

## A. REPORTING PARTY

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## ACRONYM

ABS	Access and Benefit Sharing
ASEAN	Association South East Asian Nations
BBEC	Borneo Biodiversity and Ecosystem Conservation Programme
CBD	Convention on Biodiversity
CIFOR	Centre for International Forestry Research
DANIDA	Danish International Development Agency
DID	Drainage and Irrigation Department
DOA	Department of Agriculture
DOF	Department of Fisheries
DWNP	Department of Wildlife and National Parks
EIA	Environmental Impact assessment
EQA	Environmental Quality Act 1974 (Amended 1996)
FAO	Food and Agriculture Organization
FDPM	Forestry Department of Peninsular Malaysia
FRIM	Forest Research Institute of Malaysia
GEF	Global Environment Facility
IAS	Invasive Alien Species
ICM	Integrated Crop Management
ICZM	Integrated Coastal Zone Management Policy
IPM	Integrated Pest Management
INTAN	National Institute of Public Administration
IRBM	Integrated River Basin Management
IRPA	Intensification of Research in Priority Areas
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
ITTO	International Tropical Timber Organization
JICA	Japan International Cooperation Agency
KRSTE.my	Knowledge Resource for Science and Technology Excellence, Malaysia
KUSTEM	University College of Science and Technology Malaysia
MACRES	Malaysia Centre For Remote Sensing
MARDI	Malaysian Agricultural Research and Development Institute
MC&I	Malaysian Criteria Indicators
MDG	Millennium Development Goals
MOA	Ministry Agriculture and Agro Base Industry
MOSTI	Ministry of Science, Technology and Innovation
MTCP	Malaysia Technical Corporation Programs
NAP3	National Agriculture Policy 3
NPBD	National Policy o Biological Diversity
NPP	National Physical Plan
NRE	Ministry of Natural Resources and Environment
PGRFA	Plant Genetic Resources for Food and Agriculture
PRF	Permanent Reserved Forests
SBC	Sarawak Biodiversity Council
SEAFDEC	South East Asia Fisheries Development Centre
SFM	Sustainable Forest Management System
TCPD	Town and Country Planning Department
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UM	Universiti Malaya
UKM	Universiti Kebangsaan Malaysia (National University Malaysia)
UPM	Universiti Putra Malaysia
USM	Universiti Sains Malaysia
VJR	Virgin Jungle Reserve
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
	8 <sup>th</sup> Malaysia Plan (2001-2005)
	9 <sup>th</sup> Malaysia Plan (2006-2010)

## 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.

#### List of stakeholders consulted in preparing this report

- 1) Ministry of Science, Technology and Innovation (MOSTI)
- 2) Ministry Agriculture and Agro Base Industry (MOA)
- 3) Forest Research Institute of Malaysia (FRIM)
- 4) Malaysian Agricultural Research and Development Institute (MARDI)
- 5) Forestry Department of Peninsular Malaysia (FDPM)
- 6) Wildlife And National Park Department
- 7) Drainage and Irrigation Department (DID)
- 8) Department of Fisheries (DOF)
- 9) Department of Agriculture (DOA)
- 10) Sabah Forestry Department
- 11) Sarawak Forestry Department
- 12) Sarawak Biodiversity Council
- 13) Malaysia Centre For Remote Sensing (MACRES)
- 14) Town and Country Planning Department (TCPD)

## 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.

Ministry of Natural Resources and Environment on 7 March 2004 has form a discussion with almost all the stakeholders to establish the status of the implementation of the National Biodiversity Policy. Listed below are snapshot of some programmes and activities taken up by the stakeholders pertaining to the implementation of the policy.

#### **National Biodiversity Policy Strategy I : Improve the scientific knowledge base**

##### **Among Programmes and Activities:**

- Listing of Literature on vascular and non vascular plants; fungi, vertebrate (estimate: 12,500 species)
- Department of Agriculture (DOA) established Database on insects collection 1905-2005 is in progress. DOA also has program survey on itch grass (*rotboella cochinchinensis*), survey on golden apple snail (*Pamocea insularis*) and survey on white flies and leaf miner (planned for 2006/2007)
- Forest Research Institute of Malaysia (FRIM) organized workshop June 2005 on status of biodiversity in Malaysia
- Wildlife Department's programmes on species recovery, in situ conservation
- KRSTE.my - information portal - single point access facility by Ministry of Science, Technology and Innovation
- Integrated Spatial Biodiversity database programme- using Remote Sensing technology

##### Among Activities by Forest Research Institute of Malaysia (FRIM)

- Checklist of the vascular plants of Peninsular Malaysia (1995)- available
- Tree flora of Sabah & Sarawak comprising 1561 species from 68 families and 249 genera published
- 250,000 herbarium specimen collection of vascular and non-vascular (selected families) from Peninsular Malaysia, Sabah & Sarawak and worldwide
- 1360 fungi collection mainly from Peninsular Malaysia
- 600,000 insect specimen collection
- 2,000 herpetofauna collection amassed
- Database of herbarium specimens
- Spatial database of selected threatened species and selected forest ecosystems
- Research projects dealing with inventory of vascular plants, fungi, insects and herpetofauna approved under 9<sup>th</sup> Malaysia Plan
- Established of an ex situ collection of threatened species in Kepong Botanic Gardens
- Checklists, ecological, growth and yield database for species assemblages in selected forest areas in Peninsular Malaysia
- Database of national experts working with components of biological diversity

##### Among Activities by Malaysian Agricultural Research and Development Institute (MARDI)

- Database development on PGRFA, microbe and arthropod in progress
- Database of traditional knowledge, on the use of plant as food and medicine
- National information sharing mechanism on Plant Genetic Resources for Food and Agriculture (PGRFA) under construction to monitor Global Plan of Action on PGRFA Conservation and utilisation
- Plant Genetic Resource characterization, evaluation and genetic enhancement
- Study on on-farm conservation of PGRFA
- On going genetic diversity studies (including distribution) underway
- Study on the economic value of pollinator planned
- Monitor status of microbes and insects in agro ecosystem
- Studies on threat to genetic diversity

#### **National Biodiversity Policy Strategy II : Enhance sustainable utilization of the components of biological diversity**

##### Among Programmes and Activities by FRIM

- Establish Herbal Tropical Centre in FRIM (GMP std); Research related to Natural Resource Accounting;
- FRIM also established Proteomic centre

- IGS collaboration and MOUs with other agencies and the private sector
- FRIM also provide technical consultants undertaken for private sector
- Maximum utilization of lesser-known timber and wood resources; waste minimization; recycle wood waste and agriculture by-products
- Drug discovery programmes by FRIM, medicinal plant research, macro and micro propagation, molecular breeding and genetic engineering of selected species, proteomic research
- Existing provision on assessment of fauna and flora for Environment Impact Assessment by Department of Environment to assess some of development projects

#### Others Programmes and Activities

- National Parks and Reserve Management Plants by Wildlife Department
- Replanting programmes by Forestry Department
- Plant Varieties Protection and Organic Scheme Malaysia; Farmer's incentives by Department of Agriculture
- Community Based Fisheries; Turtle Exclusion Device; Turtle eggs purchase by Department of Fisheries
- Ongoing Research on Plant Genetic Resources (bioprospecting, conservation, genetic enhancement and plant breeding) by MARDI
- Establish Gene Bank for Plant Genetic Resources (focus on 70% gene conservation) by MARDI
- Introduction of Environmentally Sensitive Areas in planning via National Physical Plan by Town and Country Planning Department
- Draft Integrated Coastal Zone Management Policy is introduced by Economic Planning Unit Prime Minister Department
- Information monitoring using Remote Sensing Technology by Ministry of Science, Technology and Innovation

### **National Biodiversity Policy Strategy III : Develop a centre of excellence in industrial research in tropical biological diversity**

#### Among Programmes and Activities

- All departments and government agencies have regular capacity building programmes, education and training programmes for staff members
- FRIM established Timber Technology Centre provides incubation programmes, equipment and machinery demonstration, product design and prototyping, product quality testing and consulting services
- MARDI is developing useful and commercially potential products from agrobiodiversity
- Genetic enhancement and genetic base broadening in PGRFA by MARDI
- Phytochemical and nutraceutical analysis of plants for useful products by MARDI
- Human Resource Development Fund for Science and Technology by Ministry Of Science, Technology and Innovation

### **National Biodiversity Policy Strategy IV: Strengthen the institutional framework for biological diversity management**

#### Programmes and Activities

- The establishment of Ministry of Natural Resources and Environment (NRE) in April 2004 was to show Malaysia commitment on biodiversity management. Under NRE almost all biodiversity related agencies and departments such as Department of Forestry, Wildlife Department, Marine Park Section, Drainage and Irrigation Department, Department of Environment for the first were put under one ministry.

National Council on Biodiversity and Biotechnology was established in 2002. The council comprise of ten cabinet ministers 13 state chief ministers. The council is the highest body in decision making for biodiversity management in Malaysia. The fourth National Biodiversity Biotechnology Council held in 13 January 2005 and was chaired by Malaysian Prime Minister. Among decisions made by the council in the 4<sup>th</sup> meeting among others were the creation of National Mangroves Replant Programme, to strengthen in research programme, Establishment of Rainforest Tropical Centre at Forest Research Institute of Malaysia, to improve institutional memory in biodiversity management and research, to combat biopiracy.

- Malaysia also added National Physical Plan (NPP) which includes conservation natural resources and the environment as a major element in the national physical development. National Physical Plan

stated:-

- Environment Sensitive Areas (ESA) shall be integrated in the planning and management of land use and natural resources to ensure sustainable development.
  - A central Forest Spine (CFS) shall be established to form the backbone of the Environmentally Sensitive Area network.
  - Sensitive coastal ecosystem shall be protected and used in a sustainable manner.
  - Land development in highlands shall be strictly controlled to safeguard human safety and environment quality.
  - All surface and ground water resources are strategic assets to be safeguarded and use optimally.
- Beside the Biodiversity and Biotechnology Council there are also biodiversity related council which also play important roles in managing national biodiversity as listed below
    - National Forestry Council
    - National Land Council
    - National Minerals Council
    - National Physical Plan; Biodiversity Unit in Town Country Planning Department
    - National Maritime Council
    - National Strategies and Plans for Agrobiodiversity
    - National Tropical Biodiversity Centre (Planned)
    - National Biosafety Board (Planned)

#### **National Biodiversity Policy Strategy V : Strengthen and integrate conservation programmes Among Programmes and Activities**

- Inclusion of Permanent Forest Areas as Protected Areas (under Min of Primary Industries – forested State Land to be gazetted as Forest Reserves; degazetted areas to be reviewed; expansion of VJR focusing on mountainous areas; Seed Production Areas; public participation for in situ conservation
- Department of Wildlife determines minimum viable population sizes for species and critical minimum size of conservation areas;
- Department of Wildlife involves public participation in conservation
- FRIM has Ex-situ collections of dipterocarps, lesser known tree species, fruit trees, monocotyledons (palms, orchids, ginger), conifers, species associated with ethnobotany held in arboreta
- MARDI conduct programmes on Species and Genetic variability; arboreta, seed gene banks and planning on farm Conservation for indigenous fruits, herbs and medical plants
- Department of Fisheries established Protected Areas for Fisheries such Kelisa breeding and Turtle

#### **National Biodiversity Policy Strategy VI : Integrate biological diversity considerations into sectoral planning strategies**

##### Among Programmes and Activities

- National Physical Plans incorporated Environmentally Sensitive Areas, Strategic Environmental Assessment in national physical development
- Malaysian Criteria Indicators for sustainable forest management
- Department of Fisheries introduces Code of Conduct for Responsible Fisheries
- Biodiversity conservation and sustainable utilisation component in National Agriculture Policy (NAP3)

#### **National Biodiversity Policy Strategy VII: Enhance skill, capabilities and competence**

##### Among Programmes and Activities

- Malaysia is taking steps to increase the number of young graduates to be trained in the fields of botany, entomology, zoology and biotechnology at local universities.
- Ministry of Science, Technology and Innovation is creating Database on experts/researchers
- Collaboration with International Organizations to enhance skill, knowledge and capacity in all sectors

#### **National Biodiversity Policy Strategy VIII: Review legislation to reflect biological diversity needs Legislation framework**

##### Among Programmes and Activities

- Reviewed legislations – Town Country Planning Act 1976 s.36A – inclusions of Sensitive Environmen-

tal Area among other

- Wildlife Protection Act 1972 is under review to include more holistic biodiversity management
- New Plant Variety Protection Bill which includes phytosanitary and provisions for alien species
- Proposed Environmental Impact Assessment review in Environment Quality Act
- Proposed Biosafety Bill by Ministry of Natural Resources and Environment
- Proposed ABS Bill by Ministry of Natural Resources and Environment
- New Plant Variety Protection Act which includes phytosanitary and provisions for alien species

### **National Biodiversity Policy Strategy X: Minimize the impact of human activities on biological diversity**

#### Among Programmes and Activities

- Department of Wildlife conducts Tiger encroachment capture programme, translocation and compensation scheme
- The establishment Genetic Modification Committee (GMAC) in 1998 provided administrative and monitoring mechanism on transboundary movement of GMO and LMO. Malaysia also introduced Guideline on Releasing Genetic Modified Organism to the Environment 1998, by Ministry of Science, Technology and Environment in the same year.
- EIA provisions on assessment of fauna and flora for some specific development projects
- Department of Agriculture (DOA) have Plant Quarantine Act for minimize the impact on biodiversity; DOA also promotes Best Agriculture Practice and enforce pesticides registration to alsom minimize the impact on biodiversity
- Department of Forestry Involved in monitoring impacts on development of peatland ecosystems
- Town and Country Department is enforcing Section 21a Town Country Planning Act 1976 LCP process has provision for Island development and creating Green areas/recreational areas.
- Integrated Coastal Zone Policy to reduce impact on coastal biodiversity

### **National Biodiversity Policy Strategy XI : Develop policies, regulations, laws and capacity-building on biosafety**

#### Programmes and Activities

- Biosafety Bill is going to be table in the parliament
- Department of Chemistry provides Facilities to detect Genetically Modified Organisms

### **National Biodiversity Policy Strategy XII : Promote international cooperation and collaboration**

#### Among Programmes and Activities

- Malaysia has long established collaboration with ASEAN members in many aspects of biodiversity research and management such as ASEAN Agreement on Nature and Natural Resources, ASEAN Agreement of the Establishment of ASEAN Centre for Biodiversity, Sulu-Sulawesi marine ecoregion to name a few.
- Malaysia has long established collaboration and cooperation at the regional level such as Bay of Bengal large Ecosystem Projects which involves country like India, Bangladesh.
- Malaysia has established collaboration and cooperation with several developed countries in many aspects of biodiversity research and management such as Borneo Biodiversity (BBEC) project with Japanese government, and many biodiversity projects with Danish government (DANIDA) to name a few.
- Malaysia also has collaboration and with international organizations such as GEF, ITTO, ITPGRFA, CIFOR, JICA, DANIDA
- Malaysia through MARDI Plant Genetic Resources network for example COGENT, RECSEA, AARNET, ASEANET. Malaysia also a signatory to JTPGRFA

### **National Biodiversity Policy Strategy XIV : Exchange of information**

#### Programmes and activities

KRSTE.my information portals developed by Ministry of Science, Technology and Innovation –

- single point access facility (e.g. biodiversity database Putra University Malaysia)
  - Research & Development databank for research and researchers in Malaysia
  - Research and Scientific Publication – information collection
  - Research, Research Field and Researchers' profile
- Integrated Biodiversity Database using Remote Sensing technology by Malaysia Centre For Remote Sensing (MACRES) with training conducted by Forestry Department. Workshops were carry out to assess status biodiversity.

- Workshop June 2005 on status of biodiversity conduct by FRIM with participation from government agencies, universities and NGOs.
- Checklist of the Flora of Peninsular Malaysia is available online
- Dipterocarpaceae distribution in Southeast Asia is available online through the Southeast Asia Botanical Collection Information Network
- Penang Tree Information System (PETIS)
- Tree Flora of Malaysia and Tree Flora of Sabah and Sarawak publication
- Fact sheet on threatened plants (spatial information .25m species in collection) by FRIM
- Listing of tree flora in Sabah and Sarawak to date 5 volumes(3 to go) (estimated 12,500 species)
- Forestry Department conduct National Forestry Inventory – in Permanent Forest Area – dipterocarp, non-dipterocarp, bamboo, palms, rattan
- Wildlife Department conduct Wildlife survey – rapid and monthly assessment – coverage sanctuaries and forest reserves
- Drainage and Irrigation Department conduct Hydrobased data; Dam fingerprinting and river registry.
- MARDI establish National Information sharing mechanism such as a) National Information sharing Mechanism (NISM) for PGRFA (in progress), b) Agro biodiversity Information System (in-progress) c) Rice Gene Bank Information System (in place)

#### **National Biodiversity Policy Strategy XV: Establish funding mechanisms**

##### Programmes and activities

- Malaysian yearly operational budget to all ministries and department
- Malaysia 5 years Development Plan
- Trust Fund for example Wildlife Trust Fund
- funding/grant (IRPA) for scientific project research by Malaysian government

## 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	X		
x) Dryland and subhumid land biodiversity			
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

4 = 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	0	2	2	2	2	1	2	1	3	2	1	3	3	2	1	1	3	3
b) Limited public participation and stakeholder involvement	1	2	3	3	3	3	2	1	3	2	1	3	3	3	1	1	3	3
c) Lack of mainstreaming and integration of biodiversity issues into other sectors	1	2	2	2	3	3	2	2	3	2	1	3	3	2	3	2	3	3
d) Lack of precautionary and proactive measures	2	2	2	2	2	2	2	1	3	2	1	3	3	2	1	1	3	3
e) Inadequate capacity to act, caused by institutional weakness	2	2	2	2	3	2	2	2	1	3	1	3	3	1	1	1	3	3
f) Lack of transfer of technology and expertise	2	2	3	2	2	3	2	2	2	2	1	2	3	2	2	1	3	3
g) Loss of	4	4	4	3	4	4	2	2	3	4	3	4	3	3	3	4	3	<b>3</b>

traditional knowledge																		
h) Lack of adequate scientific research capacities to support all the objectives	2	2	2	2	3	2	2	3	3	2	1	3	3	1	1	1	3	3
i) Lack of accessible knowledge and information	2	2	2	2	3	2	2	2	3	1	1	2	2	1	1	1	3	3
j) Lack of public education and awareness at all levels	2	2	3	3	3	2	2	2	1	3	1	3	3	3	1	1	3	3
k) Existing scientific and traditional knowledge not fully utilized	4	3	2	2	3	2	2	2	3	1	1	1	1	1	1	1	1	1
l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	2	2	3	2	4	2	2	3	3	2	1	3	1	1	1	1	3	3
m) Lack of financial, human, technical resources	2	3	3	3	3	4	3	3	3	3	2	3	3	2	1	2	3	3
n) Lack of economic incentive measures	2	3	3	3	3	3	3	2	4	2	4	3	3	1	1	1	3	4
o) Lack of benefit-sharing	2	3	3	3	4	3	3	2	4	3	4	4	3	3	3	3	3	4
p) Lack of synergies at national and international levels	2	2	3	2	2	2	2	2	1	1	1	2	3	1	1	1	3	4
q) Lack of horizontal cooperation among stakeholders	1	1	2	2	2	2	1	2	1	1	0	3	3	1	1	1	4	4
r) Lack of effective partnerships	2	2	2	2	2	2	2	2	4	1	1	3	3	1	1	1	3	3
s) Lack of engagement of scientific	1	2	2	1	2	2	2	2	3	1	1	3	3	1	1	1	2	4

community																		
t) Lack of appropriate policies and laws	1	1	2	1	2	2	1	2	3	1	1	1	3	1	1	1	3	1
u) Poverty	2	2	4	4	4	2	2	3	1	1	1	1	1	1	1	1	1	1
v) Population pressure	4	3	4	2	2	2	2	3	1	1	1	1	1	1	1	1	1	1
w) Unsustainable consumption and production patterns	4	3	3	2	4	3	2	3	3	4	2	3	2	1	4	1	4	1
x) Lack of capacities for local communities	3	2	2	4	4	2	2	1	1	1	1	1	1	1	1	1	1	4
y) Lack of knowledge and practice of ecosystem-based approaches to management	2	2	2	3	4	2	2	2	3	1	1	3	3	1	1	1	4	1
z) Weak law enforcement capacity	3	2	2	2	3	2	2	2	4	1	4	3	3	1	1	4	3	4
aa) Natural disasters and environmental change	2	2	2	2	3	3	2	4	4	2	2	3	4	2	2	2	4	3
bb) Others (please specify)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

**Ranking of challenges and obstacles to implementation**

1. Lack of financial, human, technical resources
2. Weak law enforcement capacity
3. Lack of mainstreaming and integration of biodiversity issues into other sectors
4. Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented
5. Lack of adequate scientific research capacities to support all the objectives
6. Lack of knowledge and practice of ecosystem-based approaches to management
7. Lack of political will and support
8. Limited public participation and stakeholder involvement
9. Lack of benefit-sharing
10. Lack of public education and awareness at all levels
11. Inadequate capacity to act, caused by institutional weakness
12. Natural disasters and environmental change

## 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.

<b>Goal 1</b>	<b>Promote the conservation of the biological diversity of ecosystems, habitats and biomes.</b>		
<b>Target 1.1</b>	<b>At least ten percent of each of the world's ecological regions effectively conserved</b>		
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.			
At least 50% of Malaysia's land area is forest covered.			
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		Included in 50% of forest covered
c) Marine and coastal		X	No detail information – goal taken up without indicated national target for area
d) Dry and subhumid land			N/A
e) Forest	X		50 % land forest covered
f) Mountain	X		a) National Physical Plan b) Regulation on No Logging of forests 1000m above sea level c) Crocker Range National Park management plan is currently being implemented d) Kinabalu Park Management plan is currently being implemented e) Management Plan now is being prepared for Gunung Mulu National Park Development restricted in areas above 1000m
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.	
1) National Biodiversity strategy and Action Plans	
<ul style="list-style-type: none"> <li>• Strategy I Improve the scientific knowledge base</li> <li>• Strategy II Enhance sustainable utilisation of the components of biological diversity</li> <li>• Strategy IV Strengthen the institutional framework for biological diversity management</li> <li>• Strategy V Strengthen and integrate conservation programmes</li> <li>• Strategy VI Integrate biological diversity considerations into sectoral planning strategies</li> </ul>	
2) National Physical Plan- incorporated biodiversity management and conservation in national economic and physical development plan.	
3) Third National Agriculture policy call for conservation and sustainable utilization of PGRFA	
IV) Please provide information on current status and trends in relation to this target.	
<p>The total land area of Malaysia is approximately 330,433 sq. km., of which 132,828 sq. km. are in Peninsular Malaysia, 123,985 sq. km. in Sarawak and 73,620 sq. km. in Sabah.</p> <p>Forest cover in Malaysia is estimated to be 19.52 million hectares or 59.5% of the total land area, of which 14.45 million hectares or 44.0% are Permanent Reserved Forest (PRF)s managed by Forestry Department. The PRFs has furthered classified 3.21 million hectares as protection forest. Together with 2.15 million hectares under National Parks, Wildlife and Bird Sanctuary the protected area coverage (Categories I and II under IUCN) in the country is estimated to be 5.36 million hectares, representing 27.5% of its total forested land or 16.3% of its area. Beside terrestrial protected areas, Malaysia also Establish of 40 marine park island and 6 fisheries Protected areas, few more still under consideration for establishment.</p> <p>Some of recent establishment of protected areas:</p> <ul style="list-style-type: none"> <li>• Establishment of Pulau Pinang National Park (2,562 ha) in 2002</li> <li>• Establishment of Royal Belum State Park, Perak (117,500 ha) in 2003</li> <li>• Ongoing consultation of the establishment of East Pahang Wetlands, Pahang, Klias Peninsular, Logan Bunut, Taman Negara Pulau Pinang, Peninsular Malaysia (80,000 ha)</li> <li>• Establishment of Ramsar Sites at Pulau Kukup (2536 ha), Tanjung Piai (6802.2 ha) and Sungai Pulai (6750 ha) in Johor, Peninsular Malaysia</li> </ul>	
V) Please provide information on indicators used in relation to this target.	
<ul style="list-style-type: none"> <li>▪ Malaysian Criteria Indicators (MC&amp;I) by Forest Department – SOP verifiers</li> <li>▪ Code of Conduct for Responsible Fisheries , Organic Farming Scheme</li> <li>▪ Agriculture Best Practice</li> <li>▪ Biodiversity conservation and sustainable utilisation is in National Agriculture Policy (NAP3)</li> <li>▪ Overarching framework for plans; Indicators develop by Prime Minister Department on overall development indicator</li> <li>▪ Sectoral Based Indicators by Wildlife and National Park Department</li> <li>▪ Number of forest, islands to be gazette as protected areas</li> </ul>	
VI) Please provide information on challenges in implementation of this target.	
<ul style="list-style-type: none"> <li>▪ For Fisheries protected areas in particular scientific information on species of interest, exotic resource or larval or juvenile distribution/ abundance is not available, data is still scanty, need sporadic research input.</li> <li>▪ In Agriculture, modern agriculture always lowers diversity. The challenge is to strike a balance between the two.</li> </ul>	

VII) Please provide any other relevant information.

- National Biodiversity Inventory Project (Inventory of all Malaysian's fauna and flora) will be in 9<sup>th</sup> Malaysia Plan (2006-2010). Forest Research Institute of Malaysia (FRIM) will be the lead agency and coordinator for the project. The exact amount of funding will be decided by the end of this year.
- Survey and inventorization of crop plants and its wild relatives as well as plant species that has potential for food and agriculture will also be studied by MARDI in 9<sup>th</sup> Malaysia Plan.
- The potential of in-situ/ on-farm conservation for selected crop plant gene pool will be initiated.

**Box IV.**

<b>Target 1.2</b>	<b>Areas of particular importance to biodiversity protected</b>
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>Na National Parks and State Parks include Target 1.2 in their specific management objectives. Protected Areas which has been gazette such as Rantau Abang Turtle Sanctuary, Penang National Park (include turtle nesting area), Johor State Park, Royal Belum National Park (among the oldest rainforest jungle in the world) are among programmes of particular importance to biodiversity protected.</p> <p><b>Specific Management Objectives And Critical Of Some Parks Activities Related To Target 1.2</b></p> <p><u>Taman Negara (National Park)</u></p> <ol style="list-style-type: none"> <li>1. Preservation and protection of wildlife, plantlife and objects of geological, archaeological, historical and ethnological for scientific and scenic interest</li> <li>2. Conservation and utilization to promote education, health, aesthetic values and recreation of the people.</li> </ol> <p><u>Taman Negara Pulau Pinang (Pulau Pinang National Park)</u></p> <ol style="list-style-type: none"> <li>1. Preservation and protection of wildlife, plantlife and objects of geological, archaeological, historical and ethnological for scientific and scenic interest</li> <li>2. Conservation and utilization to promote education, health, aesthetic values and recreation of the people.</li> </ol> <p><u>Taman Negara Pahang (Pahang National Park)</u></p> <ol style="list-style-type: none"> <li>a. To ptotect the biological and ecological processes and water catchment areas;</li> <li>b. To conserve flora and fauna and geological habitats;</li> <li>c. To protect the areas of regional and international interesrs;</li> <li>d. To maintain the diversity of biological resources, objects and areas of asthetic, historical and scientific charecteristics;</li> <li>e. To upgrade the learning and awareness of local communitie and tourists;</li> <li>f. To offer a wider and more controlled recreational oppurtunities to Malaysians and foreign tourists</li> </ol> <p><u>Sungai Dusun Wildlife Reserve</u></p> <p><b>Overall Objective of Development</b></p> <p>To delineate a masterplan of development that will enable management to provide various facilities and</p>	

services for the perpetuation and sustainability of Reserve resources and for public use.

***Overall Objective of Management***

The establish a framework and statement of strategies and operations for the present and future stewardship of Sungai Dusun Wildlife Reserve in terms of conservation, research, education, recreation and tourism.

Tanjung Tuan Wildlife Reserve

To formulate a management plan that takes into account of infrastructure development, research, education, human resource development, and local communities.

To minimize development impacts through ecotourism while maintaining the biodiversity integrity of the protected area.

To enhance knowledge, awareness and public support on the importance of nature conservation for the present and future generations.

