native to your country and originating outside your country.

The Forestry Department through the National Tree Planting programme promotes *ex situ* conservation of threatened species. In recent years the focus has been planting of indigenous tree species with emphasis on the rare and threatened species. In addition to this the department through the National Tree Center has short-term storage programme of threatened tree species. The seeds are often sold to interested individuals and some are generated in forestry nurseries for sell to the public during the tree planting programme.

National Herbarium and Botanic Gardens have a threatened species programme and so far orchids (mostly epiphytic), Aloes, and other endemic and threatened trees species (e.g. a Mulanje mountain endemic cycad) have been introduced in the gardens.

The Ministry of Agriculture through the National Plant Genetic Resources Center and Agricultural Research Stations has on going *ex situ* conservation programme especially focusing on collection of indigenous crops and their relatives and genetic material of all cultivated crops for both long and short term storage.

Nyala, which is currently restricted to Lengwe game reserve, has been introduced in some private game ranches such as Sucoma Game Park and Majete Game Reserve in the Lower Shire.

Ex situ conservation programmes are rare in the national parks and wildlife sector. In recent years however the department has introduced Zebras and Buffalos (from Kasungu National Park) in Liwonde National Parks as a conservation measure. Private Ranches such as Kuti Ranch in Salima and the Nyala Ranch in Chikwawa introduced Giraffes and Ostriches.

68. ? On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions.

The Department of National Parks has successfully reintroduced Black Rhinos in Liwonde National Park from South Africa. To date there are 10 Rhinos in the park.

Following drying up of lake Chilwa due to the drought of 2002 the Fisheries Department restocked the Lake with *Oreochromis shiranus chilwae* from Domasi Fish fisheries.

The Biodiversity Support Programme (supported by Norway) has embarked on reintroduction indigenous species along river banks in areas adjacent to Nyika National Park.

69. ? On Article 9(d), 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?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the 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.

The government in 2002 adopted Procedures and Guidelines for Access to and Collection of Genetic Resources. The guidelines have provisions for prior informed consent, involvement of local institutions and communities and licensing. Contractual agreements have been drafted and are yet to be adopted. The guidelines and procedures are however not legally binding.

Box XLVIII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) *Ex situ* conservation of Nyala in private game parks (Kuti and Nyala park) has resulted in increased populations of Nyala. Reintroduction and protection of Rhinos is one of the most important outcomes of the *ex situ* conservation programmes.
- b) *Ex situ* conservation programmes are improving the status of threatened species and thus contributing to the implementation of Goals 2 and 3 of the 2010 targets and Goal 7 of the MDGs.
- c) Inadequate funding, low human and infrastructural capacities, lack of comprehensive threatened species programme, and lack of understanding of the threatened species that requires protection are the major constraints in implementing this article.

Article 10 - Sustainable use of components of biological diversity

70. ? On Article 10(a), has your country integrated consideration of the conservation and sustainable use of biological resources into national decision-making?

- | | |
|---|---|
| a) No | |
| b) No, but steps are being taken | |
| c) Yes, in some relevant sectors (please provide details below) | x |
| d) Yes, in most relevant sectors (please provide details below) | |

Further information on integrating consideration of conservation and sustainable use of biological resources into national decision-making.

The revised Forestry, Fisheries and National Parks policies, which include provisions for community participation and incentives measure, are promoting sustainable use of biodiversity through CBNRM activities. This is attested by number of NGOs projects on sustainable use such as the Sustainable Management of Indigenous Forests (funded by the GTZ and being implemented by WESM), Conservation of Plant Biodiversity of Nyika National Park (Funded by Norway), Nyika-Vwaza Border Zone Project funded by the GTZ.

71. ? On Article 10(b), has your country adopted measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures adopted relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity.

By including provisions for sustainable use sectoral policies and programmes and by adopting guidelines for access and collection of genetic resources Malawi was creating a conducive environment to ensure that use of biological resources has no adverse effect on the biological diversity.

72. ? On Article 10(c), 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?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements.

The Government is in the process of developing regulations for Access and Benefit sharing. These coupled with the Plant Breeders Bill (being drafted by the Ministry of Agriculture) will provide the necessary guidance for customary use of resources.

73. ? On Article 10(d), 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?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures that help local populations develop and implement remedial action in degraded areas where biodiversity has been reduced.

Mainly through community based natural resource management programmes, a good example is Sendwe Hill where communities mobilised themselves and embarked on a restoration programme with support from WESM.

74. ? Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity? (decision V/24)

a) No	
b) No, but assessment of potential indicators and incentive measures is under way	
c) Yes, indicators and incentive measures identified (please describe below)	x

Further comments on the identification of indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity.

, incentive measures are being identified and implemented in forestry, fisheries, national parks, NGOs and the private sector but indicators are not included. Refer to question 84.

75. ? Has your country implemented sustainable use practices, programmes and policies for the sustainable use of biological diversity, especially in pursuit of poverty alleviation? (decision V/24)

a) No	
b) No, but potential practices, programmes and policies are under review	
c) Yes, some policies and programmes are in place (please provide details below)	x
d) Yes, comprehensive policies and programmes are in place (please provide details below)	

Further information on sustainable use programmes and policies.

A number of CBNRM programmes have been implemented in Malawi which are in line with the poverty reduction strategy.

Nyika-Vwaza Border Zone Project, funded by GTZ.

Sustainable Management of Indigenous Forest (Kamwamba Project), Funded by GTZ

CAMPASS I and II, funded by USAID.

Nyika Biodiversity Project (Funded by Norway).

Community Environmental Micro projects.

76. ? Has your country developed or explored mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity? (decision V/24)

a) No	
b) No, but mechanisms are under development	x
c) Yes, mechanisms are in place (please describe below)	

Further comments on the development of mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity.

The Department of Fisheries in close collaboration with Maldeco has embarked on cage fish farming in lake Malawi. This coupled with aquaculture programmes will reduce pressure on the indigenous resources.

The Department of National Parks has also given management concessions to a private wildlife

company to manage Majete Game Reserve. This has resulted in regeneration of the indigenous vegetation and increased populations of some species including Nyala.

77. Has your country initiated a process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)

a) No	
b) No, but the principles and guidelines are under review	x
c) Yes, a process is being planned	
d) Yes, a process has been initiated (please provide detailed information)	

Further information on the process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

But the guidelines were taken into consideration during the development of the NBSAP. Most of the strategies and actions presented in theme 3 (sustainable use of genetic resources) address some of the Addis Ababa Principles and Guidelines.

78. Has your country taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)

a) No	x
b) No, but relevant programmes are under development	
c) Yes, some technologies developed and transferred and limited financial resources provided (please provide details below)	
d) Yes, many technologies developed and transferred and significant financial resources provided (please provide details below)	

Further comments on the development and transfer of technologies and provision of financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

Biodiversity and Tourism

79. ? Has your country established mechanisms to assess, monitor and measure the impact of tourism on biodiversity?

a) No	
b) No, but mechanisms are under development	X
c) Yes, mechanisms are in place (please specify below)	
d) Yes, existing mechanisms are under review	

Further comments on the establishment of mechanisms to assess, monitor and measure the impact of tourism on biodiversity.

The Department of Environmental Affairs in collaboration with the Department of Tourism is in the process of developing EIA guidelines on tourism that will incorporate CBD guidelines of tourism.

Recognizing that tourism development may result in considerable environmental degradation the Strategic Tourism Development Plan (of 2002) has provisions to facilitate assessment of the impact of tourism on natural resources.

80. ? Has your country provided educational and training programmes to the tourism operators so as to increase their awareness of the impacts of tourism on biodiversity and upgrade the technical capacity at the local level to minimize the impacts? (decision V/25)

a) No	X
b) No, but programmes are under development	
c) Yes, programmes are in place (please describe below)	

Further comments on educational and training programmes provided to tourism operators.

81. Does your country provide indigenous and local communities with capacity-building and financial resources to support their participation in tourism policy-making, development planning, product development and management? (decision VII/14)

a) No	
b) No, but relevant programmes are being considered	
c) Yes, some programmes are in place (please provide details below)	x
d) Yes, comprehensive programmes are in place (please provide details below)	

Further comments in the capacity-building and financial resources provided to indigenous and local communities to support their participation in tourism policy-making, development planning, product development and management.

Department of National Parks and Wildlife trains communities around game parks production of honey and marketing.

MMCT has a CBNRM project where communities are trained on honey production and also involved in decision making regarding how to protect the mountain resources.

Through co-management arrangement communities in Kutu Game Park take part on decision making on how the gate collections may be used and conservation measures to be put in place.

82. Has your country integrated the Guidelines on Biodiversity and Tourism Development in the development or review of national strategies and plans for tourism development, national biodiversity strategies and actions plans, and other related sectoral strategies? (decision VII/14)

a) No, but the guidelines are under review	x
b) No, but a plan is under consideration to integrate some principles of the guidelines into relevant strategies	
c) Yes, a few principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)	

d) Yes, many principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)

Further information on the sectors where the principles of the Guidelines on Biodiversity and Tourism Development are integrated.

NSSD section 4.2.3.2 has relevant objectives that provides for integration of guidelines on Biodiversity and Tourism Development:

Objective 1 – integrate tourism into national development planning process and programme.

Objective 2 – Develop and promote environmentally friendly and culturally sensitive tourism policies, programmes, methodological approaches and guidelines towards the development of sustainable tourism.

Objective 3 – integrate tourism sector needs in formulating environmental and local government environmental policies, law and regulations.

Box XLIX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) Sustainable use activities have been linked to income generation activities (CBNRM), thus contributing to poverty reduction and contributing to Goal 1 of MGDs (halving poverty).
- b) The NBSAP includes a section focusing on sustainable use of genetic resources. This means that the NBSAP directly responds to one of the objectives of the convention thereby contributing to the implementation of Goal 3.1 of the Strategic Plan of the Convention, and Goal 4 of the 2010 targets.
- c) Inadequate policies, laws, regulations and institutional framework (IPR and bioprospecting); inadequate research and information; and inadequate benefit sharing mechanisms are the major constraints in achieving sustainable use of biodiversity in Malawi

Article 11 - Incentive measures

83. ? Has your country established programmes to identify and adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity?

- | | |
|--|---|
| a) No | |
| b) No, but relevant programmes are under development | x |
| c) Yes, some programmes are in place (please provide details below) | |
| d) Yes, comprehensive programmes are in place (please provide details below) | |

Further comments on the programmes to identify and adopt incentives for the conservation and sustainable use of biodiversity.

Incentive measures for natural resources management are strongly supported by the NEP 2004 part 3.2 (Economic Incentives for Sustainable Environmental Management) but no efforts have been made to identify and document incentive measures for biodiversity conservation in Malawi. However, some incentive measures do exist. For example in an effort to promote the use of solar power, the government of Malawi introduced tax subsidy on solar power equipment. Benefit sharing mechanisms being implemented through community based natural resource management (in forestry, fisheries and National Parks) may be providing economic incentives for the conservation and sustainable use of biological diversity.

84. ? Has your country developed the mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into relevant plans, policies and programmes and other relevant areas? (decisions III/18 and IV/10)

a) No	
b) No, but relevant mechanisms are under development	x
c) Yes, mechanisms are in place (please provide details below)	
d) Yes, review of impact of mechanisms available (please provide details below)	

Further comments on the mechanism or approaches to incorporate market and non-market values of biodiversity into relevant plans, policies and programmes.

The Department of Environmental Affairs is in the process of developing Financing Mechanisms (which will include incentive measures) for natural resource management with support from the SADC Biodiversity Support Programme.

85. ? Has your country developed training and capacity-building programmes to implement incentive measures and promote private-sector initiatives? (decision III/18)

a) No	
b) No, but relevant programmes are under development	
c) Yes, some programmes are in place	X CBNRM training workshops with support from COMPASS I and II
d) Yes, many programmes are in place	

86. Does your country take into consideration the proposals for the design and implementation of incentive measures as contained in Annex I to decision VI/15 when designing and implementing incentive measures for the conservation and sustainable use of biodiversity? (decision VI/15)

a) No	
b) Yes (please provide details below)	x

Further information on the proposals considered when designing and implementing the incentive measures for the conservation and sustainable use of biodiversity.

The proposals for design and implementation of incentive measures as annexed to decision VI/15 were taken into consideration during preparation of strategies and actions in the NBSAP thematic area for

incentive measures. The following desired outcome by 2020 as provided for in the NBSAP may be relevant.

- Policies, laws and institutional frameworks are revised or developed to remove or minimize potential perverse incentives
- Guidelines and procedures for the application of ways and means to remove or mitigate policies and practices that generate perverse incentives are promoting community participation in biodiversity conservation and improving livelihoods of rural communities.
- Significant progress made in developing and or adopting tools and methodologies for valuation of biodiversity and biological resources
- Institutional framework is in place and is facilitating implementation and effective monitoring, enforcement and evaluation of incentive measures.

In addition to the above desired outcome, strategies related to incentive measures are responding to some elements of the design.

Strategy 10.1.1 Promote the participation of the private sector and local communities in identification of practices that promote perverse incentives and identification and implementation of incentives

Strategy 10.1.2 Develop guidelines for promoting public participation and awareness on importance of removing policies and practices that promote perverse incentives

Strategy 10.2.1 Identify policies and practices that generate perverse incentives

Strategy 10.3.1 Enhance capacity to institutions to undertake biodiversity valuation, research, and monitoring and evaluation of policy reforms and programmes

Strategy 10.4.1 Develop markets for the agricultural and natural resource products (including non timber and wildlife products).

