

# **Convention on Biological Diversity**

## **THIRD NATIONAL REPORT for Jamaica**

**2003 - 2004**



**Environmental Management Division  
Office of the Prime Minister**

**December 2009**

## List of Acronyms

1. AIA	Advanced Informed Agreement
2. ACCC	Adapting to Climate Change in the Caribbean
3. AGGRA	Atlantic and Gulf Rapid Reef Assessment Protocol
4. BPOA	Barbados Programme of Action
5. CABI	Commonwealth Agricultural Bureaux International
6. CARICOM	Caribbean Community
7. CASE	College of Agriculture Science and Education
8. CBD	Convention on Biological Diversity
9. CBO	Community Based Organisation
10.CCDF	Canadian Climate Change Development Fund
11.CDC	Conservation Data Centre
12.CHM	Clearing-House Mechanism
13.CIDA	Canadian International Development Agency
14.CIMH	Caribbean Institute for Meteorology and Hydrology
15.CITES	Convention on International Trade in Endangered Species of Fauna and Flora
16.CMS	Centre for Marine Sciences
17.COP	Conference of Parties
18.CPACC	Caribbean Planning for Adaptation to Global Climatic Change
19.CWIP	Coastal Water Quality Improvement Project
20.EIA	Environmental Impact Assessment
21.ENACT	Environmental Action Programme
22.EAST	Environmental Audits for Sustainable Tourism
23.FOS	Friends of the Sea
24.GATT	General Agreement on Tariffs and Trade
25.GDP	Gross Domestic Product
26.GEF	Global Environment Facility
27.GIS	Geographical Information System
28.GMO	Genetically Modified Organism
29.GOJ	Government of Jamaica
30.IABIN	Inter-American Biodiversity Information Network
31.IOJ	Institute of Jamaica
32.ISCF	Island Special Constabulary Force
33.ISWG	Invasive Species Working Group
34.IUCN	International Union for Conservation of Nature
35.JANEAP	Jamaica National Environmental Action Plan
36.JBS	Jamaica Bureau of Standards
37.JCDT	Jamaica Conservation and Development Trust
38.JCRMN	Jamaica Coral Reef Monitoring Network
39.JHTA	Jamaica Hotel and Tourist Association
40.JNHT	Jamaica National Heritage Trust

41.JNPTF	Jamaica National Park Trust Fund
42.LDUC	Land Development and Utilisation Commission
43.LMO	Living Modified Organism
44.MDG	Millennium Development Goals
45.MLE	Ministry of Land and Environment
46.NBC	National Biosafety Committee
47.NBS	National Biodiversity Strategy
48.NBSAP	National Biodiversity Strategy and Action Plan
49.NCST	National Commission on Science and Technology
50.NCU	Northern Caribbean University
51.NEPA	National Environment and Planning Agency
52.NEST	National Environmental Societies Trust
53.NGO	Non-Government Organisation
54.NPEP	National Poverty Eradication Programme
55.NRCA	Natural Resources Conservation Authority
56.NWC	National Water Commission
57.OAS	Organisation of American States
58.PA	The Protected Areas
59.PAC	The Protected Areas Committee
60.PICCAP	Pacific Islands Climate Change Assistance Program
61.PIOJ	Planning Institute of Jamaica
62.POW	Programme of Work
63.RAMSAR	Convention on Wetlands of International Importance, especially as Waterfowl Habitats
64.R2RW	Jamaica Ridge to Reef Watershed Project
65.SIDS	Small Island Developing States Network
66.SPREP	South Pacific Regional Environmental Programme
67.SPS	Agreement on the Application of Sanitary and Phytosanitary Measures
68.SRC	Scientific Research Council
69.TBT	Technical Barriers to Trade
70.TPD	Town Planning Department
71.TRIPS	Trade Related Intellectual Property Rights
72.UDC	Urban Development Corporation
73.UNCED	United Nations Conference on Environment and Development
74.UNDP	United Nations Development Programme
75.UNEP	United Nations Environment Programme
76.US Aid	United States Agency for International Development
77.UTECH	University of Technology
78.UWI	University of the West Indies
79.WECAN	Wildlife and Environment Conservation Action Now
80.WMC	Water Management Unit
81.WTO	World Trade Organisation

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**A. REPORTING PARTY**

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**Information on the preparation of the report**

**Box I.**

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

The preparation of the Jamaican Third National Report was carried out by teams from National Environment and Planning Agency as well as academia and the relevant Ministries associated with land, the environment, agriculture, forestry and marine and fisheries. There has been a participatory process involving the relevant stakeholders from the over 25 organisations from the public and private sectors, statutory bodies, research organisations, academics and Non Governmental Organisations.

The Government of Jamaica acknowledges the technical and financial support of the UNEP/GEF and the CBD Secretariat in the preparation and submission of the Third National Report as well as initiatives to ensure appropriate public consultation.

## 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.

#### **Species**

The Institute of Jamaica (IOJ), a statutory body, houses the main national taxonomic collections. There are approximately 130,000 botanical specimens in the IOJ Herbarium (representing over 3,000 higher plant species and 600 fern species) and over 80,000 zoological specimens. In addition there are over 30,000 botanical specimens housed in the University of the West Indies Herbarium. Jamaica has a published "Flora of Jamaica" by C.D. Adams and "Ferns of Jamaica" by G.R. Proctor. There is a list of known plant species including recent findings and associated publications.

The IOJ builds on previous publications on Jamaica's flora through ongoing field work and research/revisions, collecting trips, botanical research, and species annotations (primary data). They maintain and update a database. Access to the herbarium is widely available to local and overseas researchers. The IOJ in collaboration with the Natural History Society of Jamaica, received support from the Environmental Foundation of Jamaica (EFJ) in 2004 to commence research, including extensive field work, to produce the "Endemic Trees of Jamaica".

The Forestry Department through the Trees for Tomorrow Project (supported by the Canadian International Development Agency) published the illustrated book "Manual of Dendrology Jamaica" in 2003. It provides a reference to a number of the endemic, indigenous and introduced tree species to be found in Jamaica..

There are no specific programmes related to marine biodiversity but under the National Environment and Planning Agency, Centre for Marine Sciences-University of the West Indies and the Jamaica Coral Reef Monitoring Network (JCRMN) we are presently conducting assessments of all the reefs around the island and also put together a species list of marine fauna and flora.

#### **Management of species and environment**

Guidelines for the introduction of endemic and threatened species have been drafted and are being reviewed.

The Jamaican Iguana (*Cyclura collei*), Giant Swallowtail Butterfly (*Pterourus homerus*), orchids and endemic cacti are the subject of activities to restore and maintain taxa. Game bird populations (doves and pigeons), winter migrants, conch, finfish and orchids continue to be monitored regularly.

The Giant Swallowtail Butterfly, an endemic species, is the largest swallowtail butterfly in the western hemisphere. It was listed in the world's top twelve endangered species of all categories by the IUCN. To aid in the protection and conservation of the species, the Jamaica Conservation and Development Trust (JCDT) has established a nursery at Millbank in the Blue Mountain which grows the host plant for the Giant Swallowtail larvae – the endemic Water Mahoe or Water Wood (*Hernandia catalpifolia*).

The habitats of the endemic Jamaican Iguana in the dry limestone Hellshire Hills are protected and managed. In their native habitat, the resident population is monitored and an eradication programme for the predatory invasive Indian Mongoose (*Herpestes auropunctatus*) is conducted. There appears to be population recovery underway for this endemic species which was recently thought to be extinct.

A small population of Jamaican Iguana were removed and introduced to the Hope Zoo in 1991 for the purposes of establishing a breeding programme. A selected number of hatchlings were collected and raised until large enough to defend themselves from their main predator, the Indian Mongoose. Through the *ex-situ* and *in-situ* programmes more persons are aware of the species and the need for their preservation.

#### **Habitat**

The National Environment and Planning Agency (NEPA) has identified areas considered critical habitat to conduct species and habitat status assessments. These areas are either existing protected areas or areas which are habitat for an endangered species such as dolphins, lobsters, sea turtles, crocodiles and other species such as the Queen Conch.

A number of forest reserves have been in place or have been established. The Forestry Department has carried out biophysical inventories of designated watersheds to develop sustainable management plans for these watersheds. The ecosystem approach is being applied in policy development processes especially related to watershed management and protected areas.

The Permit and Licence system of the Natural Resources Conservation Authority Act regulates along with other laws of Jamaica the introduction of plants and animals, micro-organisms and genetically modified organisms (GMOs) and organisms which may or could have potential effect on the local flora and fauna and provides conditions under which permitted or licensed scientific research or collection projects are to be undertaken.

#### **Jamaica Ridge to Reef Watershed (R2RW) Project 2000-2005**

The Ridge to Reef Watershed Project was a joint project between the National Environment Planning Agency

and the United States Agency for International Development. The project included work with several communities including Cascade, Penlyne Castle, and Irish Town on reforestation projects. R2RW was designed to build upon the achievements of a previous project, CWIP, in terms of both establishing strong community partners to improve environmental management in selected watersheds and expanding the coastal mandate of CWIP into upland areas. The project addressed the degradation of watersheds in Jamaica by improving and sustaining the management of natural resources in targeted watershed areas that are both environmentally and economically significant. This has been an important initiative in partially addressing some of the gaps and challenges identified in the areas of sustainable tourism and coastal and marine resources.