Endau-Kota Tinggi Wildlife Reserve

To formulate a management plan that takes into account of infrastructure development, research, education, human resource development, and local communities.

To minimize development impacts through ecotourism while maintaining the biodiversity integrity of the protected area.

To enhance knowledge, awareness and public support on the importance of nature conservation for the present and future generations

Crocker Range Park

1. Preservation of natural ecological system.
2. Conservation of water catchment.
3. Protection of Rafflesia habitat

Bako National Park

1. Protection of all the vegetation types of the state (7 vegetation types) excluding montane forest.
2. Protection of endemic species found there e.g. Proboscis Monkey.

Kubah National Park

1. Protection of catchment area.
2. Preservation of the floristic diversity of the area particularly rare and endangered palm species.
3. Conservation of palm species (palmatum established)
4. Research on frogs, gingers, medicinal plant spp. in collaboration with local universities

Gunung Gading National Park

1. Protection of the forest ecosystem particularly the keystone species of *Rafflesia*.
2. *In situ* conservation projects especially on *Rafflesia* species and their habitat

Tanjung Datu National Park

1. Protection of forest ecosystem, specifically gibbons, hornbills, edible birds nest, Argus pheasant, coral reef, and marine turtles.
2. *In situ* conservation of marine turtles and Rafflesia

Similajau National Park

1. Protection of the natural scenery in the length of the 20 km coastline comprising of golden sand beaches, sandstone cliffs, and small rocky headlands.
2. Protection of the forest vegetation that encompasses mangrove forests, kerangas forest.
3. Protection of fauna, specifically green turtle and estuarine crocodile.
4. Protection of green turtle breeding sites.

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		Protection wild crop relatives in protected areas is included
b) Inland water	X		
c) Marine and coastal	X		establishment of new marine parks
d) Dry and subhumid land			N\A
e) Forest	X		
f) Mountain	X		a) Establishment of additional Protected Areas such National Park and State Parks in areas within the proposed Central Forest Spine of the National Physical Plan that includes the Main Range, Taman Negara National Park, Tasek Bera Ramsar Site and Tasek Cini and Johor State Park b) Gazetting mountain watershed and catchment areas as protection area such as Crocker Range Park
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.			
1) Strategy V in National Biodiversity Policy - Strengthen and integrate conservation programmes			
2) Action plans in strategy V that relates to this target			
<ul style="list-style-type: none"> <li>Expand the network of <i>in-situ</i> conservation areas to ensure full representation of ecosystems and all ecological processes therein</li> <li>Strengthen capacity and role of <i>ex-situ</i> facilities in conservation activities and research, with a view to complementing <i>in-situ</i> conservation</li> <li>Expand <i>ex-situ</i> conservation centers to cater for threatened species, for breeding and selection and as repositories for germplasm i.e. genebanks, botanical and zoological gardens and arboreta</li> </ul>			
IV) Please provide information on current status and trends in relation to this target.			
Some of Activities related to this target			
<ul style="list-style-type: none"> <li>Inclusion of PFAs as PAs (forested State Land to be gazetted as Forest Reserves; degazetted areas to be reviewed; expansion of VJR focusing on mountainous areas; Seed Production Areas; public participation for in situ conservation.</li> <li>Determine minimum viable population sizes for species and critical minimum size of conservation areas; Public participation in conservation</li> <li>Species and Genetic variability; arboreta, gene banks (seed and field genebanks)</li> <li>Protected Areas for Fisheries; Kelisa (fish species) breeding; Turtle Programme</li> <li>On farm Conservation for indigenous fruits, herbs and medical plants (planned)</li> <li>Genebanks for rice in place</li> <li>Gene banks for all crops planned (National)</li> <li>Arboretum for fruits ( Field gene bank)</li> </ul>			
V) Please provide information on indicators used in relation to this target.			

- I. Number of protected area in general increase
- II. Number of agencies involved in marine (for marine sector) affair increased, NGO on ecosystem conservation increased,
- III. Financial contribution increased, number of staffs increase: all these will ensure smooth implementation of programme related to target
- IV. Public awareness increase
- V. Protected area increase
- VI. Number of farmers involved in on-farm conservation activities
- VII. Number of farmers involve in practicing sustainable agriculture

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

a) The external factors having the most impact on park resources are:

- High market value of timber species in parks, in particular *Belian (Eusideroxylon zwageri)* in Sarawak, and dipterocarp species in general.
- Strong local and regional demand for vulnerable park resources, including plant species such as *Karas (Aquilaria spp.)*, *gaharu* (aloewood), and bushmeat and medicinal products from animal species such as wild pigs (*Sus barbatus* and *S. scrofa*), Sambar Deer (*Cervus unicolor*), Mousedeer (*Tragulus napu* and *T. javanicus*), Malayan Sun Bear (*Helarctos malayanus*) and Pangolin (*Manis javanica*).
- High accessibility for illegal activities, including close proximity to roads and waterways (in some cases international boundaries), as well as easy access to local and international markets for park resources.
- Difficulties in monitoring of illegal activities due to dense jungles and mountainous terrain.

b) Lack of coordination between the federal and state government

c) Lack of Awareness, interest superseded by economic target

VII) Please provide any other relevant information.

For Marine and coastal, it is noted many positive effort are being implemented to improve the protection of habitat and ecosystem important for biodiversity. However Sectoral strategies, plans and programme to achieve target for marine and coastal is not yet synergized. There is urgent need for coordination from federal and state and various departments.

**Box V.**

<b>Goal 2</b>	<b>Promote the conservation of species diversity</b>		
<b>Target 2.1</b>	<b>Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups</b>		
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>Several species conservation plans have been prepared especially for endangered species such as tiger, elephants, gaur, Sumatran rhinoceros, otter, and pheasants. The conservation plans include aspects of research, ex-situ conservation, monitoring, and enforcement activities. Research activities are being conducted on endangered wildlife species in the country either by research institutions, universities, and Non-Governmental Organizations. The Department Wild Life and national Park conducts regular monitoring of habitats and important wildlife areas in the country through annual wildlife inventories. These inventories contribute to the biodiversity database of the country. Captive breeding of endangered wildlife species are being carried out by the Department of Wildlife and National Parks, Peninsular Malaysia, Sabah Wildlife Department and the Sarawak Forestry Corporation.</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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		priority in MARDI 1)indigenous species 2)land races & food crops 3) threatened crop wild relatives
b) Inland water	X		Endangered species
c) Marine and coastal	X		conservation programme for endangered and potentially endangered by trade are pioritized directed at endangered species such turtle, sharks, giant clam. Propose new sites for conservation, shark conservation promotion, promotion of captive breeding
d) Dry and subhumid land			N/A
e) Forest	X		New protected areas (National parks, wildlife reserves and sanctuaries) are being proposed to conserve species diversity found in these areas.
f) Mountain	X		a) Forestry Department- Seed Production Areas (SPA) b) Department of Wildlife and National Parks (DWNP) – All protected areas (National Parks, Wildlife Reserves and Sanctuaries) are managed for the protection of both flora and fauna where hunting and logging are strictly prohibited under the Protection of Wildlife Act, 1972; National Park Act, 1980; National Park (Pahang) Enactment, 1939; National Park (Terengganu) Enactment, 1939 and National Park (Kelantan) Enactment 1939.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies? MARDI: yes in RM8			

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 national Biodiversity Policy outlines strategies to restore or reduce the decline in selected species population. Among the strategies identified in the policy include Strategy I Improve the scientific knowledge base, Strategy II Enhance sustainable utilisation of the components of biological diversity, Strategy IV Strengthen the institutional framework for biological diversity management, Strategy V Strengthen and integrate conservation programmes.
- Programme on marine conservation of endangered initiated before 8<sup>th</sup> Malaysia Plan (2001-2005). Department of Fisheries established exit plan for fishermen, mesh size regulation and also banned destructive gears.

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

- a) Forestry and Wild life : proposal to increase more protected area
- b) Agriculture sector: most crop species are already in the gene bank (inclusive herbs and medicinal plants)
- c) Marine sector: Latest intensification of research and campaign to protect seahorse

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

- a) Wildlife : annually inventory
- b) Forestry : Malaysian certificate indicator, annually inventory
- c) Agriculture sector: number of species conserved and its viability in storage
- d) Marine sector: Turtle landing, wild shark population, giant clam population survey, population /species inventory for sea horse

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

1. financial support
2. Human resource need
3. Coordination among stakeholders

VII) Please provide any other relevant information.

Malaysia recognizes the importance of strengthening cooperation between all relevant agencies to achieve this target.

**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.			
<ul style="list-style-type: none"> <li>▪ The Department of Wildlife and National Park is undertaking efforts to improve the status of some endangered species in the country. This is done through various measures such as captive breeding of endangered species, <i>in situ</i> conservation, law enforcement, and awareness programs.</li> <li>▪ Some of the endangered species bred in captivity include the tiger, gaur, pheasants, tapir etc. In situ conservation activities include habitat improvement, regular monitoring of important wildlife habitats. The Wildlife Protection Act 1972 is being amended to afford more protection to these endangered species and their habitats, and control of wildlife trade. Awareness programs are being conducted to address the various target groups in the country.</li> </ul>			
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	No regular monitoring done to determine whether the status is declining or improving. This study is planned throughout the duration of 9 <sup>th</sup> Malaysia Plan
b) Inland water	X		For some species
c) Marine and coastal	X		For some endangered species
d) Dry and subhumid land			N\A
e) Forest	X		Establishing new protected areas especially those that are important to wildlife while maintaining the existing ones. New captive breeding facilities are being constructed. New breeding techniques are being applied to enhance breeding of endangered species.
f) Mountain	X		Department of Wildlife and National Parks has on going captive breeding programmes for endangered and threatened species such as Sumatran Rhinoceros ( <i>Rhinoceros sumatrensis</i> ), Seladang ( <i>Bos gaurus</i> ), Sambar Deer ( <i>Cervus unicolor</i> ) and River Terrapin ( <i>Batagur baska</i> ).
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.			
Programes and activities on improving threatened species as mention above are provided by :-			

- National Biodiversity Policy. 1998
- National Forestry Act 1984
- National Parks Act 1980
- Wildlife Protection Act 1972
- Fisheries Act 1985

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

- In marine sector positive trend is noted in the effort in public stocking and aquaculture activity. Turtle landing program by the Department of Fisheries is improving.
- It is suspected that some rare fruit species and crop wild relatives are under severe threat of genetic erosion.

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

1. Population trend of species based on annual inventories by Department of Wildlife and National Park
2. Marine sector : Number of successful aquaculture / captive breeding of endangered increased

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

1. Conflicting land use between development and conservation. Insufficient political support.
2. Agriculture sector: the number species are actually threatened are not known. Only based on assumption.
3. Monitoring of fish population of threaten species in marine is costly

VII) Please provide any other relevant information.

1. Agriculture sector: Assistance on methodology is needed. There is suspicion that rare crop species and crop relatives as well as popular herbs and medicinal plant species are endangered or threatened.
2. Marine Sector: Financial constraint noted.

**Box VII.**

<b>Goal 3</b>	<b>Promote the conservation of genetic diversity</b>
<b>Target 3.1</b>	<b>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</b>
I) National target: Has a national target been established corresponding to the global target above?	
a) No	<input type="checkbox"/>
b) Yes, the same as the global target	<input type="checkbox"/>
c) Yes, one or more specific national targets have been established	<input checked="" type="checkbox"/>
Please provide details below.	
Genetic diversity of wildlife species and crop plant gene pools in the country are maintained through <i>in-situ</i> and <i>ex-situ</i> conservation. National parks, wildlife reserves, sanctuaries and PGRFA gene bank in the country serve as the gene pool for local species including some of the rare and endangered species. <i>Ex</i>	

*situ* conservation centers serve as breeding center for some of these species. The Department of Wildlife and national Park is also involved in the preservation of genetic diversity of wildlife through the setting up of genetic banking in collaboration with research institutions in the country. Works on compiling local and traditional knowledge are still in the infant stage with efforts carried out by local universities and research institutions. MARDI, Department of Agriculture, Sarawak state, Sabah state are involved in in-situ, on-farm and ex-situ conservation of plant genetic resources and some microbial resources.

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		Strengthened field and Seed Gene Bank for Plant Genetic Resources for food and agriculture (PGRFA)
b) Inland water	X		Broodstock for captive breeding
c) Marine and coastal	X		Broodstock development for captive breeding and selective breeding, bivalve species
d) Dry and subhumid land			N\A
e) Forest	X		Species and Genetic variability; arboreta, seed banks
f) Mountain	X		Programmes such as: a) Big Tree Plot by Forestry e.g.: Semangkok Forest Reserve, Fraser Hill b) Sarawak Biodiversity Centre c) Wildlife Sanctuary- Krau Wildlife Sanctuary d) National Information Sharing Mechanism (NISM) on Plant Genetic Resources for Food and Agriculture (PGRFA) e) Department of Wildlife and National Parks has conducted genetic studies on Seladang ( <i>Bos gaurus</i> ) in both wild and captive breeding populations.

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.

1. Strategy 5 National Biodiversity Policy Strengthen and integrate conservation programmes

- Expand the network of *in-situ* conservation areas to ensure full representation of ecosystems and all ecological processes therein
- Strengthen capacity and role of *ex-situ* facilities in conservation activities and research, with a view to complementing *in-situ* conservation
- Expand *ex-situ* conservation centres to cater for threatened species, for breeding and selection and as repositories for germplasm i.e. genebanks, botanical and zoological gardens and arboreta

2. Conservation programme in Fisheries and Agriculture sector.

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

1. Agriculture: most gene pool of indigenous crop species are already in various gene bank especially more than 1000 accession of rice, more than 3000 accession of fruit are already conserved.
2. Marine sector: Most of endangered species conserved, Mollusc databases, profile foe edible mollusk, sea weed DNA profiling

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

1. Number of agencies conserved per species – (mainly plant)
2. Number of species conserved – mainly plant
3. Number of institutions involved in specific work programme
4. number of projects
5. number of scientists involved

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

1. Financial support
2. human resource need
3. Political will

public participation

VII) Please provide any other relevant information.

Balance and of Trade and Transfer of Technology : intensification of aquaculture for species of interest

**Box VIII.**

<b>Goal 4</b>	<b>Promote sustainable use and consumption.</b>	
<b>Target 4.1</b>	<b>Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity</b>	
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.		
i.	Malaysia Criteria and Indicator (MC&I) for sustainable forest management by Forestry Department.	
ii.	Non-consumptive use of biological diversity resources such as ecotourism is being promoted by the Department of Wildlife and National Park in the protected areas.	
iii.	Department of Fisheries promotes fisheries products base on sustainable fishery management practices (FAO CCRF) and according to Regional Guidelines for Sustainable Fisheries Management. There are Intensification of Research in Priority Areas (IRPA) Programme for sea weed culture and crab culture which promote sustainable use and consumption.	

- iv. Organic farming, integrated crop management, ecosystem approach in conservation are some of the practices promoted in agriculture protection.

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		Promote/widened agriculture areas that practice sustainable production practices
b) Inland water		X	To licence inland fishing (evaluation on progress)
c) Marine and coastal	X		DOF fishery exploitation rate/ CPUE/fishing power being monitored to ensure target
d) Dry and subhumid land			N\A
e) Forest	X		Enhance sustainable use of the components of biological diversity. Replanting Programme
f) Mountain		X	a) Enhance sustainable use of the components of biological diversity b) Replanting Programme c) Malaysian Biotechnology Corporation and similar initiative by the Federal and State Government of Sabah and Sarawak bodes well for the future enhancement of economic activities in the fields of biotechnology and pharmacy

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.

1. The National Policy on Biodiversity has outlined 9 action plans to be implemented under the strategy II to enhance sustainable utilization of the components of biological diversity. The Action Plans include the followings:

- a. Undertake appropriate activities in biological diversity prospecting, via new crops, pharmaceuticals and other biological products;
- b. Develop natural resource accounting methods that promote conservation and sustainable use of biological diversity;
- c. Ensure the development of sectoral and cross-sectoral policies, plans and programs which integrate considerations of biological diversity conservation and sustainable use;
- d. Ensure sectors performing Environmental Impact Assessment (EIA) accord due priority to biological diversity;
- e. Undertake research and monitoring of the impacts of resource utilization on biological diversity;
- f. Provide incentives to encourage conservation of biological diversity and sustainable use of its components;

- g. Ensure efficient dissemination of relevant information, together with appropriate extension services, to assist various sectors to conserve and sustainably use biological resources;
- h. Facilitate participation of local communities in traditional sustainable use of biological resources;
- i. Ensure fair distribution to the nation and local communities of benefits arising from the use of biological resources.

2. Fisheries sector : Sustainable Fishery Development (CCRF), MCS programme, monitoring the fisheries statistic, Sustainable Aquaculture Development, Community Based Fisheries; Turtle Exclusion Device; Turtle eggs purchase

3. Agriculture sector : Good Agriculture practice (GAP); SALAM Program; Organic Farming Scheme Malaysia; Farmer's incentives for those who practice EAP (to be introduced)

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

More farmers go into organic farming, practice SALAM, Less usage of pesticide

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

- i. Quantity of products coming from certified forest
- ii. Area of forest under sustainable management regime
- iii. Population trend of species based on annual inventories by Department of Wildlife and National Park
- iv. Area of Marine Park under sustainable management regime
- v. Agricultural land degraded agriculture practice not sustainable
- vi. areas under organic farming
- vii. application of IPM
- viii. pesticide residue in agricultural products

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

Lack of financial and appropriate human resource requirement

VII) Please provide any other relevant information.

**Box IX.**

<b>Target 4.2</b>		<b>Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced</b>	
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.			
i. MC&I for sustainable forest management ii. The establishment of more than 40 marine parks iii. The recently (April 2005) establishment of Ramsar site in state of Sarawak adding to existing 4 Ramsar sites in Malaysia. iv. In fishery sector, the deleterious fishing gears banned, collection of wild seed for aquaculture is controlled: cockle seed export regulation, grouper seed collection: closed season, exploitation of giant clam controlled. Fisheries Department also introduce buy back turtle egg scheme to reduce the impact on biodiversity loss.			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		Domestication of forest medicinal plant species
b) Inland water	X		Community Based Management (Tagal), terrapin conservation project
c) Marine and coastal	X		Fisheries Act and Regulation
d) Dry and subhumid land			N\A
e) Forest	X		MC&I for sustainable forest management
f) Mountain	X		Policies and strategies in place: a) Strategies for highland development in Peninsular Malaysia b) National Physical Plan for mountain and land use c) Crocker Range Park Management Master Plan 2004 d) Sabah Conservation Strategy 1992 e) Sabah Structure Plan 2020 Sarawak Forest Policy 1954
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.	
Strategy 6 : Strengthen and integrate conservation programmes Legal means : rule and regulations, CEPA, Community Based Management	
IV) Please provide information on current status and trends in relation to this target.	
<ul style="list-style-type: none"> <li>▪ Department of Fisheries is strengthening effort to reduce accidental catch of turtle.</li> <li>▪ MARDI : by cultivating medicinal plant species in the open, the pressure on wild plants reduced</li> </ul>	
V) Please provide information on indicators used in relation to this target.	
<ul style="list-style-type: none"> <li>a) Trend in tropic level and trash fish composition in trawl catch</li> <li>b) number of illegal gears controlled</li> <li>c) number of license fishing boat and gears</li> <li>d) quantity of products coming from certified forest</li> <li>e) products derived from sustainable sources</li> <li>f) diversity maintained or improved</li> <li>g) number of the threatened crop species increased</li> </ul>	
VI) Please provide information on challenges in implementation of this target.	
<ul style="list-style-type: none"> <li>i. Area of sustainable forest management</li> <li>ii. Area of marine Parks</li> <li>iii. Public (trawlers resistance) and illegal fishing : enforcement and financial support</li> </ul>	
VII) Please provide any other relevant information.	
NA	

**Box X.**

<b>Target 4.3</b>	<b>No species of wild flora or fauna endangered by international trade</b>
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>The Department Wildlife and National Park sets a national quota for the export of certain fauna species. Apart from that, the Department is amending the Wildlife Protection Act 1972 to include CITES-listed species under the Act to afford better protection. Fauna species that are not covered under any existing Act in the country will be included in the amended Act. The Department also regulates wildlife harvest in the Peninsular by setting hunting season and bag limits for the wildlife. Wildlife traders are also encouraged to breed wildlife species intended for wildlife trade to eliminate or reduce dependence on the wild population. Several breeders have been granted permits to breed</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		Promote the cultivation of wild flora of economic importance so that not to cause genetic erosion
b) Inland water	X		Red arowana
c) Marine and coastal	X		Turtle trade/ fishing
d) Dry and subhumid land			N/A
e) Forest	X		Wildlife Protection Act 1972, CITES Convention
f) Mountain	X		a) Wildlife Protection Act 1972, PERHILITAN b) Sabah Wildlife Conservation Enactment 1997 c) Wildlife Protection Ordinance 1998 d) National Forestry Act, 1983
<b>III) Has the global or national target been incorporated into relevant plans, programmes and strategies?</b>			
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.			
i. The National Policy on Biological Diversity calls for the provision of incentives to the private sector involvement in the conservation and sustainable use of biological resources.			
ii. Monitoring of trade practices on listed species is in place			
<b>IV) Please provide information on current status and trends in relation to this target.</b>			
Malaysia is strengthening enforcement by providing more officers especially in Wildlife Department.			
<b>V) Please provide information on indicators used in relation to this target.</b>			
i. Number of species trade			
ii. Number of confiscated vessel and fishing gears use in turtle fishing/trade			
iii. Endangered list in marine sector for example seahorse, Humphead wrasse			
<b>VI) Please provide information on challenges in implementation of this target.</b>			
Monitoring is sometime difficult since there is some illegal trading activities			
<b>VII) Please provide any other relevant information.</b>			
NA			

**Box XI.**

<b>Goal 5</b>	<b>Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.</b>		
<b>Target 5.1</b>	<b>Rate of loss and degradation of natural habitats decreased</b>		
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 Physical Plan, Environment Quality Act, Environmental Impact Assessment and Strategic Environmental Impact Assessment are policies an initiative by the Malaysia government to ensure the rate of loss and degradation of natural habitats decreased.			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		Sustainable agriculture practice are promoted to sustain agrosystem and halt land degradation
b) Inland water	X		National Physical Plan
c) Marine and coastal	X		
d) Dry and subhumid land			N/A
e) Forest	X		
f) Mountain	X		a) National Physical Plan b) National Highlands Management and Conservation Strategy c) Proposed National Land Policy d) Protection of Wildlife Act, 1972 e) National Forestry Act, 1983 f) National Parks Act, 1980 g) Selangor State Parks Corporation Enactment 2005 h) Johor State Parks Corporation Enactment, 1989 i) Perak State Parks Corporation Enactment, 2001
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.			

1. Strategy II in national Biodiversity Policy : Enhance sustainable utilisation of the components of biological diversity
2. Through multi-sectoral coordination, Land Act, Introduction of Environmentally Sensitive Areas in planning via National Physical Plan; Strategic environmental Impact Assessments , Draft NICM Policy
3. Information monitoring using Remote Sensing technology

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

There is concern of depleting Mangroves forest. There is Mangrove Replanting Programme in progress.

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

1. Acreage of green area, percentage of green area in township, acreage of managed mangrove and coral areas, geological & intensity, bioregion, bio-indicator and size over time and quality over time
2. Increase in improved domestic waste treatment system, better solid waste management and transportation (criteria for rubbish dumping), area of retention pond, discharge ponds

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

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.		
<p>One of the major steps towards controlling the pathways of major potential invasive alien species is through the establishment of the Quarantine Act, 1976 and Plant Quarantine Regulation 1981. Listed under the Act are 7 most dangerous IAS which are being controlled under an extensive preventive and eradication programme carried out by the Agriculture Department throughout Malaysia. These dangerous IAS are Khapra Beetle (<i>Trgoderma granarium</i>), Golden Snail (<i>Pomacea canaliculata</i>), Papaya Ringspot Virus Disease, Banana Bunchy Top Virus Disease, <i>Cyperus papyrus/Cyperus japonica</i> (aquatic plants), <i>Rottboellia cochinchinensis</i> (Weed) and Rice Blast Disease in Paddy field.</p> <p>In addition, the Department of Wildlife and National Parks (DWNP) is also conducting rapid field assessments and liaison with animal pet breeders for IAS presence in the forests particularly protected areas. Some of the species that are under the watch list of DWNP are water hyacinth (<i>Eichhornia crassipes</i>), mimosa (<i>Mimosa pigra</i>), golden apple snail (<i>Pomacea canaliculata</i>), walking catfish (<i>Clarias batrachus</i>), red deer (<i>Cervus elaphus</i>), Acacia (Acacia Mangium) and Talipia (<a href="#">Oreochromis mossambicus</a>) to name a few. The Department supports the implementation of the guiding principles the prevention (border control &amp; quarantine measures), introduction (both intentional and unintentional), and mitigation of impacts (eradication, containment &amp; control) of alien species that threaten ecosystems, habitats and species.</p> <p>Department of Fisheries(DOF) is implementing regulations on the import of non indigenous for aquaculture, where for an example piranhas import is banned.</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		Various acts and regulations are already in place to control IAS
b) Inland water	X		Species and pathways identified control mechanism not in place for certain species
c) Marine and coastal	X		Pathways identified , control mechanism not in place
d) Dry and subhumid land			N/A
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.

- a) IAS has been identified in the National Policy on Biological Diversity Strategy V : Strengthen and integrate conservation programmes
- b) Plant Quarantine Act has some measures on IAS

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

- i. Escaped fresh water alien species become endemic –mostly imported for aquarium fish industry and experimental culture , guidelines on release into open system is not in place
- ii. Impact from release is not clear but trait show reduced quality of local bred oysters, cobia

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

- i. Number of alien species
- ii. Changes in area occupied by invasive species

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

Malaysia recognizes the need to strengthen enforcement especially on illegal import.

VII) Please provide any other relevant information.

NA

**Box XIII.**

<b>Target 6.2</b>	<b>Management plans in place for major alien species that threaten ecosystems, habitats or species</b>		
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.			
i. There are management plans for some alien species for commercial use such as Acacia Mangium and Talipia (fish species).			
ii. Management plan restricted few species like piranhas, red claw, colossoma (freshwater fishes)			
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		Regulation on the importation and culture
c) Marine and coastal	X		Restriction on the importation of non-indigenous for aquaculture
d) Dry and subhumid land			N/A
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.			
i. National Biodiversity Policy Strategy V : Strengthen and integrate conservation programmes			
ii. Regulations, circular, directives and setup of quarantine stations are in place			
IV) Please provide information on current status and trends in relation to this target.			
Importation of various species of non-indigenous species for aquarium trade has exposed local ecosystem system to introduction of invasive species. King sucker and flower horn are two examples of species escaped and bred locally, red claw abundantly available in aquarium shops			
V) Please provide information on indicators used in relation to this target.			

- a) Number of invasive alien species
- b) Number reported incidence or occurrence of invasive alien species (piranhas and *Collosoma* and red claw in open water).

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

Staffing and financial constraint for monitoring of trade

VII) Please provide any other relevant information.