This means that design elements focusing on a) providing mechanisms for improved knowledge and understanding of incentive measures; b) improving or development of policy and regulatory framework for incentive measures; c) provision of capacity to institutions to undertake biodiversity valuation, research, and monitoring and evaluation of policy reforms and programmes; will be addressed by the NBSAP.

87. Has your country made any progress in removing or mitigating policies or practices that generate perverse incentives for the conservation and sustainable use of biological diversity? (decision VII/18)

a) No	
b) No, but identification of such policies and practices is under way	
c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below)	x
d) Yes, relevant policies and practices identified and removed or mitigated (please provide details below)	

Further information on perverse incentives identified and/or removed or mitigated.

Sectoral policies such as forestry, fisheries and national parks promote incentives through promotion of community participation through CBNRM programme but implementation has been very slow and issues of incentive measures are not adequately addressed. As a result, most protected areas are still monopolized by government control. This has encouraged encroachment and unsustainable use of natural resources.

Box L.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) The area of incentive measures is relatively new in Malawi and as a result the concept has not been integrated into the existing institutions. Thus it is difficult to assess its impact.
- b) NBSAP provisions for incentive measures. This means that implementation of the NBSAP will directly contribute to poverty reduction in the people of Malawi, and will also contribute to the sustainable use of biological resources including bioprospecting and benefit sharing. Thus contributing directly to Goal 3.1 of the Strategic Plan of the Convention, Goal 1 of the MDGs and a number of 2010 targets.
- c) Inadequate policies and legal framework is one of the constraints to the implementation of incentive measures. For example the tax policy may directly or indirectly have negative impacts on biodiversity and ecological functioning systems. High taxes and fines imposed on the private sector because of imported materials that would promote biodiversity conservation have negative impacts on biodiversity conservation. This has resulted in high prices for such commodities as paraffin and electricity that force people to depend on fuel wood for domestic uses. Policies and legislation that would promote incentives are simply unavailable. For example lack of legislation on intellectual property rights mean that genetic resources and indigenous knowledge are exchanged freely and as such the potential resulting commercial and technological benefits do not trickle down to the local communities. Another problem is that Malawi's biodiversity is inadequately valued, resulting in poor pricing of biological. This when coupled with non-existent property rights and missing or incomplete markets for biological resources results in over exploitation of the resources.

Article 12 - Research and training

88. ? On Article 12(a), 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?

- | | |
|--|---|
| a) No | |
| b) No, but programmes are under development | |
| c) Yes, programmes are in place (please provide details below) | x |

Further information on the programmes for scientific and technical education and training in the measures for identification, conservation and sustainable use of biodiversity.

In line with the Environmental Education and Awareness Strategy Malawi established the following training programmes. These programmes however are not comprehensive enough to adequately address issues of identification, conservation and sustainable use of all components of biological diversity:

- a) MSc in Biodiversity and Natural Resources Management (Chancellor College).
- b) MSc in Environmental Sciences (Chancellor College).
- c) MSc in Forestry (Bunda College of Agriculture)
- d) BSc in Environment and Natural Resource Management (Bunda College of Agriculture)

- e) BSc in Environment Sciences (Polytechnic).
- f) BSc in Forestry and short courses on Renewable Energy (at Mzuzu University)

89. ? On Article 12(b), does your country promote and encourage research which contributes to the conservation and sustainable use of biological diversity?

- | | |
|---------------------------------------|---|
| a) No | |
| b) Yes (please provide details below) | x |

Further information on the research which contributes to the conservation and sustainable use of biodiversity.

A number of projects on sustainable use have been implemented such as:

1. Medicinal Plants and Biodiversity Project – the project was funded by IDRC and produced inventories of threatened and rare medicinal plants, measures for their sustainable use.
2. Appropriate Forest Management – implemented by FRIM
3. Biodiversity Support Programme – funded by the government of Norway. The project involves communities around Nyika National Park in conservation and sustainable use of resources.
4. GTZ Biodiversity Project – which focused on sustainable use of biodiversity of protected areas.
5. Community Based Management of Plant genetic Resources in Arid and Semi-Arid Regions of Africa.
6. Management of Biodiversity in Protected Areas of Malawi – Funded by GTZ.
7. Ecological Monitoring Programme on Mulanje Mountain – Funded by GEF.

90. ? On Article 12 (c), does your country promote and cooperate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources?

- | | |
|---------------------------------------|---|
| a) No | |
| b) Yes (please provide details below) | x |

Further information on the use of scientific advances in biodiversity research in developing methods for conservation and sustainable use of biodiversity.

See 89 above

Box LI.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Research in sustainable use of biological resources has resulted in best practices in CBNRM. These have in turn promoted sustainable use and have also contributed to poverty reduction. Thus contributing to

the implementation of Millennium Goals, the NBSAP and strategic plan for the Convention.

Inadequate human, infrastructural and institutional capacity to conduct research, inadequate funding and lack of prioritization are the major constraints

Article 13 - Public education and awareness

91. Is your country implementing a communication, education and public awareness strategy and promoting public participation in support of the Convention? (Goal 4.1 of the Strategic Plan)

a) No	
b) No, but a CEPA strategy is under development	
c) Yes, a CEPA strategy developed and public participation promoted to a limited extent (please provide details below)	x
d) Yes, a CEPA strategy developed and public participation promoted to a significant extent (please provide details below)	

Further comments on the implementation of a CEPA strategy and the promotion of public participation in support of the Convention.

Malawi in response to requirements of the National Environmental Policy which seeks to promote sustainable social and economic development through among other things enhanced public and political awareness and understanding of the need for sustainable environmental protection, conservation and management in 1996 put in place a National Environmental Education and Communication Strategy. The main objective of the strategy is to raise public consciousness to the complexity of natural resources management at all levels.

92. Is your country undertaking any activities to facilitate the implementation of the programme of work on Communication, Education and Public Awareness as contained in the annex to decision VI/19? (decision VI/19)

a) No	
b) No, but some programmes are under development	
c) Yes, some activities are being undertaken (please provide details below)	x
d) Yes, many activities are being undertaken (please provide details below)	

Further comments on the activities to facilitate the implementation of the programme of work on CEPA.

In an effort to enhance global communication, education and public awareness the Environmental Education Section of the Environmental Affairs Department has established a close link with the SADC Regional Environmental Education Center of Southern Africa. Through this collaboration EAD has received support for training, policy development and networking.

Guided by the Environmental Awareness and Education Strategy Malawi embarked on a capacity building programme. For example the University of Malawi (Chancellor College, Bunda College and the Polytechnic) and Mzuzu University included environmental education in their curriculum both at undergraduate and postgraduate levels.

The EAD environmental education programme has a strong environmental sensitization component which aims at raising the awareness of communities on the value of biodiversity. Through sensitization with journalists a Forum for Environmental Communicators (FECO) was established in 1999 and a Coalition of Journalists for Environment and Agriculture (COJEA) was established in 2004. These fora have improved environmental reporting in the print and electronic media. The section has also sensitized

chiefs and local leaders, parliamentarians and cabinet ministers, musicians, judiciary and wildlife and environmental club patrons across the country.

In response to the strategy and in close collaboration with the EAD, the Wildlife and Environmental Society of Malawi in 2003 developed its own strategy which focuses on the youth through wildlife clubs in schools, thematic publication, radio and TV programme, and education visits to national parks. WESM has also conducted awareness workshops for journalists and the local leaders.

93. Is your country strongly and effectively promoting biodiversity-related issues through the press, the various media and public relations and communications networks at national level? (decision VI/19)

a) No	
b) No, but some programmes are under development	
c) Yes, to a limited extent (please provide details below)	x
d) Yes, to a significant extent (please provide details below)	

Further comments on the promotion of biodiversity-related issues through the press, the various media and public relations and communications networks at national level.

Every year Malawi commemorates World Biodiversity day through radio and TV programmes, press releases in the print media and resources permitting through outdoor activities.

Government departments such as the Environmental Affairs Department, Fisheries Department, Forestry Department reach out to various stakeholders through radio or television programmes, and through the print media. For example Environmental education section runs two radio programmes every week each lasting 15 minutes. The daily newspapers publishes natural resources articles once a week.

NGOs such as WESM also have radio and TV programmes on environment and natural resources programme.

Natural Resources Programme and Projects (e.g. COMPASS, MMCT, MEET, Biodiversity Support Programme) occasionally disseminate project results and best practices through the print and electronic media.

94. Does your country promote the communication, education and public awareness of biodiversity at the local level? (decision VI/19)

a) No	
b) Yes (please provide details below)	x

Further information on the efforts to promote the communication, education and public awareness of biodiversity at the local level.

To ensure that environmental information disseminated to stakeholders is uniform and relevant, the department of Environmental Affairs is in the process of developing a handbook that consists of technologies and procedures for sustainable management of the environment and natural resources (Draft Community Environmental Management Manual August 05).

95. Is your country supporting national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness? (decision VI/19)

a) No	x
b) No, but some programmes are under development	
c) Yes, some activities supported (please provide details below)	

d) Yes, many activities supported (please provide details below)	
Further comments on the support of national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness.	

96. Has your country developed adequate capacity to deliver initiatives on communication, education and public awareness?	
a) No	x
b) No, but some programmes are under development	
c) Yes, some programmes are being implemented (please provide details below)	
d) Yes, comprehensive programmes are being implemented (please provide details below)	
Further comments on the development of adequate capacity to deliver initiatives on communication, education and public awareness.	
Although some NGOs (WESM) and Government departments (forestry, Fisheries, EAD) have strong environmental education programmes delivery of work is affected by inadequate human capacity. A deliberate effort to improve capacity in the area of communication, education and public awareness must be made.	

97. Does your country promote cooperation and exchange programmes for biodiversity education and awareness at the national, regional and international levels? (decisions IV /10 and VI/19)	
a) No	
b) Yes (please provide details below)	x
Further comments on the promotion of cooperation and exchange programmes for biodiversity education and awareness, at the national, regional and international levels.	
WESM has established close cooperation with International Center for Conservation Education in the UK. Through this cooperation WESM has access to databases.	
The department of Environmental Affairs through the Outreach Section, established close links with the SADC Regional Environmental Education Center.	

98. Is your country undertaking some CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention?	
a) No (please specify reasons below)	
b) Yes, some activities undertaken for some issues and thematic areas (please provide details below)	x
c) Yes, many activities undertaken for most issues and thematic areas (please provide details below)	
d) Yes, comprehensive activities undertaken for all issues and thematic areas (please provide details below)	

Further comments on the CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention.

The main specific objectives of environmental education in Malawi include:

- Increase public awareness and participation;
- Integrate EE into the formal education stem;
- Build institutional and individual capacity for EE & C;
- Increase the quantity and quality and distribution of EE & C teaching and learning materials;
- Increase environmental awareness and responsiveness of key individuals at all levels, e.g. decision-makers, traditional leaders, women, farmers and the general public.
- Decentralize EE& C activities to the local level.

These objectives are currently implemented through the following activities. None of these activities specifically targeting cross-cutting issues and thematic issues.

- Mounting mass awareness campaigns to different stakeholders on sound environmental management;
- Developing and reviewing the school curriculum for integration of EE;
- Staff training at all levels in EE and environmental management in general;
- Development and reproduction of materials for education, training and public awareness;
- Promotion of information exchange on matters relating to EE and Environmental management in general;
- Coordination of environmental radio programmes to increase public awareness of environmental issues.
- Conducting environmental sensitizations workshops for the different target groups of the society.

99. ? Does your country support initiatives by major groups, key actors and stakeholders that integrate biological diversity conservation matters in their practice and education programmes as well as into their relevant sectoral and cross-sectoral plans, programmes and policies? (decision IV/10 and Goal 4.4 of the Strategic Plan)

a) No	
b) Yes (please provide details below)	x

Further comments on the initiatives by major groups, key actors and stakeholders that integrate biodiversity conservation in their practice and education programmes as well as their relevant sectoral and cross-sectoral plans, programmes and policies.

The Environmental Affairs Department works in close collaboration with NGOs such as WESM in developing environmental education materials. The department has also supported the ministry of education revise its curriculum to include environmental education issues.

100. Is your country communicating the various elements of the 2010 biodiversity target and establishing appropriate linkages to the Decade on Education for Sustainable Development in the implementation of your national CEPA programmes and activities? (decision VII/24)

a) No	
b) No, but some programmes are under development	
c) Yes, some programmes developed and activities undertaken for this purpose (please provide details below)	x
d) Yes, comprehensive programmes developed and many activities undertaken for this purpose (please provide details below)	

Further comments on the communication of the various elements of the 2010 biodiversity target and the establishment of linkages to the Decade on Education for Sustainable Development.

Through Environmental Education Programmes by NGOs, government departments.