#### **The Environmental Action (ENACT) Programme**

The Environmental Action (ENACT) Programme was jointly funded by the Government of Jamaica (GOJ) and the Canada International Development Agency (CIDA). It began in 1994 and will end in mid 2005. It is focusing its capacity development initiatives around the following five main components:

1. Greening of Government.
2. Capacity Development for NEPA;
3. Local Sustainable Development Planning (LSDP);
4. Environmental Education for Sustainable Development (EESD); and
5. Environmental management in the private Sector.

The Dolphin Head Trust implemented a project entitled Bamboo Conservation and Utilization Facility. This was an initiative to provide women and youth in the Dolphin Head area with alternatives to environmentally destructive activities, while laying the foundation for re-forestation efforts

#### **Conservation**

There are closed seasons, at spawning times, for the harvesting of spiny lobster (*Panulirus argus*), and Queen Conch (*Strombus gigas*) harvest; and a closed season and permit system with bag limits for game bird shooting.

Index beaches are being established to monitor sea turtle populations (mainland beaches and offshore cays).

The Wild Life Protection Act of 1945 provides protection for a number of animal species including all bird species except those considered introduced pest or domestic animals. There is however no protection for plants though drafting instructions for them have been developed for some time.

#### **Terrestrial Ecosystems and Protected Areas**

The Blue and John Crow Mountains National Park was established in 1990. This first Jamaican National Park and covers some 196,000 acres (79,300 hectares) and houses the watershed for the capital city of Kingston, and all communities in the eastern third of Jamaica. The Park is managed by the Jamaican Conservation Development Trust (JCDDT), who continue to work in partnership with residents of local communities to protect the boundaries and introduce more environmentally compatible practices and ventures.

The development of a Protected Areas System Plan has commenced and once completed it is expected to provide a structured framework within which protected areas would be managed. This plan has three components, legal, culture and heritage and public education.

RAMSAR sites have been declared (the Black River Lower Morass, and Palisadoes-Port Royal site.) highlighting the importance of the wetlands in these areas and their function as a habitat for waterfowls especially the West Indian Whistling Duck in the Black River Lower Morass.

Several forest reserves protect globally and nationally important biodiversity; mountain biodiversity has been subsumed into forest programme of work (POW).

The Natural Resources Conservation Authority Permit and licence system was developed in 1997 and requires all individuals/companies to get a permit for any development and a licence to discharge any waste. Where projects are likely to have a significant impact on the natural environment an Environmental Impact Assessment (EIA) will be required.

#### **Marine**

The National Programme of Action for the Protection of the Coastal and Marine Environment from Land-based Sources of Pollution includes actions such as the development of regulations for sewage effluent and sewage sludge and resuscitation and improvement of the operational design of existing malfunctioning sewage treatment plants.

#### **Alien Invasive Species**

An Alien Invasive Species Working Group was established in 2001 and comprises representatives from organizations and government agencies. It continues to fulfil their mandate which includes assisting with the development of a National Policy and Management Plan on alien invasive species and to develop an action plan to eradicate invasive species in protected areas.

The following Invasive Species are being monitored:

- the Indian Mongoose (*Herpestes javanicus*),
- Red-Claw Crayfish, (*Cherax quadricarinatus*),
- White-tailed Deer (*Odocoileus virginianus*),
- Australian Box (*Pittosporum undulatum*),
- White Ginger Lily (*Hedychium coronarium*), and
- Combed Fork Fern (*Dicranopteris pectinata*)
- feral pigs

The Mason River Reserve ecosystem is threatened by the native invasive thicket forming fern species (*Dicranopteris pectinata*) and the alien invasive Strawberry Guava (*Psidium cattleianum*). The Institute of Jamaica manages the area and accordingly undertakes control programmes.

### **Climate Change**

As a part of the Caribbean Planning for Adaptation to Global Climate Change (CPACC), the NEPA and NRCA have been associated with CPACC since the inception of the coral reef monitoring initiatives within the region. This has involved coral reef monitoring for climate change impacts under CPACC, and activities have been carried out since 1998 when Jamaica was selected as a pilot country for the programme. Additionally NEPA has been involved with several other aspects of the CPACC project and has benefited from this interaction by obtaining equipment, training and exposure at various intervals throughout.

The issue of sustainability after CPACC was expressed by Caribbean governments as early as 1997 during the review of the BPOA. This has been partially addressed by a project funded by the Canadian Climate Change Development Fund (CCCDF) through the Canadian International Development Agency (CIDA). The project, "Adapting to Climate Change in the Caribbean" (ACCC) begun in 2001 and ended in September 2004. Outputs include:

- Development of "Caribbean Risk Management Guidelines for Climate Change Adaptation Decision Making";
- A draft regional Public Education and Outreach Strategy;
- Business Plan for the Caribbean Community Climate Change Centre;
- Development and application of climate scenarios for Caribbean SIDS (to be completed under MACC). Work is in progress at the Climate Studies Group in the Physics Department of the UWI, Mona;
- A Guide to assist CARICOM country environmental impact assessment (EIA) practitioners in the integration of climate change into the EIA process;
- Staff training and development at the Caribbean Institute for Meteorology and Hydrology (CIMH) to strengthen their climate change capacity;
- Eight Students, including a Jamaican, participated in the Master's Degree course in climate change at the UWI; and
- Dialogue established with SPREP and the Pacific Islands Climate Change Assistance Program (PICCAP) for collaboration on issues related to climate change.

### **Research**

Research at the University of the West Indies, National Environment and Planning Agency, Scientific Research Council, Institute of Jamaica, Forestry Department etc all contribute to the conservation and sustainable use of biodiversity.

The University of the West Indies has a Masters Degree programme in Natural Resource Management and other degrees that include scientific and technical education for maintaining biodiversity.

The JCDT continues to host training programmes in identification of birds and plants and accompany and learn from researchers who conduct work in the Park.

Government agencies such as the Ministry of Education, the National Environment and Planning Agency and the Forestry Department as well as NGOs are pursuing initiatives that integrate biodiversity conservation into their education programmes. Agencies such as the Forestry Department and NGOs that manage protected areas also incorporate biodiversity conservation into their operational practices.

Jamaica has installed the Clearing-house Mechanism (CHM), hosted by the Institute of Jamaica, as an international network that gathers and distributes information on Biological Diversity in support of the Convention. Links are provided to Jamaican biodiversity-related information and organisations as well as to the global CHM which has links to global biodiversity information, scientific and technical initiatives, search engines and funding opportunities. The CHM has continued to improve and provide information on Jamaica's biological diversity through their website, school presentations and brochures produced.

### **Priority Setting**

The National Biodiversity Strategy and Action Plan proposed and outlined 37 project concepts which charted the priority actions for monitoring, managing and using biological resources in a sustainable manner. Of these project concepts, 17 were identified priority projects, for implementation over the next five to seven years and eight (8) were designated highest priority for the next two years.

Each project concept outlines information on specific activities and/or policies required for implementation; partner organisations, institutions or agencies and the sub-components and sub-projects which make them up.

The main Jamaican priorities agreed in relation to the main Articles of the Convention are in the areas of:

1. General measures for conservation and sustainable use
2. *In-situ* conservation
3. Management of alien invasive species
4. Public education and awareness
5. Handling of biotechnology and distribution of its benefits
6. Management of Forest and Marine & coastal biodiversity



## 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		X	
y) Mountain biodiversity		X	

## Challenges and Obstacles to Implementation

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

3 = High Challenge	1 = Low Challenge
2 = Medium Challenge	0 = Challenge has been successfully overcome
N/A = Not applicable	

Challenges	Articles																			
	5	6	7	8	8h	8j	9	10	11	12	13	14	15	16	17	18	19	20		
• Lack of political will and support	1,	3	3	2	2	1	2	3	3	n/a	2	2	3		2	2	2	3		
• Limited public participation and stakeholder involvement	1	3	3	3	2	1	3	3	3	n/a	2	3	2		2	2	2	3		
• Lack of mainstreaming and integration of biodiversity issues into other sectors	3	3	3	3	2	1	2	3	3	n/a	2	3	3		2	2	n/a	3		
• Lack of precautionary and proactive measures	N/A	3	3	3	2	1	3	3	3	n/a	2	2	n/a		2	2	2	3		
• Inadequate capacity to act, caused by institutional weakness	3	3	3	3	3	1	3	3	3	n/a	2	3	3		2	2	2	3		
• Lack of transfer of technology and expertise	1	2	3	3	2	1	1	3	3	n/a	2	2,	n/a		2	2	2	3		
• Loss of traditional knowledge	N/A	n/a	3	n/a	n/a	1	n/a	3	3	n/a	2	n/a	n/a		2	2	n/a	3		
• Lack of adequate scientific research capacities to support all the objectives	N/A	3	3	2	2	1	2	3	3	n/a	2	3	n/a		2	2	2	3		
• Lack of accessible knowledge and information	N/A	2	2	2	2	1	2	3	3	n/a	2	3	2		2	2	2	3		
• Lack of public education and awareness at all levels	N/A	1	3	2	3	1	2	3	3	n/a	2	2	2		2	2	2	3		