**Box XIV.**

<b>Goal 7</b>	<b>Address challenges to biodiversity from climate change, and pollution.</b>		
<b>Target 7.1</b>	<b>Maintain and enhance resilience of the components of biodiversity to adapt to climate change</b>		
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.			
i. The implementation of some targets mention above especially target 1.1 (At least ten percent of each of the world's ecological regions effectively conserved), target 1.2 (Areas of particular importance to biodiversity protected) and target 2.1 for example will also contribute to achieving this target as well.			
ii. Protection of jungle, mangrove from mass clearance, protect coral area to absorb carbon			
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		Genetic enhancement of PGRFA for traits tolerant to stress in progress.
b) Inland water	X		Protection of inland area and inland water vegetation
c) Marine and coastal	X		mangrove protection and revegetation
d) Dry and subhumid land			N/A
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>i. Mangrove protection and replant programmes, NPP, EIA and AIZ (aquaculture industrial Zone), Marine Protected Area, Artificial reef</p> <p>ii. Sustainable urban indicator- guideline in place, increase of public awareness</p> <p>iii. Research plan to bio-prospect genetic resources, resistant against stress (example: lack of water, flooded areas)</p>	
IV) Please provide information on current status and trends in relation to this target.	
More inter-sectoral coordination and strong support from government including local governments in environmental programme and conservation.	
V) Please provide information on indicators used in relation to this target.	
<ul style="list-style-type: none"> <li>▪ Water quality in aquatic ecosystem</li> <li>▪ Coverage of state mangrove converted into reserve mangrove increased.</li> </ul>	
VI) Please provide information on challenges in implementation of this target.	
Illegal felling and land conversion for development.	
VII) Please provide any other relevant information.	
NA	

**Box XV.**

<b>Target 7.2</b>	<b>Reduce pollution and its impacts on biodiversity</b>
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>Reduce pollution is always one of national priorities. Environment Quality Act is legal instrument to reduce pollution which one of its objectives is to minimize negative impact on biodiversity.</p> <p>In marine sector efforts also had been initiated especially in the form of rules and regulations to protect marine and coastal from pollution land based and sea based by introducing Integrated Coastal Zone Management (NICZM) (draft) policy as new tool for inter-sectoral input.</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		Reduce usage of chemical pesticide sustainable agriculture practice
b) Inland water	X		
c) Marine and coastal	X		
d) Dry and subhumid land			N/A
e) Forest	X		
f) Mountain	X		a) National Highlands Management and Conservation Strategy b) Good Agriculture Practice at highland areas c) Fire Control Towers in Forest Plantations Real Time Remote Sensing through satellite imagery to prevent illegal burning and encroachment into protected areas
<b>III) Has the global or national target been incorporated into relevant plans, programmes and strategies?</b>			
a) No			
b) Yes, into national biodiversity strategy and action plan			X
c) Yes, into sectoral strategies, plans and programmes			X
<b>Please provide details below.</b>			
i. Among the regulations and guidelines can be found are from EIA, Strategic EIA, National Physical Plan, Drainage and Irrigation Department Program on Coastal Protection, the draft Wetland Policy			
ii. Town and Country Act on provision for EIA in residential area, Town Planning, factory discharge criteria			
iii. Promoting sustainable agriculture practices			
<b>IV) Please provide information on current status and trends in relation to this target.</b>			
Malaysia recognizes the need to strengthening enforcement of related law, regulations and policies as well as reducing the usage of potent chemical pesticide.			
<b>V) Please provide information on indicators used in relation to this target.</b>			
i. Number of cases on illegal dumping of toxic materials discovered by enforcers			
ii. Number of dead rivers recovered (Klang river and Melaka River),			
iii. Number of state rivers converted to recreational area increased. Many more river including Skudai river will rehabilitated			
iv. Number of dead river reduced			
v. Water quality standards and radius of pollution			
vi. Percentage area deforested unwanted burning			
vii. Maximum residue level (of pesticide) (level of pesticide in products)			
viii. Pollinators			

ix. Soil microbes diversity
VI) Please provide information on challenges in implementation of this target. Public participation is still minimal.
VII) Please provide any other relevant information.

**Box XVI.**

<b>Goal 8</b>	<b>Maintain capacity of ecosystems to deliver goods and services and support livelihoods.</b>		
<b>Target 8.1</b>	<b>Capacity of ecosystems to deliver goods and services maintained</b>		
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.			
It is a national priority to ensure biological resources that support sustainable livelihoods, local food security and health care, especially of poor people, maintained. Among programmes implemented to achieve the target:-			
<ul style="list-style-type: none"> <li>• Sustainable Forest Management</li> <li>• Agriculture Best Practice</li> <li>• Establishment of more than 40 Marine Parks</li> <li>• Mangrove Replant programme</li> </ul>			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		Degradation of agroecosystem slowed down. Eg. Less pesticides, less erosion
b) Inland water	X		sustainable aquaculture
c) Marine and coastal	X		Artificial reefs and PAs and MCPAs, sustainable aquaculture
d) Dry and subhumid land			N\A
e) Forest	X		Sustainable Forest Management
f) Mountain	X		a) Environmental Quality Act 1984 b) Department of Wildlife and National Parks – Low impact ecotourism namely mountain climbing and camping in Gunung Tahan, Taman Negara and Gunung Benom, Krau Wildlife Reserve. c) Training of local and native communities to become

		licensed ecotourist guides and inclusion of jungle survival skills by natives as new tourism products in Taman Negara.
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.		
<ul style="list-style-type: none"> <li>▪ National Biodiversity Policy Strategy II : Enhance sustainable utilization of the components of biological diversity</li> <li>▪ National programme on artificial reef development and sustainable aquaculture development</li> <li>▪ Sustainable agriculture practice and good agriculture practices</li> </ul>		
IV) Please provide information on current status and trends in relation to this target.		
<ul style="list-style-type: none"> <li>▪ National mangrove replants is given a top priority by the government.</li> <li>▪ Farmers are beginning practicing sustainable agriculture production practices.</li> </ul>		
V) Please provide information on indicators used in relation to this target.		
<ul style="list-style-type: none"> <li>i. Number of activities associated with targets increased</li> <li>ii. number of Protected areas and reserve areas increase</li> <li>iii. income level maintain</li> <li>iv. CPUE and tropic level maintain</li> <li>v. Soil microbes</li> <li>vi. Pollinator</li> <li>vii. Residue level</li> </ul>		
VI) Please provide information on challenges in implementation of this target.		
Monitoring of compliance, financial and staffs. Here is still lacking of knowledge and experts on ecosystem approach in conservation		
VII) Please provide any other relevant information.		

**Box XVII.**

<b>Target 8.2</b>	<b>Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained</b>		
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>Absolute poverty eradication has been always Malaysia's priority and goal since her independence. This goal has always been embedded in all national development plans. Among programmes that support sustainable livelihood of poor people:</p> <ol style="list-style-type: none"> <li>i. Sustainable forest management ensure protection of watershed</li> <li>ii. Best Agriculture Practice to halt land degradation</li> <li>iii. Rice gene bank is being developed</li> <li>iv. Fisheries resource for food and medicine are managed sustainably and captive breeding for resource under threat intensified, sustainable aquaculture is promoted</li> </ol>			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		Important Plant Genetic Resources for Food and Agriculture (PGRFA) conserved
b) Inland water	X		Few species conserved and captive breeding intensified
c) Marine and coastal	X		Few marine fishes and marine life listed as endangered and artificial propagation promoted
d) Dry and subhumid land			N/A
e) Forest	X		
f) Mountain		X	Sustainable Agriculture in Cameron Highlands, Kundasang (Kinabalu Park) and Bukit Tinggi for vegetable, flowers and mushroom farming.
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.			
<ul style="list-style-type: none"> <li>▪ National Biodiversity Policy Strategy II : Enhance sustainable utilization of the components of biological diversity</li> <li>▪ Malaysia 5 year development Plans</li> </ul>			

IV) Please provide information on current status and trends in relation to this target.
<ul style="list-style-type: none"> <li>▪ In marine sector captive breeding and broodstock centre is being developed through the establishment of sea-ranching for example. The public stoking programmes are also launched; example giant prawn programme.</li> <li>▪ Strengthening Sustainable Forest management by reviewing Malaysia Criteria and indicator</li> <li>▪ Strengthening Best Agriculture Practice</li> <li>▪ Conservation of Plant Genetic Resources for Food and Agriculture (PGRFA) gene pools is still the main concern of Ministry of Agriculture/MARDI for present and future</li> <li>▪ More and more species of PGRFA (cultivated and wild) are conserved in field and seed gene bank throughout the country</li> </ul>
V) Please provide information on indicators used in relation to this target.
<ul style="list-style-type: none"> <li>▪ Species diversity,</li> <li>▪ genetic diversity indicator</li> <li>▪ Number of important species in freshwater and marine maintained</li> <li>▪ Income level</li> <li>▪ Number of protected area</li> <li>▪ reserve mangrove areas</li> </ul>
VI) Please provide information on challenges in implementation of this target.
Manpower, financial and treats from multi- sectoral development
VII) Please provide any other relevant information.

**Box XVIII.**

<b>Goal 9</b>	<b>Maintain socio-cultural diversity of indigenous and local communities.</b>
<b>Target 9.1</b>	<b>Protect traditional knowledge, innovations and practices</b>
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>Many agencies, universities and research institutes are working on traditional knowledge of the local communities in Malaysia. However it is very much sectoral basis and not very well coordinated at the national level. It is initiated by agencies of its own concern and interest. Some agencies such as Sarawak Biodiversity Centre (SBC) are working on medicinal plants that are used by local tribes in state of Sarawak. Overall activity of SBC is to facilitate the documentation of traditional knowledge among the indigenous communities in Sarawak as stipulated by the Sarawak Biodiversity Centre (Amendment) Ordinance 2003 – traditional Knowledge Documentation Programme. Its main objective is to document this traditional knowledge which could help to protect it. SBC also undertakes activities to facilitate participation of local communities in traditional sustainable use of biological resources.</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		Knowledge on the use of plants as food and medicine gathered and maintained in database
b) Inland water	X		Tagal – community based fishery management
c) Marine and coastal	X		Islands and coastal settlers well being maintained
d) Dry and subhumid land			N/A
e) Forest		X	
f) Mountain	X		Sabah Park conduct study on traditional knowledge
<b>III) Has the global or national target been incorporated into relevant plans, programmes and strategies?</b>			
a) No			
b) Yes, into national biodiversity strategy and action plan			X
c) Yes, into sectoral strategies, plans and programmes			X
<b>Please provide details below.</b>			
i. Action Plan 7 under Strategy I improve the scientific knowledge base stated to establish an inventory of traditional knowledge on the use of species and genetic diversity			
ii. Department of Fisheries is expanding the application of Tagal system to many areas and throughout all states in Malaysia			
iii. Sarawak Biodiversity Centre (SBC)			
<b>IV) Please provide information on current status and trends in relation to this target.</b>			
MARDI maintains a database on ethnobotanical information on the use of plants as medicine by indigenous people and Malay community. Documentations on traditional knowledge usually kept by individual agencies.			
<b>V) Please provide information on indicators used in relation to this target.</b>			
<ul style="list-style-type: none"> <li>▪ Quality of life of indigenous people</li> <li>▪ income trend of the indigenous people</li> <li>▪ number of patent</li> <li>▪ database on traditional knowledge</li> </ul>			
<b>VI) Please provide information on challenges in implementation of this target.</b>			
There is not enough inventory of traditional knowledge. Funding is limited and many traditional knowledge had already lost before even been documented.			
<b>VII) Please provide any other relevant information.</b>			
Ministry of Natural Resources and Environment recognizes the importance of collaboration with related agencies especially department which look into welfare of indigenous people to further strengthen the documentation of traditional knowledge.			

**Box XIX.**

<b>Target 9.2</b>		<b>Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing</b>	
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.			
Access and Benefit Sharing Bill is still in drafting stage.			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural			
b) Inland water		X	
c) Marine and coastal		X	Use of certain species in for traditional medicine example Black coral
d) Dry and subhumid land			N\A
e) Forest		X	
f) Mountain	X		Good Agriculture Practice
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.			
Sabah Biodiversity Enactment and Sarawak Biodiversity Act have access and benefit sharing element. The implementation of this act to protect the right indigenous people in two states Sabah and Sarawak is still in early stage.			
IV) Please provide information on current status and trends in relation to this target.			
In Agriculture sector as seen in other sector there is no mechanism to protect traditional knowledge nor benefit financing.			
V) Please provide information on indicators used in relation to this target.			
In Agriculture sector, MARDI with ITPGRFA is developing database of plants used as medicine by indigenous people and Malay community.			
VI) Please provide information on challenges in implementation of this target.			
Malaysia has dedicated an important agency, The Department of Indigenous People to look into the welfare of the indigenous people. However its function is specific on helping this tribe in social and economic advancement as well as provides them with better education.			

VII) Please provide any other relevant information.

Malaysia's Access and Benefit Sharing Bill will also include protection of traditional knowledge.

**Box XX.**

<b>Goal 10</b>	<b>Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.</b>
<b>Target 10.1</b>	<b>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</b>

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	X
c) Yes, one or more specific national targets have been established	

Please provide details below.

Economic Planning Unit of the Prime Minister Department had produced guidelines for foreigners conducting research in Malaysia Any collaboration between institutions in Malaysia or Malaysian Institutions with foreign institutions will be guided by this guideline, and it will ensure that both parties will benefit from such collaboration and cooperation. Access and Benefit Sharing Bill which will be completed soon will be the main legal framework.

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).

<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural	X		MTA, ITPGRFA, MTA bilateral
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land			N/A
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.

**Strategy XIII Promote international cooperation and collaboration**

Action plans

–Identify areas of research and technology requirements where cooperation and collaboration are needed

- Identify and develop collaboration with relevant international and national institutions involved in biological diversity which would promote mutual benefits
- Develop bilateral and multilateral arrangements where appropriate, inter alia, for germplasm exchange, technology transfer, and technical and scientific information exchange
- Promote regional collaboration in biological diversity in particular on transboundary issues e.g. establishment of transfrontier national parks, and the effects of pollution on biological diversity
- Recognise accepted international practices in germplasm exchange and technology transfer

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

In progress. ITPGRFA, MTA, CBD

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

Number of related projects which incorporated ABS.

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

There is lack of coordination at the national level.

VII) Please provide any other relevant information.

The need for the strengthening the implementation of strategy XIII and its action plans in National Biodiversity policy.

**Box XXI.**

<b>Target 10.2</b>	<b>Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources</b>
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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		ITPGRFA, MTA, CBD
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land			N/A
e) Forest		X	
f) Mountain		X	Ecotourism and Ecohost to sustain livelihoods of local and native communities in mountain protected areas

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.	
<b>Strategy XIII Promote international cooperation and collaboration</b>	
<u>Action plans</u>	
<ul style="list-style-type: none"> <li>- Identify areas of research and technology requirements where cooperation and collaboration are needed</li> <li>- Identify and develop collaboration with relevant international and national institutions involved in biological diversity which would promote mutual benefits</li> <li>- Develop bilateral and multilateral arrangements where appropriate, inter alia, for germplasm exchange, technology transfer, and technical and scientific information exchange</li> <li>- Promote regional collaboration in biological diversity in particular on transboundary issues e.g. establishment of transfrontier national parks, and the effects of pollution on biological diversity</li> <li>- Recognise accepted international practices in germplasm exchange and technology transfer</li> </ul>	
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.	
VI) Please provide information on challenges in implementation of this target.	
VII) Please provide any other relevant information.	

**Box XXII.**

<b>Goal 11</b>	<b>Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention.</b>		
<b>Target 11.1</b>	<b>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</b>		
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.			
Malaysia is a developing country. Malaysia is committed to promote and strengthening biodiversity management programmes by continuously funding biodiversity related agencies through yearly budget, five years development programs and research grants. Malaysia also seeks funding and collaborates with international agencies and developed countries.			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural			

b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest			
f) Mountain			
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			
Please provide details below.			
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.			
VI) Please provide information on challenges in implementation of this target.			
VII) Please provide any other relevant information.			

**Box XXIII.**

<b>Target 11.2</b>	<b>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</b>		
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			
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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural			

b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest			
f) Mountain			
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			
Please provide details below.			
IV) Please provide information on current status and trends in relation to this target.			
<ul style="list-style-type: none"> <li>▪ Some training offered by international official agencies</li> <li>▪ Subject on technology in general and technology related to biodiversity and resource is offered by higher learning institution to international students</li> </ul>			
V) Please provide information on indicators used in relation to this target.			
Number of students enrolled in courses offered by local universities			
VI) Please provide information on challenges in implementation of this target.			
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.

<b>Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Related to Strategy I: Improve the Scientific Knowledge Base in the National Policy on Biological Diversity.</li> <li>▪ Research on the flora and fauna of Malaysia began in the early 1900s by Forest Research Institute (FRIM). Publications on many groups of families are available. With the exception of a few projects (e.g. Tree Flora of Malaya and Tree Flora of Sabah &amp; Sarawak), research activities related to the target was done on an ad-hoc basis. In the forthcoming Ninth Malaysia Plan, activities for the target are approached more systematically.</li> <li>▪ On the policy front, Malaysia has, in 2004, initiated efforts to draft its Plant Conservation Strategy. This target is included in the draft Strategy. Work on this draft is currently on-going.</li> <li>▪ A comprehensive database on plant genetic resources conserved in MARDI by end of 2005</li> </ul>	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ see above.</li> <li>▪ Proposal to undertake projects aimed at documenting the lesser-known groups of organisms have been submitted to the relevant authorities for the Ninth Malaysia Plan (2006-2010)</li> </ul>	
III) Current status (please indicate current status related to this target)	
<p>A Catalogue of the Vascular Plants of Malaya was published in 1995. The tree flora of Peninsular Malaysia comprising 3,000 species in 99 families has already been documented. The tree flora of Sabah and Sarawak and partial documentation is available. Other flowering plants documented include rattans, palms, orchids, gingers, ferns, grasses and bamboo flora of Peninsular Malaysia. For Sabah, checklist of ferns, gymnosperms, dicots, monocots of Mount Kinabalu and for Sarawak, checklist for certain national parks has been published. Many books have been published on utilization; this includes Burkill's Dictionary of the Economic Products of the Malay Peninsula and PROSEA's numerous publications. Databases of plant species in the digital form have been developed and are being continually updated. At present, these databases are being held at individual institutions and efforts are in progress to make such databases readily available.</p>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	

Groups of organisms having large gaps in information e.g. fungi and lower plants as well as non-tree flora of Sabah and Sarawak are now being targeted for documentation. Proposals for the documentation of lesser-known groups of organisms have been submitted to the relevant authorities.

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

20%

VI) Constraints to achieving progress towards the target

Lack of skilled manpower and 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

X

b) No

Please specify

The threat assessment project is initiated in 2005.

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

a) Yes

X

b) No

Please specify

- Related to Strategy I : Improve the scientific knowledge base in Malaysia National Policy on Biological Diversity.
- This project has been given high priority by the Ministry of Natural Resources and Environment. The target has been incorporated in the draft Plant Conservation Strategy for Malaysia.

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

Efforts indirectly related to this target took place during the 1990s - the list of endemic tree species in Peninsular Malaysia has been published. Monographs have also included conservation status of species.

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

Principal approval for the proposal has been granted by the relevant authorities.

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

FRIM: Detailed proposal has been submitted to the relevant authorities.

VI) Constraints to achieving progress towards the target

Lack of skilled manpower and funds to undertake the necessary data collection and collation.

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

X

b) No

Please specify

The Sustainable Forest Management System (SFM), applied to forestry in Malaysia, has been practiced since early 1980s'. In SFM, codes of practice have been established for conservation and sustainable use but with the advent of the ITTO guidelines, timber certification and the ecosystem-based approach, the requirements for conservation of terrestrial biological resources in production lands have tightened considerably.

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

a) Yes

X

b) No

Please specify

See above

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

- Network of protected areas covers protection, amenity forests and Virgin Jungle Reserves under the Permanent Reserved Forests (PRF), the National Parks and Wildlife Sanctuaries and the State Parks. *Ex situ* conservation, practised on an ad hoc basis, is limited to a small selection of wild and crop plants.
- Prior to SFM, the country has been practicing Selective Management System and the Malayan Uniform System. Both systems have clearly established operational plans.
- Although there is a management system in place for most of the forested land of the nation (SFM), the elements of the ecosystem approach, as advocated by CBD, has been difficult to implement in Malaysia, simply because the inherent complexities in research, legislation, management, land ownership etc. An example is the integrated river basin management (IRBM) to include other land uses in a river basin (agriculture and settlements) is yet to be implemented on the ground. The Environment Sensitive Areas is a framework that largely embraces an ecosystem approach and is being participated by a variety of stakeholders.

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

Development of models on the economic valuation of the forest will be undertaken in the GEF/ITTO project on Conservation of biological diversity through improved planning tools. This project is expected to define economic values of the forest and develop models that can assist planners in the allocation of land for conservation and production.

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

Funding approved and the project is under review by the GEF Council.
VI) Constraints to achieving progress towards the target
Lack of skilled research manpower and lack of practical management guidelines that can be followed.
VII) Any other relevant information
Not practical to have protocol for conservation especially for filed gene bank. MARDI is in progress for agro-preservation.

**Box XXVII.**

<b>Target 4. At least ten percent of each of the world's ecological regions effectively conserved.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
The network of protected areas, covering areas identified under protection, amenity forests and Virgin Jungle Reserves under the Permanent Reserved Forests, the National Parks and Wildlife Sanctuaries and the State Parks, surpassed the 10% required. This network was established decades before CBD existed and continues to grow in size until today.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Related to Strategy 5-Strengthen and integrate conservation programmes in the National Policy on Biological Diversity.</li> <li>▪ Several new state parks have been established and gazetted during the past 5 years.</li> </ul>	
III) Current status (please indicate current status related to this target)	
Apart from the existing ones, new state parks that have been established and gazetted during the past 5 years are the Perlis State park (comprising limestone habitats), Penang State Park (Comprising beach and rocky coast vegetation) and the Royal Belum State Park (comprising an array of inland habitats inhabited by highly diverse groups of organisms). Three newly established wetland sites in Johor state and one in Sarawak state declared as Ramsar sites.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Proposals to establish other state parks have already been submitted to the relevant authorities.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
The proposals are under review by the relevant authorities. This negotiating process takes a long time as many stakeholders are involved.	
VI) Constraints to achieving progress towards the target	

Economic models to show that tangible and intangible values of important ecological areas far surpasses the tangible values of harvestable resources. This is a critical constraint as Malaysia, although an economy in transition, still derives much revenue from the use of its biological resources.

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

X

b) No

Please specify

Related to Strategy V: Strengthen and integrate Conservation Programmes in the National Policy on Biological Diversity.

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

a) Yes

X

b) No

Please specify

Much of the highland areas above 1000 m, where there is a high degree of plant endemism, are under strict protection. Some limestone and ultra basic areas are protected in the National Parks.

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

See target 4

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

Steps are being taken to identify new IPAs, such as those in the peat swamp forests and other wetland areas.

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

On-going collaborative project with UNDP/GEF on the peat swamp forests in Peninsular Malaysia, Sabah & Sarawak. Other wetland sites have been identified for RAMSAR.

VI) Constraints to achieving progress towards the target

Little data available for lower plant groups. For these groups, little is known about its IPAs.

VII) Any other relevant information

**Box XXIX.**

<b>Target 6. At least thirty percent of production lands managed consistent with the conservation of plant diversity.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
MTCC (Malaysian Timber Certification Council) has revised Malaysian Criteria and Indicators (MC&I) in 2002.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
III) Current status (please indicate current status related to this target)	
<ul style="list-style-type: none"> <li>▪ Agro-biodiversity strategies and action plans is still at planning stage.</li> <li>▪ Over 59% of the nation is forested, and of the 19.5 million ha of forest, 11 million ha or just over 56%, is production forest that is managed on a sustainable yield basis. Manuals, guidelines and a whole range of documentation that are in place for implementing sustainable forest management practices are considered to be supportive of plant diversity being conserved in these wood production areas. Also, the 'Guidelines for Logging in Hill Forests of Peninsular Malaysia' (which includes guidelines for building of roads, skid trails, culverts, silt traps for roads, buffer strips for streams and rivers) is designed to reduce soil erosion to a minimum. Forest management audits undertaken so far in several states of Peninsular Malaysia, as part of a timber certification process, have revealed that implementation of sustainable forest management practices has been weak in some aspects. As part of the certification process, remedial action is required to be taken to rectify the weakness.</li> </ul>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<ul style="list-style-type: none"> <li>▪ MARDI: may develop target but on voluntary basis. Ministry of Agriculture will provide incentives to promote sustainable agriculture.</li> <li>▪ MC&amp;I 2002 strengthened Sustainable Forest Management (SFM).</li> </ul>	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
Increase acreage under Good Agriculture Practice, SALAM, organic farming.	
VI) Constraints to achieving progress towards the target	
Cooperation from farmers.	
VII) Any other relevant information	

**Box XXX.**

<b>Target 7. Sixty percent of the world's threatened species conserved <i>In-situ</i>.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
It is inferred that populations of threatened species found in the existing network of parks, wildlife reserves & sanctuaries, and protected permanent reserved forests of the PFE are conserved. Related to targets 4 and 5.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	x
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Related to Strategy V in the National Policy on Biological Diversity.</li> <li>▪ A threat assessment project is initiated in 2005 and this will assess the conservation status of all known Malaysian plant species. Following this will be recommendations for in-situ as well as ex situ conservation. The threat assessment project is regarded by NRE as high priority. Proposal to undertake threat assessment has been submitted to the relevant authorities.</li> <li>▪ Research work is currently on-going to identify populations of selected threatened species occurring outside the Protected areas.</li> </ul>	
III) Current status (please indicate current status related to this target)	
<ul style="list-style-type: none"> <li>▪ To inventory and identify species as under threat</li> <li>▪ Sabah and Sarawak have both gazetted a list of threatened plants in their territory. The Department of Wildlife and National Parks (PERHILITAN) is reviewing the Wildlife Act 1972 to include certain plants for legal protection because of their importance to the survival of some animals. Other related legislations are also being reviewed to incorporate issues on biodiversity conservation.</li> <li>▪ Checklist for many PAs are available.</li> <li>▪ Populations of selected threatened dipterocarp species have been identified.</li> <li>▪ The first workshop on the threat assessment for Malaysian plant species held in June 2005.</li> </ul>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<ul style="list-style-type: none"> <li>▪ Proposal to undertake the threat assessment project at the national level has been submitted to the relevant authorities.</li> <li>▪ New state parks are in the process of being developed.</li> </ul>	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
The above proposal is being reviewed by the authorities.	
VI) Constraints to achieving progress towards the target	

Lack of skilled manpower and funding to undertake the project; lack of skilled manpower in natural resource management; lack of ground enforcement.

VII) Any other relevant information

No information relating to what the species are threatened. Our primary species are bred on 1) food crops 2) land races 3) medicinal plants 4) indigenous to the country

**Box XXXI.**

**Target 8. Sixty percent of threatened plant species in accessible *Ex-situ* 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

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

a) Yes

b) No

X

Please specify

Related to Strategy V in the National Policy on Biological Diversity. Proposal to strengthen the national ex situ collection of threatened plants have been submitted for the Ninth Malaysia Plan (2006-2010).

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

A small percentage of threatened trees have been established in arboreta and field genebanks. This includes agricultural crop species, several of which are foreign in origin. For the agricultural crop species, the primary aim of ex situ conservation is protection of the genetic resource and promotion of activities to broaden the genetic base. In general, the collections are considered small and are distributed around the country. As there is no definable national list of threatened plant species, collection from the wild for *ex situ* conservation has been on an ad-hoc basis.

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

Proposal to strengthen the national ex situ collection of threatened plants has been submitted for the Ninth Malaysia Plan (2006-2010)

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

Proposal to strengthen the ex situ collection of threatened plants have been submitted to the relevant authorities.

VI) Constraints to achieving progress towards the target

Lack of infrastructure and long-term management commitment towards maintaining the collection in good condition.

VII) Any other relevant information

Information on what species threatened will assign genebank to look into this.