Box LII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

- a) By putting in place the environmental education programme, the government of Malawi identified environmental education as a key tool to achieving sustainable environmental management and development and thus directly responding to goal 4.1 of the Strategic Plan of the Convention.
- b) The most outstanding outcome is the inclusion of environmental education in tertiary and secondary education curricula and also inclusion of environmental education in informal training. This has resulted in improved environmental awareness in most stakeholders.
- c) Constraints to the implementation include: i) inadequate trained personnel in Environmental Education Methodologies - Most staff in Environmental Education does not have pre requisite training in Environmental Education. The low capacity may have attributed to the current narrow view of environmental issues which seem to refer to deforestation; ii) inadequate teaching and learning materials; iii) inadequate funding commitment from the government; iv) inadequate inter-sectoral co-operation – there is inadequate collaboration between institutions dealing with environmental awareness and education and this leads to duplication of efforts and sometimes to conflicting messages; v) and poverty – this forces communities to continue using resources unsustainably despite being aware of the consequences.

Article 14 - Impact assessment and minimizing adverse impacts

101. ? On Article 14.1(a), has your country developed legislation requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity?

- a) No
- b) No, legislation is still in early stages of development
- c) No, but legislation is in advanced stages of development
- d) Yes, legislation is in place (please provide details below)
- e) Yes, review of implementation available (please provide details below)

x

Further information on the legislation requiring EIA of proposed projects likely to have adverse effects on biodiversity.

Issues of EIAs are provided for in the Environmental Management Act section 24, which prescribes the types and sizes of projects for which an EIA is required. In keeping with this Act Malawi has developed Guidelines for EIA, 1997 and has also developed Sector-specific EIA Guidelines for Mining, Irrigation

and Drainage, Sanitation and Waste Management.

102. ? On Article 14.1(b), has your country developed mechanisms to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity?

- | | |
|--|---|
| a) No | |
| b) No, mechanisms are still in early stages of development | |
| c) No, but mechanisms are in advanced stages of development | |
| d) Yes, mechanisms are in place (please provide details below) | x |

Further comments on the mechanisms developed to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biodiversity.

EIA Guidelines advocate the need to conduct strategic environmental assessment (SEA) (a higher level environmental assessment that is conducted for policies, programmes and plans) for policies, programmes and plans. However, there are no guidelines on how the SEA is to be undertaken.

In addition, SEA is not explicitly mentioned in the Act. However, under Section 24 (1) of the Act, the Minister may prescribe the types and sizes of activities for which EIA is mandatory. This has been done and the prescribed list of activities for which EIA is mandatory is in the Guidelines under Appendix B and A14 of the Guidelines is on Major Policy Reforms. Policies are an area that SEAs deal with.

In practice, environmental assessments are being carried out for all programmes (e.g. road maintenance rehabilitation Programme, irrigation, education, health programmes, and hydroelectric scheme).

103. ? On Article 14.1(c), is your country implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction?

- | | |
|---|---|
| a) No | |
| b) No, but assessment of options is in progress | |
| c) Yes, some completed, others in progress (please provide details below) | X |
| d) Yes (please provide details below) | |

Further information on the bilateral, regional and/or multilateral agreements on activities likely to significantly affect biodiversity outside your country's jurisdiction.

Zambezi River Basin Project – being implemented in eight countries that share that Zambezi catchment area.

104. ? On Article 14.1(d), has your country put mechanisms in place to prevent or minimize danger or damage originating in your territory to biological diversity in the territory of other Parties or in areas beyond the limits of national jurisdiction?

- | | |
|---|---|
| a) No | |
| b) No, mechanisms are still in early stages of development | |
| c) No, but mechanisms are in advanced stages of development | X |

d) Yes, mechanisms are in place based on current scientific knowledge	
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105. ? On Article 14.1(e), has your country established national mechanisms for emergency response to activities or events, which present a grave, and imminent danger to biological diversity?

a) No	
b) No, mechanisms are still in early stages of development	
c) No, but mechanisms are in advanced stages of development	X
d) Yes, mechanisms are in place (please provide details below)	

Further information on national mechanisms for emergency response to the activities or events, which present a grave, and imminent danger to biodiversity.

Malawi has drafted a Disaster Preparedness Plan, which spells out response procedures to all emergencies and proposes mitigating mechanisms to cope with a variety of natural and man-caused catastrophes. The plans has strategies for:

- a) reducing the risks of flooding and drought by, *inter-alia*, promoting wetland and watershed protection and restoration;
- b) promoting integrated water resource management ;
- c) improving techniques and methodologies for assessing effects of climate change
- d) promoting stakeholder cooperation; and
- e) improving policy and decision-making at all levels through

106. Is your country applying the Guidelines for Incorporating Biodiversity-related Issues into Environment-Impact-Assessment Legislation or Processes and in Strategic Impact Assessment as contained in the annex to decision VI/7 in the context of the implementation of paragraph 1 of Article 14? (decision VI/7)

a) No	
b) No, but application of the guidelines under consideration	
c) Yes, some aspects being applied (please specify below)	x
d) Yes, major aspects being applied (please specify below)	

Further comments on application of the guidelines.

Assessment of the impact of projects on biodiversity components such as plants, vertebrates (including soil micro organisms), and invertebrates is standard procedure in most EIAs.

107. On Article 14 (2), has your country put in place national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity? (Decision VI/11)

a) No	
b) Yes (please specify the measures)	X

Further comments on national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity.

The Environment Management Act advocates the Polluter Pays Principle where it provides for the restoration, rehabilitation of degraded land, clean up of polluted land and compensation of affected parties. The Act under Section 33 has provisions to issue an Environmental Protection Order (EPO) against any person whose acts or omissions are likely to damage the environment and conservation and

sustainable utilization of natural resources. The Order may require the person against which it is made to:

- a) take such measures as are necessary for the restoration of any land degraded by reason of the activities of the person against whom the Order is made including the replacement of soil, the replanting of trees and other flora, and the restoration, as far as may be possible, of unique geological, physiographical, ecological or historical features of the land and of waste disposal sites;
- b) stop, prevent or modify any action or conduct which causes or contributes or is likely to cause or contribute to pollution;
- c) pay such compensation as may be specified in the Order to any person whose land is degraded by the action or conduct of the person against whom the Order is made.

Currently, the Department is looking at the modalities and mechanisms of how the Polluter Pays Principle can be operationalised.

108. Has your country put in place any measures to prevent damage to biological diversity?

a) No	
b) No, but some measures are being developed	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures in place to prevent damage to biological diversity.

The following are some of the measures (which guide EIA requirements for development activities, Development of Environmental Management Plans and Monitoring Plans as part of EIA and Environmental audits).

- National Environmental Action Plan that provides a framework for action to address key environmental issues in Malawi, including threat to biodiversity.
- Revised sectoral policies and legislation dealing with natural resources management in line with the National Environmental Policy.
- National Biodiversity Strategy and Action Plan (Draft) provides a framework for the conservation of biodiversity in Malawi.

109. Is your country cooperating with other Parties to strengthen capacities at the national level for the prevention of damage to biodiversity, establishment and implementation of national legislative regimes, policy and administrative measures on liability and redress? (Decision VI/11)

a) No	
b) No, but cooperation is under consideration	
c) No, but cooperative programmes are under development	
d) Yes, some cooperative activities being undertaken (please provide details below)	x
e) Yes, comprehensive cooperative activities being undertaken (please provide details below)	

Further comments on cooperation with other Parties to strengthen capacities for the prevention of damage to biodiversity.

E.g. SADC Biodiversity Support Programme, and Zambezi River Basin Initiative.

Box LIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

EIAs are promoting and encouraging conservation of rare species (since rare species are often rescued). This thus contributes to the implementation of Goal 2 of 2010 targets. EIAs also promote environmental sustainability and therefore contribute to the implementation of Goal 7 of the MDGs.

The major problem with the implementation of EIAs is inadequate capacity and lack of understanding of the EIA guidelines, lack of adherence to EIA requirements.

Article 15 - Access to genetic resources

110. ? Has your country endeavored to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms, in accordance with paragraphs 2, 4 and 5 of Article 15?

a) No	x
b) Yes (please provide details below)	

Further information on the efforts taken by your country to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms.

Access to genetic resources is partially provided for in Environmental Management Act (section 4) and in sectoral laws and policies and is further guided by Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi and Procedures and Guidelines for the Conduct of Research in Malawi. These guidelines however are inadequate because they do not indicate type of benefits to be shared and have not been promulgated into rules or regulations under the exiting legislation.

Despite the existence of these measures, access to genetic resources by foreign institutions is often through a front (say funded projects).

Malawi is current developing comprehensive regulations for Access and benefit Sharing.

111. ? Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Parties is developed and carried out with the full participation of such Parties, in accordance with Article 15(6)?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the 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.

Procedures and Guidelines for Access and Collection of Genetic Resources, and Procedures and Guidelines for the Conduct of Research in Malawi encourage foreign researchers to be affiliated to local institutions to ensure that research is conducted according to Malawi regulations.

112. ? Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources, in accordance with Article 15(7)?

a) No	x
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive legislation is in place (please provide details below)	
e) Yes, comprehensive statutory policy or subsidiary legislation are in place (please provide details below)	
f) Yes, comprehensive policy and administrative measures are in place (please provide details below)	

Further information on the type of measures taken.

Malawi has no elaborate schemes for fair and equitable sharing of the results of research. An informal scheme of sharing benefits appears to be restricted to co management arrangements in forestry, fisheries and wildlife. In the forestry sector, through mechanisms for co management agreements local communities are allowed some access to local forestry resources and in some cases they are entitled to a proportion of forest revenue ranging from 25 to 60% the revenue.

Co management arrangements in the Fisheries Department have facilitated formation of regulations that are being constituted as legal entities through which the activities and interests of Beach Village Committees can be articulated and represented. Through this agreement the department seeks to transfer to the fisheries management authorities (the associations) the specific rights of use and management of the aquatic environment and other aquatic resources for the duration of the agreement.

The department of National Parks also has benefit sharing arrangements with local communities and though this arrangement the department is supposed to share 50-50 with the communities all gate taking.

Kuti Game Park (a private reserve) shares 70% of gate collections with communities.

Malawi is currently through a consultative process developing regulations for Access and benefit Sharing. The proposal to develop the regulations has already been endorsed by a Parliamentary Committee on Agriculture and Natural Resources.

113. ? In developing national measures to address access to genetic resources and benefit-sharing, has your country taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture?

a) No	X
b) Yes (please provide details below)	

Further information on national measures taken which consider the multilateral system of access and benefit-sharing as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture.

The draft regulation on access and benefit sharing have provisions that prohibit transfer of permit between parties and also prohibit transfer of any genetic resources outside Malawi unless a Material Transfer Agreement has been executed.

114. Is your country using the Bonn Guidelines when developing and drafting legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contracts and other arrangements under mutually agreed terms for access and benefit-sharing? (decision VII/19A)

a) No	
b) No, but steps being taken to do so (please provide details below)	
c) Yes (please provide details below)	x

Please provide details and specify successes and constraints in the implementation of the Bonn Guidelines.

Contractual agreements under the Procedures and Guidelines for access and collection of genetic resources (which include Agreements for Use with Traditional Knowledge, collection on customary lands, material transfer for agreement for profit making collectors, for nonprofit collectors, for academic collectors) were modeled on Bonn Guidelines, but these are yet to be adopted.

Draft Access and Benefit Sharing Regulations were to a larger extent based on the Bonn Guidelines.

115. Has your country adopted national policies or measures, including legislation, which address the role of intellectual property rights in access and benefit-sharing arrangements (i.e. the issue of disclosure of origin/source/legal provenance of genetic resources in applications for intellectual property rights where the subject matter of the application concerns, or makes use of, genetic resources in its development)?

a) No	
b) No, but potential policies or measures have been identified (please specify below)	
c) No, but relevant policies or measures are under development (please specify below)	x
d) Yes, some policies or measures are in place (please specify below)	
e) Yes, comprehensive policies or measures adopted (please specify below)	

Further information on policies or measures that address the role of IPR in access and benefit-sharing arrangements.

The relevant IPR legislation in Malawi is the Patents Act, which principally deals with industrial inventions and was not designed to cater for issues such as community, farmers and breeders rights or indeed with specific attention to biological resources. The Patent Act is designed in such a way that indigenous knowledge systems commonly perceived to be in the public domain would not be protected on the ground that it may not be a new invention or capable of industrial application. As currently defined most of the indigenous technologies which passed from generation to generation may not be considered 'new'.

The draft Access and Benefit Sharing regulations address issues of IPR in relation to access and benefit sharing.

116. Has your country been involved in capacity-building activities related to access and benefit-sharing?

a) Yes (please provide details below)

b) No

x

Please provide further information on capacity-building activities (your involvement as donor or recipient, key actors involved, target audience, time period, goals and objectives of the capacity-building activities, main capacity-building areas covered, nature of activities). Please also specify whether these activities took into account the Action Plan on capacity-building for access and benefit-sharing adopted at COP VII and available in annex to decision VII/19F.

Box LIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Issues of access and benefit sharing are not well known in Malawi and as a result it is difficult to assess and measure their impact. The preliminary access and benefit sharing mechanisms that are available however have contributed to poverty reduction in some communities, thus partially contributing to the implementation of Millennium Development Goal related to halving poverty.

By including provisions on Access and Benefit Sharing in the NBSAP Malawi is specifically responding to one of the objectives of the Convention, goal 3.1 of the strategic plan, and Goal 10 of the 2010 Global Targets.

Inadequate capacity and understanding on the ABS issues and lack of institutional and legal framework to implement ABS issues are the major constraints.

Article 16 - Access to and transfer of technology

117. ? On Article 16(1), has your country taken measures to provide or facilitate access for and transfer to other 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?

a) No

b) No, but potential measures are under review

c) Yes, some measures are in place (please provide details below)

d) Yes, comprehensive measures are in place (please provide details below)

x

Further information on the measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment.