Challenges	Articles																			
	5	6	7	8	8h	8j	9	10	11	12	13	14	15	16	17	18	19	20		
• Existing scientific and traditional knowledge not fully utilized	n/a	2	3	2	2	1	2	3	3	n/a	2	2	2		2	2	2	3		
• Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	n/a	3	3	3	3	1	3	3	3	n/a	2	3	n/a		2	2	2	3		
• Lack of financial, human, technical resources	3	3	3	3	3	1	3	3	3	n/a	2	3	3		2	2	2	3		
• Lack of economic incentive measures	n/a	2	3,	3	N/A	1	3	3	3	n/a	2	n/a	n/a		2	2	2	3		
• Lack of benefit-sharing	n/a	1	1	3	n/a	1	n/a	3	3	n/a	2	n/a	2		2	2	2	3		
• Lack of synergies at national and international levels	2	3	3	3	3	1	2	3	3	n/a	2	3	3		2	2	2	3		
• Lack of horizontal cooperation among stakeholders	n/a	2	2	2	2	1	2	3	3	n/a	2	2	2		2	2	2	3		
• Lack of effective partnerships	n/a	2	3	3	2	1	2	3	3	n/a	2	n/a	3		2	2	2	3		
• Lack of engagement of scientific community	1	2	2	2	2	1	2	3	3	n/a	2	2	2		2	2	2	3		
• Lack of appropriate policies and laws	0	3	3	3	3	1	2	3	3	n/a	2	2	3		2	2	2	3		
• Poverty	n/a	3	3	3	n/a	1	n/a	3	3	n/a	2	n/a	2		n/a	2	2	3		
• Population pressure	n/a	3	3	3	n/a	1	n/a	3	3	n/a	2	n/a	n/a		n/a	2	2	3		
• Un-sustainable consumption and production patterns	n/a	3	3	3	n/a	1	n/a	3	3	n/a	2	3	n/a		2	2	2	3		
• Lack of capacities for local	n/a	3	3	3	n/a	1	2	3	3	n/a	2	3	2		2	2	2	3		



## 2010 Target

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

### Box III.

<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		X	
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		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes		X	
Please provide details below.			
<p>Areas identified to be declared as protected areas cover representative biomes/ecosystems and fall within the implementation planned for the Protected Areas System Master Plan (being developed). Workshops and meetings are to be held to complete the following documents:</p> <ul style="list-style-type: none"> <li>◦ Strategic Plan for Developing the Protected Areas System Plan-Feb 2006;</li> <li>◦ Stakeholder focus group meeting for the Protected Areas system Plan-Nov. 2005;</li> </ul>			

◦ Situation Analysis of Jamaica Protected Areas system Plan-Dec. 2005

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 IV.**

**Target 1.2**

**Areas of particular importance to biodiversity protected**

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

a) No

b) Yes, the same as the global target

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

X

Please provide details below.

The National Biodiversity Strategy and Action Plan for Jamaica includes the establishment of protected areas in selected areas that will protect important biodiversity

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

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water	X		
c) Marine and coastal	X		Legislation, policies, and audits initiatives underway.
d) Dry and subhumid land		X	
e) Forest	X		Several forest reserves protect globally and nationally important biodiversity
f) Mountain			In Jamaica, mountain biodiversity is subsumed into forest POW

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

a) No

b) Yes, into national biodiversity strategy and action plan

c) Yes, into sectoral strategies, plans and programmes

X

X

Please provide details below.

The National Forest Conservation and Management Plan and the National Biodiversity Strategy and Action Plan for Jamaica both address biodiversity to be protected within forests and protected areas, both proposed and those already declared.

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. Indicators are being developed.
VI) Please provide information on challenges in implementation of this target. There is lack of adequate human and financial resources to implement existing programmes and plans such as the NBSAP and Forest Conservation Plan.
VII) Please provide any other relevant information.

**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.			
Jamaican Iguana ( <i>Cyclura collei</i> ), orchids and Giant Swallowtail Butterfly ( <i>Pterourus homerus</i> ) are the subject of activities to restore and maintain taxa.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land	X		Jamaican Iguana, cacti and orchids
a) Forest	X		Orchids, cacti and Giant Swallowtail Butterfly
e) 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 sector based strategies, plans and programmes			X
Please provide details below.			
Jamaica Conservation and Development Trust has established a nursery in Millbank which grows the host plant (Water Mahoe - <i>Thespesia populnea</i> ) of the endemic Giant Swallowtail Butterfly. Also the draft Orchid Policy addresses the conservation and restoration of Jamaican orchids. The Iguana Conservation Group continues its programme of head-starting and release of Jamaican Iguana.			
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 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.

Jamaican Iguana habitats are protected and managed. Jamaican orchids are to be protected by revisions to the Wild Life Protection Act and the passage of an Orchid Policy, though they have some level of protection in the Endangered Species (Protection, Conservation and Regulation of Trade) Act. The Giant Swallowtail Butterfly is being protected and managed within a National Park – the Blue and John Crow Mountains National Park.

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

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal	X		Continue to establish index beach for monitoring sea turtle populations (mainland beaches and offshore cays)
d) Dry and subhumid land	X		Hellshire Hills and Jamaican Iguana project continues
e) Forest		X	
f) Mountain		X	

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

a) No

b) Yes, into national biodiversity strategy and action plan

c) Yes, into sectoral strategies, plans and programmes

X

Please provide details below.

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 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			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).			
<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 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.			
Queen conch and lobster harvesting is specifically licensed.			
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		National targets exist for conch and lobsters- Queen Conch catch levels are legislated, and there is a closed season for spiny lobster harvesting during their breeding periods
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			X
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 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		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).			
<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 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		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).			
<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 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			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).			
<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 XII.**

<b>Goal 6</b>	<b>Control threats from invasive alien species.</b>		
<b>Target 6.1</b>	<b>Pathways for major potential alien invasive species controlled</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.			
We have done some work in this area, e.g. Pink Mealy Bug control programme.			
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			X
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
The NBSAP addresses alien invasive species and the development of a Strategy for the eradication of goats from Goat Island and the White-tailed deer from Portland. The Alien Invasive Species Working Group was established in 2001 and comprises representatives from organization and government agencies involved with the issues of invasive species. Two of their terms of reference are to: assist with the development of a National Policy and Management Plan on alien invasive species and develop an action plan to eradicate invasive species in protected areas.			
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 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		X		
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		X		
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.				
<p>The NBSAP has targets as it regards the White-tailed deer (<i>Odocoileus virginianus</i>), goats on Goat Island, Red Bush (<i>Polygonum chinense</i>) and wild ginger (<i>Hedygium coronarium</i>). Also the Jamaica Conservation and Development Trust has been doing some work on invasive in the Blue and John Crow Mountains National Park. In their 2005-2010 management plan being developed one of the key activities in their forest management is the identification and implementation of suitable rehabilitation practices with e.g. planting of native fast growing forest trees and removal of invasive species.</p>				
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 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			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).			
<b>Programme of work</b>	<b>Yes</b>	<b>No</b>	<b>Details</b>
a) Agricultural			
b) Inland water			
c) Marine and coastal	X		Caribbean Planning for Adaptation to Global Climate Change (CPACC)
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			X
Please provide details below.			
The Centre for Marine Sciences (CMS) is involved in two activities that are related to climate change and marine biodiversity.			
<ul style="list-style-type: none"> <li>▪ In collaboration with NEPA the CMS has carried out the analysis of video-monitoring data collected by NEPA. This was done under CPACC in 2000 and as part of the NEPA Workplan for the period 2001-2003. Issues regarding equipment and manpower have resulted in no monitoring being conducted for the 2004. Monitoring is expected to resume in 2007.</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 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.			
Prepared in October 2004, <i>Jamaica's National Programme of Action for the Protection of the Coastal and marine Environment from Land-based Sources of Pollution (2005-2010)</i> has identified a number of programme elements for implementation:			
<ul style="list-style-type: none"> <li>• Review and revise policy, legal and instructional framework to effectively manage the implementation and operation of sewage solutions</li> <li>• Expand and improve the collection, treatment and disposal of sewage island wide</li> <li>• Expand and improve public education on the effect of sewage and solid waste disposal, recovery and reuse and the effect they have on the environment</li> <li>• Expand and improve the solid waste collection and disposal network</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			
b) Inland water			
c) Marine and coastal	X		Within the National Plan of Action Land-based Sources
d) Dry and sub-humid 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			X
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
The need for the reduction of pollutants in freshwater and the marine environment has been recognized.			
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 XVI.**

**Goal 8** Maintain capacity of ecosystems to deliver goods and services and support livelihoods.

**Target 8.1** Capacity of ecosystems to deliver goods and services maintained

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

a) No

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			
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 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				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).				
<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 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	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).			
<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 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.			
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	<input type="checkbox"/>	<input type="checkbox"/>	
b) Inland water	<input type="checkbox"/>	<input type="checkbox"/>	
c) Marine and coastal	<input type="checkbox"/>	<input type="checkbox"/>	
d) Dry and subhumid land	<input type="checkbox"/>	<input type="checkbox"/>	
e) Forest	<input type="checkbox"/>	<input type="checkbox"/>	
f) Mountain	<input type="checkbox"/>	<input type="checkbox"/>	
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 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			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).			
<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 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>		
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).				
<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 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.			
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			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).			
<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.			