**Box XXXII.**

<b>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.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
The genetic diversity of major socio-economically valuable plant species conserved in the existing network of parks, wildlife reserves & sanctuaries, and protected permanent reserved forests and field and seed gene bank. The Sustainable Forest Management has in place, criteria and operational procedures for harvesting of economically valuable plant species.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
In planning stage. Apart from the above, special management attention is given to species traded in the international market (see Target 11), as well as those heavily traded in the domestic market.	
III) Current status (please indicate current status related to this target)	
<p>MARDI: about 30 – 50%. Important Traditional vegetable &gt;70%, important fruits &gt;70%, rice &gt;70%, indigenous and rare fruit species 30%. A number of crop plants are conserved almost entirely in field and seed gene banks by MARDI. Rice (<i>Oryza sativa</i>) has the largest number of accessions conserved in seed gene banks. The fruit accessions include 16 commercial fruit species, these being the durian, banana, papaya, mangosteen, star fruit, jackfruit, cempedak, mango, rambutan, soursop, ciku, salak, lansium, guava, pineapple and some minor fruits. Almost all, with the exception of papaya, are conserved in field gene banks. A number of other institutions also conserve fruit tree species in field gene banks.</p> <p>Genetic diversity of commercially valuable tree species is conserved <i>in situ</i> in the various protected forests described in Target 6. The dipterocarp and non-dipterocarp arboreta, and the ethno-botanical collections and the bambusetum in FRIM, and the recently established Kepong Botanical Gardens, serve as field gene banks for various species. Because only a few trees per species are planted, the genetic diversity conserved is narrow. For example, 722 species of timber trees is maintained in a 600 ha of arboreta at FRIM. The Virgin Jungle Reserves in the PRFs and the Genetic Resource Areas (GRAs) in Ulu Sedili, Johor and Semengoh, Sarawak act as <i>in situ</i> conservation sites of selected tree species that are at risk of genetic erosion. Seed Production Areas (SPAs) are areas in natural forests in Peninsular Malaysia, Sabah and Sarawak wherein plus trees of both dipterocarp and non-dipterocarp species have been identified as seed sources. These also act to conserve genetic variability. Genetic diversity of selected commercial tree species is conserved to an extent through the seed stands and field trials that have been established in Peninsular Malaysia, Sabah and Sarawak.</p>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<ul style="list-style-type: none"> <li>▪ More activities on collection and conservation</li> <li>▪ FRIM: Research efforts are slowly shifting towards lesser-known socio-economically valuable plant species.</li> </ul>	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	

Related to Target 8
VI) Constraints to achieving progress towards the target
Related to Target 8
VII) Any other relevant information

**Box XXXIII.**

<b>Target 10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems.</b>	
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	
III) Current status (please indicate current status related to this target)	
Importation of various species of non-indigenous species for aquarium trade has exposed local ecosystem system to introduction of invasive species.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<p>a) IAS has been identified in the National Policy on Biological Diversity Strategy V : Strengthen and integrate conservation programmes. One of the major steps towards controlling the pathways of major potential invasive alien species is through the establishment of the Quarantine Act, 1976 and Plant Quarantine Regulation 1981. Listed under the Act are 7 most dangerous IAS which are being controlled under an extensive preventive and eradication programme carried out by the Agriculture Department throughout Malaysia. These dangerous IAS are Khapra Beetle (<i>Trgoderma granarium</i>), Golden Snail (<i>Pomacea canaliculata</i>), Papaya Ringspot Virus Disease, Banana Bunchy Top Virus Disease, <i>Cyperus papyrus/Cyperus japonica</i> (aquatic plants), <i>Rottboellia cochinchinnensis</i> (Weed) and Rice Blast Disease in Paddy field.</p> <p>b) In addition, the Department of Wildlife and National Parks (DWNP) is also conducting rapid field assessments and liaison with animal pet breeders for IAS presence in the forests particularly protected areas. Some of the species that are under the watch list of DWNP are water hyacinth (<i>Eichhornia crassipes</i>), mimosa (<i>Mimosa pigra</i>), golden apple snail (<i>Pomacea canaliculata</i>), walking catfish (<i>Clarias batrachus</i>), red deer (<i>Cervus elaphus</i>), Acacia (Acacia Mangium) and Talipia (<a href="#">Oreochromis mossambicus</a>) to name a few. The Department supports the implementation of the guiding principles the prevention (border control &amp; quarantine measures), introduction (both intentional and unintentional), and mitigation of impacts (eradication, containment &amp; control) of alien species that threaten ecosystems, habitats and species.</p> <p>c) Department of Fisheries(DOF) is implementing regulations on the import of non indigenous for aquaculture, where for an example piranhas import is banned.</p>	

V) Progress made towards target (please specify indicators used to monitor progress towards the target)
VI) Constraints to achieving progress towards the target
VII) Any other relevant information

**Box XXXIV.**

<b>Target 11. No species of wild flora endangered by international trade.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
Malaysia ratified the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Undertaking non-detrimental studies on species traded internationally in harvesting plans. Establishing annual quotas for such species.</li> <li>▪ The CITES administrative procedures are adhered to.</li> </ul>	
III) Current status (please indicate current status related to this target)	
see above.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Addressing minor shortcomings related to non-detrimental findings and national legislation.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
see IV	
VI) Constraints to achieving progress towards the target	
VII) Any other relevant information	

**Box XXXV.**

<b>Target 12. Thirty percent of plant-based products derived from sources that are sustainably managed.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Malaysian Criteria and Indicators (MC&amp;I) for sustainable forest management.</li> <li>▪ Ministry of agriculture is promoting Good Agriculture Practice (GAP) and sustainable production practices to ensure agro-systems are sustainably managed.</li> </ul>	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
<ul style="list-style-type: none"> <li>▪ Research activities in 8<sup>th</sup> Malaysia Plan (2001-2005) and 9<sup>th</sup> Malaysia Plan (2006-2010).</li> <li>▪ National Agriculture Policy</li> </ul>	
III) Current status (please indicate current status related to this target)	
About 10-20% of farmers practice and the number of hectare are increasing.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
More research, public awareness and farmers participation.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
<ul style="list-style-type: none"> <li>▪ Pesticide residue level on product</li> <li>▪ Number of organic farmers</li> <li>▪ Percentage products produce from organic farm</li> </ul>	
VI) Constraints to achieving progress towards the target	
Public awareness	
VII) Any other relevant information	

**Box XXXVI.**

<b>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.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
Research planned by MARDI in 9 <sup>th</sup> Malaysia Plan (2006-2010) to reduce genetic erosion and identify threats to PGRFA	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
8 <sup>th</sup> (2001-2005) and 9 <sup>th</sup> Malaysia Plan (2006-2010)	
III) Current status (please indicate current status related to this target)	
The general decline of plant resources has been mitigated by the establishment of protected areas such as national and state parks, and VJRs. Ex situ conservation of, for example, lesser grown and rare fruits, and of local edible herbs, though on a small scale by institutions, is helping to halt the decline of specific plant resources, and farmers are also being encouraged to cultivate these resources. Ornamental plants are being produced by tissue culture methods, and this is helping to take pressure off wild populations. Indigenous uses of local medicinal plants is better documented than similar uses of other plants, and some of these plants are being conserved ex situ, on a small scale, by institutions.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
1) Introduction of sustainable production practices	
2) Strengthening conservation	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
1. Diversity index	
2. No of plant left	
3. Number of species left	
4. Regular survey	
VI) Constraints to achieving progress towards the target	
1. Financial	
2. Human Resources	
VII) Any other relevant information	
Relevant work in MARDI related to this target: ethno botany, collection, conservation, database development.	

**Box XXXVII.**

<b>Target 14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
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	
In Malaysia, environmental education is being conducted by various organizations, including government agencies, private organizations and non-profit organizations.	
III) Current status (please indicate current status related to this target)	
<ul style="list-style-type: none"> <li>▪ MARDI organizes seminars &amp; conferences on biodiversity related subjects from time to time</li> <li>▪ In the Ministry of Education, environmental education is a concept to be taught across the school curricula but until today there is no subject identified or targeted for environmental education. Many independent education centers have been established.</li> </ul>	
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	
Lack of coordination and funding. The heavy school curriculum does not provide enough time for environmental education and the examination-oriented attitude is a constraint. The nature education centers established need to be assessed for effectiveness.	
VII) Any other relevant information	

**Box XXXVIII.**

<b>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.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
No specific national target but the principal approval granted to undertake inventory and taxonomic work in biological diversity will definitely increase the number of trained personnel required.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
FRIM: Principal approval obtained from the relevant authorities to undertake inventory and taxonomic work in biodiversity. Proposal awaiting funding approval.	
III) Current status (please indicate current status related to this target)	
Research in lower plant group has been lagging because there is little local expertise.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
These groups have been identified and prioritized.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
FRIM: Proposal awaiting funding approval.	
VI) Constraints to achieving progress towards the target	
Lack of skilled manpower, lack of commitment and funding	
VII) Any other relevant information	

**Box XXXIX.**

<b>Target 16. Networks for plant conservation activities established or strengthened at national, regional and international levels.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
Traditional ties with many national, regional and international agencies, established well before CBD.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
Malaysia will continue to enhance networking.	
III) Current status (please indicate current status related to this target)	
FRIM is in close contact with Herbaria around the world such as Kew Gardens, The Nationaal Herbarium at Leiden, the Netherlands, Arnold Arboretum in Harvard, regional herbaria such as Singapore Herbarium, Herbarium Bogoriense, and local herbaria such as the herbarium at Sarawak Forest Department and Sabah Forest Department. Malaysia is also involved in the Global Taxonomic Initiative.	
MARDI involves in REC-SEA, INBAP, AARNET, INGER mainly PGRFA networks.	
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	
Information sometimes does not reach the relevant agencies.	
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.

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### 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.  <sup>1</sup> 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	
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	
c) Yes, practical expressions have been developed for applying some principles of the ecosystem approach	X
d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach	

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

**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)	
c) Yes, formal cooperation (please provide details below)	X

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

Malaysia-Indonesia cooperation programmes such as Lanjak Entimau National Park, Sarawak (Malaysia) and Gunung Buntu and Karimun in Kalimantan (Indonesia), Sulu-Sulawesi Marine Ecoregion project under WWF and proposed Bay of Bengal Large Marine Ecosystem Project (BOBLME) among other regional cooperation projects which involve elements of Ecosystem Approach principles.

**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.

Activities which involve exchange of experiences, capacity building, technology transfer to assist with the elements of implementation of ecosystem approach

1) Workshop on the Status Biodiversity in Malaysia held in June 2005 organized by Forest Institute of Malaysia was to convene meeting of experts from Malaysia Forestry Departments, Wildlife and national Parks Department, State Parks manager, universities, NGOs and other foreign experts to continue collection, compilation and dissemination of case studies of the status biodiversity. It will be the basis of information to formulate the implementation of the ecosystem approach.

2) Workshop on management effectiveness assessment of National and State Parks in Malaysia rapid assessment which held in May 2005 was to convene meeting of experts from Forestry Departments, Wildlife and national Parks Department, State Parks manager, universities to study the status of national parks and state parks.

3) Roundtable dialogue Mountain Biodiversity June 2005 – participants from Town and Country Planning Department, Agriculture Department, Department of Irrigation and Drainage, Forest Department, Wildlife Department to develop proposals for refinement of the principles and operational guidance on mountain ecosystem.

**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.

- 1) Definition on Ecosystem approach varied and not holistically seen in the context of objective of establishment of national park or state park and marine parks those contribute complete ecosystem corridor and ecosystem approach principle. Redefinition of Ecosystem Approach based on the existing interconnected areas using different definition should be in place to avoid confusion. Clear example is the existence of National Park Endau-Rompin and the establishment of Mersing Isle Johor State Park as complete integrated system under Ecosystem Approach principle.
- 2) The establishment of National Physical Plan which economic and physical development in the country must considered environmental/biodiversity impact.
- 3) The Sustainable Forest Management (SFM) that is practiced by Forest Department in managing forest in Malaysia consistent with many elements of Ecosystem Approach defined by CBD. The vision of managing forest resources through an ecosystem approach is similar to the long-term goals of sustainable forest management in the overall context of sustainable development.

## 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.

Malaysia is actively involved either through bilateral, subregional or regional cooperation. Within ASEAN, a few regional working groups are formed to look into the conservation and sustainable use of biodiversity such as ASEAN Working Group on Nature and Biodiversity Conservation, ASEAN Working Group on Marine and Coastal Environment.

In addition, Malaysia over the years has assisted other developing countries through Malaysia Technical Cooperation Programme (MTCP). Through International Timber Trade Organisation (ITTO), Forestry Dept with Malaysian Timber Certification Council (MTCC) has come out with some new criteria indicators and from 2005, new Malaysia Criteria & Indicators will be used which is compatible with the Forest Stewardship Certification (FSC).

As for multilateral cooperation, Malaysia currently is actively involved in almost all biodiversity related MEAs such as CBD, Ramsar Convention and CITES. Malaysia will continue to play her part in the issue of conservation and sustainable use of biodiversity.

**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.**

ASEAN in which Malaysia as one of member country have formulated some agreements such as ASEAN Agreement on Nature and Natural Resources, ASEAN Agreement of the Establishment of ASEAN Centre for Biodiversity and a few more. In addition, ASEAN held its first ASEAN Symposium on Protected Areas in 2004.

Philippines, Brunei Darussalam and Malaysia together with WWF undertook a regional project titled Conservation Plan for Sulu-Sulawesi Marine Ecoregion which expresses the aspiration of the ecoregion's stakeholders to conserve its biodiversity.

**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.**

At the National level, several policies and legislatives framework are partly in place. For example, Malaysia has already several policies related to biodiversity conservation and sustainable use such as National Policy on Biological Diversity, National Forestry Policy, National Policy on Environment and National Policy on Wetlands. The Biosafety Bill is being updated before it is tabled to Parliament whilst the Access and Benefit bill is still being finalised. Furthermore, the Government is in the process of amending the Wildlife Protection Act with an aim to further consolidate it.

In addition, some of the states in Malaysia such as Sabah and Sarawak have already its own legislation to protect its biodiversity through Biodiversity enactment and Conservation enactment. In Malaysia, biodiversity and land is under the jurisdiction of the states. The aim to have a uniform legislation is to ensure equal access and benefit in using biodiversity throughout the country and also the use of her indigenous knowledge on biodiversity use.

Through the 3<sup>rd</sup> National Agriculture Policy, the Government of Malaysia is promoting integrated pest control (plant varieties act) enlarged to good agriculture practice and organic farming. This has helped in ensuring that agrobiodiversity is manage and utilized sustainably.

The recently launched National Policy on Biotechnology (April 2005), sets the among others the need for the sustainable utilization of Malaysia rich biodiversity for new wealth creation.

**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.

The bilateral, regional and multilateral cooperation increase the regional biodiversity management capacity which will benefit Malaysia and other countries in this region. The increase of capacity in biodiversity management will directly contribute in achieving the convention strategic plan especially Goal 2 and Goal 11 in 2010 target which parties have to improve financial, human, scientific, technical and technological capacity to implement Convention.

To further strengthen Malaysia's contribution to the 2010 targets as well as the MDG; among others the Forestry Policy was reviewed to include a more holistic approach on biodiversity management and conservation. The policy envisages increasing areas of forest reserve including its sustainable use as to complement the action plans of the National Policy on Biological Diversity. For example the Forestry policy was used as a basis for the recent National Forestry Council meeting to gazette forest areas above 1000m of sea level as areas cannot be logged and to also to gazette more water catchments areas.

In Malaysia's efforts to conserve and manage our unique and rich marine biodiversity more than 40 islands have been gazetted as marine park. Shortage of funds, man power and expertise are identified to be the major constraints in achieving our goals set forth in this aspect.

## 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)	
d) Yes, comprehensive strategies, plans and programmes are in place (please provide details below)	<b>X</b>

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

Malaysia has outline strategies and plan of actions to ensure her biodiversity is conserve, utilize in sustainable manner and also the benefits arising from the use of her biodiversity is shared in a fair & equitable ways in the National Policy o Biological Diversity (NPBD). This is in line with the objectives of the Convention. NPBD has 15 strategies and 87 plan of actions to meet the vision of transforming Malaysia as a World Centre of Excellence in Conservation, Research and Utilization of Tropical Biological Diversity by the year 2020.

Department of Forestry has further enhanced existing criteria and indicators in the new Malaysia Criteria & Indicators (MC&I) for forest production which is Forest Stewardship Certificate (FSC) compatible. This new MC&I is expected to be ready by mid-2005. In addition to the NPBD, the National Forestry Policy, Environment Policy, 3<sup>rd</sup> National Agriculture Policy and the latest , National Wetlands Policy were formulated to ensure that the environment is clean and healthy, but also the biodiversity is managed, utilized and use sustainably.

**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	<b>X</b>
c) No, but measurable targets are in advanced stages of development	
d) Yes, relevant targets are in place (please provide details below)	
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.

Malaysia has set a target of at least 50% of tree and forest cover in perpetuity. Several of important under-represented habitats still need to be addressed and negotiations with relevant State Governments are still ongoing. By the end of 2004, Malaysia has at least 70% tree and forest cover.

**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)	<b>X</b>

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

The 15 strategies and 87 plans of action outline in the NPBD.

There are also priorities set by respected agencies

- i. MARDI: in the process of priority the plan of actions for the conservation and sustainable utilization of plant Genetic Resources conservation & utilization. The plan of actions were based on FAO Global Plan of action for PGRFA.
- ii. Forestry Department: planning to increase the number of Virgin Jungle Reserve (VJR) in the mountainous areas (1000m and above) and more water catchments areas will be gazetted.
- iii. Forest Research Institute (FRIM) is designated s the country's focal point for all inventories of flora and fauna program. A national program to inventorize poorly known groups of biological organisms such as lower plants and insect diversity in Malaysia
- iv. For Fisheries Department, the implementation of National Policy on Intergrated Costal Zone Management (ICZM) and establishment of national focal point for IZCM, strengthening of cooperation between agencies assigned to deal with marine affairs will provide a better platform to implement biodiversity strategies and action plan. Multi-sectoral input, refining of present regulations and laws, institutional arrangement, financial backup and state – government direct involvement in biodiversity programme are good tool for a better livelihood and ecosystem management. To achieve the objectives, more focus programme are in place at sectoral level.

**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)	X
c) Yes, in major sectors (please provide details below)	
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.

At the moment, the integration of the conservation and sustainable use of biodiversity is rather sectoral. For example, the management of forest in the country have evolved towards its goal of Sustainable Forest Management. The new Malaysian Criteria, Indicators, Activities and Standards of Performance for Forest Management Certification (MC&I) will be use in 2005. This will ensure Malaysia's forests will be managed in a sustainable manner taking into consideration the economic, social, environmental and conservational aspects.

Malaysia is in the process of formulating Access and Benefit Sharing legislation. At this moment guidelines from Economic Planning Unit is used as administrative tool for access and benefit sharing mechanism.

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

a) Yes	X
b) No	

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	Several areas of importance to migratory birds has been gazetted as protected areas such as Kuala Gula in Perak, Tanjung Tuan in Melaka bird Sanctuary, Kota Kinabalu Bird Sanctuary.
(c) Minimizing or eliminating barriers or obstacles to migration	In year 2005, the Federal Government has directed all states not to develop mangrove areas. This ecosystem has many important ecological functions such as breeding areas for marine species, feeding ground for migratory birds, flood mitigation, preventing coastal erosion and also as a waves breaker especially during tsunami. Besides its ecological function, this ecosystem also provides direct economic benefit to communities who live in this areas and sustainably use the resources.
(d) Research and monitoring for migratory species	
(e) Transboundary movement	National and States legislation does provide protection for migratory species such as turtles, elephants and other mammals that move between countries. There is also enforcement through The Wildlife

Department (PERHILITAN) to protect migratory birds, Elephant and other large mammals

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

- |  |  |
|--|--|
| (a) The extent to which your country addresses migratory species at national level |  |
| (b) Cooperation with other Range States since 2000                                 |  |

### 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                 | X |
| c) Yes, some projects have been implemented (please provide details below) |   |

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

A few CDM projects related to biodiversity conservation and sustainable use are underway on how to mitigate the climate change.

**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   | X |
| b) No, but relevant mechanisms are under development                    |   |
| c) Yes, relevant mechanisms are in place (please provide details below) |   |

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.

In marine sector there was an isolated report on incidence of coral bleaching in 1997 is available but no intensive surveys were conducted. Nevertheless, continued coral monitoring and mapping is in place. This will contribute to 2010 targets and MDG. Main constraint in implementing coordinated work on Biodiversity and Climate Change was because of the lack of fund, man power and expertise in this new emerging area.

#### Box XLII.


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

- outcomes and impacts of actions taken;
- contribution to the achievement of the goals of the Strategic Plan of the Convention;
- contribution to progress towards the 2010 target;
- progress in implementing national biodiversity strategies and action plans;
- contribution to the achievement of the Millennium Development Goals;

f) constraints encountered in implementation.

As stated above Malaysia has outline strategies and plan of actions through the National Policy of Biological Diversity (NPBD) which has 15 strategies and 87 plan of actions to ensure her biodiversity is conserve, utilize in sustainable manner and also the benefits arising from the use of her biodiversity is shared in a fair & equitable ways in. This is in line with the objectives of the Convention. This provided institutional framework which is very important in achieving Strategic Plan of the convention and 2010 target.

## 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.

As a country rich in biodiversity, Malaysia is committed to ensure that her biodiversity are utilized in line with the CBD's three objectives. In doing so, the need to identify components of biodiversity at all levels becomes extremely importance, but, as a developing country, the financial implications in identifying the components of biodiversity at all levels are sometimes the limiting factor and has to be done in a phases.

However there are some routine monitoring processes undertaken by some of Departments and institutions :

- i. Malaysian Agricultural Research and Development Institute (MARDI): identification studies on plant, microbe, arthropod (genetic and species level)
- ii. Sabah Parks & Fishery Department have monitoring marines turtle program
- iii. Wildlife Department carries out "species" specific inventories once every 5 years. Orangutan state-wide surveys shows that 60% of population is outside totally protected areas.
- iv. Forestry Department, Sabah Parks and Fisheries Department - inventory at various levels done periodically, on average 10 year-span and monitoring using GIS.
- v. Department of Fisheries : Monitoring programs on fish, invertebrate, benthic, corals, seagrass, crustacean, macro-invertebrate, bivalves
- vi. University Malaya: monitoring and identification studies on seaweed, marine and mangrove microbe, micro algae, actinomycetes and phototropic bacteria from marine, phototrophic bacteria for aquaculture, investigation on microbial abundance and ecology in mangrove, marine fungi
- vii. University College of Science and Technology Malaysia (KUSTEM) : monitoring and identification studies on Benthic, coral, sponge, seahorse, gastropod, copepods , marine bacteria/ microbe , marine plankton including species causing HAB.
- viii. University Putra Malaysia (UPM): monitoring and identification studies on benthic, sea grass, mollusk, microbe and fish.
- ix. FRIM: on-going programmes to document the tree flora of Sabah & Sarawak, flora of Peninsular Malaysia and long-term conservation monitoring of threatened plant species; genetic conservation on selected threatened tree species; inventory for fungi, insects and herpetofauna will begin in 9<sup>th</sup> Malaysia Plan.

**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)	
b) at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group)	At least 5 Big mammals (Wildlife Department) couple hundred of tree species (Forestry department) and several critically threatened tree species (FRIM)
c) at genetic level (please indicate number and focus of monitoring programmes ) several tree species of economic importance and threatened species requiring conservation attention (FRIM)	50 species of agriculture plants

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


There is initiative focusing on application of DNA for identification and genetic conservation

**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)	
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.


- a)** Department of Fisheries monitoring of HAB species (redtide) and species in ballast water are being considered, pollution study on the selected aquaculture area, monitoring of trashfish landing of trawl and volume use in aquaculture.
- b)** FRIM has an on-going project to monitor threatened plant populations in areas outside TPAs. Work on the threat assessment on Malaysian plant species has been initiated.
- c)** MARDI : study the effect of land development to biodiversity of plants and microbes. MARDI also conduct monitoring and peatland degradation.
- d)** Sabah state Department of Agriculture monitoring eed and giant mimosa under its quarantine section

**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	X
c) Yes, some mechanisms or systems are being established	
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.

Currently inventories are carried out by Government departments, agencies, research institutes and institutes of higher learning are in a very sectoral basis and data are institutional-based. The government recognized the need to have a one stop inventories for flora and fauna and is currently looking into how this can be expedited. In the 9<sup>th</sup> Malaysian Plan there is a proposal to integrate the various sorts of biodiversity databases held at relevant agencies which will further value add the National Clearing House database as a one stop portal for Biodiversity.

**23.**  Does your country use indicators for national-level monitoring of biodiversity? (decision III/10)  
**Q 41 SNR**

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.

Currently monitoring of biodiversity is very sectoral based where individual agency carry out this exercise and database is retained by them. For example MARDI uses some indicator such as diversity of soil microbes and diversity index of certain species.

**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.

Malaysia recognizes the need to integrate the identification and monitoring mechanism at the national level which are now done by individual agencies. The National Inventory Biodiversity project in 9<sup>th</sup> Malaysia Plan (2006-2010) will ensure the establishment of identification and monitoring mechanism at the national level.

### 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  |   |
| b) No, but a plan is under development                                     | X |
| 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.

Limited taxonomic works were done by various agencies and universities. Compilation and data gathering and confirmative identification are still needed in many cases. Completion of sampling for taxonomic work for marine organisms for example still required and be based on spatial basis. Limiting factors in the work progress are the lack of funds to conduct research and inventory, the difficulties in getting sufficient people into the work force.

**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.

a) Establishment of Herbarium in Forest Research Institute of Malaysia (FRIM), Sabah Forest Research Centre, Sarawak Forest Research Centre and a network of smaller herbarium based at other research institutions and institution of higher learning. Establishment of Zoological Museum in some states.

b) Entomological Museums based at FRIM, National University of Malaysia (UKM), Sarawak Museum and Sabah Museum, University Malaysia, Sarawak (UNIMAS), University Malaysia Sabah (UMS).

c) Borneo Marine Research Institute – University Malaysia Sabah (UMS), Taxonomic room for marine fish and new repository under 9th Malaysia Development Plan, UMS has established coral exhibition/display and taxonomic room.

d) MARDI's current herbarium is being strengthened.

#### Among on going taxonomic studies done by institutions in Malaysia (data provided by FRIM)

institute	plants	bryo- phytes & algae	fungi & lichen	mam- mals	reptiles & am- phibians	birds	Fwater- fish	marine- fish
Borneo Marine Res.Inst, UMS (Sabah University)	58	95	0	0	13	0	0	149
Deoartment of Agriculture (DOA)	407	0	0	0	0	0	0	0
DoA, Quarantine section	30,000	0	0	0	0	0	0	0
Department of Fisheries (DoF)	60	102	0	2	0	0	348	1,147
FRIM	250,000	0	1,360	0	0	0	0	0

Jabatan Muzium Sabah	7,624	0	124	3,519	5,194	3,628	2,893	272
KUSTEM	0	0	0	0	15	0	500	100
MARDI	11,000	0	1,100	0	0	0	0	0
Marine Research, Sabah Parks	0	32	0	6	5	0	0	6
Department of Wildlife (PERHILITAN)	0	0	0	3,655	1,530	500	59	0
Sabah Forest Department	250,000	480	0	0	0	0	0	0
Sabah Parks	27,842	54	1,174	1,821	7,920	2,527	2,652	0
Sarawak Biodiversity Centre	3,839	93	0	94	441	913	0	0
Sarawak Forest Department	250,000*	0	0	0	0	0	0	0
Sarawak Museum	0	0	0	12,000	3,400	12,000	4,000	1,500
National University (UKM)	72,000*	0	0	coll.	coll.	coll.	Coll.	coll.
University Malaya (UM)	65,000	9,000	0	0	0	0	Coll.	coll.
University Sarawak (UNIMAS)	0	20	2,500	200	1,600	65	0	0
Marine Park Section		coll	coll.	coll.	coll.			coll.
UPM	2,168	0	0	0	0	0	0	0
	<b>647,998</b>	<b>9,876</b>	<b>6,258</b>	<b>21,297</b>	<b>20,118</b>	<b>19,633</b>	<b>10,452</b>	<b>3,174</b>

coll. = collections in the process of cataloguing/determined

\* estimates

**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.

i) FRIM will increase number of taxonomists working in the institute. The best kind of training is on-the-job type and this provided in the programmes documenting the tree Flora of Sabah & Sarawak and the flora of Peninsular Malaysia.

ii) IPGRI from time to time provides free training to MARDI staff on molecular taxonomy.

iii) In house taxonomic training in Department of Fisheries for field officer for fish species and plankton.

iv) Courses on taxonomy at National University of Malaysia (UKM) and Malaya University.

**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.\***<sup>2</sup> 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	X
c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments)	
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.

Regional work in fisheries sector for example confined to endangered species such as turtle, shark, and WWF Malaysia on whale

**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.

Most institutions (such as MARDI, FRIM and Department of Fisheries) stated the human resource capacity and appropriate funding as most important need. MARDI for example stated requirement of at least 5 taxonomists.

**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
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)	

<sup>2</sup> 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.

Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties.

Asian Development Bank funded and IRRI funded regional projects in MARDI. And a few programs under Department of fisheries such as SEADec fish and turtle taxonomic program. FRIM has collaboration with major foreign herbaria to provide access to taxonomic information.

**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	
b) Yes, for forest biodiversity (please provide details below)	X
c) Yes, for marine and coastal biodiversity (please provide details below)	X
d) Yes, for dry and sub-humid lands (please provide details below)	
e) Yes, for inland waters biodiversity (please provide details below)	X
f) Yes, for mountain biodiversity (please provide details below)	
g) Yes, for protected areas (please provide details below)	X
h) Yes, for agricultural biodiversity (please provide details below)	X
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.