Specific strategies for technology development and transfer are provided in the Science and Technology Policy. The strategy seeks to take action among other things the following:

1. Assess Malawi's needs in capabilities based on its S&T state of the art and national resource endowment and integrate specific S&T components into socio economic development plans.
2. Monitor imported technologies by establishing national capability to screen technology agreements.
3. Foster selective development of endogenous scientific and technological capacity in order to undertake or promote the assessment of S&T needs and their prioritization.
4. Promote innovation at the firm level including development of indigenous technologies,

118. ? On Article 16(3), has your country taken measures so that Parties which provide genetic resources are provided access to and transfer of technology which make use of those resources, on mutually agreed terms?

a) No	x
b) No, but potential measures are under review	
c) Yes, some measures are in place	
d) Yes, comprehensive legislation is in place	
e) Yes, comprehensive statutory policy or subsidiary legislation are in place	
f) Yes, comprehensive policy and administrative arrangements are in place	
g) Not applicable	

119. ? On Article 16(4), 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?

a) No	
b) No, but potential measures are under review	x
c) Yes, some policies and measures are in place (please provide details below)	
d) Yes, comprehensive policies and measures are in place (please provide details below)	
e) Not applicable	

Further information on the measures taken.

Gel Fuel, an agro based alcohol fuel made from industrial alcohol, which was spearheaded by World Bank under a regional programme for traditional energy sector is being produced and distributed by a private company. Gel fuel is an alternative source of energy and its continued use by the local communities will in the long run reduce the pressure on fuel wood.

The Press Trust has provided funding to Maldeco Fisheries Ltd to undertake in collaboration with the Fisheries Department a feasibility study of cage fish farming in lake Malawi. The project has potential to halt the decline of fish in Lake Malawi.

Box LV.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Issues of technology transfer are also not well known, thus making it difficult to assess its impact and contribution to the achievement of CBD requirements.

Programme of Work on transfer of technology and technology cooperation

120. Has your country provided financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation? (decision VII/29)

a) No	x
b) No, but relevant programmes are under development	
c) Yes, some programmes being implemented (please provide details below)	
d) Yes, comprehensive programmes being implemented (please provide details below)	

Further comments on the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation.

121. Is your country taking any measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation? (decision VII/29)

a) No	
b) No, but some measures being considered	x
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation.

Clearing House Mechanism is under development.

122. Has your country made any technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building? (annex to decision VII/29)

a) No	
b) No, but assessments are under way	x
c) Yes, basic assessments undertaken (please provide details below)	
d) Yes, thorough assessments undertaken (please provide details below)	

Further comments on technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building.

Some of the information is being collected through the National Self Assessment Capacity Building Project.

123. Has your country made any assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies? (annex to decision VII/29)

a) No	
b) No, but assessments are under way	x
c) Yes, some assessments undertaken (please provide details below)	
d) Yes, comprehensive assessments undertaken (please provide details below)	

Further comments on the assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies.

Assessment and risk analysis of new technologies is provided for in the Biosafety Act (2002) and the Science and Technology Policy.

124. Has your country identified and implemented any measures to develop or strengthen appropriate information systems for technology transfer and cooperation, including assessing capacity building needs? (annex to decision VII/29)

a) No	x
b) No, but some programmes are under development	
c) Yes, some programmes are in place and being implemented (please provide details below)	
d) Yes, comprehensive programmes are being implemented (please provide details below)	

Further comments on measures to develop or strengthen appropriate information systems for technology transfer and cooperation.

125. Has your country taken any of the measures specified under Target 3.2 of the programme of work as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention? (annex to decision VII/29)

a) No	x
b) No, but a few measures being considered	
c) Yes, some measures taken (please specify below)	
d) Yes, many measures taken (please specify below)	

Further comments on the measures taken as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention.

Malawi in 2001 adopted a national policy on Science and Technology Policy which provides for mechanisms for access and transfer of technologies

Malawi is in the process of developing an Information and Communication Technology Policy (ICT) to guide the utilization and development of ICT and enhance information access, sharing and dissemination.

Box LVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Issues of technology transfer have not been actively pursued in Malawi and as such their impacts and contribution to 2010 targets and MGDs cannot be determined.

Inadequate capacity and limited financial resources are the major constraints.

Article 17 - Exchange of information

126. ? On Article 17(1), has your country taken measures to facilitate the exchange of information from publicly available sources with a view to assist with the implementation of the Convention and promote technical and scientific cooperation?

a) No	
b) No, but potential measures are under review	x
c) Yes, some measures are in place	
d) Yes, comprehensive measures are in place	

The following question (127) is for DEVELOPED COUNTRIES

127. ? On Article 17(1), do these measures take into account the special needs of developing countries and include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on?

a) No	
b) Yes, but they do not include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on	
c) Yes, and they include categories of information listed in Article 17 (2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on	

Box LVII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Issues of information exchange are provided for in the Science and technology Policy and the Information Communication Technology Policy. Despite this issues of information exchange are affected by the following factors:

Inadequate capacity - Currently institutions holding biodiversity information have inadequate capacity in form of infrastructure, human capacity and sustainable financing mechanisms, and as such are unable to maintain information sources as part of their work programmes.

Lack of an enabling policy - Malawi currently has no clear policy on management of biodiversity information and as such most activities are haphazard and result in inefficient collection, management and dissemination of quality scientific information

Lack of information management standards - Biodiversity information maintained by various institutions is often in a format that cannot be easily understood and accessed by resource users, and shared between the custodian institutions.

Inadequate biodiversity information - Very little is known about Malawi's biodiversity.

Lack of sustainable financing mechanisms - Financing of biodiversity activities including biodiversity information management has tended to depend on external sources, which are routed through projects. The over dependency on external sources has impinged severely on data collection

Article 18 - Technical and scientific cooperation

128. ? On Article 18(1), has your country taken measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity?

- | | |
|--|---|
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | x |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further information on the measures to promote international technical and scientific cooperation.

The Science and technology Policy (2001) has provisions for promoting cooperation, collaboration and network (paragraph 3.4.8) at regional and international levels. In line with this policy Malawi has in collaboration with international institutions participated in a number of projects. The following are a few examples:

As an active member of SABONET Malawi benefited a lot from scientists from South Africa especially in the area of database and plant identification.

PROTA (Plant Resources of Tropical Africa) – in collaboration with international scientists Malawi is participating in PROTA project which aims to document, database and produce information tool kits for conservation and sustainable use of plant resources.

The Fisheries Department cooperates with scientists from Hull University (UK) in research to assess the genetic diversity of fish in lake Malawi.

Zambezi River Basin Initiative

SADC Biodiversity Support Project

129. ? On Article 18(4), has your country encouraged and developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention?

- | | |
|---|---|
| a) No | |
| b) No, but relevant methods are under development | x |
| c) Yes, methods are in place | |

130. ? On Article 18(5), has your country promoted the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention?

- | | |
|---|---|
| a) No | |
| b) Yes (please provide some examples below) | x |

Examples for the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention.

Guided by the Procedures and Guidelines for Access and Collection of Genetic Resources and the

Science and Technology Policy joint research programme or ventures relevant to the implementation of the Convention include the following:

The Millennium Seed Bank Project – between Malawi and the Millennium Project in the UK.

131. Has your country established links to non-governmental organizations, private sector and other institutions holding important databases or undertaking significant work on biological diversity through the CHM? (decision V/14)

a) No	
b) No, but coordination with relevant NGOs, private sector and other institutions under way	x
c) Yes, links established with relevant NGOs, private sector and institutions	

The following question (132) is for DEVELOPED COUNTRIES

132. Has your country further developed the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation? (decision V/14)

a) No	
b) Yes, by using funding opportunities	
c) Yes, by means of access to, and transfer of technology	
d) Yes, by using research cooperation facilities	
e) Yes, by using repatriation of information	
f) Yes, by using training opportunities	
g) Yes, by using promotion of contacts with relevant institutions, organizations and the private sector	
h) Yes, by using other means (please specify below)	

Further comments on CHM developments to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation.

133. Has your country used CHM to make information available more useful for researchers and decision-makers? (decision V/14)

a) No	
b) No, but relevant initiatives under consideration	x
c) Yes (please provide details below)	

Further comments on development of relevant initiatives.

The Clearing House Mechanism for Malawi is still being developed and has very limited biodiversity information.

134. Has your country developed, provided and shared services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions? (decision V/14)

a) No	x
b) Yes (please specify services and tools below)	

Further comments on services and tools to enhance and facilitate the implementation of CHM and further improve synergies among biodiversity-related Conventions.

Box LVIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Scientific and Technical cooperation with international institutions are contributing to ex situ conservation of threatened species (through the Millennium Seed Bank). It also contributes to capacity building to conduct meaningful research. Thus contributing to the implementation to 2010 targets and Strategic Plan of the Convention.

Despite many efforts (e.g. regional CHM workshops) the CHM for Malawi remains underdeveloped mainly due to inadequate capacity to organize available information into user friendly packages.

Article 19 - Handling of biotechnology and distribution of its benefits

135. ? On Article 19(1), has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties which provide the genetic resources for such research?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place	x
d) Yes, comprehensive legislation are in place	x
e) Yes, comprehensive statutory policy and subsidiary legislation are in place	
f) Yes, comprehensive policy and administrative measures are in place	

136. ? On Article 19(2), has your country taken all practicable measures to promote and advance priority access by Parties, on a fair and equitable basis, to the results and benefits arising from biotechnologies based upon genetic resources provided by those Parties?

a) No	
b) No, but potential measures are under review	x
c) Yes, some measures are in place	
d) Yes, comprehensive measures are in place	

Box LIX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
 - b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
 - c) contribution to progress towards the 2010 target;
 - d) progress in implementing national biodiversity strategies and action plans;
 - e) contribution to the achievement of the Millennium Development Goals;
 - f) constraints encountered in implementation.
- a) Issues of biotechnology are partially regulated by the Biosafety Act, which was developed in response to the Cartagena Protocol. In line with the Biosafety Act regulations and guidelines for management of GMOs have been developed but these will be supported by sectoral regulations and guidelines to govern handling of GMOs in such sectors like agriculture, health, environment, trade and commerce. Malawi is also developing a comprehensive Biotechnology Policy. This means that Malawi has made some progress towards implementation of goals of 1.4, 2.4, and 3.2 of the strategic plan have been made.
- b) The NBSAP has the following strategies pertaining to article 19.
Strategy 5.1.1 Strengthen legal and institutional structures on biotechnologies.
Strategy 5.2.1 Enhance development of human and institutional capacity for identification, monitoring and risk assessment and management of biotechnologies and research.
Strategy 5.3.1 Promote research and disseminate user friendly information on relevant biotechnologies, emphasizing on risk assessment, identification of GMOs, and socio economic impact
Strategy 5.4.1 Enhance public awareness and community participation in identification, assessment, management and information dissemination on biotechnology and biosafety.
 This means that the NBSAP is responding to targets 1.4, 2.4 3.2 of the Strategic Plan of the Convention.
- c) Implementation of the article however is affected by inadequate human capacity and infrastructural capacity.

Article 20 – Financial resources

Box LX.

Please describe for each of the following items the quantity of financial resources, both internal and external, that have been utilized, received or provided, as applicable, to implement the Convention on Biological Diversity, on an annual basis, since your country became a Party to the Convention.

a) Budgetary allocations by national and local Governments as well as different sectoral ministries	National budget allocations for forestry, fisheries, national parks, NHBG, Museums of Malawi have declined in recent years and are often just enough to cover salaries.
b) Extra-budgetary resources (identified by donor agencies)	
c) Bilateral channels (identified by donor agencies)	Sustainable Forest Management Programme – MK 129 million; Improved Forest Management for Sustainable Livelihood Project – Euro 1.996 million; Malawi Forestry Sector Support Programme - £4.9 million; NATURE Programme US \$ 9.0 million
d) Regional channels (identified by donor agencies)	Lilongwe Forestry Project – USD 4.4 million; SADC Wetland Conservation Project (2 million USD) EU Social Forestry: Training and Extension Project – Euro 5.28 million; GEF funded projects (national and international projects) <ul style="list-style-type: none"> - Clearing House Mechanism Enabling Activity – 11,000 US\$ - Enabling Malawi to Prepare its First National Communication in Response to its Commitments to UNFCCC – 194,000US\$ - Barrier Removal to Malawi Renewable Energy Programme - National Adaptation Program of Action – 3,418 000 US\$ - Community-based Management of On-farm Plant Genetic Resources in Arid and Semi-arid Areas of Sub-Saharan Africa – 750,000 US\$ - Pilot Biosafety Enabling Activity - National Capacity Self-Assessments (NCSA) under the CDI - US\$ 0.222; - Mulanje Mountain Biodiversity Conservation Project - US\$ 5.3; - Lake Malawi Biodiversity Conservation - US\$ 5.000 Million; - National Biodiversity Strategy and Action Plan and First National Report to the CBD – US\$ 0.289 million; - Environmental Management Programme – SDR 9.5 million; - SADC Biodiversity Support Programme - UD\$ 270,000 - Lake Malawi Ecosystem Management Project- UD\$ 2000 - Mulanje Mt. Biodiversity Conservation Project -UD\$ 802 - Environmental Management Project -UD\$ 1370 - Fisheries Development Project - UD\$ 880 - Wood Energy Project (02) - UD\$ 16.7 - Viphya Wood Industries Project - UD\$6.4 - Third National Report – US\$20, 000
e) Multilateral channels (identified by donor agencies)	

f) Private sources (identified by donor agencies)	
g) Resources generated through financial instruments, such as charges for use of biodiversity	Environmental Management Fund

Box LXI.