## 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	
Maintain and update the National Herbarium (field research and database) hosted at the Institute of Jamaica	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
The Institute of Jamaica contributes to national inventory of plant and animal collections	
III) Current status (please indicate current status related to this target)	
There are approximately 130,000 botanical specimens in the IOJ Herbarium (representing over 3,000 higher plant species and 600 fern species) In addition there are over 30,000 botanical collections housed in the UWI Herbarium. Jamaica has a published "Flora of Jamaica" by C.D. Adams" and "Ferns of Jamaica" by G.R. Proctor, and a list of known plant species including recent findings and associated publications. The IOJ builds on this through ongoing field work and research/revisions.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
Activities include collecting trips, botanical research, species annotations (primary data), maintain and update database, access to herbarium widely available to local and overseas researchers.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
The Institute of Jamaica will set indicators and monitor progress in the future.	
VI) Constraints to achieving progress towards the target	
Lack of dedicated field vehicles and equipment, and limited access to relevant journals and online publications.	
VII) Any other relevant information	

**Box XXV.**

<b>Target 2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels.</b>	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
Preliminary meetings held to establish the status of some species. Extensive fieldwork required to complement information from C.D. Adams (1972) and G.R. Proctor (1983 and pers. comm.).	
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)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
It has been proposed that Jamaica increase its capability to Red List species in Jamaica	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
No progress beyond initial discussions and acceptance that a target should be established	
VI) Constraints to achieving progress towards the target	
Limited financial and technical expertise specifically for Red Listing	
VII) Any other relevant information	

**Box XXVI.**

<b>Target 3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience.</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	

Please specify
N/A
III) Current status (please indicate current status related to this target)
N/A
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)
N/A
V) Progress made towards target (please specify indicators used to monitor progress towards the target)
N/A
VI) Constraints to achieving progress towards the target
N/A
VII) Any other relevant information

**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 Protected Areas System Plan Project which was funded by the Environmental Foundation of Jamaica and the Canada Jamaica Green Fund commenced in 2003 and was intended to address <i>inter alia</i> public awareness, legal, heritage and culture, institutional arrangements, financial sustainability and biodiversity including protected area categories as well as the criteria and procedures for the selection and prioritization of areas proposed for inclusion in the protected areas system. The plan is to provide a framework for the management of protected areas which are the responsibility NEPA, Forestry Dept., Fisheries Division and the Jamaica National Heritage Trust	
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)	
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	

VII) Any other relevant information

**Box XXVIII.**

<b>Target 5. Protection of fifty percent of the most important areas for plant diversity assured.</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	
Please specify	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
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	
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)
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
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	
Some threatened species occur in Protected Areas	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
It is incorporated in the NBSAP	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
VII) Any other relevant information	

**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

Please specify

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

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

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

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

**Box XXXII.**

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

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

a) Yes

b) No

X

Please specify

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

c) Yes

d) No

Please specify
III) Current status (please indicate current status related to this target)
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)
V) Progress made towards target (please specify indicators used to monitor progress towards the target)
VI) Constraints to achieving progress towards the target
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	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	
The NBSAP has identified targets for alien species.	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
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	
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	
Please specify	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
The Institute of Jamaica has sought to discourage collection of wild flora and subsequent trade of these species.	
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 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?	
1. Yes	
2. 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	
Please specify	

III) Current status (please indicate current status related to this target)
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)
V) Progress made towards target (please specify indicators used to monitor progress towards the target)
VI) Constraints to achieving progress towards the target
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	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	
Please specify	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
VII) Any other relevant information	

**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	
Education Outreach Programmes, Gallery tours, The Clearing-house Mechanism, exhibitions, public education materials	
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)	
Ongoing campaign by the Institute of Jamaica	
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	
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	
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	
Please specify	

III) Current status (please indicate current status related to this target)
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)
V) Progress made towards target (please specify indicators used to monitor progress towards the target)
VI) Constraints to achieving progress towards the target Financial and bureaucratic constraints
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	
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	
Please specify	
III) Current status (please indicate current status related to this target)	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
VI) Constraints to achieving progress towards the target	
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.

### 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	
Further comments	The ecosystem approach is being applied in policy development processes especially related to watershed management, biosafety and protected areas.

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	Forestry Department is incorporating the ecosystem approach in the implementation of their forest management

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

	plans; Jamaica Conservation and Development Trust (JCDD) has developed case studies applying the ecosystem approach within the BJMNP.
d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach	

5. Is your country strengthening capacities for the application of the ecosystem approach, and providing technical and financial support for capacity-building to apply the ecosystem approach? (decision V/6)	
a) No	X
b) Yes, within the country	
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	X
b) Yes, informal cooperation (please provide details below)	
c) Yes, formal cooperation (please provide details below)	
Further comments on regional cooperation in applying the ecosystem approach across national borders.	

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	X
b) No, some programmes are under development	
c) Yes, some programmes are being implemented (please provide details below)	
d) Yes, comprehensive programmes are being implemented (please provide details below)	
Further comments on facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach.	

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	X
c) Yes, some policies and programmes are in place (please provide details below)	

below)	
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.	

## 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)	
d) Yes, regional and/or subregional cooperation (please give details below)	
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.	
<p>A Maritime delimitation treaty between Jamaican and the Republic of Colombia came into force on November 12, 1993. It recognizes the common interest both countries has relating to the exploitation, management and conservation of the maritime area. The delineated area is called the Joint Regime Area and Parties may carry out activities such as marine scientific research, protection and preservation of the marine environment and exploration and exploitation of natural resources.</p>	

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.	
<p>CABI has been working with the Caribbean ISWG to develop management strategies for invasive species in the Caribbean. Jamaica has been an important player in the on going development of the Inter-American Biodiversity Information network particularly in the area of invasive alien species.</p>	

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	X
c) Yes, some steps are being taken (please specify below)	
d) Yes, comprehensive steps are being taken (please specify below)	
Further comments on the harmonization of policies and programmes at the national level.	

**Box XLI.**

<p>Please elaborate below on the implementation of this strategy 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>

**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)	
b) No	
c) No, but relevant strategies, plans and programmes are under development	
d) Yes, some strategies, plans and programmes are in place (please provide details below)	X
e) Yes, comprehensive strategies, plans and programmes are in place (please provide details below)	
Further comments on the strategies, plans and programmes for implementing the three objectives of the Convention.	
The NBSAP was developed in 2003 and is being implemented. There are projects and programmes related to the 3 aspects of the Convention. The NBSAP Secretariat has been established with a focus on project development and funding. Also the National Implementation Support Partnership, a partnership with the Nature Conservancy, has been established with its focus on the CBD PA POW.	

13. ♦ Has your country set measurable targets within its national strategies and action plans? (decisions II/7 and III/9)	
a) No	
b) No, measurable targets are still in early stages of development	
c) No, but measurable targets are in advanced stages of development	
d) Yes, relevant targets are in place (please provide details below)	X
e) Yes, reports on implementation of relevant targets available (please provide details below)	



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

The NBSAP Action Plan has set targets.

The Blue and John Crow Mountains National Park 2005-2010 Management plan for the protected area and one of the conservation targets is for reforestation and invasive control.

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

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

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

The NBSAP contains 37 project proposals, with 8 highest priority projects and 17 priority projects. These span the 3 objectives of the convention.

Projects within the Management Plan for the Blue and John Crow Mountain National Park are listed according to high priority and priority. There are 11 priority areas within the Blue and John Crow National Park that have been identified for action.

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.

The plans and programmes of Fisheries Division, Forestry Department, National Environment and Planning Agency, and The Ministry of Local Government and Environment address these issues.

The JCDT undertakes training and employment of tour guides who promote conservation, while using the resources as a means of income generation under the Park's Recreation and Tourism programme.

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

a) Yes	
b) No	X

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

a. Conservation, sustainable use and/or restoration of migratory species' habitats, including protected areas	
b. Minimizing or eliminating barriers or obstacles to migration	

c. Research and monitoring for migratory species	
d. Transboundary movement	
II) If <b>NO</b> , 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	
III) Other	

### 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.	

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	
c) No, but relevant mechanisms are under development	X
b) 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.	

**Box XLII.**

<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>

## 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.	
<p>The National Environment and Planning Agency identified areas considered critical habitat to conduct species and habitat status assessments. These areas are either existing protected areas or areas which are habitat for an endangered species such as dolphins, lobsters, sea turtles, crocodiles and other species such as conch.</p> <p>The Jamaica Conservation and Development Trust (JCDDT) has an ongoing bird and freshwater benthic macro-invertebrate identification programmes. We also have a programme where staff accompany visiting researchers and learn identification of the study species.</p> <p>A biophysical inventory of forests in selected areas.</p>	

20. ♦ On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes?	
i. at ecosystem level (please provide percentage based on area covered)	
ii. at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group)	X
iii. at genetic level (please indicate number and focus of monitoring programmes )	
Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level.	
<p>Jamaican Iguana, game birds (doves and pigeons), winter migrants, conch, finfish and orchids are monitored regularly.</p>	

21. ♦ On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity?	
g) No	
h) Yes, invasive alien species (please provide details below)	X
i) Yes, climate change (please provide details below)	X
j) Yes, pollution/eutrophication (please provide details below)	X
k) Yes, land use change/land degradation (please provide details below)	X
l) Yes, overexploitation or unsustainable use (please provide details below)	
Further comments on monitoring programmes on key threats to biodiversity.	
<p>The following IAS are monitored: mongoose, feral pigs, <i>Pittosporum</i> sp, <i>Cherax</i> sp, White-tailed deer,</p>	

White ginger, *Dicranopteris pectinata*

Climate change threats: selected sites are being monitored, related to coral reef impacts.

The National Environment and Planning Agency conducts monitoring of water quality across the island- pollution/eutrophication threats.

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	
d) No, but some mechanisms or systems are being considered	X
e) Yes, some mechanisms or systems are being established	
b) Yes, some mechanisms or systems are in place (please provide details below)	
c) Yes, a relatively complete system is in place (please provide details below)	
Further information on the coordination of data and information collection and management.	

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

a) No	
b) No, but identification of potential indicators is under way (please describe)	
c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)	X
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.	
Indicators in use for water quality monitoring	

**Box XLIII.**

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

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

## Decisions on Taxonomy

24. ♦ Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1)	
a) No	X
b) No, but a plan is under development	
c) Yes, a plan is in place (please provide details below)	
d) Yes, reports on implementation available (please provide details below)	
Further information on a plan to implement the suggested actions as annexed to decision IV/1.	