Most of stakeholder agencies such as Wildlife Department, Forestry Department, Fisheries Department, Department of Agriculture had already incorporated taxonomy work in their programs and activities. For example MARDI existing taxonomists are working on plant and arthropod. A number of new plant taxonomists have and being recruited for agro biodiversity. Department of Fisheries is focus on work and refines the existing taxonomy groups including endangered. New species are also targeted especially for coral and other organisms for potential bio-prospecting. Department of Agriculture is embarking on training program of taxonomy surveillance of specific exotic pest species.

**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	
b) Yes, for access and benefit-sharing (please provide details below)	
c) Yes, for Article 8(j) (please provide details below)	X
d) Yes, for the ecosystem approach (please provide details below)	X
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.

There is always collaboration between related agencies in the taxonomic work. The recent collaboration between agencies was on biodiversity assessment under peat ecosystem. Department fisheries with collaboration with some universities are working on bioindicators and invasive HAB taxonomy and monitoring studies.

The establishment of Sarawak Biodiversity Centre was to look into taxonomic studies for medicinal and conservation purposes on plants that are used by local people in Sarawak.

## **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.

- a) MARDI: ongoing project on the potential of on-farm conservation complementing ex situ and other in situ conservation.
- b) Forestry Department: guidelines on Malaysia Criteria and Indicators (MC&I), impose specific cutting limit and residual stand and also conserve vegetation ecosystem for production forest. And leaving behind fruit trees. Sustainable Forest management (SMP) requires inventories to be conducted every 10 years.
- c) Wildlife Department (PERHILITAN): National Physical Plan identifies the environmental sensitive areas (ESA) wildlife corridors and connectivity between protected areas in the country.

**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.

- Malaysia has already a legislation to protect threatened fauna species which is Wildlife Protection Act and in the process of further consolidating its provisions. As for the flora especially extraction of timbers are regulated thro' the National Forestry Act and also the Malaysia Timber Industrial Board Act.
- At the moment, Ministry of Agriculture and Agro-based Industries through Department of Fisheries and Department of Agriculture are in the process of formulating legislations to address the gaps on flora, marine and inland water wildlife species.
- There are also Fisheries Act 1985 - Prohibition of Fishing in certain Areas-Regulation 1983, Establishment of turtle sanctuary Order 1991, Establishment of Marine Parks, its control & protection, Environmental Quality Act- Impact Assessment- Order 1987 on logging in state park, national marine parks, conservation of mangrove swamps for industrial, housing or agriculture use.

**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.

- a. Ministry of Tourism, National Ecotourism Plan identifies adverse impacts on biodiversity and ways and means to mitigate to a number of guidelines (25).
- b. Department of Forestry has produced guidelines to harvest, to construct, to fell trees, sensitive areas (slope more than 35 deg), logging, number of machinery per hectre area.
- c. Department of Town and Country Planning is to determine the capacity for ecotourism in Pulau Redang, Pulau Tioman, Mersing area.
- d. Department of Fisheries: Study and management number of tourists is projected through the carrying capacity study done for specific marine park and no overnight stay allowed e.g Pulau Payar Marine Park, in Sipadan temporary closing was adopted before resort operation no longer allowed.

**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

Numerous legislations, policies, guidelines that are already implemented is to show that Malaysia commitment to achieve 2010 target especially on goal 1 (Promote conservation), Goal 2 (promote the conservation of species diversity, goal 4 (promote sustainable use and consumption). It will also help directly and indirectly in achieving goals of the Strategic Plan of the Convention, Millennium Development Goals especially in poverty reduction and national biodiversity strategies and action plans.

### 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.

Forestry department is in the process to increase the number of Virgin Jungle Reserves in the mountainous areas and mangroves forests. Existing number of fisheries protected areas is also expected to increase.

**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	
c) Yes, limited actions taken (please provide details below)	
d) Yes, significant actions taken (please provide details below)	X

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

Among recently establishment of National Parks adding to the existing national Parks:-

- 1) Establishment of Pulau Pinang National Park (2,562 ha) in 2002
- 2) Establishment of Royal Belum State Park, Perak (117,500 ha) in 2003
- 3) Establishment of Gunung Ledang State Park (8,655 ha)
- 4) Establishment of Bukit Tiban National Park, Sarawak (8000 ha) in 2000
- 5) Establishment of Maludam National Park, Sarawak (43137 ha) in 2000
- 6) Establishment of Similajan National Park, Sarawak (1932 ha) in 2000
- 7) Establishment of Rajang National Park, Sarawak (9374 ha) in 2000
- 8) Establishment of Sama Jaya Nature Reserve, Sarawak (37.916 ha) in 2000
- 9) Establishment of Semenggoh Nature Reserve, Sarawak (653 ha) in 2000
- 10) Establishment of Bukit Hitam Nature Reserve, Sarawak ( 147 ha) in 2000
- 11) Establishment of Bukit Sembiling Nature Reserve, Sarawak (101 ha) in 2000
- 12) Establishment of Sibuti Wildlife Sanctuary. Sarawak (678 ha) in 2000
- 13) Establishment of Perlis State Park, Peninsular Malaysia (5015 ha)
- 14) Proposed Selangor State Park (113000 ha) in 2003

**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)	
e) Yes, significant actions taken (please provide details below)	X

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.

- i. Ongoing consultation of the establishment of East Pahang Wetlands, Pahang, Klias Peninsular, Logan Bunut, Taman Negara Pulau Pinang, Peninsular Malaysia (80,000 ha)
- ii. Establishment of Ramsar Sites at Pulau Kukup (2536 ha), Tanjung Piai (6802.2 ha) and Sungai Pulai (6750 ha) in Johor, Peninsular Malaysia
- iii. Establishment of Mersing Islands State Park
- iv. Action taken, NPP identified three large forest areas comprising the main range, Endau-Rompin, Taman Negara and its connectivity among these three areas by way natural corridors. Ongoing consultation with the states.
- v. Establishment of Sabah Water Catchments Management Plan, Kinabatangan flood plain management plan / rehab, peat swamp conservation (UNDP/GEF)

**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	
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)	X

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

- Creation of a new Ministry of Natural Resources Environment in 2004 which taken together all biodiversity related departments such as Department of Wildlife and National Parks, Forestry Department of Peninsular Malaysia and Marine Park Division under one Ministry could strengthen the integration of the protected areas.
- The implementation of existing National Policy on Biological Diversity and National Wetlands Policy could further strengthen the integration of the protected areas.
- The National Physical Plan (NPP) has identified localities of forest areas, seascapes, environmental sensitive areas, corridors to ensure connectivity with major forest areas in Peninsular Malaysia. The NPP forms the core of land use planning in Malaysia followed by State Structure Plans and District Structure Plans. This *modus operandi* will be applied to East Malaysia which includes Sabah and Sarawak in the near future.

**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)	X
d) Yes, EIA guidelines are applied to all relevant projects or plans (please provide details below)	

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

- EIA for logging in area adjacent to state park, national park and marine park, Construction of fishing harbour and expansion of harbour, development and construction of fishing harbour are apply to area in Marine Park. EIA also required for the construction of tourism related facilities.
- EIA is needed for 19 prescribed activities under EQA, for example forest clearing (conversion) or land use change. However the revision of the EIA guidelines to improve sustainable forest management is required.

**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.**

- Basically, the legislative and institutional gaps are related to Federal-State legislation. In Malaysia land and natural resources are state matters and in many cases are beyond the purview of the Federal legislation. To address this barrier, Malaysia has established National Councils which are usually chaired by the Hon. Prime Minister to overcome some of the impediments by collective agreement. Examples of these National Councils are the National Council on Biotechnology and Biodiversity, National Land Council, National Forestry Council and the newly formed National Physical Planning Council.
- Establishment of NRE in 2004 will further strengthen the management and conservation on natural resources in the country. New legislations are in the pipeline for uniformity between states in the country. Synergies between biodiversity related department is being strengthened

**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	
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)	X

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

In cooperation with the Danish Cooperation on Environment and Development (DANCED), Malaysia has conducted various capacity needs assessment and capacity building programmes. One major outcome of these projects is the Master Plan for Capacity Building and Strengthening of Protected Areas System in Peninsular Malaysia. The follow up of this project is the formulation of Management Plan for the Krau Wildlife Reserve. Both of these projects provide the impetus for institutional and human resource development in many conservation related organizations both governmental and non governmental through direct and non direct capacity building efforts such as short term training and consultancies.

**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)	
d) Yes, relevant plan is being implemented (please provide details below)	X

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

- The Malaysia Plan provides for the development budget for protected areas. For example the 8<sup>th</sup> Malaysia Plan (8MP) (2001-2005) which is a 5-year development plan in Malaysia, the Malaysian Government has allocated some RM70 million (US18.42 million) for protected areas management such as boundary surveys, trail development for ecotourism and habitat improvement.
- Additionally, there is also an annual budget provided by federal government to manage these protected areas such as salaries and emolument and operating costs. Some protected areas charge entrance fees. However these only cover a fraction of the operating costs.
- Sabah forestry has smart partnership with private sector for example Sabah Wildlife Conservation area leased to private sector Forestry – smart partnership with private sector on FMU. In addition, some Wildlife Conservation areas are leased to private sector for example there is conservation fee for bird nest harvesting.

**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	
c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below)	<b>X</b>
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.

The Statistics Department has come up with questionnaires to determine extent of each protected area, management objectives, biodiversity inventories, availability of maps, ecological research, genetic resources, management plan, zoning, boundaries, protection of natural resources, local community participation, formal and non formal education, ecotourism potential, political support, benefits to local peoples, budget, personnel and training, equipment, role of external support, access to protected areas and population trends of biological resources.

**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.


- **Outcomes & impacts:** The present trend of the Government of Malaysia has been towards the establishment of more protected areas arising from the Tsunami disaster. The Hon. Prime Minister, Datuk Seri Abdullah Ahmad Badawai has called for more mangrove forests, beech forest and coastal forest is protected acting as natural barriers to tidal waves. He has reaffirmed this commitment during the International Conference on Biodiversity on 24<sup>th</sup> January 2005 in Paris where he said that Malaysia will continue to treasure its natural resources, primary forests, pristine beaches, precious rivers and tributaries – all of these must be conserved and protected.
- **Strategic Plan of the Convention:** Malaysia is committed to the implementation of the program of work (POW) for protected areas and has been looking into ways and means to identify, proposed and gazette more protected areas nationally and regionally in the form of National Parks, Nature reserves, wildlife sanctuaries and transboundary national parks.
- **2010 Target:** Most of the totally protected areas in Malaysia are managed for the preservation of both flora and fauna that assist in halting the loss of biological diversity via in situ and ex situ conservation. Malaysia believe in setting aside representative ecosystems by establishing more national and state parks and captive propagation of both threatened and endangered species. Towards this end, there has been considerable success in the captive propagation of seladang (*Bos gaurus*) and sambar deer (*Cervus unicolor*) as well as commercial timber species, endangered plants especially orchids, traditional medicinal and ornamental plants through tissue culture.

- National Biodiversity Strategies and action plans: As far as protected areas are concerned, significant progress has been made in the implementation of national strategies and action plans. In the National Policy on Biological Diversity (NPBD), protected areas are recognized as important sites for in situ conservation for ensuring ecological stability, scientific, education and recreation values and preservation of the biological heritage of the country. The NPBD has 15 strategies and 87 action plans. A total of 8 action plans are related to protected areas management such as in situ conservation, management plans, minimum viable populations, sustainable use and legislation.
- MDG: The establishment of protected areas has contributed to the achievement of MDG particularly in poverty eradication amongst indigenous local communities through their participation in the conservation of natural resources i.e. ecotourism. Most of the indigenous local communities are employed as ecotourist guides, porters and mountain climbing guides in Taman Negara National Park and several wildlife reserves in Malaysia. The Hon Prime Minister, Datuk Seri Abdullah Ahmad Badawi is committed in the achievement of MDGs particularly in ensuring environmental sustainability and is supportive of the establishment of national and state parks.
- Constraints: Malaysia has identified more biodiversity projects in and around protected areas that encourage local communities' participation in the 9<sup>th</sup> Malaysian Plan (2005-2010) to address the issue of low local community involvement in conservation projects. We are also encouraging more strategic involvement of the private sector in conservation projects through PETRONAS (local petroleum company), BP, SHELL, and HSBC amongst others.
- In the periphery marine parks where fishing are allowed reports by fishers that the abundance of good quality fish were observed, inhabitat marine park island provide opportunity for income from tourism industry (boat, guide, diving, snorkeling) and park rangers without impairing fishing opportunities.

### 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	
c) Yes, some alien species identified and tracking system in place	X
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.

Golden Apple Snail (introduced as source of food, but a threat to rice cultivation). Acacia was introduced to green up the area. But seen as a nuisance, and may overtake species especially in degrade areas. However there were no comprehensive risk analyses made on most of the species identified because it is costly to control the uncontrollable spread especially on species like golden apple snails.

**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.

Established quarantine procedures and import permits and complying with phyto-sanitary requirement. Inspection at entry points, post entry quarantine and proper risk analysis for importing species. Other measures include pre-clearance procedures. Monitoring post importing is very minimal.

**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	X
c) Yes, regional and/or subregional cooperation	X
d) Yes, multilateral cooperation	X

**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	X
b) Yes (please provide details below)	

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

<b>50. Has your country identified national needs and priorities for the implementation of the Guiding Principles? (decision VI/23)</b>	
a) No	
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)	X
Further comments on the identification of national needs and priorities for the implementation of the Guiding Principles.	
<p>There is an Alien Invasive Species Committee that is now anchored by Department of Agriculture and Department of Fisheries to identify and manage invasive species that threatened domestic crops and fisheries sector. This is to protect national crops against invasive alien species. The committee will be expanded to include Forestry Department, Wildlife Department and other related agencies to identify and manage species that threatened to overall national biodiversity.</p>	

<b>51. Has your country created mechanisms to coordinate national programmes for applying the Guiding Principles? (decision VI/23)</b>	
a) No	
b) No, but mechanisms are under development	
c) Yes, mechanisms are in place (please provide details below)	X
Further comments on the mechanisms created to coordinate national programmes for implementing the Guiding Principles.	
<p>Department of Agriculture (DOA) work alongside with the customs, police, relevant institutions and the Ministry of Natural Resources and Environment (NRE) for example in activities such as importing oil palm seeds from neighboring countries. Eradication of pest is supported by the ACT. Import of wildlife requires permit from Wildlife Department. There is still a need to harmonization of procedures especially in marine sector for quarantine, export/ import and Phyto Sanitary Programme (PSP) and aquaculture guideline needed.</p>	

<b>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)</b>	
a) No	
b) No, but review under way	
c) Yes, review completed and adjustment proposed (please provide details below)	
d) Yes, adjustment and development ongoing	X
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.	
<p>Plant quarantine Act 1976 regulation is being reviewed and proposed to table in 2005. The purpose of this regulation is to streamline alongside the international obligation and requirement.</p>	

**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	
c) Yes, mechanisms are in place (please provide details below)	X

Further comments on cooperation between various sectors.

There is already existing cooperation between DOA, Police, customs, NRE and relevant government agencies.

**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	X
c) Yes, relevant programmes are in place (please specify below the measures taken for this purpose)	

Further comments on collaboration with trading partners and neighboring countries.

Regional training on pest risk analysis by FAO-IPPC.

**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	X
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)	
d) Yes, comprehensive activities are being undertaken (please provide details below)	

Further information on capacity development to address threats of invasive alien 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	
b) No, but relevant measures and policies are under development	
c) Yes, some measures, policies and tools are in place (please provide details below)	X
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.

Policies to promote activities to reduce the threat of invasive species are stated in National Biodiversity Policy. However only regulatory measures are being undertaken at this point by DOA. Department of Fisheries is looking at the initial stage that focuses only on basic information of IAS.

**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.

The expansion members in Alien Invasive Species National Committee which will include biodiversity related agencies to the existing member agencies (Department of Agriculture and Department of Fisheries) will further strengthen the national capacity and capability on broader issues related to invasive alien species.

**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

<b>58.</b> 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	
b) No, but support to relevant studies is being considered	X
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.	
There are Biodiversity related laws in two states Sarawak and Sabah which give some provision on status, trend and threats related to knowledge, innovations and practice of indigenous local communities in Sabah and Sarawak. There is also existing ethno-botany project in Sabah park and a few other state parks which could provide information on status and trends.	

### Akwé:Kon Guidelines

<b>59.</b> 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.	

<b>60.</b> 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	
b) No, but a review of the Akwé: Kon guidelines is under way	
c) Yes, to some extent (please provide details below)	X
d) Yes, to a significant extent (please provide details below)	
Further information on the projects where the Akwé:Kon Guidelines are applied.	
This guideline are also referred to among other in developing our national legal framework on Access and Benefit Sharing	

## 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	
c) Yes, some measures taken (please provide details below)	X
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.

Among Community projects which involves participation local communities: -

- a) Sabah state government - actively involves local communities in planning, seeking inputs in management
- b) Tagal system where village community look after fish in the river, where harvesting is allowed during certain periods (based on customary law / practice)
- c) Crocker Range Park Management preparation involved local communities
- d) Forestry Department – Community Forestry Project – Community-based forest management
- e) Environmental Local Plans – has component on public participation
- f) Wildlife Department – participation of local communities in Krau Wildlife reserve and Tasik Bera Ramsar site. There is lower segama community participation in monitoring wildlife movement.

**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.

Although no clear guidelines provided, the policy of government is supportive in allowing communities participation in conservation and sustainable development. Land Ordinance (caption 68) 1968 has some elements on native customary Rights. Wildlife Department includes participation of local people in Krau Management Plan and Integrated management plan for Tasik Bera. Department of Fisheries has initiated CBRM project in Langkawi, some Fisheries Authority (LKIM) project spearhead by Local Fishermen Association

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

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.

### 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	X
c) Yes	

**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	X
b) Yes (please provide details about the outcome of meetings)	

Further information on the outcome of regional meetings.

**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.

- a) Local community employment as para taxonomist at Krau Management Plan and integrated management plan for Tasik Bera and also ecotour guide
- b) Planning on Ulu Padas community based project.
- c) Community Forestry Project uses funds and technical know-how provided by Forestry Department.
- d) Government funding on technical know-how to implement Tagal system.
- e) Langkawi Community Base Fisheries Management (DOF) and Under "Aware" Project in Genting Highland to promote sustainable tourism


**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.

There are agencies such as Sarawak Biodiversity Centre (SBC) which are working on medicinal plants that are used by local tribes. Overall activity of SBC is to facilitate the documentation of traditional knowledge among the indigenous communities in state of Sarawak as stipulated by the Sarawak Biodiversity Centre (Amendment) Ordinance 2003 – traditional Knowledge Documentation Programme which meets action plan of establish an inventory of traditional knowledge on the use of species and genetic diversity in Strategy I of National Biodiversity Policy and target I of 2010 targets. Its main objective is to document this traditional knowledge in state of Sarawak which could help to protect it. SBC also undertakes activities to facilitate participation of local communities in traditional sustainable use of biological resources.

### **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.

- a. Department of Fisheries has initiated broodstock development project in the department for fish fry production, (groupers, seabass, napollean wrasse). Initiative was also done for giant clam and holothurians.
- b. Seed and field gene bank for PGRFA in place at MARDI. It will be strengthening in 9<sup>th</sup> Malaysia Plan.
- c. Wildlife Department of Sabah has Rhino and Orangutan Conservation program (Captive Breeding)
- d. State of Sabah has Kinabalu Park as *Ex-situ* conservation, Ethnobotanical Garden at the Sabah Museum and Agriculture Park, Tenom
- e. FRIM, Semengoh Arboretum (FRC Sarawak) and Sepilok Arboretum (FRC Sabah): *Ex-situ* collections of dipterocarps, lesser known tree species, fruit trees, monocotyledons (palms, orchids, gingers, etc), conifers, species associated with ethnobotany held in arboreta

**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.

- a. Department of Fisheries had been involved in hatching of turtle and release of juvenile as the main turtle conservation project. For holothurians and giant clam; sea-ranching will be the following task after captive breeding is successful.
- b. The Wildlife Department had been involved in Orangutan Rehabilitation Programme, Sepilok, Pahang.
- c. MARDI multiplied planting materials of rare fruits and vegetable for planting by interested farmers and a way of promoting on-farm conservation.
- d. FRIM : Re-introduction programme for *Neobalanocarpus heimii* (chengal)

**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.

There are some existing measure in regulation and management guideline for activities stated above such as Breeding centre for Wildlife, trees and non-trees' genebanks in Forest Research Institute of Malaysia(FRIM), Semengoh Arboretum (Sarawak) and Sepilok (Sabah) and orchid conservation by Sabah Park.

**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; MARDI(satisfied)
- d) progress in implementing national biodiversity strategies and action plans; MARDI(satisfied)
- e) contribution to the achievement of the Millennium Development Goals; MARDI(ok)
- f) constraints encountered in implementation. MARDI(financial & HR)

Malaysia has extensive and long experience in ex situ conservation. Malaysia in fulfilling her obligations has established several ex-situ facilities according to Strategy V National Biodiversity Policy (Strengthen and integrate conservation programs) and meet especially goal 1 and Goal 2 (to promote conservation) of 2010 targets. Among other ex situ conservation facilities as listed below:

- Gaur Breeding Centre;
- Pheasants Breeding Centre;
- Samber Deer Breeding Centre;
- Seladang Rehabilitation and Breeding Centre in Pahang
- Rehabilitation & Breeding Centre in Melaka Zoo.
- Terrapin Hatchery in Bota Kanan, Perak;
- Arboreta in FRIM
- And more than 40 islands are gazetted as Marine Parks
- Rice gene bank in MARDI; Rice almost >90% of genetic diversity conserved
- MARDI : >50% PGRFA genetic diversity for ex-situ conservation
- MARDI also focusing conservation on indigenous species and species under threat

## 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)	
d) Yes, in most relevant sectors (please provide details below)	x

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

Malaysia has National biodiversity-Biotechnology Council, National Forestry Council, National Physical Plan, National Biodiversity Policy, National Agriculture Policy (NAP3), among others for decision making.

**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.

Programmes and activities MC&I, RIL, guidelines for sustainable Forest management (SFM). There is also existing Guideline for wildlife management by Department of Wildlife.

**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.

- a. National Biodiversity Policy encourage customary use of biological resources that is compatible with conservation or sustainable use requirements
- b. States like Sabah and Sarawak has their own Biodiversity Enactments and customary rights.
- c. Guidelines and management for harvesting of bird nest
- d. Tagal system to harvest fish
- e. Community forest project practice by Forestry Department

**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	X
c) Yes, some measures are in place (please provide details below)	
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.

Replanting of shifting cultivation areas by Sabah Forestry Development Authority. Replanting of degraded forest areas, where there are communities (Bajau and Dusun ethnic group) such as in Kalawat Forest Reserve, Kota Belud by Sabah Forestry Department. Rehabilitation of Riparian Area in

Kinabatangan, project by Sabah's relevant state departments, NGOs, private sector and local communities.

**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	X
c) Yes, indicators and incentive measures identified (please describe below)	

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

Department of Fisheries has fishermen exit plan, which shifting traditional and surplus fishermen to other sectors and land development scheme.

**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. Training of EcoTour guides within the indigenous community.
- b. Bee keeping programme under Agriculture Department (state-wide project)
- c. Community Forestry Project.
- d. National Project lead by Forestry department on rehabilitation of Mangroves forest

**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	
c) Yes, mechanisms are in place (please describe below)	X

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


- a) National Biodiversity Policy, Strategy 8 – Encourage Private Sector Participation.
- b) Initiative By Sabah State – on Timber, Sabah Industrial Agriculture Precint – focused on cultivation of herbs, and medical plants which involve community and private sector investment
- c) Department of Fisheries: aquaculture development using seed from hatchery.
- d) FRIM: assisting the private sector to establish tree plantations


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<b>77.</b> 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	
c) Yes, a process is being planned	X
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.	

<b>78.</b> 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	
b) No, but relevant programmes are under development	X
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

<b>79.</b>  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	
c) Yes, mechanisms are in place (please specify below)	X
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.	
Several carrying capacity studies and limit of acceptable change (LAC) has been carried out in several marine parks and national parks such as on Sipadan Island, some of Sabah Marine Parks, Taman Negara Peninsular Malaysia.	

**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	
b) No, but programmes are under development	
c) Yes, programmes are in place (please describe below)	X
Further comments on educational and training programmes provided to tourism operators.	
Training programs are provided through Tourism Development Corporation. National and state parks also conduct their own training programs.	

**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	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 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 Fisheries for example has initiated program to train tour operators (usually local communities) in marine parks to encourage them understand the opportunity and problems related to the industry and environment of concern.	

**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.	
Most of the guidelines are found in the National EcoTourism Plan. Malaysia is in the process of reviewing the national ecotourism plan to address some of the gaps.	


**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.

Malaysia recognizes the need to further integrate and strengthen the existing policies and institutions in National Biodiversity-Biotechnology Council, National Forestry Council, National Physical Plan, National Biodiversity Policy, National Agriculture Policy (NAP3), among others as a mechanism of sustainable development. This will enhance her contributions in achieving goals of Strategic Plan of the Convention and 2010 target.

### 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.

- a) Forestry Management: New Malaysia Criteria and Indicator MC&I in-line with FSC (Forestry Stewardship Council) in timber harvesting to ensure that Malaysian forest will be manage sustainable.
- b) MARDI: a) Organic farming programme, incentives for sustainable agriculture, b) SALAM (Malaysia Good Agriculture Practice) Program – to ensure agriculture practice is sustainable

**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 non-market values are in research stages. There are studies on North Selangor Peat Swam, Southeast Pahang Peat swam on benefits derive from the peat swam function as a carbon sink and also social, private and hydrological benefit which total benefit more than RM 1,000 million (Woon, et al 1999). There also study indirect use values and biodiversity on forest mangrove in Johor state. There also studies on forest ecosystem non direct value, economic value on wetlands, marine and coastal area.

**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
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.

Malaysian government is collecting cess (from forestry, palm oil), and these are used to fund activities that are related to biodiversity management, conservation and Research Development.

**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	X
c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below)	

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.

**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.

Incentives given by the Malaysia government for the conservation and sustainable use of components of biological diversity is at early stage. However the federal government did provide fund for the four RAMNSAR sites (Sarawak state government and Johor state government). Federal government also encourages state governments to establish National Park which will be funded by the federal government.

Malaysia government is also looking into creating more incentive base on going studies of direct and indirect economic values on forest, marine and wetlands biodiversity.

## 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.

There are many programs related to research and training for identification, conservation and sustainable use of biological diversity that have been established by government agencies, Research Institutes and Universities in Malaysia. Programs for scientific and technical education and training are stated in several strategies in national Biodiversity Policy such as a) Strategy 1 to improve scientific knowledge base, b) strategy II to enhance sustainable utilization of the components of biological diversity and c) strategy III to develop a centre of excellence in industrial research in tropical biological diversity among others.

Resource management agencies such as Wildlife and National Park Department and Forestry Department have regular forest expedition program to identify and collect existing specimen and new specimen.

Forest Research Institute Malaysia (FRIM) is now embarking on National Inventory and Survey on Biodiversity under the 9<sup>th</sup> Malaysian Economic Plan. Malaysian Agriculture Research Institute (MARDI) has established a program on identification of microbes. The Field Gene Bank Unit in MARDI also organized training to its officers and other officers from other government department.

Most of public funded universities in Malaysia have programs in biology conservation. National University of Malaysia (UKM) has dedicated departments, and programs on Biodiversity. Other universities such as Malaya University, University Sabah Malaysia, University of Science Malaysia has intensive programs and research on biodiversity. University of Science Malaysia and College University Trengganu has recently established study on Marine Biodiversity. UKM is the leading university in the study of Mountain biodiversity.

**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) IRPA (Intensification of Research In Priority Areas) national research funding system, which recently include funding in basic science research such as research in the field of biodiversity conservation.
- b) Forest Research Institute (FRIM) conduct research waste minimization; recycling wood waste and agriculture by-products and on herbal products group on utilization of herbal medicine. FRIM also runs programs on identification of rare, threatened and endangered plants and the initiation of the threat assessment of plant species in Malaysia
- c) Department of Fishery has done research in cooperation with i) FAO, WSSD plan , ii) Regional Initiatives –SEAFDEC (South East Asia Fisheries Development Centre), iii) Brunei, Philippine and Malaysia Cooperation in Turtle Research, iv) IPTC (Indo-pacific Tuna Commission),and IOTC (Tuna).