Please describe in detail below any major financing programmes, such as biodiversity trust funds or specific programmes that have been established in your country.

Malawi Environment Endowment Trust (MEET):

Registered under the Trustees Incorporation Act in 1999, MEET was launched in 2001 as a capitalized fund to provide a sustainable source of financing for conservation and natural resource management. MEET is a not-for-profit independent institution that derives funding from a capital investment trust fund and from donor grants. The endowment is administered on behalf of the people of Malawi in order to provide sustainable support for improved environmental activities. Grants are available to management, educational, scientific, cultural and networking programs that promote the long-term sustainable use, management and conservation of the Malawian environment.

The Endowment fund started with a capital investment from USAID of 4.5 million US\$. The fund is in local currency and makes annual returns of about 20%.

Mount Mulanje Conservation Trust (MMCT):

MMCT is an endowment-based organisation, facilitating the awareness, conservation, research, and responsible management of the biological and natural resources of Mulanje Mountain and to ensure equitable of benefits thereof. MMCT funds environmental micro projects.

Under the MMCT, a Biodiversity Conservation Research & Monitoring Programme seeks to support activities to identify, protect, manage and monitor the status of biodiversity and ecosystem health of the mountain and reduce the aspects of human pressures on the ecosystem and its biological resources.

MMCT endowment trust started in 2004 with a capital investment of about 3 million US\$.

Environmental Management Fund:

Alongside the process of preparing the NSSD, Government embarked on preparation of a new "user pays", "polluter pays" policy. The Cabinet in September 2003 approved the Environment Fund, which promotes the "polluter pays principle" and "user pays principle". The Environment Fund is an innovative, sustainable funding mechanism for central, district and local level community action in ENRM. Under this fund, levies are to be put on the use of natural resources. It is that electricity; mineral sales, petroleum sales, water sales, forest products, etc shall all pay a levy to the Environment Fund for sustainable management of the environment.

The fund is not yet funded and such its not fully operational.

137. ? On Article 20(1), has your country provided financial support and incentives to those national activities that are intended to achieve the objectives of the Convention?

a) No	x
b) Yes, incentives only (please provide a list of such incentives below)	
c) Yes, financial support only	x
d) Yes, financial support and incentives (please provide details below)	

Further comments on financial support and incentives provided.

National activities are supported through budgetary support to government departments dealing with

natural resources such as Fisheries Department, Forestry Department, Environmental Affairs Department, National Parks and Wildlife Department, and National Herbarium and Botanic Gardens.

The next question (138) is for DEVELOPED COUNTRIES

138. ? On Article 20(2), 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 fulfill the obligations of the Convention?

a) No	
b) Yes (please indicate the amount, on an annual basis, of new and additional financial resources your country has provided)	

Further comments on new and additional financial resources provided.

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The next question (139) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

139. ? On Article 20(2), has your country received new and additional financial resources to enable it to meet the agreed full incremental costs of implementing measures which fulfill the obligations of the Convention?

a) No	
b) Yes	x

140. ? Has your country established a process to monitor financial support to biodiversity, including support provided by the private sector? (decision V/11)

a) No	
b) No, but procedures being established	x
c) Yes (please provide details below)	

Further comments on processes to monitor financial support to biodiversity, including support provided by the private sector.

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141. ? Has your country considered any measures like tax exemptions in national taxation systems to encourage financial support to biodiversity? (decision V/11)

a) No	x
b) No, but exemptions are under development (please provide details below)	
c) Yes, exemptions are in place (please provide details below)	

Further comments on tax exemptions for biodiversity-related donations.

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142. Has your country reviewed national budgets and monetary policies, including the effectiveness of official development assistance allocated to biodiversity, with particular attention paid to positive incentives and their performance as well as perverse incentives and ways and means for their removal or mitigation? (decision VI/16)

a) No	
b) No, but review is under way	x
c) Yes (please provide results of review below)	

Further comments on review of national budgets and monetary policies, including the effectiveness of official development assistance.

Government has put in place a tax waiver on paraffin making it affordable by most households as a way of reducing pressure on the use of firewood. This has a positive impact on the protection of biodiversity in forest reserves.

143. Is your country taking concrete actions to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, as well as in national sustainable development plans and relevant sectoral policies and plans? (decisions VI/16 and VII/21)

a) No	
b) No, but review is under way	
c) Yes, in some initiatives and plans (please provide details below)	x
d) Yes, in major initiatives and plans (please provide details below)	

Further comments on review and integration of biodiversity considerations in relevant initiatives, policies and plans.

Malawi Poverty Reduction Strategy Paper has provisions for sustainable use of natural resources.

National Strategy for Sustainable Development includes specific actions for biodiversity conservation.

144. Is your country enhancing the integration of biological diversity into the sectoral development and assistance programmes? (decision VII/21)

a) No	
b) No, but relevant programmes are under development	
c) Yes, into some sectoral development and assistance programmes (please provide details below)	x
d) Yes, into major sectoral development and assistance programmes (please provide details below)	

Further comments on the integration of biodiversity into sectoral development and assistance programmes

Sectoral policies (forestry, fisheries, national parks, lands) were reviewed to align them with the requirements of the National Environmental Policy. Through this policy reform process these sectoral policies integrate biodiversity concerns into their programmes.

The next question (145) is for DEVELOPED COUNTRIES

145. Please indicate with an "X" in the table below in which area your country has provided financial support to developing countries and/or countries with economies in transition. Please elaborate in the space below if necessary.

Areas	Support provided
a) Undertaking national or regional assessments within the framework of MEA (decision VI/8)	
b) <i>In-situ</i> conservation (decision V/16)	
c) Enhance national capacity to establish and maintain the mechanisms to protect traditional knowledge (decision VI/10)	
d) <i>Ex-situ</i> conservation (decision V/26)	
e) Implementation of the Global Strategy for Plant Conservation (decision VI/9)	
f) Implementation of the Bonn Guidelines (decision VI/24)	
g) Implementation of programme of work on agricultural biodiversity (decision V/5)	
h) Preparation of first report on the State of World's Animal Genetic Resources (decision VI/17)	
i) Support to work of existing regional coordination mechanisms and development of regional and sub regional networks or processes (decision VI/27)	
j) Development of partnerships and other means to provide the necessary support for the implementation of the programme of work on dry and subhumid lands biological diversity (decision VII/2)	
k) Financial support for the operations of the Coordination Mechanism of the Global Taxonomy Initiative (decision VII/9)	
l) Support to the implementation of the Action Plan on Capacity Building as contained in the annex to decision VII/19 (decision VII/19)	
m) Support to the implementation of the programme of work on mountain biological diversity (decision VII/27)	
n) Support to the implementation of the programme of work on protected areas (decision VII/28)	
o) Support to the development of national indicators (decision VII/30)	
p) Others (please specify)	

Further information on financial support provided to developing countries and countries with economies in transition.

The next question (146) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

146. Please indicate with an "X" in the table below in which areas your country has applied for funds from the Global Environment Facility (GEF), from developed countries and/or from other sources. The same area may have more than one source of financial support. Please elaborate in the space below if necessary.

Areas	Applied for funds from		
	GEF	Bilateral	Other
a) Preparation of national biodiversity strategies or action plans	x	x	
b) National capacity self-assessment for implementation of Convention (decision VI/27)	x		
c) Priority actions to implement the Global Taxonomy Initiative (decision V/9)	X but was not successful	-	-
d) <i>In-situ</i> conservation (decision V/16)		x	
e) Development of national strategies or action plans to deal with alien species (decision VI/23)	x	-	-
f) <i>Ex-situ</i> conservation, establishment and maintenance of <i>Ex-situ</i> conservation facilities (decision V/26)		x	x
g) Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19)		x	
h) Preparation of national reports (decisions III/9, V/19 and VI/25)	x		
i) Projects for conservation and sustainable use of inland water biological diversity (decision IV/4)	x	x	
j) Activities for conservation and sustainable use of agricultural biological diversity (decision V/5)		x	
k) Implementation of the Cartagena Protocol on Biosafety (decision VI/26)	x		
l) Implementation of the Global Taxonomy Initiative			
m) Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity	-	-	-
n) Others (please specify)			
Further information on application for financial support.			

Box LXII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Financial support received so far has contributed to Malawi's human and infrastructure capacity, development of strategies, plans and policies for the implementation of the Convention. This means that some progress has been made towards implementation of almost all goals of the Strategic Plan of the Convention, 2010 targets and the Millennium Development Goals. Funding however has not been adequate to successfully implement all decisions. Implementation also is affected by inadequate capacity to prepare and negotiate project proposals. Lack of capacity to follow up CBD decisions has affected Malawi's ability to access funding opportunities.

D. THEMATIC AREAS

147. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the thematic programmes of work of the Convention (marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, inland waters biodiversity, dry and sub-humid lands and mountain biodiversity).

3 = High Challenge

1 = Low Challenge

2 = Medium Challenge

0 = Challenge has been successfully overcome

N/A = Not applicable

Challenges	Programme of Work					
	Agricultural	Forest	Marine and coastal	Inland water ecosystem	Dry and subhumid lands	Mountain
(a) Lack of political will and support	2	2		2	2	2
(b) Limited public participation and stakeholder involvement	2	2		3	2	3
(c) Lack of main-streaming and integration of biodiversity issues into other sectors	1	3		2	2	2
(d) Lack of precautionary and proactive measures	2	2		1	3	3
(e) Inadequate capacity to act, caused by institutional weakness	2	3		3	3	3

(f) Lack of transfer of technology and expertise	3	3		3	3	3
(g) Loss of traditional knowledge	3	3		3	3	3
(h) Lack of adequate scientific research capacities to support all the objectives	2	3		3	3	3
(i) Lack of accessible knowledge and information	2	2		2	2	3
(j) Lack of public education and awareness at all levels	2	2		2	2	2
(k) Existing scientific and traditional knowledge not fully utilized	3	3		3	3	3
(l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	3	3		3	3	3
(m) Lack of financial, human, technical resources	3	3		3	3	3
(n) Lack of economic incentive measures	2	2		2	3	2
(o) Lack of benefit-sharing	3	3		3	3	3
(p) Lack of synergies at national and international levels	3	3		3	3	3
(q) Lack of horizontal cooperation among stakeholders	2	3		2	3	3
(r) Lack of effective partnerships	2	2		2	2	3
(s) Lack of engagement of scientific community	3	3		3	3	3
(t) Lack of appropriate policies and laws	1	1		1	1	2
(u) Poverty	3	3		3	3	3
(v) Population pressure	3	3		3	3	3
(w) Unsustainable consumption and production patterns	3	3		3	3	3
(x) Lack of capacities for local communities	3	3		3	3	3

(y) Lack of knowledge and practice of ecosystem-based approaches to management	3	3		3	3	3
(z) Weak law enforcement capacity	3	3		3	3	3
(aa) Natural disasters and environmental change	3	3		3	3	3
(bb) Others (please specify)						

Inland water ecosystems

148. Has your country incorporated the objectives and relevant activities of the programme of work into the following and implemented them? (decision VII/4)				
Strategies, policies, plans and activities	No	Yes, partially, integrated but not implemented	Yes, fully integrated and implemented	N/A
a) Your biodiversity strategies and action plans		x		
b) Wetland policies and strategies		x		
c) Integrated water resources management and water efficiency plans being developed in line with paragraph 25 of the Plan of Implementation of the World Summit on Sustainable Development		x		
d) Enhanced coordination and cooperation between national actors responsible for inland water ecosystems and biological diversity		x		
Further comments on incorporation of the objectives and activities of the programme of work				
The following strategies addressing the aquatic ecosystems as presented in the draft NBSAP when read together with the desired outcomes for the same thematic area may be perceived to address some elements of the work programme for the Inland water ecosystems.				
NBSAP Desirable outcome by 2020				
<ul style="list-style-type: none"> – Inventories of all aquatic ecosystems and species available, guidelines to promote research especially in the area of ecology, taxonomy and threats to biodiversity developed. – Increased public knowledge about the importance of aquatic ecosystems and their current threats has been achieved through public awareness and education campaigns. – Policies and legislation related to aquatic biodiversity and ecosystems are harmonised and strengthened and are supporting conservation and management of aquatic biodiversity. – Management plans for various types of aquatic ecosystems based on holistic and integrated approach put in place and instituted in a co-management arrangement. This will lead to an increase in number of aquatic protected areas and increase in protection of a representative range of aquatic ecosystems and species. 				
NBSAP Strategy 2.1.1 Promote protection of the existing network of aquatic protected areas and initi-				

ate programmes to provide legal protection to other aquatic habitats.

NBSAP Strategy 2.2.1 Restore degraded aquatic habitats and ecosystems and support initiatives and programmes that have priority in sustainable use of aquatic biodiversity.

NBSAP Strategy 2.3.1 Increase the population and distribution ranges of rare and threatened aquatic species and prevent additional ones from becoming threatened.