25. ♦ Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (decision IV/1)	
i. No	
ii. Yes (please provide details below)	X
Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections.	
The Institute of Jamaica, a statutory body, houses the main national taxonomic collections	

26. ♦ Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1)	
iii. No	X
iv. Yes (please provide details below)	
Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research.	

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)
--

<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.

a) No	
b) No, but collaborative programmes are under development	
c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments)	X
d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification)	
Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification.	
Work with IABIN.	

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	X
b) Yes, basic assessment made (please provide below a list of needs and capacities identified)	
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.	

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

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)	
d) Yes, for dry and sub-humid lands (please provide details below)	
e) Yes, for inland waters biodiversity (please provide details below)	

f) Yes, for mountain biodiversity (please provide details below)	
g) Yes, for protected areas (please provide details below)	
h) Yes, for agricultural biodiversity (please provide details below)	
i) Yes, for island biodiversity (please provide details below)	
Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.	
The Forestry Department through the Trees For Tomorrow Project (a Canadian International Development Agency-CIDA) published the book in 2003 entitled Manual of Dendrology Jamaica.	

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

**Article 8 - *In-situ* conservation**  
**[excluding paragraphs (a) to (e), (h) and (j)]**

33. ♦ On Article 8(i), has your country endeavored to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components?	
a) No	
b) No, but potential measures are being identified	
c) Yes, some measures undertaken (please provide details below)	X
d) Yes, comprehensive measures undertaken (please provide details below)	
Further comments on the measures taken to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components.	
There is a closed season for spiny lobster harvest (at breeding times); a permit system for Queen Conch harvest; and a closed season and permit system with bag limits for game bird shooting.	
Forestry reserves have been established.	
The Forestry Department has carried out biophysical inventories of designated watersheds to develop sustainable management plans for the watersheds.	

34. ♦ On Article 8(k), has your country developed or maintained the necessary legislation and/or
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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.	
<p>Wild Life Protection Act of 1945 provides protection for a number of animal species including all bird species except those considered introduced pest or domestic animals such as chickens. There is however no protection for plants though drafting instructions for them has been developed for some time.</p> <p>The Endangered Species (Protection, Conservation and Regulation of Trade) Act has provisions not only for the sustainable use of CITES Appendix I and II species, also for Jamaica's endemics.</p>	

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.	
<p>The Permit and Licence system of the Natural Resources Conservation Authority Act regulates along with other laws of Jamaica the introduction of plants and animals, micro-organisms and genetically modified organisms which may or could have potential effect on the local flora and fauna. The laws administered by the Plant Quarantine and Veterinary Services Division regulate the importation of plants and animals respectively, which may have a potential effect of agriculture crops and livestock.</p> <p>The Endangered Species (Protection, Conservation and Regulation of Trade) Act (2000) enables Jamaica to implement its objectives under the Convention on International Trade in Endangered Species.</p>	

**Box XLIV.**

<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>



### 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	X
c) Yes, some targets and indicators established (please provide details below)	
d) Yes, comprehensive targets and indicators established (please provide details below)	
Further comments on targets and indicators for protected areas.	
Protected Areas System Master Plan project began in 2004 and is ongoing.	
Work on the production of an ecological zonation map for Jamaica started and was ongoing.	

37. Has your country taken action to establish or expand protected areas in any large or relatively unfragmented natural area or areas under high threat, including securing threatened species? (decision VII/28)	
a) No	
b) No, but relevant programmes are under development	X
c) Yes, limited actions taken (please provide details below)	
d) Yes, significant actions taken (please provide details below)	
Further comments on actions taken to establish or expand protected areas.	
Programmes are on the way – Ramsar sites have been declared (Black River Lower Morass, Palisadoes- Port Royal site.) highlighting the importance of the wetlands in these areas and their function as a habitat for waterfowls especially the West Indian Whistling Duck in the Black River Lower Morass.	
Forestry Act includes provisions for large landowners to declare portions of their estate as forest management areas in exchange for a land tax rebate.	

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	X
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)	
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.	
While there is no under representation in marine ecosystems the inland water ecosystems are under-represented.	

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)	X
d) Yes, many steps identified and implemented (please provide details below)	

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

Aspects of the programme of work on protected areas under the CBD have been incorporated into the workplan for the National Environment and Planning Agency. Jamaica has an intention to develop a Protected Areas Master Plan to monitor and regulate its protected areas in a more holistic manner.

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

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

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

EIAs are consistently done if there are two or more major environmental impacts identified by NEPA as a part of screening all developments.

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)	
d) Yes, many gaps and barriers identified (please provide details below)	X

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

Basis for having private land owners involved, incentives to encourage them to be involved; resources to effectively monitor legislation. New regulations for all categories of protected areas proposed.

42. Has your country undertaken national protected-area capacity needs assessments and established capacity building programmes? (decision VII/28)	
a) No	X
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)	
Further comments on protected-area capacity needs assessment and establishment of capacity building programmes.	

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	X
c) Yes, relevant plan is in place (please provide details below)	
d) Yes, relevant plan is being implemented (please provide details below)	
Further comments on implementation of country-level sustainable financing plans that support national systems of protected areas.	

44. Is your country implementing appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance? (decision VII/28)	
a) No	
b) No, but relevant methods, standards, criteria and indicators are under development	X
c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below)	
d) Yes, some national methods, standards, criteria and indicators developed and in use and some international methods, standards, criteria and indicators in use (please provide details below)	
Further comments on methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance.	

**Box XLV.**

<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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The development of a Financial Sustainability plan is to be part of a Protected Areas System Master Plan Project currently underway.

### Article 8(h) - Alien species

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

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

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

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

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

*Pittosporum undulatum* – 1997. Goodland and Healey. The effect of *Pittosporum undulatum* on the native vegetation of the Blue Mountains of Jamaica. The Mason River Protected Area was under threat from a native invasive species, *Dicranopteris pectinata* and an invasive alien species, *Psidium cattleianum*. The Institute of Jamaica conducted a project to document and show the level of significance of the influence of the species on the Protected Area vegetation.

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.

Legislation is being amended to prevent the introduction of new Invasive Alien Species (IAS) and further reintroductions of known IAS in Jamaica. Early detection systems are being fine tuned with respect to some IAS. Eradication of some IAS has begun including the mongoose and feral pigs, as well as some IAPs (Invasive alien plants).

Some areas of special conservation value within the Blue & John Crow Mountains National Park have been chosen, where invasive alien species – *Pittosporum undulatum* and *Hedychium coronarium* are controlled. We currently have 12 acres along the Blue Mountain Peak trail where *Pittosporum* is controlled, and 2 acres along the Fairy Glade trail, where *Hedychium* is controlled.

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

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

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

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

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

Work has been done on geographical distribution of some IAS and their proximity to ecologically sensitive areas such as wetlands, tropical and dry forests. With some IAS, GIS has been used to manage potential risks of IAS.

Ecosystem approach is used as invasive are removed with the conservation of the entire ecosystem in mind. Precautionary principle is used as there has so far been no study to quantify the effects of some of the invasive like *Hedychium coronarium* for example, however it is still controlled.

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

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

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

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

a) No	
b) No, but mechanisms are under development	
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.

A multi-sector Invasive Alien Species Working Group has been established with a broad mandate which would include the development of coordinated approaches for the implementation of the Guiding Principles.

52. Has your country reviewed relevant policies, legislation and institutions in the light of the Guiding Principles, and adjusted or developed policies, legislation and institutions? (decision VI/23)	
a) No	
b) No, but review under way	
c) Yes, review completed and adjustment proposed (please provide details below)	X
d) Yes, adjustment and development ongoing	
e) Yes, some adjustments and development completed (please provide details below)	
Further information on the review, adjustment or development of policies, legislation and institutions in light of the Guiding Principles.	

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.	
Working group on Invasive species	

54. Is your country collaborating with trading partners and neighbouring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries? (decision VI/23)	
a) No	X
b) Yes, relevant collaborative programmes are under development	
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.	

55. Is your country developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)? (decision VI/23)	
a) No	
b) No, but programmes for this purpose are under development	X
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	X
c) Yes, some measures, policies and tools are in place (please provide details below)	
d) Yes, comprehensive measures and tools are in place (please provide details below)	

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

Jamaica is preparing drafting instructions for the revision of the Wild Life Protection Act to incorporate the issue of invasive species inclusion of a schedule of invasive species.

**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.

**Article 8(j) - Traditional knowledge and related provisions**

**GURTS**

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

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

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

**Status and Trends**

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

a) No	X
b) No, but support to relevant studies is being considered	

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

### Akwé:Kon Guidelines

59. Has your country initiated a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé:Kon Guidelines into national legislation, policies, and procedures?	
a) No	X
b) No, but review is under way	
c) Yes, a review undertaken (please provide details on the review)	
Further information on the review.	

60. Has your country used the Akwé:Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities? (decision VII/16)	
a) No	X
b) No, but a review of the Akwé: Kon guidelines is under way	
c) Yes, to some extent (please provide details below)	
d) Yes, to a significant extent (please provide details below)	
Further information on the projects where the Akwé:Kon Guidelines are applied.	

### 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.	
Plans being developed to have the Maroons involved in the conservation plans for the Forestry Department	



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.	
Local Forest Management Committees are being formed in the watershed communities to implement the Forestry Department conservation plans.	

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

a) No	
b) No, but relevant mechanisms are being developed	X
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	X
b) No, but relevant work is under way	
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?

c) No	X
d) Yes, to some extent (please provide details below)	

e) Yes, to a significant extent (please provide details below)	
Further information on the support provided.	