**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.

- a) FRIM use of molecular techniques to quantify current genetic diversity and proposals for conservation based on genetic considerations. Use of remote-sensing and GIS to provide real-time data on ground activities.
- b) Department of Fishery conduct Fisheries Indicators Study- CPUE, income status, tropic levels, fish index for biotic integrity, biomonitoring, sediment and water quality indicators, wetland economic value. Results of research used in formulation of policy and action plan.
- c) MARDI researchers use conservation techniques, cultivation techniques, domestication utilization of genetic resources and Information system developments in most of their studies on developing methods for conservation and sustainable use of biological resources. Scientific data are used in mapping the collection, identify biodiversity components and plan strategies. Scientific data also use as a tool to strategize research programs in Mardi.

**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.

With a relatively strong biodiversity research programs in resource management departments, research institutes and universities, Malaysia is in a position to utilize it for a better management and developing methods for conservation and sustainable use of biodiversity. Malaysia also recognizes to further strengthen and integrate all the research programs in decision making process.

### 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.

There are several programs that are related towards implementing CEPA. Among others are stated below:-

- a) Sabah State Fishery Department conduct i) Anti Fish bombing Campaign, ii) Community Based Resources Management for example 'Tagal System' ( Fisheries dept as advisor ), iii) Restocking of fisheries resources campaign, iv) Releasing of mangrove crabs, shrimps, freshwater fishes fries to it's natural habitat and iv) Replanting of mangroves trees campaign
- b) Sabah State Agriculture Department established i) Sabah Agriculture Park that incorporate educational on plant conservation aspect as one of the main activities, ii) Agriculture Research and Development - IPM being given emphasis in pest and disease control for sustainability and iii) Initiative on *in-situ* and *ex-situ* conservation of tropical fruit trees species diversity
- c) MARDI has organised Public Awareness Seminar on CBD, Global Plan of Action on PGRFA Conservation and Sustainable utilization, and ITPGRFA
- d) Department of Environment has environmental awareness program at primary schools level.

**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.

There are many programs related to facilitate the implementation of work in CEPA. Among others are stated below

- a) Ministry Of Science, technology and Innovation, Economic Planning Unit and higher learning institution such as Malaysia National University, Malaya (UKM) and Malaya University (UM) are funding for seminar and conference facility and facilitation (including) for international conference seminar especially to exchange knowledge and expertise on biodiversity researches and management.
- b) UM held seminar on Ecotourism as a viable tool for conservation sustainable management, Seminar on Island and Reef, Asia –Pacific Conference on Marine Science and Technology. Science and Technology College (KUSTEM) held annual seminar on sustainable management in marine sector
- c) Marine Institute of Malaysia (MIMA) conduct GEF Reversing Environment Degradation Trend in SCS and Gulf of Thailand Project
- d) MASDEC-UM held National Conference on Malacca Strait

**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.

- a) As seen recently Malaysia enhance mass media coverage on biological diversity issue. Slot on environmental and biodiversity mismanagement by the public as well as private sector are part of daily coverage by the TV3 the largest Malaysian private television company in it's prime time news. Awareness on the importance biodiversity also has a weekly coverage in some of major national newspapers.
- b) Government agencies such as Department of Fishery involves in many TV programme on biodiversity management. These programs are screened to viewer's national wide. Every Biodiversity activities will be promoted through various channels, as mentioned above. Institutes such as MARDI and FRIM are regularly conduct seminars and conferences exhibition on Biodiversity research and management.
- c) Sabah State Department of Agriculture also embark in communication through internet and web base such TF-Net – with MARDI, Department of Agriculture and TF-Net Intl.

**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.

- a) There is public participation during the preparation of development plans. Forum and focus group discussion with local community, which directly involves the public in nature conservation issues.
- b) Sabah State Fishery Department: Villagers and school's students (primary & secondary schools) are highly involved in CEPA, as they are considered as the target group. Special award for the best school in environmental conservation activities, given by Ministry of Education.
- c) Sabah Department of Agriculture establishes On-farm research on beekeeping for the local community.
- d) FRIM has an outreach programme with schools in various parts of the country

**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	
b) No, but some programmes are under development	X
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.

Malaysia Technical Corporation Programs (MTCP)) support conservation programs and regional cooperation in developing and least develop countries by giving training to their officers and researchers through National Institute of Public Administration (INTAN).

**96.** Has your country developed adequate capacity to deliver initiatives on communication, education and public awareness?

a) No	
b) No, but 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 the development of adequate capacity to deliver initiatives on communication, education and public awareness.

- a) Establishment of liaisons officers with NGOs. Annually ministerial dialogues with NGOs. Government through National Institute of Public Administration (INTAN) provides environmental courses to the civil servant and the general public. Ministry of Education established school Greening Programme as a co-curricular program.

- b) Cooperation between Wildlife Department and Ministry of Education in designing conservation co-curricular activities in schools. Creation of specific conservation units in many government departments. Department of Fishery also appointed officer to handle CHM as a part of CEPA.
- c) The establishment of SEEN (Sabah Environment Education Network) to promote awareness among the public in the state of Sabah one of 14 State in Malaysia.

**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.

Malaysia always promotes cooperation and exchange programs for biodiversity education and awareness at the national, regional and international levels. Among related programs are stated below:

- a) DANIDA (cooperation between the government of Malaysia and the government of Denmark) funded awareness program for NRE officers
- b) ASEAN Regional Programs
- c) JIRCAS, JICA BBEC (cooperation between the government of Malaysia and the government of Japan on Borneo Island Biodiversity Program) has awareness output on the program
- d) Department of fisheries and JIRCAF Project Seminar
- e) SABAH FISHERY: Through participation of programmes organised by others.
- f) SABAH Department of Fisheries: COGENT, UNEP/GEF Tropical Fruit Trees Diversity Conservation

**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.

- a) DOF-SEAFDEC published many book on taxonomy on fish and turtle and related aspect of regional guidelines on fisheries management
- b) SABAH Department of Agriculture: Germplasm conservation – coconut (COGENT), rice (IRRI), fruits (MARDI, IRFC), food crop (AVRDC, ICRISAT, CYMMIT)

**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.

SABAH Department of Agriculture: Germplasm conservation – coconut (COGENT), rice (IRRI), fruits (MARDI, IRFC), food crop (AVRDC, ICRISAT, CYMMIT)

**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	X
c) Yes, some programmes developed and activities undertaken for this purpose (please provide details below)	
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.

In review process and raising significant financial allocation for CEPA

**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.

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## 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)            | X |
| e) Yes, review of implementation available (please provide details below) |   |

Further information on the legislation requiring EIA of proposed projects likely to have adverse effects on biodiversity.

EIA approval is required for 19 activities prescribed under the Environment Quality (Prescribed Activities) (Environment Impact Assessment) Order 1987. One of the scopes of an EIA study stipulated in the Handbook of EIA Guidelines published by the Department of Environment is to evaluate the impact of the proposed project on the existing ecosystem, including flora and fauna. Therefore, all sectors performing EIA in Malaysia are required to consider the impact of the proposed activities on the biological diversity.

The scope of EIA study will also look at the impact of any human activities to the existing environment, therefore, the impact of the project proponent will have to proposed suitable mitigation measure to minimize the impact. Measure may include relocation of protected or endangered flora and fauna.

Malaysia also has partial bio-d related legislations in Malaysia which address elements of impact assessment and minimizing adverse impact such as:-

- National Forestry Act 1984
- National Parks Act 1980
- Wildlife Protection Act 1972
- Fisheries Act 1985

Besides these legislations, States have enacted their own enactments or ordinances on conservation and sustainable use of biodiversity. National Physical Plan (NPP) was approved by Malaysian Cabinet on 20<sup>th</sup> April 2004 which emphasize on sustainable use and also conserving natural resources and environment as one of its important elements for national physical development.

**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.

Forestry's Malaysia Criteria and Indicator ensure that Malaysian Forest will be sustainable manage.

National Physical Plan (NPP) stated:-


- Environment Sensitive Areas (ESA) shall be integrated in the planning and management of land use and natural resources to ensure sustainable development.
- A central Forest Spine (CFS) shall be established to form the backbone of the Environmentally Sensitive Area network.
- Sensitive coastal ecosystem shall be protected and used in a sustainable manner.
- Land development in highlands shall be strictly controlled to safeguard human safety and environment quality.
- All surface and ground water resources are strategic assets to be safeguarded and use optimally.

**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.

- i. ASEAN Haze Technical Task Force (HTTF) for regional fire and haze monitoring, prevention and mitigation activities., etc.
- ii. Programmes in Borneo: Trans boundary Protected Area
- iii. ITPGRFA (International Treaty on Plant Genetic Resources for Food & Agriculture) initiatives and programs
- iv. Malaysia, Brunei and Philippines Turtle Program

**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	
d) Yes, mechanisms are in place based on current scientific knowledge	X

**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	
d) Yes, mechanisms are in place (please provide details below)	X

Further information on national mechanisms for emergency response to the activities or events which present a grave and imminent danger to biodiversity.

Among initiatives:-

- o ASEAN Peat land Project to mitigate peat fires
- o rapid/emergency response on oil-spill prevention

**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.

- a) NPP stated that Strategic Environment Assessment will be guideline for all physical development projects.
- b) Reducing minimum area from 50 ha to 20 ha as requirement for EIA Reporting in Land Development
- c) National Physical Plan on development in sensitive area
- d) Strategic EIA should be in place to curve the problem of manipulating EIA in the fragmented development in the sensitive area.

**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	X
b) Yes (please specify the measures)	

Further comments on national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity.

Draft National Policy on Integrated Coastal Zone Management incorporated measures on liability and redress based on polluter pay principles

**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.

Related regulations such as Environment Quality Act, National Parks Act., Forestry Act, National Physical Plan, Fisheries Act & Fisheries Regulation, Merchant Shipping Ordinance 1985, Exclusive Economic Zone Act 1984, Petroleum (Safety Measures) Act 1984, Petroleum (Transportation of Petroleum by Pipelines) Regulation 1985, Petroleum (Transportation of Petroleum by water) Regulation 1985, Merchant Shipping Ordinance 1980 (Sabah), Merchant Shipping Ordinance 1960 (Sarawak) among others.

**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	X
d) Yes, some cooperative activities being undertaken (please provide details below)	
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.

Malaysia–Singapore land reclamation in Johore Strait and waste discharge from ship based in Singapore port

**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.

National Forestry Act 1984, National Park Act 1980, Wildlife Protected Act 1972, Environment Quality Act 1974 and Fishery Act 1985 are the main legislations which directly provide impact assessment and minimizing adverse impacts on national biodiversity resources.

Malaysia also added National Physical Plan (NPP) which includes conservation natural resources and the environment as a major element in the national physical development. NPP identify Environmentally Sensitive Areas (ESA) which has 3 components:


- i) ESA Rank 1 – all protected area, potential protected areas (wetlands, turtle landing sites), catchments areas of existing and proposed dams an all areas above 1000 meters,
- ii) ESA Rank 2 – all forests, corridors linking important protected area, buffer zone around Rank 1 area and all areas between 300m – 1000 meters and
- iii) ESA Rank 3 – all marine park islands, buffer zone around Rank 2 areas, catchments areas water intakes, areas for groundwater extraction (well fields), all areas between 150 meter – 300 meter, all areas with erosion risk greater than 150 ton/ha/yr, all areas experiencing critical or significant coastal erosion.

Management criteria for each ESA ranking

- i) ESA Rank 1- No development, agriculture or logging shall be permitted except for low impact nature tourism, research and education,
- ii) ESA rank 2 - No development or agriculture. Sustainable harvesting and low impact nature tourism may be permitted to local constraints and
- iii) ESA Rank 3 – Controlled development where the type of the development shall be strictly controlled depending on the nature of constraints.

Effective implementation of the existing legislations stated above and NPP will certainly enhance Malaysia contribution in achieving goals of the Strategic Plan of the Convention and 2010 target.


## 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	
b) Yes (please provide details below)	X

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.

Sarawak facilitates ABS through Sarawak Biodiversity Ordinance 1997, and Sabah through biodiversity Enactment 2000. In Peninsular Malaysia currently there is no dedicated law on ABS. However there is Economic Planning Unit of the Prime Minister's Department guidelines which address issue on ABS for research projects. Nevertheless efforts are underway to come up with a national legal instrument on ABS

**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.

Whenever a Malaysian public research entity accesses a genetic resource of another country, it is done with the full participation of the country concern.

**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	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
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.

When a resource is accessed, the sharing of benefits is stipulated in and Memorandum of Understanding on case by case basis.

**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	
b) Yes (please provide details below)	X

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.

Malaysia just launched out Plant Variety Act in the year 2004.

**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.

The process of reviewing the draft Federal bill on access and benefit sharing will incorporated or assimilate elements of the Bonn Guidelines where possible.

**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)	
d) Yes, some policies or measures are in place (please specify below)	X
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.

Currently the issue on Intellectual Property is guided by the 1983 Patents Act of Malaysia. Nevertheless this issues is still being discussed at the national level taking into account current developments in the CBD negotiations on the International Regime, TRIPs negotiation of the WTO and other multilateral forum.

**116.** Has your country been involved in capacity-building activities related to access and benefit-sharing?

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

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.

Malaysia has participated in several International Workshops on ABS which assist in developing national capacity on this matter. Some of the recent workshops did take into account 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.

The need for a legislative framework on ABS has been stipulated in the National Policy on Biological Diversity which was launched in April 1998. The 9<sup>th</sup> strategy of this policy calls for the need for review and the creation of new laws to adequately conserve and sustainable utilization components of our rich biological diversity. Efforts are now currently under way to come up with a national law on ABS. This efforts to recognize the potential benefits of biodiversity as a new source of wealth will certainly benefit local communities and also encourage conservation and sustainable utilization of resources. This efforts further enhances the overall nations contribution to the achievement of the Millennium development Goals such as poverty eradication and also Malaysia's contribution to the 2010 target.

## 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)          | X |
| d) Yes, comprehensive measures are in place (please provide details below) |   |


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.

Through transboundary conservation initiatives focusing on information sharing.

- Lanjak-Entimau Wildlife Sanc.
- Bentung Karihun National Park Indonesia

**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   |   |
| b) No, but potential measures are under review                                |   |
| c) Yes, some measures are in place  | X |
| 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.

Department of Fisheries involvement with Magellan Biotechnology from Taiwan on application of diagnostic probe on shrimp/ fish diseases.

**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.

Access to and transfer of technology on genetic resources is according to individual agreements done by institutions and parties involved. Malaysia is going to strengthen the access and transfer of technology at the national level coordination by introducing new Access and Benefit Bill.

**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	
b) No, but relevant programmes are under development	
c) Yes, some programmes being implemented (please provide details below)	X
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.

- i. Some fund from government through MARDI to CG Centre on Sustainable development and Biodiversity conservation
- ii. Assistance and Cooperation given to other developing countries on shrimp and fish hatchery

technology by Department of Fisheries through Malaysia Technical Cooperation Program.

**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.

**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.

- i. MARDI is in the process of identifying gap in Research and Development in Biodiversity under 9<sup>th</sup> Malaysian development Plan
- ii. Programme for technology prospecting and assessment in breeding/ hatchery technology to increase production capacity of fish fry is being developed under Department of Fisheries.

**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.

Modern technology cost is higher and without working knowledge in such technology in different climate condition and species of interest, result on technology application may not be encouraging as expected

and it may turn to be waste of resource

**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	
b) No, but some programmes are under development	
c) Yes, some programmes are in place and being implemented (please provide details below)	X
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.

- National Information Sharing Mechanism through seminars and conferences between Universities, Research Institutes, Government agencies, foreign institutions, NGO's and private sectors.
- All the government agencies, universities and government funded research institute have their own websites and portals for information and communication.
- Agrobiodiversity Database by MARDI
- Rice Genetic Information System collaboration with IPRI
- The introduction of Kruste.my - It is a website for information of scientific research and development information under Ministry of Science, technology and Innovation.
- MARDI: network IRRI – MARDI, NISM database to the web
- Seagrass NET by Department of Fisheries
- Coral NET
- Fish BASE
- South East Asia Botanical Collection Information Network

**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	
b) No, but a few measures being considered	X
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.

Programme of transfer of technology is the integral part of many institutional /sectoral planning. Department of Fisheries (DOF) for example has initiated transfer of technology for a number of years and now matured to handle international course and cooperation in hatchery technology for fish and shrimp and mollusk culture. Periodic course is now in place in DOF Training Centre in Pulau Sayak, state of Kedah.

**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.

Cooperation between Malaysia and some developed countries such as in BBEC program (cooperation between Japanese government and Sabah state government), DANIDA programs (cooperation between Danish government and Malaysian government) to name a few have been long established. There is also cooperation between institutions in Malaysia, such as cooperation between MARDI and Wildlife Department in breeding Seladang (local buffalo species) program through the application of biotechnology tools. All these process of transferring technology through cooperation will contribute to achieve goals of the Strategic Plan of the Convention especially on goals 2 to improve financial, human, scientific, technical and technological capacity.

As for Department of Fisheries the Transfer of Technology processes for example will accelerate the establishment of private nursery and hatchery operators and fish farming industry growth as a whole and this will contribute directly to National Agriculture Policy 3(NAP3), National Policy on Biodiversity goals and progress.

### 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	
c) Yes, some measures are in place	X
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.

FRIM is developing National Biodiversity Inventories (in 9<sup>th</sup> Malaysia Plan) where biodiversity databases from research institutions, government agencies and universities will be integrated and incorporated for information sharing.

### 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.

Malaysia promotes technical and scientific cooperation through bilateral, multi-lateral, joint workshops, seminars and conferences, research collaboration amongst scientists, external research grant including from research foundation and also funding from international companies. Among activities on international technical and scientific cooperation are stated below:-

i) MARDI: a) AVRDC Network (Asian Vegetable Research & Development Centre), b) Collaboration with FAO, IPGRI for agriculture research and development, c) CGIAR – Consultative Group in International Agriculture Research (programmers on GR conservation and utilization. These cooperation to enhance capacity building.

ii) Marine Sector:

- a) Bay of Bengal Large Marine Ecosystem program is being planned
- b) UNEP-GEF South China Sea Project on Reversing Environment Degradation Trend in SCS and Gulf of Thailand
- c) Scripp’s Institute of Oceanography, California –Universiti Malaya
- d) NOD-MU – Sulu- Sulewasi Ecoregion (AFTER COP 7),
- e) IMT-GT Collaboration –UNINET-Conference,
- f) SEAFDEC member countries Project on Stock Assessment and Fishery Management, Regional Turtle and Tuna Tagging, Tuna Statistic,
- g) FADs in untrawble areas, management of coral reef, shark conservation, bio-economic and biology and population dynamic,
- h) Department of Fisheries and world Fish cooperation on tilapia genetic research, Stock Assessment Biology, JIRCAS –UM- DOF on Aquatic Animal in the Mangrove ,
- i) Manbusho Programme, Toray Scientific Foundation ,
- j)UNDP-Titan Group-UM, Otsuka Pharmaceutical Co. LTD- UPM

iii) Ministry of Agriculture: i) collaboration with IPGRO MOA ii) with Australian Company – NCI,

CERYLID, etc.

iv) Conservation /Forest Dept with ITTO, UNDP, DANIDA Programme, Netherlands – Alterra

v) Japan – Asian Consortium on Microbial Resource

**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.

- i) MARDI: i) extensive collaboration with IRRI, FAO, IPGRI, ii) Biotech, utilization of Genetic Resources of microbes: National Inst of Tech Evaluation (NITE) (Japan) iii) AVRDC Network (Asian Vegetable Research & Development Centre)
- ii) SABAH FISHERY: SSME ( Sulu Sulawesi Marine Ecoregion ) committee comprise of representatives from Malaysia, Indonesia and the Philippines
- iii) SCM: Forest Department collaboration with ITTO related project.

**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.	

<b>133.</b> 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.	
All biodiversity related ministries, government agencies, universities and research institutes in Malaysia have website and portals. Some of the agencies are in the process of upgrading information on biodiversity information in their websites.	

<b>134.</b> 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.	
All national focal points for biodiversity related conventions such CBD, CITES and RAMSAR are under Ministry of Natural Resources and Environment (NRE). And almost all implementation agencies such as Wildlife Department, Forestry Department, Marine Park Division, Department of Irrigation and Drainage, Department of Environment are also under NRE. This could contribute to improve synergy among biodiversity-related conventions.	

**Box LVIII.**

<p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> <li>a) outcomes and impacts of actions taken;</li> <li>b) contribution to the achievement of the goals of the Strategic Plan of the Convention;</li> <li>c) contribution to progress towards the 2010 target;</li> <li>d) progress in implementing national biodiversity strategies and action plans;</li> <li>e) contribution to the achievement of the Millennium Development Goals;</li> <li>f) constraints encountered in implementation.</li> </ul>
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Ministry of Natural Resources and Environment is planning to create portal on natural resources management. There are also a few CHM similar Biodiversity initiatives namely KRSTE.my (Knowledge Resource in Science and Technology Portal) which is going to incorporated all science and technology domain such as biotechnology, sustainable development, environmental management, biodiversity and Information technology for decision makers, scientists and government agencies. There are also

biodiversity databases scattered around in universities and research institutes. The process to integrated all the databases/information is ongoing process and the objective of this process is to consolidate and coordinate these databases in a manner that can be used by researchers, policy maker and the public.

## 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	
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	
c) Yes, some measures are in place	X
d) Yes, comprehensive measures are in place	

### Box LIX.

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

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

## 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	5 years development budget Annual operating budget Research and Development Grant
b) Extra-budgetary resources (identified by donor agencies)	Global Environmental facility (GEF)
c) Bilateral channels (identified by donor agencies)	Among others: DANIDA Programmes ( funded by Danish Government) JICA Programmes (Funded by Japanese Government)
d) Regional channels (identified by donor agencies)	
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	

### 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.

- a) Marine Parks Trust
- b) Wildlife Conservation Trust Fund
- c) Taman Negara (National Park) trust Fund
- d) Many states have their own trust Fund

**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	
b) Yes, incentives only (please provide a list of such incentives below)	
c) Yes, financial support only	
d) Yes, financial support and incentives (please provide details below)	X

Further comments on financial support and incentives provided.

Financial support is provided by yearly operational and 5 years plan. Research and development funds are provided by IRPA Funds.

***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.

***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 process to monitor financial support to biodiversity a, including support provided by the private sector? (decision V/11)

a) No	
b) No, but procedures being established	
c) Yes (please provide details below)	X

Further comments on processes to monitor financial support to biodiversity, including support provided by the private sector.

Steering Committees at Economic Planning Unit Prime Minister Department are established to coordinate and monitor any financial assistance from donor countries.

**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	
b) No, but exemptions are under development (please provide details below)	X
c) Yes, exemptions are in place (please provide details below)	

Further comments on tax exemptions for biodiversity-related donations.  
Wildlife Department (PERHILITAN) provides sponsorship for some zoos.

**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.

**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)	
d) Yes, in major initiatives and plans (please provide details below)	X

Further comments on review and integration of biodiversity considerations in relevant initiatives, policies and plans.

- i) At the national level the national sustainable development plan is already incorporated into:-
- a) Yearly operational budget for all ministries and government agencies
  - b) 5 year national development plans (Malaysia Plans) for all ministries and government agencies
  - c) Research and Development grant (IRPA for example).
- ii) Any major cooperation biodiversity projects which are funded by other donor countries (mainly by developed countries) are being coordinated and monitored at the steering Committee in Economy Planning Unit Prime Minister Department.

<b>144.</b> 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)	
d) Yes, into major sectoral development and assistance programmes (please provide details below)	X
Further comments on the integration of biodiversity into sectoral development and assistance programmes	
National Physical Plan	

**The next question (145) is for DEVELOPED COUNTRIES**

<b>145.</b> 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.	
A r e a s	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		
b) National capacity self-assessment for implementation of Convention (decision VI/27)			
c) Priority actions to implement the Global Taxonomy Initiative (decision V/9)			
d) <i>In-situ</i> conservation (decision V/16)	X		X: <i>International Rhino Fund</i>
e) Development of national strategies or action plans to deal with alien species (decision VI/23)			
f) <i>Ex-situ</i> conservation, establishment and maintenance of <i>Ex-situ</i> conservation facilities (decision V/26)			AVRDC ADB, FAO, (GCDT) Global Crop Diversity Trust  WPA – World Pheasant Association
g) Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19)	X	X (DANIDA)	

h) Preparation of national reports (decisions III/9, V/19 and VI/25)	X		X
i) Projects for conservation and sustainable use of inland water biological diversity (decision IV/4)			
j) Activities for conservation and sustainable use of agricultural biological diversity (decision V/5)			
k) Implementation of the Cartagena Protocol on Biosafety (decision VI/26)	X		
l) Implementation of the Global Taxonomy Initiative	X		
m) Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity	X		
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.

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## 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	3	3		2
(b) Limited public participation and stakeholder involvement	2	1	3	2		2
(c) Lack of mainstreaming and integration of biodiversity issues into other sectors	2	3	3	3		3
(d) Lack of precautionary and proactive measures	1	3	3	3		3
(e) Inadequate capacity to act, caused by institutional weakness	2	1	3	3		1
(f) Lack of transfer of technology and expertise	1	1	3	3		3
(g) Loss of traditional knowledge	1	3	3	3		3
(h) Lack of adequate scientific research capacities to support all the objectives	2	1	2	2		2
(i) Lack of accessible knowledge and information	1	1	2	2		2
(j) Lack of public education and awareness at all levels	3	1	2	3		2
(k) Existing scientific and traditional knowledge not fully utilized	2	1	2	3		2

(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	2	3	3	3		3
(n) Lack of economic incentive measures	1	3	3	3		3
(o) Lack of benefit-sharing	1	3	3	3		3
(p) Lack of synergies at national and international levels	2	1	3	3		2
(q) Lack of horizontal cooperation among stakeholders	1	1	2	2		2
(r) Lack of effective partnerships	1	2	3	2		1
(s) Lack of engagement of scientific community	1	1	2	2		1
(t) Lack of appropriate policies and laws	2	1	2	2		1
(u) Poverty	1	0	1	1		0
(v) Population pressure	1	3	2	2		2
(w) Unsustainable consumption and production patterns	1	1	2	2		3
(x) Lack of capacities for local communities	1	3	3	3		3
(y) Lack of knowledge and practice of ecosystem-based approaches to management	3	1	2	3		2
(z) Weak law enforcement capacity	2	2	3	3		2
(aa) Natural disasters and environmental change	1	1	2	2		2
(bb) Others (please specify)			NA	NA		

### 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

Efforts to incorporate and to coordinate the programme between national actors such Department of Fishery, Drainage and Irrigation Department, Forestry Department, Department of Wild Life and National Park are being addressed to enable achievement of stated objectives and goals through different sectoral programme.

**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).

Malaysia is strengthening cooperation amongst stakeholders to achieve the outcome oriented target.

**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	
d) Yes, some measures taken for joint implementation (please specify below)	X
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.

Peatswamp forest Project – GEF/UNDP is ongoing project.

**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		
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		
e) On threats to which inland water ecosystems are subjected?	X		

Further comments on the development of data sets, in particular a list of data sets developed in case you have replied "YES" above.

Malaysia is in the process of incorporating databases from agencies which involve directly or indirectly with the management of inland water ecosystem. Historical and current information is being collected and studies have been conducted. National biodiversity inventory programme is on going project and additional funding is being proposed under the 9<sup>th</sup> Malaysian Development Plan which will include further database development and refinement.

**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	
b) No, the guidelines have been reviewed and found inappropriate	
c) Yes, the guidelines have been reviewed and application/promotion is pending	X

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.

Promotion and application of rapid assessment of the biological diversity of inland water ecosystem under Department of Fisheries will be further refined under the 9<sup>th</sup> Malaysian Development Plan. This will be done with the application of remote sensing technology and GIS in mapping spatial data for fisheries. Although this approach new but it offers great potential to ensure documentation of projects and actions with the potential to give negative impact on biodiversity components, potential impact on sacred sites and on lands and waters.

Multi-sectoral participation in giving the input in form of activities including potential logging, mining, tourism and additional data on plant species, microbe and wild life and indigenous people organization and community will contribute to a strengthened mechanism for remedial and mitigation measures.