NBSAP Strategy 2.4.1 Enhance the knowledge base of Malawians on the extent of aquatic biodiversity and develop enough human, institutional and national capacity to monitor, identify and manage aquatic biodiversity.

Ministry of Water Development Strategic Plan has provisions that incorporate relevant activities of the programme of work such as:

- Updating the existing policies, legislation and standards in the provision of equitable and sustainable water and sanitation services
- Development of enforcement guidelines that clearly state the roles and responsibilities of implementing agencies/individuals
- Educating local communities and relevant stakeholders to understand and adhere to the updated policies and standards.
- Taking a leadership role in the development of policies and guidelines on water resources management and sanitation
- Development of an integrated water resources management plan
- Development of an educational and consultative programme for staff on the Ministry's devolution plan.

Malawi has no single wetland policy and legislation but issues of wetland management are covered in sectoral policies and legislation.

149. Has your country identified priorities for each activity in the programme of work, including timescales, in relation to outcome oriented targets? (decision VII/4)

a) No	x
b) Outcome oriented targets developed but priority activities not developed	
c) Priority activities developed but not outcome oriented targets	
d) Yes, comprehensive outcome oriented targets and priority activities developed	

Further comments on the adoption of outcome oriented targets and priorities for activities, including providing a list of targets (if developed).

But the following NBSAP general priority actions and their associated targets may be relevant. These are here considered a starting point for Malawi to start developing outcome-oriented targets.

Priority Action 1: Create an enabling policy framework that would promote conservation of species, habitats and ecosystems that are important but not represented within the existing protected area networks or are vulnerable, fragile or are at risk of irreversible loss or decline of biodiversity.

Targets: Biodiversity hotspots including lakes and wetlands, mountains and terrestrial habitats and ecosystems outside the protected areas network are identified, characterized and protected by 2010.

Priority Action 2: Develop and effectively manage restoration programmes and initiatives to restore vulnerable/fragile habitats and ecosystems to a healthy functioning state.

Targets: Degraded habitats and ecosystems especially wetlands are identified and restored following comprehensive ecosystems restoration programmes by 2008.

Priority action 15: Provide strategic direction and guidance to review and harmonize relevant policies and legislation and ensure that policy and legislation are in line with the Convention on Biological Diversity and other international conventions.

Targets: Sectoral policies are revised to incorporate biodiversity issues by 2008.

150. Is your country promoting synergies between this programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level? (decision VII/4)

a) Not applicable (not Party to Ramsar Convention)	
b) No	
c) No, but potential measures were identified for synergy and joint implementation	x
d) Yes, some measures taken for joint implementation (please specify below)	
e) Yes, comprehensive measures taken for joint implementation (please specify below)	
Further comments on the promotion of synergies between the programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level.	

151. Has your country taken steps to improve national data on: (decision VII/4)

Issues	Yes	No	No, but development is under way
a) Goods and services provided by inland water ecosystems?	X		Information on biodiversity components of aquatic ecosystem was collected during the NBSAP process but the information is yet to be consolidated and organized and published on the CHM.
b) The uses and related socioeconomic variables of such goods and services?		X	
c) Basic hydrological aspects of water supply as they relate to maintaining ecosystem function?	X		
d) Species and all taxonomic levels?	X		NHBM has taxonomic data on plants. Fisheries Department has taxonomic data of fish whilst the Museums has adequate taxonomic data for most vertebrates and invertebrates. Taxonomic data on micro organisms is limited.
e) On threats to which inland water ecosystems are subjected?	X		The following major threats to aquatic ecosystems have been identified: Tsetse fly infestation especially in wetlands,

			poaching, encroachment for cultivation and settlement, deforestation, and inadequate government policy on wetland management, invasive species.
Further comments on the development of data sets, in particular a list of data sets developed in case you have replied "YES" above.			

152. Has your country promoted the application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems? (decision VII/4)	
a) No, the guidelines have not been reviewed	x
b) No, the guidelines have been reviewed and found inappropriate	
c) Yes, the guidelines have been reviewed and application/promotion is pending	
d) Yes, the guidelines promoted and applied	
Further comments on the promotion and application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems.	

Box LXIII.

<p>Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation.
<p>Mechanism being proposed in the NBSAP will contribute to the implementation of MDGs especially target 10 regarding halving by 2015, the proportion of people without sustainable access to safe drinking water. These strategies will also promote conservation of aquatic species and ecosystems and thus contributing to the implementation of goal 3.1 of the Strategic Plan of the Convention.</p>
<p>Lack of capacity to interpret and operationise CBD decisions has contributed to the inadequate understanding of the programme of work for inland water ecosystems.</p>

Marine and coastal biological diversity

General

153. Do your country's strategies and action plans include the following? Please use an "X" to indicate your response. (decisions II/10 and IV/15)

- | | |
|--|--|
| a) Developing new marine and coastal protected areas | |
| b) Improving the management of existing marine and coastal protected areas | |
| c) Building capacity within the country for management of marine and coastal resources, including through educational programmes and targeted research initiatives (if yes, please elaborate on types of initiatives in the box below) | |
| d) Instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment | |
| e) Protection of areas important for reproduction, such as spawning and nursery areas | |
| f) Improving sewage and other waste treatment | |
| g) Controlling excessive fishing and destructive fishing practices | |
| h) Developing a comprehensive oceans policy (if yes, please indicate current stage of development in the box below) | |
| i) Incorporation of local and traditional knowledge into management of marine and coastal resources (if yes, please elaborate on types of management arrangements in the box below) | |
| j) Others (please specify below) | |
| k) Not applicable | |

Please elaborate on the above activities and list any other priority actions relating to conservation and sustainable use of marine and coastal biodiversity.

Implementation of Integrated Marine and Coastal Area Management

154. 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 | |
| b) Early stages of development | |
| c) Advanced stages of development | |
| d) Arrangements in place (please provide details below) | |
| e) Not applicable | |

Further comments on the current status of implementation of integrated marine and coastal area management.

155. Has your country implemented ecosystem-based management of marine and coastal resources, for example through integration of coastal management and watershed management, or through integrated multidisciplinary coastal and ocean management?

a) No	
b) Early stages of development	
c) Advanced stages of development	
d) Arrangements in place (please provide details below)	
e) Not applicable	

Further comments on the current status of application of the ecosystem to management of marine and coastal resources.

Marine and Coastal Living Resources

156. Has your country identified components of your marine and coastal ecosystems, which are critical for their functioning, as well as key threats to those ecosystems?

a) No	
b) Plans for a comprehensive assessment of marine and coastal ecosystems are in place (please provide details below)	
c) A comprehensive assessment is currently in progress	
d) Critical ecosystem components have been identified, and management plans for them are being developed (please provide details below)	
e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below)	
f) Not applicable	x

Further comments on the current status of assessment, monitoring and research relating to marine and coastal ecosystems, as well as key threats to them

157. Is your country undertaking the following activities to implement the Convention's work plan on coral reefs? Please use an "X" to indicate your response.

Activities	Not implemented nor a priority	Not implemented but a priority	Currently implemented	Not applicable
a) Ecological assessment and monitoring of reefs				x
b) Socio-economic assessment and monitoring of communities and stakeholders				X
c) Management, particularly through application of integrated coastal management and marine and coastal protected areas in coral reef environments				X

d) Identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral reef services				X
e) Stakeholder partnerships, community participation programmes and public education campaigns				X
f) Provision of training and career opportunities for marine taxonomists and ecologists				X
g) Development of early warning systems of coral bleaching				X
h) Development of a rapid response capability to document coral bleaching and mortality				X
i) Restoration and rehabilitation of degraded coral reef habitats				X
j) Others (please specify below)				X
Please elaborate on ongoing activities.				

Marine and Coastal Protected Areas

158. Which of the following statements can best describe the current status of marine and coastal protected areas in your country? Please use an "X" to indicate your response.	
a) Marine and coastal protected areas have been declared and gazetted (please indicate below how many)	
b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders	
c) Effective management with enforcement and monitoring has been put in place	
d) A national system or network of marine and coastal protected areas is under development	
e) A national system or network of marine and coastal protected areas has been put in place	
f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities	
g) The national system of marine and coastal protected areas includes areas which exclude extractive uses	

h) The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment.	
i) Other (please describe below)	
j) Not applicable	
Further comments on the current status of marine and coastal protected areas.	

Mariculture

159. Is your country applying the following techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity? Please check all that apply.	
a) Application of environmental impact assessments for mariculture developments	
b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management	
c) Development of effective methods for effluent and waste control	
d) Development of appropriate genetic resource management plans at the hatchery level	
e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature.	
f) If seed collection from nature cannot be avoided, development of environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch	
g) Use of native species and subspecies in mariculture	
h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids.	
i) Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity	
j) Minimizing the use of antibiotics through better husbandry techniques	
k) Use of selective methods in commercial fishing to avoid or minimize by-catch	
l) Considering traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques	
m) Not applicable	
Further comments on techniques that aim at minimizing adverse impacts of mariculture on marine and coastal biodiversity.	

Alien Species and Genotypes

160. Has your country put in place mechanisms to control pathways of introduction of alien species in the marine and coastal environment? Please check all that apply and elaborate on types of measures in the space below.

a) No	
b) Mechanisms to control potential invasions from ballast water have been put in place (please provide details below)	
c) Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below)	
d) Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below)	
e) Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below)	
f) Not applicable	x

Further comments on the current status of activities relating to prevention of introductions of alien species in the marine and coastal environment, as well as any eradication activities.

Box LXIV.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Not Applicable

Agricultural biological diversity

161. ? Has your country developed national strategies, programmes and plans that ensure the development and successful implementation of policies and actions that lead to the conservation and sustainable use of agrobiodiversity components? (decisions III/11 and IV/6)

a) No	
b) No, but strategies, programmes and plans are under development	
c) Yes, some strategies, programmes and plans are in place (please provide details below)	x
d) Yes, comprehensive strategies, programmes and plans are in place (please provide details below)	

Further comments on agrobiodiversity components in national strategies, programmes and plans.

With funding from IDRC an attempt was made to design and implement an *in situ* agricultural biodiversity conservation and development strategy. The project was designed to contribute to national level decision-making process with respect to agrobiodiversity conservation, local knowledge innovation and gender analysis. To achieve this the project collect and characterized from local perspective the land races of indigenous crops, assess the genetic status and variation of indigenous crops, promote local women participation in problem analysis, and identify crop improvement priorities.

The project emphasized on participatory plant breeding as one way of ensuring that new varieties are accepted by the farmers. A major output of the project was five the sorghum varieties that were released based on the result of the study.

The draft NBSAP has provisions for the conservation of agrobiodiversity in theme three of the NBSAP document (sustainable use of genetic resources) which includes the following strategies:

NBSAP Strategy 3.1.1 Building on past experience design, develop and implement *in situ* and *ex situ* agricultural diversity conservation programmes with full participation and involvement of local communities.

NBSAP Strategy 3.1.2 Enhance human and research capacity on conservation and sustainable use of agrobiodiversity

The Ministry of Agriculture has an going agrobiodiversity conservation programme which involves collection, storage and characterization of plant genetic resources. The programme is implemented by the National Plant Genetic Resource Centre.

162. ? Has your country identified 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? (decision V/5)

a) No	x
b) No, but potential measures are under review	
c) Yes, some measures identified (please provide details below)	
d) Yes, comprehensive measures identified (please provide details below)	

Further information on ways and means to address the potential impacts of genetic use restriction technologies on the *In-situ* and *Ex-situ* conservation and sustainable use of agricultural biodiversity.

Annex to decision V/5 - Programme of work on agricultural biodiversity

Programme element 1 – Assessment

163. Has your country undertaken specific assessments of components of agricultural biodiversity such as on plant genetic resources, animal genetic resources, pollinators, pest management and nutrient cycling?

a) No	
b) Yes, assessments are in progress (please specify components below)	x
c) Yes, assessments completed (please specify components and results of assessments below)	

Further comments on specific assessments of components of agricultural biodiversity.

a) IDRC funded agrobiodiversity project concentrated on integrating farmers' knowledge in plant breeding.

- b) Domesticated and introduced species (covering cereals, legumes, agroforestry, fruits and vegetable, livestock) were assessed and documented during the NBSAP project. The survey identified a number of problems (such as lack of programmes for conservation the indigenous species) that should be addressed in order to conserve the existing diversity of domesticated and introduced species.
- c) Bunda College of Agriculture assessed and collected local breeds of beef cattle (Malawi Zebu), goats, pigs, chickens and ducks. These are currently being maintained at Bunda College of Agriculture.
- d) The Ministry of Agriculture through the National Plant Genetic Resources Programme assesses, collects and maintains agricultural diversity.
- e) As a member of the Millennium Project genetic resources of crops are being collected and stored on long term basis at the Millennium Seed Bank and the National Plant Genetic Resources Centre.

164. Is your country undertaking assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance)?

a) No	
b) Yes, assessments are under way	
c) Yes, some assessments completed (please provide details below)	x
d) Yes, comprehensive assessments completed (please provide details below)	

Further comments on assessment of biodiversity components (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance).

e.g. MEMP Project which among other things assessed the effect of burly tobacco in deforestation; Public Land Utilisation Study (PLUS); Customary Land Utilisation Study (CLUS).