**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.

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**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.

Jamaican iguana were introduced to the Hope Zoo in 1991 for the purposes of establishing a breeding programme, and subsequently the "headstart" programme for re-introduction to their natural environment of the Hellshire Hills was initiated.

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.

Guidelines for the introduction of endemic and threatened species have been drafted and are being reviewed.

69. ♦ On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species?

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

Further information on the measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species.

The National Environment Planning Agency in association with the University of the West Indies and the Hope Zoo has been conducting a "head start" programme for protecting the Jamaican Iguana. A selected number of hatchlings were collected and taken to the Hope Zoo. There they were raised until large enough to defend themselves from their main predator, the Indian Mongoose. In their native habitat, the resident population is monitored and an eradication programme for the Indian Mongoose is conducted.

The Plant Conservation Centre housed at the Hope Botanical Gardens has approximately 170 taxa in its collection of which 65 species are native and 40 endemic to Jamaica.

**Box XLVIII.**

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

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

Jamaican Iguana – there appears to be population recovery underway for this once thought to be extinct species and through the *ex-situ* and *in-situ* programme more persons are aware of the species.

**Article 10 - Sustainable use of components of biological diversity**

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

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

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

The Natural Resources Conservation Authority Permit and licence system was developed in 1997 and requires all individuals/companies to get a permit for any development and licence to discharge any waste. Where projects are likely to have a significant impact on the natural environment an Environmental Impact Assessment (EIA) will be required. Guidelines for the preparation of EIA's have been developed inclusive of generic Terms of References.

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.

The Fisheries Division of the Ministry of Agriculture has developed a management plan for the harvest of Queen Conch (*Strombus gigas*). There are biannual population surveys on the main fishing site and harvest limits established for industrial and artisanal fishermen. An annual export quota is also established by the Natural Resources Conservation Authority (NRCA).

There are measures and procedures in place to restrict exploitation of game birds and spiny lobsters, with specific and enforced harvesting bans during breeding seasons.

Closed broadleaf forest should not be used

The NRCA permit and licence system provides conditions under which permitted or licensed projects are to be undertaken.

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

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

73. ♦ On Article 10(d), has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced?

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

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

The Ridge to Reef Watershed Project was a joint project between the National Environment Planning Agency and the United States Agency for International Development. The project included work with several communities including Cascade, Penlyne castle, Irish Town on reforestation projects.

Co-management agreement signed between Bowden Pen farmer's assoc. and JCDT. Activities under this agreement include reforestation with Water Mahoe [*Hernandia catalpifolia*] (food plant of giant swallowtail larval stage).

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.

Private conservation incentives being developed

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.

The Dolphin Head Trust implemented a project entitled Bamboo Conservation and Utilization Facility. This was an initiative to provide women and youth in the Dolphin Head area with alternatives to environmentally destructive activities, while laying the foundation for re-forestation efforts ([http://www.dolphinhead.org/projects/bliss\\_bamboo.html](http://www.dolphinhead.org/projects/bliss_bamboo.html)).

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.

We regularly invite the private sector to contribute to initiatives such as reforestation, clean-up activities, promotional activities etc. Our approach is to highlight the value of the activity we would like them to contribute to, and then to recommend a specific contribution. Recently, we have received contributions from about 5 major private sector entities.

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

a) No	X
b) No, but the principles and guidelines are under review	
c) Yes, a process is being planned	

d) Yes, a process has been initiated (please provide detailed information)	
Further information on the process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.	

78. Has your country taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)	
a) No	X
b) No, but relevant programmes are under development	
c) Yes, some technologies developed and transferred and limited financial resources provided (please provide details below)	
d) Yes, many technologies developed and transferred and significant financial resources provided (please provide details below)	
Further comments on the development and transfer of technologies and provision of financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.	

### Biodiversity and Tourism

79. ♦ Has your country established mechanisms to assess, monitor and measure the impact of tourism on biodiversity?	
a) No	X
b) No, but mechanisms are under development	
c) Yes, mechanisms are in place (please specify below)	
d) Yes, existing mechanisms are under review	
Further comments on the establishment of mechanisms to assess, monitor and measure the impact of tourism on biodiversity.	

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	X
c) Yes, programmes are in place (please describe below)	
Further comments on educational and training programmes provided to tourism operators.	

81. Does your country provide indigenous and local communities with capacity-building and financial resources to support their participation in tourism policy-making, development planning, product development and management? (decision VII/14)	
a) No	
b) No, but relevant programmes are being considered	

c) Yes, some programmes are in place (please provide details below)	X
d) Yes, comprehensive programmes are in place (please provide details below)	
Further comments in the capacity-building and financial resources provided to indigenous and local communities to support their participation in tourism policy-making, development planning, product development and management.	
The JCDT has obtained sponsors for training events regularly	

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	
b) No, but a plan is under consideration to integrate some principles of the guidelines into relevant strategies	X
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.	

**Box XLIX.**

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

**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.

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	X
b) No, but relevant mechanisms are under development	
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.

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	X
b) Yes (please provide details below)	

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

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

## 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.

The University of the West Indies has a Masters degree programme in Natural Resource Management and other degrees that include scientific and technical education for maintaining biodiversity.

The JCDT has training programmes in identification of birds and plants and accompany and learn from researchers who conduct work in the Park

### **CPACC**

In 2004, NEPA continued to collect coral reef data using a video monitoring technique designed under the CPACC project – Component 5 of this project refers to coral reef monitoring. The National Environment & Planning Agency/Natural Resources Conservation Authority has been associated with CPACC since the inception of the coral reef monitoring initiatives within the region and has been involved in coral reef monitoring for climate change impacts under CPACC (Caribbean Planning for Climate Change Impacts project) since 1998 when Jamaica was selected as a pilot country for the programme. Additionally NEPA has been involved with several other aspects of the CPACC project and has benefited from this interaction by obtaining equipment, training and exposure at various intervals throughout.

Data collected using this protocol is sent to the CMS for analysis. Under there programme 3 permanent monitoring sites were established; Portland, Port Royal Cays and Discovery Bay.

### **AGRRA**

In 2004 an assessment of the coral reef is the Palisadoes Port Royal Protected Area was done in partnership with the Port Royal Marine Lab, and the Dept of Life Science (UWI) using the Atlantic and Gulf Rapid Reef Assessment Protocol (AGRRA). This assessment was undertaken in fulfilment of the requirements of an MSc project which was done by Ms. Michelle McNaught, who was required to analyse the data collected and submit a report to NEPA and the UWI. NEPA, UWI and volunteers were involved in data collection.

### **REEF CHECK/JCRM**

Since 2001 reef check data collection has been an annual event in the Island. In 2004 a group of volunteers including the dive club members and individuals from the Sandals Group were trained in the method through the Jamaica Coral Reef Monitoring Network (JCRMN). Data collected using this method was analysed and processed by the National Reef Check Coordinator who then sent this data to REEF CHECK International.

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.

Research at the University of the West Indies, National Environment and Planning Agency, Scientific Research Council, Institute of Jamaica, Forestry Department etc all contribute to the conservation and sustainable use of biodiversity.

The Urban Development Corporation has a research prospectus in the new management plan for the Hellshire Hills (a part of the Portland Bight Protected Area) which includes various research gaps for the Park. The UDC plans to advertise this on their website and the websites of some universities.

In February 2004 a preliminary aerial survey for the Bottlenose Dolphin (*Tursiops truncatus*) was conducted by the National Environment and Planning Agency, the Department of Life Sciences-University of the West Indies and Dr. Robert Kenney of the University of Rhode Island. The survey was conducted in the nearshore waters of Jamaica. Training of NEPA staff in conducting the aerial survey was undertaken by Dr. Kenney.

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.

Organisations such as the Scientific Research Council, Bodles Research Station and Rural Agricultural Development Agency incorporate research into practical applications and advice to conserve biodiversity

We try to keep abreast of the latest research and apply the relevant new knowledge

Improved Coral and sea grass relocation methods developed from research and new understandings.

**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.

- SRC and Bodles research outcomes are routinely passed on to farmers and incorporated into practices leading to improved production
- Sea grass survival increased from 10% to 80%

## 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.	
<p>Biodiversity is part of the general Environmental Education programmes and initiatives conducted by institutions including the Ministry of Education, the Joint Board of Teacher Education, the National Environment and Planning Agency and NGOs in the formal education sector as well as in the non-formal sector: in the community and in general environmental awareness campaigns. The school curriculum specifically includes a focus on all international environmental conventions. Education programmes in Jamaica's protected areas and national parks focus on the preservation of biodiversity in support of the Convention.</p> <p>Draft biodiversity public education programme is being developed and a programme is being developed by NEPA to address some of the gaps identified in the NBSAP.</p>	

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.	
<p>Jamaica has established the Clearing-house Mechanism (CHM), hosted by the Institute of Jamaica, as an international network that gathers and distributes information on Biological Diversity in support of the Convention. Links are provided to Jamaican biodiversity-related information and organisations as well as to the global CHM which has links to global biodiversity information, scientific and technical initiatives, search engines and funding opportunities.</p> <p>The National Environmental Education Committee is developing a database of resources and skills that will be accessible nationally by practitioners as well as the general public.</p> <p>Capacity development of environmental educators and communicators is undertaken in the formal education system through the teachers colleges, in-service teacher training programmes and the Caribbean Institute of Media and Communication as well as in the informal system through community-level initiatives often led by NGOs.</p>	

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.