**Box LXIII.**

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 Programme of work in inland water ecosystem help in documenting the information on ecology, biology, species and genetic of freshwater fish, information for conservation and resource management and enable department to create systematic and strengthened fresh water fisheries management system based on bioinformation. Impact from effective management and rehabilitation of ecosystem provides the opportunity to increase, conserve and maintain the stock of endangered species in open water. Potential exploitation of this ecosystem for recreational fishing and tourism based on recreational fisheries. Programme of Work (POW) in inland water also helps to protect endangered species found in the system. National repository centre strengthened by database on biodiversity are used as reference centre and one stop centre for public. Protected areas in inland water ecosystem provide opportunity for the management for in-situ breeding of endangered species. There was also a good opportunity for establishment of sanctuary. This POW posses a good outcomes and many positive impacts on actions taken and it was noted to be a significant contribution to goals of the Strategic Plan of the Convention; contribution to progress towards the 2010 target an indicator of progress in implementing national biodiversity strategies and action plans. The POW will definitely contribute to Millennium Development Goals and objectives especially to integrate the principles of sustainable development into country policies and programmes and reverse loss of environmental resources.

Constraints encountered in implementation noted were the lack of synergy between various agencies and actors in the thematic to enable integration of information at this juncture.

## 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	X
b) Improving the management of existing marine and coastal protected areas	X
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)	X
d) Instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment	X
e) Protection of areas important for reproduction, such as spawning and nursery areas	X
f) Improving sewage and other waste treatment	X
g) Controlling excessive fishing and destructive fishing practices	X
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.

- Malaysia is developing new marine and coastal protected areas and the process will involve few new proposal including Perak Island, Sembilan Island and North East of Langkawi Island. There are efforts to improve the management of existing marine and coastal protected through the input of new intake of Marine Park staffs to be recruited soon. Currently 40 marine parks are already being gazetted in Peninsular Malaysia alone excluding those established in the East Malaysian states of Sabah and Sarawak. Fisheries (Prohibited Area) Regulation 1994 had 6 areas listed: Talang Besar Island, Talang Kecil Island, Tanjong Tuan, Tanjong Tuan 1, Tanjong Tuan 2 and Besar Island.
- Capacity building in management of marine and coastal resources, including through educational programmes and targeted research initiatives are in place in Department of Fisheries (DOF) and SEAFDEC initiatives. Intensified training in specific discipline of fisheries at national level is expected to be in place when new intake of officers is approved under institutional full restructuring exercise. Currently under SEAFDEC initiative and Department of Research and Management of Fisheries Resource, DOF had explored training need and capacity building in management of resource amongst ASEAN members through SEAFDEC programme.
- Instituting improved integrated marine and coastal area management is still an uphill task due to the need for multi-sectoral approach and full mechanism is not yet in place. However, monitoring the effect of sediment and nutrient loads coming into the marine environment still continued in many agencies and universities. This is also strengthened by sediment quality, water quality water and bioindicator monitoring undertaken by individual agencies plan and coopera-

tive effort under MEA.

- Protection of areas important for reproduction, such as spawning and nursery areas is achieved through the establishment of fisheries protected areas and closed season (Mollusks Harvest in Kedah, Carpet Clam and Cockle harvest in Selangor and Shad Harvest in Sarawak). This is also strengthened by international trade prohibition (Grouper fries export, prohibition of Tiger Prawn broods export, prohibition of Blood Cockle export of seeds through size limitation)
- Improving sewage and other waste treatment is done through Town and Country Planning Department (TCPD) guidelines and guideline on development in the coastal areas, report on development proposal (like EIA -TCPD) and criteria for solid and liquid waste treatment and disposal (Urban and Village Planning Act 1972). Controlling excessive fishing and destructive fishing practices are exercise by banning on destructive fishing gears such as pair trawls, push nets, cyanide and fish bombing.
- There are programme on Monitoring, control and surveillance of fishing activities (MCS) in DOF as a measure to regulate fishing activities.

### **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	X
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.

Final draft of National Integrated Coastal Zone Management (NICZM) is still under review. Integrated shoreline management plan has been prepared for some coastline of the country namely west coast of Sabah and northern Pahang. These are being considered for incorporation into the land-use planning laws. PEMSEA-ICAM-LUAS project in Port Klang is a new ICZM project implemented. There is also an annual Seminar on ICZM organized by DOF and KUSTEM.

The main guidelines used under sectoral ICZM implementation are :

- Government Circular No. 5/1987 on Control of development in the coastal zone
- Guideline for Development Planning in the Coastal Zone (TCPD 6/97)
- Guidelines for Erosion Control for Development Project in the Coastal Zone (DID 1/97)
- Regional Guidelines on the implementation of Integrated Coastal Zone.

Other laws, regulation and guidelines used are:

- The National Environment Policy
- Environmental Quality Act, 1974
- National Biological Diversity Policy, 1998
- Forestry Acts, 1985
- National Land Code , 1965
- Land Conservation Act, 1960
- Local authority management procedure for principal sources of land based pollution
- Local Authority Sanitation by-laws for domestic waste
- Pig Farming Enactments
- Conservation of Environment Enactment
- Water Enactment

**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	X
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.

Although there was no proper ecosystem based management of marine and coastal, cabinet committee on Highlands and Islands established in the year 2000 play the role in major issues arising in the coastal and marine areas. Individual law and regulation such as Urban and Rural Area Planning Act 1972 could be apply and enforce through local government. Under National Physical Plan, coastal sensitive areas are considered in development planning. Report on development proposal (EIA) is to be send by state development corporation by developers for consideration and TCPD's guidelines on coastal area could be applied. Drainage Work Act, 1954 which was revised in 1988 still need to be further refined to include water management and address issue of pollution and own stream flooding, coastal hard structures. This is important to ensure agriculture will prevail in balance with coastal and marine sectors of economy. An addition EIA is still considered as important tool for the protection of marine and coastal resource.

### 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)	X
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)	X
e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below)	
f) Not applicable	

Further comments on the current status of assessment, monitoring and research relating to marine and coastal ecosystems, as well as key threats to them

- Assessment and monitoring of mangrove ecosystem is done by remote sensing technology and GIS through the effort of MACRES and Forestry Department. Conservative estimate of area of mangrove has implied that degrading trend is caused by many factors. While research in specific mangrove areas has not been completed, mangrove loss seems to be rapid due to high demand for land for development. However the government is now launching the National Mangrove Replant Programme to increase the acreage of mangroves.
- Coral areas normally found in Marine Parks, fisheries protected areas and in coastal and offshore islands. Assessment of status of coral resource is ongoing process. Mapping and surveys to determine the health status indicated that in many areas, coral resource are being exposed to various types of threats. Sedimentation, shipping, unsustainable tourism and also pollution are among the threats.
- Assessment of sea grass areas interfacing mangrove and coral and monitoring may not be

completed. Only few reports on distribution and abundance available and monitoring of their beds are done at regular basis. Common problem under laying this habitat is threat from sedimentation, siltation, land based pollution and reclamation of coastal areas.

- Assessment of overlapping habitat is a new task in marine and coastal biodiversity. Threats known to exist are the same as the sea grass areas. There is also potential risk from shipping, deposition of contaminant from land based.
- 1 fathom bank which is located in the south of Malacca Strait is a shallow area fringe with mangrove in both sides (Malaysia and Sumatra). Specific assessment, monitoring and research rarely focus on this ecosystem. Key threats come from shipping discharge, from ships cleaning and dockyard in Singapore, and from river discharges.

**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.

<b>Activities</b>	<b>Not implemented nor a priority</b>	<b>Not implemented but a priority</b>	<b>Currently implemented</b>	<b>Not applicable</b>
a) Ecological assessment and monitoring of reefs			X (Coray Cay, International Coral Reef, National Coral Reef Network)	
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 (to do with relocation / resettlement of coral-dependant community)	
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)				
Please elaborate on ongoing activities.				
<ul style="list-style-type: none"> <li>▪ National Oceanography Directorate, Ministry of Science, technology and Innovation has initiated works on documentation of biodiversity in new areas including coral species inventory through the cooperation with Malaya University. Centre for Coordination of Maritime Enforcement in Lumut is involved in Rapid/ Emergency Response on "Oil Spill Prevention" and coordinating tasks of enforcement related in other marine affair.</li> <li>▪ In many states, committee for Inland and Coastal Water is established and they assess the need for habilitation including artificial reef development in individual state.</li> <li>▪ Consultative arrangement is made to provide baseline information on coastal area normally through the engagement of research groups from universities.</li> <li>▪ Management and Conservation of biodiversity including Island Socio Economic Study on the people who depend on coral and coral ecosystem were also conducted by University College of Science and Technology Malaysia (KUSTEM), National University of Malaysia (UKM) and Malaya University (UM). Assessment on the socio-economic of communities and stakeholders are also done for sectors related to this ecosystem. This include environmental economic of marine park islands.</li> <li>▪ Awareness in product formulation from local island community is also going on in National University of Malaysia (UKM). Individual Island Development Authorities are also involved in promoting the rapid response procedure to safeguard coral ground, protection of coral from potential risk.</li> <li>▪ Community participation in care of local environment now is in place. Awareness campaign in the importance of coral ecosystem is held by many parties including Marine Park Authority, NGO, volunteer groups and maritime agencies like custom, marine police.</li> <li>▪ Research on coral and mapping are done by DOF and Marine Park. Specific research on taxonomy, bio-prospecting of coral, level of contaminants in coral, fish community in coral area, productivity and carrying capacity study are amongst the popular research areas. Another new study affecting coral ground is the study on the effect of tsunami on coral in Payar Island and Bidan Island.</li> </ul>				

### Marine and Coastal Protected Areas

<b>158.</b> 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)	X (more than 40)
b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders	X
c) Effective management with enforcement and monitoring has been put in place	X (partial)
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	X
f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities	(local communities exempted)
g) The national system of marine and coastal protected areas includes areas which exclude extractive uses	X

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	
<b>Further comments on the current status of marine and coastal protected areas.</b>	
<ul style="list-style-type: none"> <li>▪ Management plans have been developed in marine and coastal protected areas declared and gazetted. This was done with the involvement of all stakeholders sitting in park council under Department of Fisheries.</li> <li>▪ Effective management with enforcement and monitoring has been put in place for limited number of island such as Payar Island and during the initial stage after declaration in some other islands. Broader marine park areas had contributed constraints in enforcement with limited number of staffs and financial back-up for facility maintenance, allowances for staffs in roaster shift. With shifting of ministry responsible for marine park management, it is expected that staffing of Marine Park Department will be back in orderly system including in enforcement.</li> <li>▪ Development of a national system or network of marine and coastal protected areas is still ongoing process. The network needs refinement and consideration in the inclusion of corridor or connectivity amongst the islands.</li> <li>▪ The national system of marine and coastal protected areas includes areas are sustainable managed but there is need to control traditional fishing by local community which activities sometimes encroached protected areas.</li> <li>▪ The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment. Although the principle of Effective Monitoring Control Surveillance applies to area around marine parks, limitation of resource again become the major hindrance in effective implementation of the programme.</li> </ul>	

### Mariculture

<b>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.</b>	
a) Application of environmental impact assessments for mariculture developments	X
b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management	X
c) Development of effective methods for effluent and waste control	X
d) Development of appropriate genetic resource management plans at the hatchery level	X
e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature.	X
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	X
g) Use of native species and subspecies in mariculture	X
h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids.	X

i)	Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity	X
j)	Minimizing the use of antibiotics through better husbandry techniques	X
k)	Use of selective methods in commercial fishing to avoid or minimize by-catch	X
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.

- Effective site selection methods, effective methods for effluent and waste control, genetic resource management plans at the hatchery level, controlled hatchery and genetically sound reproduction methods, development of environmentally sound practices for spat collecting operations (including use of selective fishing gear to avoid by-catch), use of native species and subspecies in mariculture, minimizing the use of antibiotics through better husbandry techniques are used to develop sustainable mariculture.
- These effort is strengthened by available mechanisms and guidelines such as National Mangrove Committee (Natmancom) Guidelines, Draft Management Plan for mangrove forest, National Guideline on Code of Conduct for Good Aquaculture Practice, Aquaculture Farm Certification (emphasizing the aspect Hazard Analysis Critical Control Point implementation), Regional Guidelines on Code of Conduct for aquaculture, Requirement for EIA for land-based aquaculture development in mangrove areas, Fisheries Maritime Culture System Regulation 1990 and FAO–Code of Conduct for Responsible Fisheries. Additional mechanism such as Sanitary and Phytosanitary (SPS), control of non-indigenous species for mariculture through appropriate protocols and regulations e.g. fisheries (prohibition of import, etc., of Fish) Regulation 1990, Fisheries (Marine Culture System) Regulations 1990 and Fisheries Regulation (Import, Export, Transport & Quarantine of Life Fish).
- Proper methods of breeding and proper places of releasing in order to protect genetic diversity is being considered and integrated in broodstock and selective breeding programme.
- Effective measures to prevent the inadvertent release of mariculture species and fertile polyploid however still not in place but consideration for the integration of work may be made possible through alien-species control program.

### 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)	Early Stage
c) Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below)	Early Stage
d) Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below)	X
e) Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below)	X

below)

f) Not applicable

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.

National representatives for regional workshops on ballast water, sediment and invasive species programme had been recognized and it is expected the initiation of national consultation on the POW can be called soon. This initiative will trigger a broader discussion on the issue and enable identification of stakeholders and actors. The absent of guidelines on the subject is recognized as constrains in POW implementation. Application of Fisheries Regulation (Import, Export, Transport & Quarantine of Life Fish) and Control of non-indigenous species for mariculture through appropriate protocols and regulations e.g. fisheries (prohibition of import, etc., of Fish) Regulation 1990. A regional workshop on alien-species and carrying pathogen had been held recently under the initiative of NACA in Penang and this was the initial effort toward a refined regional and national programme to control alien species invasion.

#### **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.

Malaysia is always committed to sustainable manage her marine and coastal biodiversity resources by implementing activities and programmes such as developing new marine and coastal protected areas, improving the management of existing marine and coastal protected areas, building capacity within the country for management of marine and coastal resources, including through educational programmes and targeted research initiatives, instituting improved integrated marine and coastal area management, Ecological assessment and monitoring of reefs, Socio-economic assessment and monitoring of communities and stakeholders and techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity among others. This certainly helps Malaysia to contribute in achieving MDG, Convention Strategic Plan and also 2010 target.

Although there is no complete ecosystem management of marine and coastal yet to be established, Cabinet Committee on Highlands and Islands plays the role in major issues arising in the coastal and marine areas. Final draft of National Integrated Coastal Zone Management (NICZM) is now under review. NICZM will be in line with ecosystem management of marine and coastal biodiversity. The fully implemented NICZM will further strengthen Malaysia capacity and capability to achieve national and international's objectives and targets.


### 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.

- a) Agrobiodiversity related action plans has been incorporated in almost all NBDP strategies. Some examples :
  - Strategy I – studies on pollinator, comprehensive data base of Agro biodiversity,
  - Strategy II – Prospect for new crop, genes, etc., monitoring agriculture impact on peat land ecosystem, Training on IPM and organic farming
- b) Ministry Agriculture and Agro-base industry is to start planning to develop a National Agrobiodiversity Strategies and Plan for agriculture biodiversity management and sustainable utilization.
- c) Sabah state Department of Agriculture is setting up of Tenom Agricultural Park, Research and Development on diversity of bees.

**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	
<b>163.</b> 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) Malaysian Agriculture Research and Development Institute (MARDI) is developing : <ul style="list-style-type: none"> <li>a. Crop Plant – survey and inventory</li> <li>b. Microbes – survey and inventory</li> <li>c. Plant Genetic Resources for food and agriculture (PGRFA)- survey and investigation inventory</li> </ul> b) Sabah state Department of Agriculture is developing Biodiversity of bee species in Sabah–colony culture, potential pollinators c) Forest Research Institute is developing Fruit, Rice, Orchid Genetic Resource Directory	

<b>164.</b> 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	X
c) Yes, some assessments completed (please provide details below)	
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).	
<ul style="list-style-type: none"> <li>▪ Research on the assessment is on-going in MARDI – a) the effect of agriculture development and practices on agro-biodiversity loss b) on the impact of land clearing and development on the agro-biodiversity of peat land in Sarawak</li> <li>▪ Works will be completed this year to asses the impact of agriculture on the biodiversity of virgin peat land development</li> </ul>	

**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	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.

On-farm socio-economic study to find out why farmers keep traditional varieties / land races.

**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	X
b) Yes, no change found (status quo)	
c) Yes, overall degradation found (please provide details below)	
d) Yes, overall restoration or rehabilitation observed (please provide details below)	

Further comments on observations.

Monitoring is being conducted, but data has not been analysed yet. Ecosystems studied include: peat, rice, fruit, and vegetable ecosystems. Monitoring covers: Soil microbes are monitored, number of biodiversity species and pollinator population.

### 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.

- i. Good Agriculture Practices (AGP) has been always actively promoted Integrated Pest Management (IPM), Integrated Crop Management (ICM) and Organic Farming.
- ii. Sabah state Department of Agriculture has policy on Land alienation for Agriculture Development which only agriculture land is recommended for alienation.
- iii. Ecosystem approach in agro-biodiversity conservation shall be studied
- iv. Sustainable agriculture is being promoted

### 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.

Training provided to farmers on how to use IPM, organic farming, Integrated Crop Management (ICM) and Organic Farming.

**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	
b) No, but potential mechanisms being identified	X
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	X
c) No, but measures and arrangements are under development	
d) Yes, measures and arrangements are being implemented (please specify below)	

Further comments on the measures taken to improve the policy environment.

ITPGRFA ratified which covered Access and Benefit Sharing annex 1 plant genetic resources

### 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	
d) Yes, some national plans or strategies mainstreamed and integrated into some sectoral plans and programmes (please provide details below)	X

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.	
1) The practices of Good Conservation Practice on-farm by Farmers are being promoted. 2) Global Plan of Action are being nationalized. 3) Agro-biodiversity related action plans has been incorporated in almost all NBDP strategies.	

<b>172.</b> 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	
d) Yes, by developing training material	
e) Yes, by supporting capacity-building at policy, technical and local levels	
f) Yes, by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes.	
Further comments on support for institutional framework and policy and planning mechanisms.	
Global Plan of Action for the conservation and sustainable utilisation of plant genetic resources incorporated into Research and Development.	

<b>173.</b> In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, <i>In-situ</i> , and <i>Ex-situ</i> , 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 of the conservation of the variability of genetic resources for food and agriculture in their center of origin.	
A Research and & Development Programme is in place in Mardi, focusing mainly on indigenous plants and vegetables including rice.	

**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.
This is still ongoing process and still at the initial stage. A workshop was held in 2004 sponsored by CABI and the resolution was to seek funding for sustainable use of pollinators.

**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.

Works carried out by Malaysia in the area of Agriculture Biological Diversity conservation and utilization has contributed to meeting the :

1. Strategic plan of the convention
  - An R & D program on Agro-biodiversity management has been put in place – capacity building (Goal 2)
  - Has established linkage with FAO and other agriculture related organization to strengthen work on Agro-biodiversity – capacity building (Goal 2)
  - Agro biodiversity issues were noted in NBDP, NAP3, and currently effort is underway to formulate National Agro biodiversity Strategies and Action Plans. (Goal 3 – mainstreaming)
  - Mardi in collaboration with MOA and MOSTE has organized a public awareness seminar on CBD, Global Plan of Action on PGRFA and ITPGRFA
2. All activities are aimed at food security and poverty alleviation. Example: project in collaboration with AVRDC funded by ADB on conservation and promoting indigenous vegetable has the objective of ensuring food security and increasing poor farmers' income.
3. Work has been carried out to meet Targets 2.1, 3.1, 8.1, and 10.1 of the 2010 global targets. Example: Species and genetic diversity of major cultivated crops, indigenous fruit crops and its various wild relatives, and crop under threat of extinction are conserved in Crop genebanks at Mardi. Genebank will be strengthened in 9<sup>th</sup> Malaysia Plan

## 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

**b) process used**

The Government of Malaysia is fully committed to achieve sustainable forest management in the overall context of sustainable development. Since 1994, Malaysia has developed a set of Malaysian

Criteria and Indicators for Sustainable Forest Management (MC&I) at both the national and forest management unit levels, based on the International Tropical Timber Organization (ITTO) criteria and indicators for sustainable management of natural tropical forests.

Currently, of the eight Forest Management Units in Peninsular Malaysia, seven have been certified by independent third party assessors based on a phased approach using the MC&I. The total area covered is 4.03 million ha or 85.7% of the Permanent Forest Reserve (PRF) in Peninsular Malaysia. In fact, these Forest Management Units are managed in consonance with the need to conserve the plant diversity as environment impact assessment (EIA) is required for timber extraction area covering 500 ha or more, and riparian reserves and environmentally sensitive areas are demarcated and excluded from any forest harvesting operations.

There is also Sabah state initiative as stated below

- Gazettement of Sabah Biodiversity Enactment 2000 to legally protect and promote holistic and optimum utilization of Sabah's rich biodiversity.
- A project called "Borneon Biodiversity & Ecosystems Conservation (BBEC) Programme" was initiated in early 2002 in collaboration with JICA, UMS and State Agencies with the secretariat at UMS. Its main goal is "The Endangered and precious biodiversity and ecosystems of Sabah are conserved". The main purpose is "Comprehensive and sustainable conservation approaches of biodiversity and ecosystem are established". The outcome of this 5 year programme is hoped to provide practical methods, guidelines, etc. to be apply on other forested areas in Sabah for the proper management of biodiversity and ecosystems.
- Formulation of a 10 year Forest Management Planning for FMU's areas for the implementation of SFM practices which take into account the need of protection and holistic management of Forest Biological Diversity in the areas.
- States forest policy as follows
  - Conservation through prudent management of all forest areas;
  - Aggressive reforestation programmes
  - Escalation of research and development
  - Massive re-injection of funds in forest activities, and;
  - Upgrading if manpower through training programme

**C) obstacles encountered in the process**

- Lack of expertise
- Lack of financial resources
- Lack of understanding of the Forest Biological Diversity work programmes

**d) lessons learned**

- Lack of understanding on the Work Programme of Forest Biological Diversity
- Forest Biological Diversity in Sabah is currently managed by various state agencies and there seems to be lack in coordination
- Lack of expertise and financial resources to undertake work programme

**e) targets for priority actions in the programme of work**

- Emplacing all Permanent Forest Estates (PFE) under Sustainable Forest Management Practices in line with ITTO Guideline on Sustainable Forest Management.
- The management and implementation of SFM in the PFE should consider the importance of biodiversity and the need for its protection.
- To protect, recover and restore forest biological diversity
- To promote the sustainable and optimum used of forest biological diversity
- Access and Benefit sharing of forest genetic resources

**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 National Policy on Biological Diversity 1998 has resulted in the Government approving forest biological and conservation projects under the Eight Malaysian Plan, thus reflecting the importance placed by the Government on biodiversity conservation and management, and perhaps, this will translate into more staff being assigned to this field. Related studies on conservation status of plant species are continuously undertaken by relevant Government's agencies namely, FRIM. The WWF, Malaysia is also undertaking such activities on specific site.
- Ethnobotany related activities are also currently undertaken by Forestry Department of Peninsular Malaysia (FDPM) and FRIM so that traditional knowledge of local plants could bring further benefits and enhance the conservation and sustainable utilization of these species. Conservation awareness is not just the responsibility of government agencies alone, but also the forest concessionaires and licenses who are entrusted to undertake sustainable forest management practices in their allocated forest areas. Currently, a total of 4.08 million ha of PRFs in Peninsular Malaysia has been certified by independent third party assessors through the Malaysian Timber Certification Council Timber Certification Scheme, using the Malaysian Criteria and Indicators for Sustainable Forest management (MC&I) which is based on the 1998 International Tropical Timber Organization (ITTO) Criteria and Indicators for Sustainable Management of Natural Tropical Forests.

**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.

- The implementation of Sustainable Forest Management in PRFs in Peninsular Malaysia requires that all interested stakeholders, as well as other state agencies are consulted through multi-stakeholders' dialogues so as to enable them to understand the importance of conservation and protection of forest biological diversity for humankind, taking cognizance of the importance to have a balance between social, economic and environmental needs. It further stresses the need to include the local communities in the planning and implementation of forest management practices.
- Formal and informal consultations with indigenous and local communities on forest utilization will be further enhanced through multi-stakeholders' dialogues, as well as more effective conflict resolution mechanisms and adaptive management techniques be developed.
- In areas of the Permanent Forest Reserve (PFE) where indigenous and local community exercise community rights, their views were sought in the planning processes. In certain areas, community compartment units were assigned where they can still practice their acceptable traditional practices. Job opportunities were encouraged to be given to indigenous and local communities where possible.

**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.

Malaysia through related agencies especially through Forest Department of Peninsular Malaysia (FDPM) always encourages staff and personnel to continuously upgrade their capability and skills through in-service training, attending related conferences, workshops and seminars or even pursuing higher degrees to achieve excellence in discharging their duties. The FDPM is currently preparing an integrated Human Resource Development Programme with GTZ for enhancing sustainable management in Peninsular Malaysia, including the conservation of forest biological diversity, as well

as taking into account the future need for sustainable utilization of the forest genetic resources.

Other initiative from State of Sabah for example as stated below:

- Local university (University Malaysia Sabah) undertake biodiversity related courses
- Collaboration R&D with foreign experts for technology transfer is encouraged as long as it gives long term benefit to the state and collaborating partners

Allocation of fund though insufficient was allocated to state agencies to implement related forest biological diversity works.

**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.

Some of collaboration and cooperation programmes:-

- The FDPM has adopted an open attitude to parties or individuals either local or foreign to establish networks on conservation activities in Peninsular Malaysia, provided that the Department benefits from such activities in terms of enhancing further the management, conservation and sustainable utilization of the forest resources.
- In terms of species protection, FDPM has restricted certain species from felling during forest harvesting operations, such as fruit trees, undersized trees and species that need special protection, for example, *Neobalanocarpus hemii* (Chengal).
- The tree flora project (Sabah state) a project to document systematically the tree flora biodiversity is still aggressively pursued jointly with various local and international experts and organizations such as international herbaria's in the UK and Netherlands, etc.
- Collaboration projects such as BBEC (local Sabah state agencies with JICA of Japan) and the Peat Swamp Project of Klias with UNDP, etc.
- Agroforestry research projects to support rehabilitation of degraded forests jointly undertaken by Sabah state with JIRCAS of Japan.
- Carbon related research projects is being planned to be undertaken jointly with Kyoto University of Japan and Sabah state.

**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).

The Sustainable Forest Management Policy (SFM) which is practice by Malaysia on PFE is regarded as in line with ecosystem-based approach, which the vision of managing forest resources through an ecosys-

tem approach is similar to the long-term goals of sustainable forest management in the overall context of sustainable development. Hence, the guiding principles of the ecosystem approach in managing natural resources that are relevant to forest will be incorporated in the current framework of criteria and indicators used to monitor and assess sustainable forest management.

**176.** as your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity?

Options	X	Details
a) Yes	<b>X</b>	<p data-bbox="427 520 1443 583">Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions</p> <ul data-bbox="427 642 1448 1549" style="list-style-type: none"> <li>• Regulating the entry of alien plant species is being undertaken through quarantine and phytosanitary procedures that are currently enforced by the Ministry of Agriculture Malaysia.</li> <li>• Exotic species particularly those introduced and planted in forest plantations, such as <i>Acacia</i> and <i>Eucalyptus</i>, will continue to be monitored to ascertain their invasiveness and their threatening behavior to surrounding natural vegetations.</li> <li>• Acidification and eutrophication are not reported to be serious in the Malaysian environment, particularly their effects on the forest and its biodiversity. However, the chemical effluent discharged by factories, for example oil palm refineries, could be a threat to river ecosystems and thus affecting forests on the fringes of rivers. This matter is being monitored by the Department of Environment through the enforcement of the Environment Quality Act 1974.</li> <li>• Forest biodiversity study is continuously undertaken by the Forestry Department, Peninsular Malaysia (FDPM), and the Forest Research Institute Malaysia (FRIM) and by various governmental and non-governmental agencies. The Meteorological Department with other state agencies and big private companies also undertake the collection and measurements of meteorological data. Efforts will be taken to merge these two types of information to determine the relationship of climate change on forest biodiversity in the future.</li> <li>• The FDPM and other agencies have been vigilant of wild forest fires, especially during periods of prolonged drought. Over the years, the FDPM has enhanced its capacity in fire management and prevention and has developed fire management plan for all its Permanent Reserved Forests (PRFs).</li> <li>• Land conversion to other uses is probably the main cause of biodiversity losses in Peninsular Malaysia. Efforts are being taken to ensure a balanced development that harmonizes the need to maintain biodiversity and socio-economic development in the overall context of sustainable development.</li> <li>• In Peninsular Malaysia, forest fragmentations are not a serious phenomenon as the forests are managed in contiguous blocks, while forest areas converted to other land uses are mainly planted with perennial agricultural tree crops, such as rubber and oil palm, which are very similar to planted forests.</li> </ul>
b) No		<p data-bbox="427 1619 781 1650">Please provide reasons below</p>

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).