165. Has your country carried out an assessment of the knowledge, innovations and practices of farmers and indigenous and local communities in sustaining agricultural biodiversity and agro-ecosystem services for food production and food security?

a) No	
b) Yes, assessment is under way (some preliminary assessment)	x
c) Yes, assessment completed (please specify where information can be retrieved below)	

Further comments on assessment of the knowledge, innovations and practices of farmers and indigenous and local communities.

One of the components of the IDRC Agrobiodiversity project was to document available indigenous in relation to conservation of indigenous crops. Indigenous knowledge for all the target crops were collected and these were integrated or were used when selecting desirable varieties.

Malawi participated in a regional project on Community Based Management of on-farm plant genetic resources in arid and semi-arid areas. In Malawi the study focused on understanding the range of on farm conservation practices for sorghum and cow peas land races in semi arid areas of Malawi (Shire Valley).

166. Has your country been monitoring an overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993 when the Convention entered into force?

a) No	
b) Yes, no change found (status quo)	
c) Yes, overall degradation found (please provide details below)	x
d) Yes, overall restoration or rehabilitation observed (please provide details below)	

Further comments on observations.

Sorghum and cowpeas have been extensively assessed and as a result there are proposals to restock sorghum especially in drought prone areas such as Salima.

Programme element 2 - Adaptive management

167. Has your country identified management practices, technologies and policies that promote the positive, and mitigate the negative, impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods?

a) No	
b) No, but potential practices, technologies and policies being identified	
c) Yes, some practices, technologies and policies identified (please provide details below)	x
d) Yes, comprehensive practices, technologies and policies identified (please provide details below)	

Further comments on identified management practices, technologies and policies.

e.g. Biosafety Act.

Programme element 3 - Capacity-building

168. Has your country increased the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage sustainable agricultural biodiversity and to develop strategies and methodologies for *In-situ* conservation, sustainable use and management of agricultural biological diversity?

a) No	x
b) Yes (please specify area/component and target groups with increased capacity)	

Further comments on increased capacities of farmers, indigenous and local communities, and their organizations and other stakeholders.

169. Has your country put in place operational mechanisms for participation by a wide range of stakeholder groups to develop genuine partnerships contributing to the implementation of the programme of work on agricultural biodiversity?

a) No	x
b) No, but potential mechanisms being identified	
c) No, but mechanisms are under development	
d) Yes, mechanisms are in place	

170. Has your country improved the policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of agricultural biodiversity?

a) No	
b) No, but some measures and arrangements being identified	
c) No, but measures and arrangements are under development	x
d) Yes, measures and arrangements are being implemented (please specify below)	

Further comments on the measures taken to improve the policy environment.

Collection and protection of agricultural biological diversity is the responsibility of the Ministry of Agriculture. Through the National Plant Genetic Resources Center Malawi in collaboration with the SADC Genetic Resource Center in Zambia collects and stores genetic material of cultivated crops and their relatives.

The existing regulations have not provisions for sharing of benefits with farmers in situations samples collected from farmers are used to develop a new plant variety. In addition to this as currently defined most of the indigenous technologies and innovation, which are passed from generation to generation, may not be protected by the current patent law. Recognizing this shortfall the Ministry of Agriculture is in the process of drafting a Plant Breeders Bill and upon parliament approval farmer whose landraces have been used in breeding a new variety that is commercialized will be rewarded accordingly. In order to ensure that the Plant Breeders Bills is as comprehensive as possible it is has been recommended that regional instruments such as the African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (the Model Legislation) should be integrated into the Plant Variety Bill.

Malawi is in the process of drafting regulations for Access and Benefit Sharing.

Programme element 4 – Mainstreaming

171. Is your country mainstreaming or integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes?

a) No	
b) No, but review is under way	
c) No, but potential frameworks and mechanisms are being identified	x
d) Yes, some national plans or strategies mainstreamed and integrated into some sectoral plans and programmes (please provide details below)	
e) Yes, some national plans or strategies mainstreamed into major sectoral plans and programmes (please provide details below)	

Further comments on mainstreaming and integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes.

In situ and *ex situ* conservation of agricultural biodiversity is a core activity of the Ministry of Agriculture. For example Mbawa Research Station is charged with *ex situ* conservation of the local breeds of cattle. The National Plant Genetic Resources center has an on going *ex situ* conservation programme of cultivated crops and so far 200 accessions in 50 crop species have been collected.

172. Is your country supporting the institutional framework and policy and planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and action plans, and its integration into wider strategies and action plans for biodiversity?

a) No	
b) Yes, by supporting institutions in undertaking relevant assessments	X
c) Yes, by developing policy and planning guidelines	X
d) Yes, by developing training material	X
e) Yes, by supporting capacity-building at policy, technical and local levels	X
f) Yes, by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes.	X

Further comments on support for institutional framework and policy and planning mechanisms.

Malawi is mainstreaming agriculture biodiversity issues through activities and functions of the National Plant Genetic Resources Centre, Agricultural Research Stations, Bunda College of Agriculture and NGOs

173. In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, *In-situ*, and *Ex-situ*, of the variability of genetic resources for food and agriculture, including their wild relatives?

a) No	
b) Yes (please provide details below)	X

Further comments on the conservation of the variability of genetic resources for food and agriculture in their center of origin.

Farmers in Malawi have always maintained crops of their preference on farm. Programmes to promote on farm conservation are rare. The National gene Bank recently participated in a regional programme on community based management of plant genetic resource. Malawi should build on results of this

study to develop strategies for promoting on farm conservation.

Since its inception the Gene Bank has collected all over the country various crop species and these are conserved *ex situ* at the gene bank as a long term conservation measure. Samples are also stored at the regional gene bank in Lusaka but these can only be used by a third party upon being granted permission by Malawi.

Box LXV.

Please provide information concerning the actions taken by your country to implement the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators.

The plan of action for the conservation and sustainable use of pollinators has not be operationalized in Malawi.

Box LXVI.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Measures proposed in the NBSAP and the current activities by the Ministry of Agriculture have the potential to contribute to the implementation of Goal 3 of the Strategic Plan for the Convention, Goal 3 and 8 of the 2010 targets.

Lack of understanding of the work programme on agrobiodiversity, lack of policy and institutional framework to spearhead agrobiodiversity conservation, and inadequate capacity are the major constraints.

Forest Biological Diversity

General

174. Has your country incorporated relevant parts of the work programme into your national biodiversity strategies and action plans and national forest programmes?

a) No	
b) Yes, please describe the process used	x
c) Yes, please describe constraints/obstacles encountered in the process	
d) Yes, please describe lessons learned	
e) Yes, please describe targets for priority actions in the programme of work	

Further comments on the incorporation of relevant parts of the work programme into your NBSAP and forest programmes

The following strategies and actions were specially designed to respond to some elements of the

work programme on forestry biodiversity

NBSAP Strategy 1.1.1 - Develop appropriate guidelines, methodologies and procedures and technologies that fully utilise the concepts of ecosystems approach and enhance sustainable use of forest biological diversity.

Actions

Develop and implement guidelines and/or technologies for applying ecosystems approach in forest ecosystems.

Promote mechanisms for the participation of all stakeholders in the conservation of forest biodiversity,

Promote activities that minimise the impact of fragmentation of forests biological diversity such as agroforestry and forest restoration.

NBSAP Strategy 1.2.1 - Develop and implement mechanisms to prevent and mitigate the adverse effects of forest fires on biological diversity

Actions

Strengthen the existing measures and mechanisms on forest fire management, including developing guidelines that promote community participation in fire prevention activities.

Strengthen policies and institutional infrastructure that address fire preventions and ensure that such policies are integrated into other sectoral policies.

Promote participatory research on forest fire management.

NBSAP Strategy 1.3.1 - Enhance conservation of forest biological diversity through promotion of sustainable use of resources.

Actions

Develop guidelines and programmes to document and evaluate the economic importance of forest biodiversity especially in sustaining the livelihoods of local communities.

Develop, support and promote programmes and initiatives that address the sustainable use of timber and non timber products,

Strengthen the capacity of local communities to develop and implement community based programmes on conservation and sustainable use of forest biological diversity.

Box LXVII.

Please indicate what recently applied tools (policy, planning, management, assessment and measurement) and measures, if any, your country is using to implement and assess the programme of work. Please indicate what tools and measures would assist the implementation.

The Forestry Department developed a comprehensive national forestry programme, which addresses most of the issues raised in the programme of work. In addition to this the department developed a Forestry Ecosystem and Biodiversity Strategy and Action plan for 2003 to 2006 covering four thematic areas: Conservation of forest ecosystems, control and management of alien invasive species, development of access and benefit sharing mechanisms, and indigenous knowledge.

Box LXVIII .

Please indicate to what extent and how your country has involved indigenous and local communities, and respected their rights and interests, in implementing the programme of work.

Though not directly related to the implementation of the programmes of work, the Department of Forestry has effectively involved communities in forestry management through Community Forestry Management.

Box LXIX.

Please indicate what efforts your country has made towards capacity building in human and capital resources for the implementation of the programme of work.

Box LXX.

Please indicate how your country has collaborated and cooperated (e.g., south-south, north-south, south-north, north-north) with other governments, regional or international organizations in implementing the programme of work. Please also indicate what are the constraints and/or needs identified.

Expanded programme of work on forest biological diversity

Programme element 1 – Conservation, sustainable use and benefit-sharing	
175. Is your country applying the ecosystem approach to the management of all types of forests?	
a) No (please provide reasons below)	
b) No, but potential measures being identified (please provide details below)	
c) Yes (please provide details below)	x
Comments on application of the ecosystem approach to management of forests (including effectiveness of actions taken, lessons learned, impact on forest management, constraints, needs, tools, and targets).	
A good example is the Liwonde – Mangochi Forest Management Plan that was development jointly by the Forestry Department and Department of National Parks. The management plan follows a holistic approach to the management of all components of biodiversity in the area.	

176. Has your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity?

Options	X	Details
a) Yes	x	Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions
		Monitoring, eradication and control of invasive species (plants and invertebrates) is an ongoing programme in forestry reserves. The department has comprehensive fire management plans for all forestry reserves. In addition to protecting forest biodiversity from fires, fire management programmes contribute to reduction in green house gasses emissions. Community Forestry Programmes have instilled sense of ownership to communities and this has reduced to some extent encroachment into forest reserves.
b) No		Please provide reasons below
Further comments on measures to reduce threats to, and mitigate the impacts of threatening processes on forest biodiversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		
A Forest fires are the number one enemy of forests and its biodiversity. The forestry Department has a fire management plan which encourages the involvement of communities in fire management.		

177. Is your country undertaking any measures to protect, recover and restore forest biological diversity?

Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
		Through the public works programme the Forestry Department has embarked on a programme to rehabilitate degraded areas of Mulanje, Zomba and Nkhota kota, Ndirande Forest Reserves. The department has also embarked on a programme rehabilitating heavily encroached and degraded forestry reserves starting with Ndilande and Thyolo Forest Reserves Surveys to determine the status and conservation needs of endemic or threatened species have not been done although a few species are protected by law. Despite the lack of management plans to conserve threatened species the department collect and stores seeds of threatened species (through the National Tree Seed Center) as a short-term conservation measure.
b) No		Please provide reasons below

Further comments on measures to protect, recover and restore forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools

and targets).

178. Is your country undertaking any measures to promote the sustainable use of forest biological diversity?

Options	X	Details
a) Yes		Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
	x	Mainly done through co management arrangements with communities (CBNRM). In line with current management practices the Department of Forestry has developed resource use programmes in most forest reserves. This has promoted sustainable harvesting of timber and other non-timber forestry products.
b) No		Please provide reasons below

Further comments on the promotion of the sustainable use of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

179. Is your country undertaking any measures to promote access and benefit-sharing of forest genetic resources?

Options	X	Details
a) Yes		Please specify priority actions in relation to each objective of goal 5 and describe measures undertaken
	x	The Department of Forestry has provisions in the Forest Ecosystem and Biodiversity Strategy and Action Plan for developing access and benefit-sharing mechanisms. This in line with current government initiative to develop regulations for access and benefit sharing. Regardless the lack of regulations for access and benefit sharing, the department has established appropriate institutional arrangement at the local level to oversee and manage resource use programmes and equitable sharing of benefits through community groups. Malawi is in the process of developing regulations for Access and Benefit Sharing
b) No		Please provide reasons below

Further comments on the promotion of access and benefit-sharing of forest genetic resources. (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints,

needs, tools and targets)

Programme element 2 – Institutional and socio-economic enabling environment

180. Is your country undertaking any measures to enhance the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing?

Options	X	Details
a) Yes	X	<p>Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities</p> <p>The Forestry Policy was revised in 1996 to align it with the Environmental Management Act. Implementation of the policy is supported by the National Forestry Programme, which adequately integrates biodiversity conservation. Furthermore the ecosystems and biodiversity strategy action plan strengthens the position of forestry department in integrating biodiversity issues into forestry management plans and programmes.</p>
b) No		Please provide reasons below

Further comments on the enhancement of the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

181. Is your country undertaking any measures to address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity?

Options	X	Details
a) Yes	X	<p>Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities</p> <p>Limited incentives measures are available through co-management arrangement which aim at giving back to communities some stake in forest conservation and use. Co-management arrangements have included portioning or zoning of part of the reserve into management blocks and signing of agreements with the state forest department. The idea behind co-management is to decrease illegal and unsustainable use of the forest and improve long-term prospects of conservation.</p> <p>The incentive measures are also income generating activities – these IGAs contribute to the socio economic livelihoods of the communities.</p>
b) No		Please provide reasons below

Further comments on review of socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

182. Is your country undertaking any measures to increase public education, participation and awareness in relation to forest biological diversity?

Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
		In line with Environmental Education and Awareness Strategy the Department of Forestry in collaboration with NGOs such as WESM, CURE and the Department of Environmental Affairs runs awareness campaigns covering a wide range of subjects such as forest fire management and afforestation. This is done through Radio and TV programmes. The extension section within the Forestry Department produces disseminates forest management information through leaflets and other public education materials.
b) No		Please provide reasons below

Further comments on measures to increase public education, participation and awareness in relation to forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

Programme element 3 – Knowledge, assessment and monitoring

183. Is your country undertaking any measures to characterize forest ecosystems at various scales in order to improve the assessment of the status and trends of forest biological diversity?

Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
		A survey of the vegetation of Malawi was conducted during the NBSAP process. The survey confirmed vegetation classification as developed by Chapman and White (1970). This classification has since been modified by Dowsett-Lemaire (2001). Zambezian Woodland (divided into miombo, mopane, and undifferentiated woodlands), transition woodland, deciduous forests and thickets, evergreen forest (subdivided into riparian, lowland, mid altitude and Afromontane rain forests), riparian forest, lowland rain forest, mid altitude rain forest, afromontane rain forest, undifferentiated Afromontane forests (which include <i>Hagenia abyssinica</i> forest, <i>Juniperus procera</i> forest, <i>Widdringtonia whytei</i> forest), afromontane Bamboo, afromontane evergreen bushland and thicket, afromontane shrubland, and afromontane grassland
		No efforts have been made to revise vegetation maps developed by Young and Brown in 1962, Stobs in 1970, Shaxon in 1976 and White in 1983.

b) No		Please provide reasons below
Further comments on characterization of forest ecosystems at various scales (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

184. Is your country undertaking any measures to improve knowledge on, and methods for, the assessment of the status and trends of forest biological diversity?		
Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of goal 2 and describe measures undertaken to address these priorities
		The Department of Forestry is in the process of developing criteria and indicators for sustainable use of forest biodiversity.
b) No		Please provide reasons below
Further comments on improvement of knowledge on and methods for the assessment of the status and trends (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

185. Is your country undertaking any measures to improve the understanding of the role of forest biodiversity and ecosystem functioning?		
Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
		Through dissemination of research results. E.g. Forest Biodiversity and Ecosystem Functioning research currently underway on Mulanje Forestry Reserve (by MMCT) and on going research by the Forestry Research Institute of Malawi which focus on ecology, regeneration and management of forest reserves, including management of forest fires.
		The Forestry Department has various posters, radio and TV programmes which are promoting sustainable use of forest resources.
b) No		Please provide reasons below
Further comments on the improvement of the understanding of the role of forest biodiversity and ecosystem functioning (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

186. Is your country undertaking any measures at national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity?

Options	X	Details
a) Yes	x	Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on the improvement of the infrastructure for data and information management (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

Box LXXI.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The work programme is indirectly being implemented through current and on going forestry programmes and plans, which are supported, by the Forestry Policy, National Forestry Programme and the Forestry Ecosystems Biodiversity Action Plan. These activities contribute to the implementation of Goal 3 of the strategic Plan, Goal 1, 2 and 8 of the 2010 targets.

Lack of capacity to operationalise CBD decisions, inadequate human capacity and resources are the major constraints for the implementation of this work programme.

Biological diversity of dry and sub-humid lands

187. Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? (decisions V/23 and VII/2)

a) No	x
b) Yes (please provide details below)	

Further comments on scientific, technical and financial support, at the national and regional levels, to the activities identified in the programme of work.

188. Has your country integrated actions under the programme of work of dry and sub-humid lands into its national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD? (decisions V/23, VI/4 and VII/2)

a) No	x
b) Yes (please provide details below)	

Further comments on actions under the programme of work of dry and sub-humid lands integrated into national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD.

189. Has your country undertaken measures to ensure synergistic/collaborative implementation of the programme of work between the national UNCCD process and other processes under related environmental conventions? (decisions V/23, VI/4 and VII/2)

a) No	
b) Yes, some linkages established (please provide details below)	x
c) Yes, extensive linkages established (please provide details below)	

Further comments on the measures to ensure the synergistic/collaborative implementation of the programme of work between the national UNCCD processes and other processes under related environmental conventions.

Programme Part A: Assessment

190. Has your country assessed and analyzed information on the state of dryland biological diversity and the pressures on it, disseminated existing knowledge and best practices, and filled knowledge gaps in order to determine adequate activities? (Decision V/23, Part A: Assessment, Operational objective, activities 1 to 6)

a) No	x
b) No, but assessment is ongoing	
c) Yes, some assessments undertaken (please provide details below)	
d) Yes, comprehensive assessment undertaken (please provide details below)	

Further comments on the relevant information on assessments of the status and trends and dissemination of existing knowledge and best practices.

Programme Part B: Targeted Actions

191. Has your country taken measures to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences? (part B of annex I of decision V/23, activities 7 to 9)

a) No	x
b) Yes, some measures taken (please provide details below)	
c) Yes, many measures taken (please provide details below)	

Further comments on the measures taken to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences.

192. Has your country taken measures to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work?

a) No	x
b) Yes, some measures taken (please provide details below)	
c) Yes, comprehensive measures taken (please provide details below)	
d) Yes, all identified capacity needs met (please provide details below)	

Further comments on measures taken to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work.

Box LXXII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Mountain Biodiversity

Programme Element 1. Direct actions for conservation, sustainable use and benefit sharing	
193. Has your country taken any measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity?	
a) No	
b) No, but relevant measures are being considered	
c) Yes, some measures taken (please provide details below)	x
d) Yes, many measures taken (please provide details below)	
Further comments on the measures taken to prevent and mitigate the negative impacts of key threats to mountain biodiversity	
<p>Most mountains in Malawi are part of the protected areas network (e.g. Mulanje Forest Reserve on Mulanje Mountain, Nyika National Park at Nyika Plateaux, Dzalanyama Forest Reserve on Dzalanyama range, Zomba Forestry Reserve on Zomba mountain). Being protected areas most mountains are therefore protected by law (i.e. the forestry Act and National Parks Act). A good number of mountains however are on customary land and as such are prone to extensive encroachment and deforestation. Protection of mountains on customary land however may be achieved through community participation.</p>	

194. Has your country taken any measures to protect, recover and restore mountain biodiversity?	
a) No	
b) No, but some measures are being considered	
c) Yes, some measures taken (please provide details below)	x
d) Yes, many measures taken (please provide details below)	
Further comments on the measures taken to protect, recover and restore mountain biodiversity	
<p>Some forest reserves especially those close to urban areas such as Thyolo, Ndirande, Bangwe, Soche forest reserves in the southern region have been heavily encroached. But the department has initiated a process to rehabilitate these forest reserves.</p> <p>Through the Public Work Programme funded by the EU the Department of Forestry will be rehabilitating all degraded areas in Zomba and Mulanje mountain slopes.</p> <p>Through community initiatives communities around Sendwe hill in Lilongwe embarked on a restoration programme and through natural regeneration the hill has been reforested. The communities have now with support from WESM developed management plans and the hill has since recovered.</p> <p>Due to population pressure Mulanje Forest Reserves suffered enormous encroachment. But through community participation and with support from the Mulanje Mountain Conservation Trust encroachment into the reserve has reduced.</p>	

195. Has your country taken any measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems?	
a) No	
b) No, but some measures are being considered	
c) Yes, some measures taken (please provide details below)	x
d) Yes, many measures taken (please provide details below)	
Further comments on the measures to promote the sustainable use of mountain biological resources	

and to maintain genetic diversity in mountain ecosystems

Sustainable use of mountain biodiversity is being achieved through community involvement in management of protected areas.

196. Has your country taken any measures for sharing the benefits arising from the utilization of mountain genetic resources, including preservation and maintenance of traditional knowledge?

- | | |
|--|---|
| a) No | |
| b) No, but some measures are being considered | x |
| c) Yes, some measures taken (please provide details below) | |
| d) Yes, many measures taken (please provide details below) | |

Further comments on the measures for sharing the benefits arising from the utilization of mountain genetic resources

Mulanje Mountain Conservation Trust in partnership with WESM is negotiating with communities to establish co management arrangements around Mulanje Forest Reserve. Through this initiative communities around Mulanje are participating in bee keeping activities.

Communities around protected area networks (including mountains) have entered into co management arrangement with the Forestry Department and negotiations are underway to reach a consensus on how best the benefits can be shared.

The regulations on access and benefit sharing being developed by the Department of Environmental Affairs when gazetted will provide guidance on sharing of benefits arising from the use of forest biodiversity.

Programme Element 2. Means of implementation for conservation, sustainable use and benefit sharing

197. Has your country developed any legal, policy and institutional framework for conservation and sustainable use of mountain biodiversity and for implementing this programme of work?

- | | |
|--|---|
| a) No | |
| b) No, but relevant frameworks are being developed | x |
| c) Yes, some frameworks are in place (please provide details below) | |
| d) Yes, comprehensive frameworks are in place (please provide details below) | |

Further comments on the legal, policy and institutional frameworks for conservation and sustainable use of mountain biodiversity and for implementing the programme of work on mountain biodiversity.

Mountains as part of protected area are protected by either the Forestry or National Parks and Wildlife Act.

Access to mountain biodiversity is also regulated by existing Procedure and Guidelines for Access and collection of genetic resources. These procedures of course are not legally binding.

198. Has your country been involved in regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity?

a) No	
b) No, but some cooperation frameworks are being considered	
c) Yes (please provide details below)	x

Further information on the regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity

Although not directly linked to conservation of mountain biodiversity the current MoU between Malawi and Zambia on Transfrontier Conservation Areas in Nyika and Vwaza national parks are here considered a good example of Malawi's involvement in regional transboundary management of mountain ecosystems (Nyika Plateau in this case).

Programme Element 3. Supporting actions for conservation, sustainable use and benefit sharing

199. Has your country taken any measures for identification, monitoring and assessment of mountain biological diversity?

a) No	
b) No, but relevant programmes are under development	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for identification, monitoring and assessment of mountain biodiversity

Some collection and assessment of mountain biodiversity has been undertaken although plants, vertebrates (especially birds, mammals), invertebrates to a limited extent are being collected and identified as on going programmes of the National herbarium, Museums of Malawi and Chancellor college (University of Malawi).

With support from MMCT various biodiversity components are being identified and monitored at Mulanje Forestry Reserve.

Through activities of Biosearch Nyika Initiative and the Biodiversity Support Programme various biodiversity components of Nyika Plateau have been produced.

200. Has your country taken any measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity?

a) No	
b) No, but relevant programmes are under development	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity

But the MMCT is collaborating with international organisations such as the Wildlife Society of America

and Royal Botanic Gardens Kew, UK in the ecological zoning of the Mulanje Mountain Forest Reserve.

201. Has your country taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems?

a) No	
b) No, but relevant programmes are under development	X
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems

Through the Mulanje Mountain Conservation Trust

Box LXXIII .

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Mountains such as Mulanje and Nyika are areas of high biological diversity and their protection is contributing to conservation of threatened species as well as protection of areas of areas with significance biodiversity.

E. OPERATIONS OF THE CONVENTION

202. Has your country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention? (decision V/20)

a) No	
b) Yes (please provide details below)	x

Further comments on the regional and subregional activities in which your country has been involved.

Malawi participates in regional Biodiversity Forums in preparation of COP. It is capacity as biodiversity focal point (before SADC reform) was instrumental in organizing regional biodiversity forums.

203. Is your country strengthening regional and subregional cooperation, enhancing integration and promoting synergies with relevant regional and subregional processes? (decision VI/27 B)

a) No	
b) Yes (please provide details below)	x

Further comments on regional and subregional cooperation and processes.

Through SADC Biodiversity Support Programme

The following question (204) is for DEVELOPED COUNTRIES

204. Is your country supporting the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes? (decision VI/27 B)

- | | |
|--|--|
| a) No | |
| b) No, but programmes are under development | |
| c) Yes, included in existing cooperation frameworks (please provide details below) | |
| d) Yes, some cooperative activities ongoing (please provide details below) | |

Further comments on support for the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes.

205. Is your country working with other Parties to strengthen the existing regional and subregional mechanisms and initiatives for capacity-building? (decision VI/27 B)

- | | |
|--------|---|
| a) No | |
| b) Yes | x |

206. Has your country contributed to the assessment of the regional and subregional mechanisms for implementation of the Convention? (decision VI/27 B)

- | | |
|---------------------------------------|---|
| a) No | |
| b) Yes (please provide details below) | x |

Further comments on contribution to the assessment of the regional and subregional mechanisms.

Malawi contributed in needs assessments in Southern Africa (capacity building in taxonomy and botanic gardens), participated in the development of regional Biodiversity Strategy and Action Plan under the SADC Biodiversity Support Programme; and contributed to the taxonomic needs assessment for the GTI.

Box LXXIV.

Please elaborate below on the implementation of the above decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

F. COMMENTS ON THE FORMAT

Box LXXV.

Please provide below recommendations on how to improve this reporting format.

There is a bit of repetition among the major sections. This of course could not be avoid but some sections could have been combined.

The format however is good in the sense that it acts as a reminder to parties about their obligations to the Conventions.

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