The level of interest by the media and general public and media coverage of all environmental issues including biodiversity-related issues has increased significantly in the past few years.

Strong efforts made through Green Expo, etc. – wood and water day and other environmental days.

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.

Biodiversity-related issues are discussed at the community level by a national network of NGOs, sometimes within externally-funded projects. Including the environmental school programme of the Jamaica Environment Trust and the Jamaica Conservation and Development Trust. The Scientific Research Council host annually a poster and essay competition on various environment issues and also host an annual Conference on Science and Technology.

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	
c) Yes, some activities supported (please provide details below)	X
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.

The Ministry of Education's curricula for primary and secondary schools include biodiversity issues as well as all international environmental conventions. The Joint Board of Teacher Education syllabuses for the teachers colleges also include biodiversity issues.

The National Environment and Planning Agency celebrates International Day for Biological Diversity annually, raising awareness about the issues among the general public. World Wetland Day, Earth Day, World Oceans Day.

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.	
Capacity development of environmental educators and communicators is undertaken in the formal education system through the teachers colleges, in-service teacher training programmes and the Caribbean Institute of Media and Communication as well as in the informal system through community-level initiatives often led by NGOs.	

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.	
Jamaica has established the Clearing-house Mechanism (CHM), hosted by the Institute of Jamaica, as an international network that gathers and distributes information on Biological Diversity in support of the Convention. Links are provided to Jamaican biodiversity-related information and organisations as well as to the global CHM which has links to global biodiversity information, scientific and technical initiatives, search engines and funding opportunities.	

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.	
CEPA initiatives including biodiversity issues are being conducted among the following sectors: community, business, tourism, forestry, agriculture, fisheries, etc.	

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.	
Government agencies such as the Ministry of Education, the National Environment and Planning Agency and the Forestry Department as well as NGOs are pursuing initiatives that integrate biodiversity conservation into their education programmes. Agencies such as the Forestry Department and NGOs that manage protected areas also incorporate biodiversity conservation into their operational practices.	

NRCA/NEPA has supported the Forestry Department in conducting some activities.

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.

Jamaica's efforts to support the Decade on Education for Sustainable Development are now being designed; the National Environmental Education Committee is working with UNESCO and other organisations to promote ESD.

However various sections of 2010 targets have not been communicated.

**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.

**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.

The island of Jamaica was declared a prescribed area in NRCA Act .

NRCA Act and work on NEPA Act; development of generic terms of reference for different terms of references for Environmental Impact Assessment. During the reporting period a Developers and Investment Manual was being prepared by the National Environment and Planning Agency which aimed to provide all the necessary information required to carrying any project in Jamaica.

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	X
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)	

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.

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	X
b) No, but assessment of options is in progress	
c) Yes, some completed, others in progress (please provide details below)	
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.

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.

Jamaica's National Oil Spill Contingency Plan was developed more than ten years ago and continues to be implemented. The plan focuses on marine pollution and provides a framework for industrial, Governmental and Regional Cooperation in response to any pollution incident which may pose a threat to the waters or coastal areas of Jamaica.

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)	
d) Yes, major aspects being applied (please specify below)	X

Further comments on application of the guidelines.

EIA guidelines developed by the National Environment and Planning Agency have included biodiversity related issues into the terms of reference developed for EIA's.

107. On Article 14 (2), has your country put in place national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity? (decision VI/11)

a) No	
b) Yes (please specify the measures)	X

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

Under the NRCA Permit and Licence System, where a development will lead to the removal of mangrove, coral or seagrass, the developer is required to replant/relocate the mangrove plants or seagrass and coral where applicable to a location approved by the relevant agency.

The Forestry Department in respect of their Forest Reserves requests payment for the removal of any trees along the proposed development route

108. Has your country put in place any measures to prevent damage to biological diversity?

a) No	
b) No, but some measures are being developed	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures in place to prevent damage to biological diversity.

The NRCA Permits and Licences sets out a number of mitigation measures for developmental activities to reduce the impact on the natural environment.

The Island Special Constabulary Force established in 1950 as an Auxiliary to and first reserve to the Jamaica Constabulary Force. In addition to their some of their special duties such as serving summons and warrants, and acting as security for Foreign Missions and Residences, ISCF Officers are also responsible to enforcing a number of environmental laws.



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	X
b) No, but cooperation is under consideration	
c) No, but cooperative programmes are under development	
d) Yes, some cooperative activities being undertaken (please provide details below)	
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.

**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.

**Article 15 - Access to genetic resources**

**110.**  Has your country endeavored to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms, in accordance with paragraphs 2, 4 and 5 of Article 15?

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

Further information on the efforts taken by your country to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms.

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

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.

**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.

The National Environment and Planning Agency through the use of Material Transfer Agreements, where a research project has a commercial objective aims to solicit comments from stakeholders and ensure as far as possible consensus with the conditions of the Agreement and the monetary or non-monetary benefits.

**113.**  In developing national measures to address access to genetic resources and benefit-sharing, has your country taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture?

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

Further information on national measures taken which consider the multilateral system of access and benefit-sharing as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture.

**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.

Drafting Instructions for a new Wildlife Protection Act has used aspects of the Bonn Guidelines as it relates to access and benefit-sharing of the biological resources have been prepared.

**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	X
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)	
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.	

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

a) Yes (please provide details below)	
b) No	X
Please provide further information on capacity-building activities (your involvement as donor or recipient, key actors involved, target audience, time period, goals and objectives of the capacity-building activities, main capacity-building areas covered, nature of activities). Please also specify whether these activities took into account the Action Plan on capacity-building for access and benefit-sharing adopted at COP VII and available in annex to decision VII/19F.	


**Box XXVI.**

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 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	X
b) No, but potential measures are under review	

c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	
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.	

<b>118.</b> <input checked="" type="checkbox"/> 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	
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	X

<b>119.</b> <input checked="" type="checkbox"/> 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	
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	X
Further information on the measures taken.	

**Box XXVII.**

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.	

### Programme of Work on transfer of technology and technology cooperation

**120.** Has your country provided financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation? (decision VII/29)

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

Further comments on the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation.

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**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	X
b) No, but some measures being considered	
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.

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**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	X
b) No, but assessments are under way	
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.

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**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	X
b) No, but assessments are under way	
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.	

<b>124.</b> 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, but some programmes are under development	X
b) Yes, some programmes are in place and being implemented (please provide details below)	
c) 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.	

<b>125.</b> Has your country taken any of the measures specified under Target 3.2 of the programme of work as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention? (annex to decision VII/29)	
a) No	X
b) No, but a few measures being considered	
c) Yes, some measures taken (please specify below)	
d) Yes, many measures taken (please specify below)	
Further comments on the measures taken as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention.	

**Box LVI.**

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

## 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 [N/A]*

**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.

## 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
c) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to promote international technical and scientific cooperation.


Proposals have been submitted under the Jamaica Bi-national Agreements with Columbia, Mexico and Brazil in the area of molecular characterization of plant genetic resources and preparing passport data for plant *ex situ* genebank. Also participated in needs assessment workshop towards Caribbean

Biotechnology and Biosafety programmes.

- Establishment of a Caribbean Agricultural Science and Technology Information Network System (PROCICATIBE) to provide Regional research Coordination.
- Collaborative research with international organizations on vegetable and root crops and sheep and goat production systems.

**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?

e) No	
f) No, but relevant methods are under development	
c) Yes, methods are in place	X

**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.

While joint international programmes have been promoted, establishment is still outstanding. One pending programme includes an activity with INBio (Costa Rica). Local joint venture activities with the Ministry of Agriculture and the University of the West Indies are underway. [SRC]

Examples for the establishment of joint programmes and joint ventures for the development technologies relevant to the objectives of the Convention:

- Support rural development through transfer of economical and sustainable agricultural technologies
- Promotion of empowerment of rural communities through demonstrations and pilot projects for farmers
- Collaborative projects

**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	
c) Yes, links established with relevant NGOs, private sector and institutions	X



**The following question (132) is for DEVELOPED COUNTRIES [N/A]**

**132.** Has your country further developed the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation? (decision V/14)

a) No	
b) Yes, by using funding opportunities	
c) Yes, by means of access to, and transfer of technology	
d) Yes, by using research cooperation facilities	
e) Yes, by using repatriation of information	
f) Yes, by using training opportunities	
g) Yes, by using promotion of contacts with relevant institutions, organizations and the private sector	
h) Yes, by using other means (please specify below)	

Further comments on CHM developments to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation.

**133.** Has your country used CHM to make information available more useful for researchers and decision-makers? (decision V/14)

a) No	
b) No, but relevant initiatives under consideration	
c) Yes (please provide details below)	X

Further comments on development of relevant initiatives.

The CHM is adequately represented on all major committees regarding biodiversity conservation in Jamaica. Information provided by the CHM is needs-driven and aims to fulfill the needs of the researchers and decision-makers

**134.** Has your country developed, provided and shared services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions? (decision V/14)

a) No	
b) Yes (please specify services and tools below)	X

Further comments on services and tools to enhance and facilitate the implementation of CHM and further improve synergies among biodiversity-related Conventions.

In one case, the CHM developed an online searchable database for biodiversity literature in Jamaica, and in most of the agencies and institutions that have the literature, there is no electronic system; as such, the CHM team has put all the metadata into a usable database form so that all persons requiring information can do this easily.

**Box LVIII.**

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

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

The modalities for implementing this Article often include bilateral agreements already established between countries in Science and Technology. In this way, the objectives and outcomes depend on the pace of the inherent bureaucratic processes.