- The amended National Forestry Act was endorsed by all the States in Peninsular Malaysia.
- The Malaysian Government has also drawn up a comprehensive list of plants and animals to be protected. Currently many of these, such as the tiger, rhinoceros, slow loris and even the birdwing butterfly are fully protected by law.
- The Wildlife and National Parks Department of Peninsular Malaysia runs active programmes to conserve the larger mammals. Complementing these efforts, there other programmes co-ordinated by the National Steering Group to conserve the plant genetic resources of the country. One such programmes is the conservation of wild fruit trees.
- The FDPM have conducted scientific expeditions in collaboration with various researchers and scientists to gather information on endemic and threatened species. The reports from these expeditions, among others, will provide inputs for listing of protected species which will be incorporated into Forest Management Plan/Annual Work Plan so as to ensure that they are protected during forest harvesting operations.
- Community forestry programmes in rehabilitating degraded forest areas will be further enhanced, especially through enriching these areas with indigenous tree species, as well as through the implementation of agro-forestry projects.
- Invasive alien species
  - Regulating the entry of alien plant species is done through the Quarantine procedure being enforced through the Agriculture Department.
  - Exotic species particularly thus introduced and planted in forest plantation programme, such as the Acacias and Eucalyptus, will continue to be monitored to ascertain their invasiveness and their threatening behaviour to surrounding natural vegetations.
- Pollution
  - chemical effluent discharge by factory (ie. Oil palm refinery) could be serious to river ecosystem and thus the forests on the fringes of rivers. This matter is being looked at by the Ministry of Environment and Tourism Sabah using their legislation the Environment Protection Enactment 2002.
- Forest Cover
  - The Sabah Forestry Department (SFD) will remain vigilant of widespread forest fires, especially during periods of prolonged drought. Over the last four years the SFD has tremendously enhanced its capacity in fire management and prevention. This was possible through technical assistance from international experts (Canadian Government and JICA) incorporating intensive training program. Plans are afoot to develop fire management plan for all the permanent forest reserves in the State.
- fragmentation and conversion to other land uses
  - The SFM practiced in all forest reserves require the FMU holders to alienate land above 25 degrees slope and areas with nature conservation interest as a protective forests and managed for purposes of environmental and wildlife protection. SFM also requires FMU holders to alienate adequate land within FMU for corridors for wildlife migratory routes. These are recorded in the FMPs.

**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

- The practice of selective harvesting of the natural inland forests in Peninsular Malaysia would ensure that the larger trees that remain would reach commercial sizes in 25 to 55 years to allow for a second round of harvesting. And the process goes on. This in itself is a form of silvicultural treatment because natural regeneration is increased by the gaps created during forest harvesting. Several studies have also indicated that regeneration of desirable species occur naturally in and around the gaps left by logging, and only when necessary, the logged-over forests are silviculturally treated in terms of girdling and climber cutting, as well as enrichment planting with indigenous tree species.
- Since 1957, Peninsular Malaysia has initiated the establishment of commercial forest plantations in poorly stocked and degraded forest areas, mainly with fast-growing hardwood species, such as *Acacia mangium*, *Gmelina arborea* and *Paraserianthes falcataria*.
- Over the years, Peninsular Malaysia has been establishing a network of protected areas for the conservation of biological diversity. Some of these national parks, wildlife reserves, nature parks, bird sanctuaries and marine parks have been established since the 1930s.
- In its efforts to further conserve various forest and ecological types in their original conditions, the FDPM, since the 1950s, has also set aside pockets of Virgin Jungle Reserves (VJRs) to serve a permanent nature reserves and natural arboreta, and as undisturbed natural forests for general ecological and botanical studies.
- Currently, a total of 90 VJRs covering 23,851 hectares have been established throughout the peninsula and actions are being taken to assess their representativeness and appropriateness in providing an effective network of protected forest areas in Peninsular Malaysia.
- Represented forest types of the VJRs include Mangrove Forest, Health Forest, Peat Swamp Forest, Lowland Dipterocarp Forest, Hill Dipterocarp Forest, Upper Dipterocarp Forest and Montane Forest.

#### **State Of Sabah Initiatives :-**

##### **a) Restoring Forest biological diversity in degraded areas**

The State's Policy of SFM among others encourage vigorous forest restoration programme through a smart partnership with the private sector. To affect this, a SFMLA was signed between the Government and selected private sectors through smart partnership to implement SFM. Forest rehabilitation and Forest Plantation Development is regarded as vital component to ensure the sustainability of timber yield due to the degraded nature of most of Sabah's commercial forest reserves. Forest tree plantation development will focus on severely degraded forest area with slope limitation not exceeding 15 degrees (in forest reserves) and also on state land. Status of forest restoration and Forest Plantation development both in Forest Reserves and outside of Forest Reserves is monitored by the Sabah Forestry Department and report is made available in its annual report.

##### **b) Conduct scientific studies or scientific expedition and listing of species under protected list of species**

The current Tree Flora Study conducted in collaboration with various international parties and the various Scientific Expeditions conducted in Sabah provide information of the nature of endemic and threaten of a particular species. These reports among others could provide input for listing on protected species list under the Forest Enactment 1968 (for forest tree species). This list of protected species could be incorporated into Forest Management Plan/ Annual Work Plan which is supervised and control by the Forestry Department.

##### **c) Legal framework for protected forest area network**

The development of FMPs in the various FMUs required SFMLA holders to consider ensuring adequate and effective protected area networks in their area concerned. On top of this Class 2 Commercial Forests which provide for protected forest areas, the other classes such as class 1 to 6 (exclude class 2) and thus forest parks under The Sabah Parks Enactment and the Wildlife Sanctuary under the Wildlife Conservation Enactment further show the extensiveness of the protected forest area networks in Sabah.

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).		
<ul style="list-style-type: none"> <li>• Since Malaysia is one of the 12-mega diversity areas in the world, the importance of biological diversity conservation was accorded high priority with the adoption of the National Policy on Biological Diversity 1998. The main thrust of the Policy is to identify and protect 'hotspots' that have high value for biodiversity conservation. Under the 8<sup>th</sup> Malaysia Plan (2001-2005), appropriate actions have been included on conservation of biodiversity through rigorous <i>in-situ</i> and <i>ex-situ</i> conservation programmes.</li> <li>• Efforts are also being taken by the Forestry Departments to ensure in situ conservation of biological diversity during forest harvesting of the production forests of the Permanent Reserved Forests (PRFs). In this context, even though the prescribed minimum cutting limit for the dipterocarp species in Peninsular Malaysia being 50 cm dbh; for the species <i>Neobalanocarpus heimii</i> (Chengal), the minimum cutting limit has been raised to 60 cm dbh so as to better conserve this species during forest harvesting.</li> <li>• In fact, forest harvesting in Malaysia, especially in Peninsular Malaysia has also adopted reduced impact logging techniques (RIL) which will further minimize the adverse impacts and the loss of forest biological diversity.</li> </ul>		

<b>178.</b> Is your country undertaking any measures to promote the sustainable use of forest biological diversity?		
<b>Options</b>	<b>X</b>	<b>Details</b>
a) Yes	<b>X</b>	Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities

		<ul style="list-style-type: none"> <li>• The production forests of the PRFs in Peninsular Malaysia are managed under strict management guidelines and prescriptions and in accordance with the MC&amp;I, which include the need to prepare a ten-year Forest Management Plan, five-yearly Working Plan and Annual Work Plan, as well as forest harvesting plan for each area to be harvested, and the use of reduce impact logging (RIL) techniques in forest harvesting operations.</li> <li>• Forest harvesting in the production forests of the Permanent Reserve Forests (PRF) requires the preparation of a comprehensive forest harvesting plan and all trees with diameter equal to or above the prescribed cutting limits are individually marked and tagged with the direction of felling indicated so as to ensure the future sustainability of the forest resources. This will also minimize damage to the residual stand, while the removal of non-timber forest resources, such as rattan and bamboos, is strictly enforced through the issuance of licences.</li> <li>• The existing rights of indigenous and local communities are acknowledged and recognized in the implementation of sustainable forest management and are reflected in the MC&amp;I. Local communities have been involved in the planting of rattan, forest fruit trees etc, and priority is given to them for implementing various forest management and development activities.</li> <li>• The National Policy on Biological Diversity 1998 has provided a common framework for the coordination, management and development of information systems, formulation of strategies for implementation and monitoring of designated conservation areas and the sustainable use of forest genetic resources. Malaysia is also reviewing the adequacy and appropriateness of current legislation to govern the collection of genetic resources and protect farmer's rights, as well as to safeguard breeder's intellectual property rights.</li> </ul>
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).		
<ul style="list-style-type: none"> <li>• In line with her commitment to the Convention on Biological Diversity (CBD), the National Policy on Biological Diversity was developed in 1998 to provide the direction for the nation to implement strategies, action plans and programmes on biological diversity for the conservation and sustainable utilization of its resources. Malaysia is formulating a national policy and reviewing the adequacy and appropriateness of current legislation to govern the collection of genetic resources and protect farmers' rights, as well as to safeguard plant breeders' intellectual property rights. In Malaysia, the national programme is part and parcel of the national sustainable development strategy, as well as an integral component of the national integrated land management strategy. Effective mechanisms are in place to harmonize cross-sectoral policies related to Forests through the formation of consultative councils such as National Forestry Council (NFC) and the National Land Council (NCL).</li> <li>• Furthermore, the existing rights of indigenous and local communities, including customary rights, have been acknowledged, recognized and protected through expressed legal provisions and duly gazetted. Towards this end, Malaysia is committed to improve the livelihoods of the indigenous people and incorporating them into the mainstream of development.</li> </ul>		

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
b) No	X	Please provide reasons below  The Government of Malaysia is currently preparing legislation to regulate the access to biological resources and the sharing of benefits resulting from the utilization of such resources. It will also address, among others, the principle of prior informed consent (PIC), legal rights to collect material and any downstream innovations using the material, as well as the conditions for benefit sharing.
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	Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities

		<ul style="list-style-type: none"> <li>• Related studies are being undertaken to understand further the causes of biological diversity losses, especially on the need to harmonize socio-economic development and the conservation of biological diversity, as well as in situ conservation of forest genetic resources during forest harvesting operations.</li> <li>• The various strategies that currently address biological diversity conservation were developed through inter-sectoral discussions and consultations between governmental and non-governmental organizations. For example, the development of the MC&amp;I for assessing and monitoring the attainment of sustainable forest management, the Highland Development Strategy and the Integrated Management of Coastal Zone.</li> <li>• Legislation such as the National Forestry Act 1984, Environmental Act Quality 1974, and the Wildlife Protection Act 1972 are related laws that promote good governance in providing a sound basis for the conservation and sustainable use of forest biological resources. The National Forestry Policy 1978 and the National Policy on Biological Diversity 1998 have further strengthened, coordinated and streamlined the inter-sectoral processes for inputs into Government's policy and legislation for more effective conservation and prudent use of forest biological resources in Peninsular Malaysia.</li> <li>• Setting up of 'Enforcement Teams' within State Forestry Departments and the Forestry Department Headquarters in Peninsular Malaysia to patrol sensitive areas, and occasionally by helicopter.</li> <li>• Encouraging public informants to report illegal activities to the relevant Forestry Department, by putting up posters and giving rewards. Complaints are acted upon within three days.</li> <li>• Checking Station System where all log-carrying lorries are required to carry '(log) removal passes' at all times which are issued by the checking stations. Roadblocks are also set up by the Enforcement Team from time to time to check the movement of illegally harvested logs.</li> <li>• Deterrent sentences in the National Forestry Act 1984 were revised in 1993 which have greatly increased pecuniary penalties and include mandatory jail sentences for offenders. The revised Act also enables the Forestry Departments, whenever necessary, to enlist the assistance of the Police and Armed Forces in countering activities involving illegal logging, encroachment of forest areas and timber theft.</li> <li>• Undertake independent third party forest management certification in the overall context of timber certification so as to ensure that trade of timber and timber products are sourced from sustainable managed forests.</li> </ul>
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).		
Malaysia is currently preparing legislation to regulate the access to biological resources, including forest resources, and the sharing of benefits resulting from the utilization of the resources. This will address, among others, the legal rights with regard to the collection of materials and any downstream innovations using the materials which will further enhance the sustainable use of biological resources by the private sector.		

**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		Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities
	X	Currently, efforts are being taken by FDPM to ascertain the full cost of forest goods, including environmental costs, for example, in the production of sustainably managed timber and timber products, as well as the valuation of services provided by forests that are not readily traded in the markets, such as watershed protection and in the conservation of forest biological diversity.
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).

- The Government of Malaysia has granted full tax exemption under the Pioneer Status for ten years or 100% tax exemption under the Investment Tax Allowance for five years, as compared to 70 to 85% and 60 to 80% for 5 years for the manufacturing sector under the Pioneer Status and Investment Tax Allowance respectively, effective from 29 October 1993, for forest plantations established by the private sector.
- To further encourage the private sector to establish and develop forest plantations, additional incentives were granted by the Government in January 2002 to enable private company undertaking forest plantation projects to offset qualifying capital expenditures, such as in the clearing and preparation of land, planting of timber seedlings, provision of plant and machinery, building of access roads and bridges, and construction or purchase of buildings, against income from other business sources of the company under Schedule 4A of the Approved Agricultural Projects.
- Group Relief incentives for companies involved in forest plantation development were also **recently granted by the Government to further encourage private sector investment in plantation forestry**. A company resident in Malaysia in the based year of assessment may surrender its adjusted loss, in full or in part, to one or more related companies resident in Malaysia for the year of assessment that is being reviewed so as to make plantation forestry more attractive.

**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		Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
	X	Public awareness campaign among all level of societies to promote the understanding of the value of forest biological diversity and the goods and services that forests provide is an on-going activity of FDPM. The aim is to eventually enable the people of Malaysia to have a better understanding and appreciation of the value in conserving forest biological diversity. This effort will be intensified when information on the full valuation of forest goods and services is available.

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).		
<p>The National Forestry Policy Act 1978 calls for the involvement of local communities near forest fringes in planting fruit trees to conserve forestry resources. The policy also calls for the promotion of public awareness in forestry through various mass programmes, education, and the introduction of forestry science in the school curriculum. Community forestry programme will be intensified to cater for public needs in recreation and tourism. Permits are issued to pretty traders in the recreational areas, which are reserved forests. Interested parties including indigenous and aboriginal people and local communities were involved in the implementations of the Sub-national Forest Programmes in Peninsular Malaysia. They were especially involved in the contractual works on forest development as well as in the silvicultural works. Malaysia is always sensitive to the needs of critical areas as regards tree planting. For example in Langkawi and Pahang the Department has carried out the planting of rhu (casuarinas Sumatra) in areas, which are subject to sea erosion. The excellent sustainable management of mangrove in Matang, Perak is another example of the efforts undertaken by the Department in this aspect of sustainable forest management. Malaysia has also established about 250,000 ha of forest plantations as alternative source of timber. The private sector is encouraged to participate in plantation forestry. Incentives for forest plantation establishment have been given but are being reviewed to make them more attractive.</p>		
<p>The BBEC (Borneon Biodiversity and Conservation Programme) through its Public Awareness Component undertakes Public Awareness Campaign among all level of the societies to promote the understanding and value of forest biological diversity and the goods and services that it could provide. The main aim eventually is "to enable the people of Sabah to have better understanding and appreciation of the conservation of biodiversity and ecosystem". The Forest Department through the Forest Research Centre is also undertaking "Environmental education and awareness programme" with schools in the district as its target group as well as the local community in the district. The Sabah Biodiversity Centre when fully operational will complement and intensify this effort</p>		

<b>Programme element 3 – Knowledge, assessment and monitoring</b>		
<b>183.</b> 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?		
<b>Options</b>	<b>X</b>	<b>Details</b>
a) Yes	<b>X</b>	Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities

- Internationally recognized forest classification systems have been used by FDPM in managing its forest resources, such as those advocated by the Food and Agriculture Organization of the United Nations (FAO), and these have been incorporated in forest inventory conducted at both the national and forest management unit levels. The information derived is used in the preparation of the ten-year Forest Management Plan and the five-yearly Forest Working Plan.
- This is being implemented by FDPM and the forest classification systems are periodically updated through the use of geographical information system (GIS) and remote sensing (RS) technologies.
- The FDPM under the Eighth Malaysia Plan is reviewing the status of all the established VJRs through inventory surveys, and to increase their representativeness, if deemed necessary.
- Scientific expeditions have also been conducted to pristine forest areas to document rare and endemic species.

**State of Sabah Initiative**

- Definitions on forestry matters have been using internationally recognized system such as ITTO, UNFF (United Nation Forum on Forests), FSC and FAO. This is testified in our active participation in international fora discussing issues on forestry.
- Sabah’s policy on the management of forest biological diversity follows the National Policy on Biological Diversity.
- Forest Resource Inventory has recently been undertaken in the FMUs in the preparation of the 10 year FMPs by the SFMLA holders. It is expected that after 10 years another round of inventory to be undertaken (probably on specified areas if not the whole areas) to prepare for the next 10 year of the FMP.
- The FD through the FRC and funded by ITTO is currently reviewing the status of all class 1 (protection) forest reserves. A database called CAIMS (Conservation Areas Information Management System) is being developed and shall be up on the Web-Site for synthesis by interested parties.
- Couple of Scientific expeditions has been organized on selected areas by various agencies and also under the BBEC programme to uncover the biodiversity richness of these areas. This is an on-going exercise undertaken in collaboration with various related government and non-governmental agencies.

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
		At research level only. Currently conducted by FRIM. The FDPM, through multi-stakeholders' dialogues, has prepared the MC&I based on the 1998 ITTO <i>Criteria and Indicators for Sustainable Management of Natural Tropical Forests</i> . It has included management prescriptions and standards of performance to enable independent third party assessors to undertake forest management certification in the overall context of timber certification at the forest management unit level.
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
		The current Malaysian-German project on <i>Sustainable Forest Management and Conservation in Peninsular Malaysia</i> which is involved in the refinement of the current forest management systems, the improvement of silvicultural practices and the development of a cost-effective forest planning system for application at the operational level will greatly enhance FDPM's understanding on forest ecosystem functioning.
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).

A project called "Borneon Biodiversity & Ecosystems Conservation (BBEC) Programme" was initiated in early 2002 in collaboration with JICA, UMS and State Agencies with the secretariat at UMS. Its main goal is "The Endangered and precious biodiversity and ecosystems of Sabah are conserved". The main purpose is "Comprehensive and sustainable conservation approaches of biodiversity and ecosystem are established". The outcome of this 5 year programme is hoped to provide practical methods, guidelines, etc. to be applied on other forested areas in Sabah for the proper management of biodiversity and ecosystems. At the same time, various related

research and activities related to the above are also being undertaken by various state's agencies, private sectors and NGO's.

**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	<p>Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities</p> <p>The current development of the forest management information system (FMIS) under the Eighth Malaysia Plan by FDPM will greatly enhance its capability to update its geographically-based forest information system (GIS). This will enable the Department to effectively monitor the status of forest biological diversity in the future.</p> <p><b>State of Sabah and Sarawak Initiative</b></p> <ul style="list-style-type: none"> <li>• At the state level, beside the various scientific expeditions conducted, The FD through the FRC is currently undertaking a tree flora project jointly with the Sarawak Forestry Department and FRIM to document the tree flora of Sabah and Sarawak. So far under the Tree Flora of Sabah and Sarawak Project in describing these wild tree species, a total of 1,183 tree species (covering 64 families and 291 genera) has been described and recorded under four volumes of the project's document.</li> <li>• A database system to digitize information / records of 250,000 plant specimens in FRC's herbarium has been undertaken using BRAHMS system</li> </ul>
b) No		<p>Please provide reasons below</p>

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.

- Activities undertaken by forest concessionaires and licensees will be closely monitored to ensure that fully they adhere to the requirements of the Malaysian Criteria and Indicators for Sustainable Forest Management (MC&I) which will ensure that the forest resources are sustainably harvested.
  - Current forest charges such as royalty rates will be reviewed to ensure that the forest resources are sustainable use in the overall context of sustainable forest management, conservation and development.
  - Coordinate and regulate harmoniously the forest harvesting and related infrastructural development in both PFE and other forest areas in accordance with prescribes forest management and/or harvesting plan so as to maintain a favourable level of log production, and minimize damage to regeneration consistent with the need to safeguard environmental and ecological balance.
- The activities mention under this section will certainly enhance Malaysia contribution in achieving goals of the strategic Plan of Convention and 2010 target.

**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	
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	
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)	
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  |  |
| 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  |  |
| 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  |  |
| 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

- a) Regulation on No Logging of forests 1000m above sea level
- b) Crocker Range National Park management plan is currently being implemented
- c) Kinabalu Park Management plan is currently being implemented
- d) Management Plan now is being prepared for Gunung Mulu National Park

**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

- a) In Sarawak, National Parks including Gunung Mulu National Park (GMNP) are managed under a new Ordinance passed in 1998 that will carry the responsibility for implementing the Convention in Malaysia.
- b) ASEAN Heritage Park listing for Mount Mulu, Mount Kinabalu, Mount Tahan listed under ASEAN Heritage Protected Area
- c) World Heritage Site for Mount Mulu and Mount Kinabalu
- d) Gazetting of mountain watershed and catchment areas as protection area under National

Forestry Act 1984

- e) Sabah State Park has In-situ conservation strategy, regular patrol to enforce law and Long term Research and monitoring

**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

- a) Management Plan under Sarawak's 1998 Parks Act for Mount Mulu National Park
- b) Gazetting mountain biodiversity resources under Virgin Jungle Reserve
- c) Gazetting mountain biodiversity resources under National Park Act 1982
- d) SABAH PARK: Kinabalu Park – management of the Summit Trail
- e) SABAH PARK: In-situ conservation, flora and fauna sensitive zone preserved (limited access)

**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

- a) Economic Planning Unit Prime Minister Department has administrative element of ABS
- b) ABS Legislation is being drafted
- c) Sarawak Biodiversity Ordinance and Sabah Biodiversity Ordinance regulates ABS issues in the state of Sarawak and Sabah
- d) Project Ethnobotany Kinabalu for Kinabalu Park has element of ABS

**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	
c) Yes, some frameworks are in place (please provide details below)	X
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.

- a) In Sarawak, National Parks including Mount Mulu National Park are managed at the level under a new Ordinance passed in 1998 that will carry the responsibility for implementing the Convention in Malaysia. ASEAN Heritage Park listing (Mount Mulu, Mount Kinabalu, Mount. Tahan listed under ASEAN Heritage Protected Area )
- b) World Heritage Site (Mount Mulu, Mount Kinabalu)
- c) Gazetting of mountain watershed and catchment areas as protection area under National Forestry Act 1984
- d) Sabah Parks: Parks Enactments, 1994
- e) Sabah Parks: Sabah Parks to manage the park

**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

Gunung Mulu National Park adjoins the Labi Forest reserve in Brunei. This forest reserve contains extensive undisturbed lowland forest and effectively complements GMNP by adding to its integrity and habitat connectivity.

**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	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 for identification, monitoring and assessment of mountain biodiversity

- Relevant programmes have been taken on many aspects of identification, monitoring and assessment of mountain biodiversity through the Cabinet Committee on Highlands and Islands Development.
- Initiative by Sabah state through Research & Education Division of Sabah Parks that manage herbarium and zoological & entomological museums.

**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

- a) Institute for Environment and Development (LESTARI) act as a secretariat for Malaysia Mountain Ecosystems Research Initiative (MMERI). Activities conducted under Malaysian Mountain Ecosystems Research Initiatives such as
- Workshop on Environmental Sensitive Area (ESA) to identify definition of highland and mountain that can be used for the purpose of planning and development, land use and environmental management.
  - Workshop on Landslide Risk in Kundasang, Sabah: Impact, Roles and Action- to present findings of research entitled Kundasang Landslide Complex: Hazard Assessment and Control to stakeholders, to identify landslide issues and preparing resolution on short term and long term structural planning to prevent the impact of landslide.
  - Maliau Basin, Sabah Expedition in planning to be held on September 2005 that will be organized by Academy of Sciences Malaysia, Sabah Foundation, Universiti Kebangsaan Malaysia, Universiti Malaysia Sabah and Sabah Parks.
- b) There is also national collaboration with German Society for Tropical Ecology (University of Wurzburg), Kew Garden, Field Museum of Natural History, Chicago and Louisiana State University and Sabah Parks collaboration with Japan Research Team (Kyoto University) among others.

**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

**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.

Malaysia Mountain Ecosystems Research Initiative (MMERI) has been established in line with global commitment particularly the CBD and policy directions for sustainable mountain and highland development. It focused on three different perspectives namely resource conservation, sustainable use and human dependency. Programme of Work under MMERI is geared towards supporting the goals of Strategic Plan of the CBD. Recognizing the importance of achieving 2010 target, such activities have been planned starting 2005 to 2010. The main objective is to integrate information and develop strategies for research and development for mountain ecosystems. As part of contribution to the achievement of Millennium Development Goals, target groups of MMERI includes experts and academia help facilitate to a better knowledge and provide information on characterization of ecosystems in mountain including key species and its role. This initiative has benefited Malaysia because the outcome generated by the activities has been invaluable for better management of the mountain ecosystems.

National Physical Plan (NPP) identifies Environmentally Sensitive Areas (ESA) which has 3 components. One of the components is ESA Rank 1 that defines as all protected area, potential protected areas (wetlands, turtle landing sites), and catchments areas of existing and proposed dams an **all areas above 1000 meters**. NPP stated that no development, agriculture or logging shall be permitted except for low impact nature tourism, research and education for ESA Rank 1. By definition of ESA Rank 1, mountain biodiversity is protected under NPP.

## 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.

Malaysia is participating in many regional initiatives which directly and indirectly contribute for operation of convention such as among others:-

- i) ASEAN related initiatives such as ASEAN biodiversity Centre
- ii) CBD regional meetings during SBSTTA meeting, COP meeting
- iii) WSSD Regional / Ministerial Prep Meeting
- iv) ECOASIA – lead by Japanese government

**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.

Among activities:-

- 1) IYM – Both scientific and cultural aspects of the mountain were equally emphasized and embodied in the statement of principles and strategies for sustainable development of mountains and mountain communities.
- 2) International Year of Mountain (IYM) was celebrated in Sabah from 8-13- July 2002 with the hosting of three event : The international Dialogue on Earth Heritage conservation, The international conference on culture and science of mountains and the science inspired Art camps (celebration).
- 3) MARDI: through several regional initiatives and network
- 4) ASEAN related initiatives such as ASEAN Biodiversity Centre
- 5) CBD regional meetings at COP and SBSTTA meetings
- 6) WSSD Regional / Ministerial Prep Meeting

**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.

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**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 (MARDI: Japanese Government – NISM through FAO, ACM – Asian Conservation of Microbial resources)	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.

Through conference, seminar and workshops of many ASEAN biodiversity related conferences and meetings such as ASEAN Senior Officials Meetings, ASEAN Peat land Initiative, ASEAN biodiversity Centre, ASEAN ABS framework and many others.

**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.

Malaysia participated in regional discussion during COP meetings, SBSSTA and Implementation of Convention meetings. Malaysia recognizes the need to be more actively participate in these discussions. However in terms of convention implementations, Malaysia together with ASEAN members has been always collaborate and cooperate in various ASEAN biodiversity related projects which directly enhance member countries capacity and capability. This certainly will help the region especially ASEAN in achieving objectives and target set by convention.

## F. COMMENTS ON THE FORMAT

### Box LXXV.

Please provide below recommendations on how to improve this reporting format.

- **The questions are too lengthy and very legally draft.**
- **During the stakeholder discussion, members spend more time analyzing the context of the question rather than completing the boxes.**

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