Through funds made available from the Organization of American States (OAS), aspects of the Strategic Plan have been undertaken locally, where possible, ensuring maximum local co-operation in related areas. Capacity has improved in the area of extraction and characterization of chemical actives in local plants, as well as germplasm characterization utilizing Molecular Markets. In addition, capacity in negotiating bio-prospecting contracts has been enhanced. Protocols for the conservation & micro-propagation of selected crops have also been developed.


**Constraints** - The lack of sufficient funds to undertake activities in rational and sustainable manner, often results in a piece-meal approach to activities.

The national priorities of co-operating countries must be in sync in order to facilitate co-operation. Parties to the CBD do not necessarily prioritise Art. 18, especially in face of increasing competition for limited funds.


Increasing incidence of Natural Disasters has hampered progress.

Lack of a modern Intellectual Property Rights regulatory regime.

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

**Box LIX.**

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

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

A Draft Biotechnology Policy as well as Draft National Biotechnology Strategy has been prepared. These involved country-wide consultations with a range of stakeholders. The Strategy outlines areas in which income generating activities may be derived from the sustainable use of the country's biodiversity. Workshops with community groups involved in traditional use of herbs have been held to sensitise to approve methods for identification, harvesting, handling, storage and use.

The sustainable use of biodiversity has been noted to present opportunities for the reduction of poverty (MDG). These have been shared at the community level and with policy makers.

**Constraints**

- o Lack of a modern IPR culture and regulatory system
- o Lack of a strong monitoring arm for pertinent activities under the CBD
- o Lack of financing.

**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.

g) Budgetary allocations by national and local Governments as well as different sectoral ministries	There is no budgetary allocation which specifically states that it is for the implementation of the Convention
h) Extra-budgetary resources (identified by donor agencies)	
a) Bilateral channels (identified by donor agencies)	
b) Regional channels (identified by donor agencies)	
c) Multilateral channels (identified by donor agencies)	
d) Private sources (identified by donor agencies)	
e) 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.

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**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	X
d) Yes, financial support and incentives (please provide details below)	

Further comments on financial support and incentives provided.

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*The next question (138) is for DEVELOPED COUNTRIES [N/A]*

**138.**  On Article 20(2), has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfill the obligations of the Convention?

a) No	
b) Yes (please indicate the amount, on an annual basis, of new and additional financial resources your country has provided)	

Further comments on new and additional financial resources provided.

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*The next question (139) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION*

**139.**  On Article 20(2), has your country received new and additional financial resources to enable it to meet the agreed full incremental costs of implementing measures which fulfill the obligations of the Convention?

a) No	
c) Yes	X (USAID and UNDP funding)

**140.**  Has your country established a process to monitor financial support to biodiversity, including support provided by the private sector? (decision V/11)

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

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

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**141.**  Has your country considered any measures like tax exemptions in national taxation systems to encourage financial support to biodiversity? (decision V/11)

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

Further comments on tax exemptions for biodiversity-related donations.

**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	X
b) No, but review is under way	
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	X
c) Yes, in some initiatives and plans (please provide details below)	
d) Yes, in major initiatives and plans (please provide details below)	

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

Conservation is being implemented into the National Sustainable Development Framework.

**144.** Is your country enhancing the integration of biological diversity into the sectoral development and assistance programmes? (decision VII/21)

a) No	X
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)	

Further comments on the integration of biodiversity into sectoral development and assistance programmes

**The next question (145) is for DEVELOPED COUNTRIES [N/A]**

**145.** Please indicate with an "X" in the table below in which area your country has provided financial support to developing countries and/or countries with economies in transition. Please elaborate in the space below if necessary.

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.

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**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)	X		
c) Priority actions to implement the Global Taxonomy Initiative (decision V/9)			
d) <i>In-situ</i> conservation (decision V/16)		X	X
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)			
g) Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19)			
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			
m) Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity			
n) Others (please specify)			
Further information on application for financial support.			

**Box LXII.**

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

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

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



Challenges	Programme of Work					
	Agricultural	Forest	Marine and coastal	Inland water ecosystem	Dry and subhumid lands	Mountain
(n) Lack of financial, human, technical resources	2	3				
(o) Lack of economic incentive measures	3	2				
(p) Lack of benefit-sharing	1					
(q) Lack of synergies at national and international levels	1					
(r) Lack of horizontal cooperation among stakeholders	1					
(s) Lack of effective partnerships	1	2				
(t) Lack of engagement of scientific community	3	2				
(u) Lack of appropriate policies and laws	1	1				
(v) Poverty	3					
(w) Population pressure	3					
(x) Unsustainable consumption and production patterns	2					
(y) Lack of capacities for local communities	3	2				
(z) Lack of knowledge and practice of ecosystem-based approaches to management	3	3				
(aa) Weak law enforcement capacity	2	2				
(bb) Natural disasters and environmental change	3	2				
(cc) Others (please specify)						

### Inland water ecosystems

<b>148.</b> Has your country incorporated the objectives and relevant activities of the programme of work into the following and implemented them? (decision VII/4)				
<b>Strategies, policies, plans and activities</b>	<b>No</b>	<b>Yes, partially, integrated but not implemented</b>	<b>Yes, fully integrated and implemented</b>	<b>N/A</b>
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	X	
Further comments on incorporation of the objectives and activities of the programme of work				
Water resources management and use efficiency is fully addressed in GOJ's <i>Water Sector Policy</i> document and the Water Resources Authority's coordination and cooperation between Sector Players. Appreciation of the role of wetlands in the ecosystem is steadily being enhanced.				

<b>149.</b> 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	
b) Outcome oriented targets developed but priority activities not developed	X
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).	
Priority claims on available funding.	

<b>150.</b> 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.

International cooperation is not applicable – an island state. However conservation and wise use of wetlands (particularly mangroves) at local level.

**151.** Has your country taken steps to improve national data on: (decision VII/4 )

Issues	Yes	No	No, but development is under way
a) Goods and services provided by inland water ecosystems?	X	X	
b) The uses and related socioeconomic variables of such goods and services?	X	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.

- Mainly in Tourism – Black River Safari, YS and Dunns River development and rafting on the Rio Grande, Martha Brae, etc.
- Water Resources Authority – stream flow measurements. Licensing, monitoring and control of ground and surface water abstraction
- Deforestation of watersheds and pollution of sources by industrial and urban waste as well as by recreational tourism activities

**152.** Has your country promoted the application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems? (decision VII/4 )

a) No, the guidelines have not been reviewed	X
b) No, the guidelines have been reviewed and found inappropriate	
c) Yes, the guidelines have been reviewed and application/promotion is pending	
d) Yes, the guidelines promoted and applied	

Further comments on the promotion and application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems.

**Box LXIII.**

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.

- Indiscriminate abstraction of water has been effectively controlled to stymie saline intrusion (in ground-water mainly) and ecosystem changes in surface flows. Impact in other areas, e.g. deforestation less comprehensive [(a)]
- Slow. Improved coordination between agencies necessary. [(d)]
- Mainly funding constraints. [(f)]

**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)	
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
g) Protection of areas important for reproduction, such as spawning and nursery areas	X
e) Improving sewage and other waste treatment	X
f) Controlling excessive fishing and destructive fishing practices	X
g) Developing a comprehensive oceans policy (if yes, please indicate current stage of development in the box below)	X
h) 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)	
i) Others (please specify below)	
j) 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.

Jamaica has completed the development of its policy on ocean and coastal zone management. The draft Fisheries Policy targets issues of fishing zones, fishing gear and types of fishing licences. The National Programme of Action for the Protection of the Coastal and Marine Environment from Land-based Sources of Pollution which includes actions such as the development of regulations for sewage effluent and sewage sludge and resuscitation and improvement of the operational design of existing malfunctioning sewage treatment plants.

### 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.

Draft Policies on Coral Reefs, Seagrasses and Mangroves and Coastal Wetlands developed.

**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	X
b) Early stages of development	
c) Advanced stages of development	
d) Arrangements in place (please provide details below)	
e) Not applicable	

Further comments on the current status of application of the ecosystem to management of marine and coastal resources.

### Marine and Coastal Living Resources

**156.** Has your country identified components of your marine and coastal ecosystems, which are critical for their functioning, as well as key threats to those ecosystems?

a) No	
b) Plans for a comprehensive assessment of marine and coastal ecosystems are in place (please provide details below)	
c) A comprehensive assessment is currently in progress	
d) Critical ecosystem components have been identified, and management plans for them are being developed (please provide details below)	
e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below)	
f) Not applicable	

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

**157.** Is your country undertaking the following activities to implement the Convention's work plan on coral reefs? Please use an "X" to indicate your response.

Activities	Not implemented nor a priority	Not implemented but a priority	Currently implemented	Not applicable
a) Ecological assessment and monitoring of reefs			X	
b) Socio-economic assessment and monitoring of communities and stakeholders		X		
c) Management, particularly through application of integrated coastal management and marine and coastal protected areas in coral reef environments				
d) Identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral reef services	X			
e) Stakeholder partnerships, community participation programmes and public education campaigns		X		
f) Provision of training and career opportunities for marine taxonomists and ecologists			X	
g) Development of early warning systems of coral bleaching				
h) Development of a rapid response capability to document coral bleaching and mortality				
i) Restoration and rehabilitation of degraded coral reef habitats				
j) Others (please specify below)				
Please elaborate on ongoing activities.				

### 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)	
b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders	
c) Effective management with enforcement and monitoring has been put in place	
d) A national system or network of marine and coastal protected areas is under development	
e) A national system or network of marine and coastal protected areas has been put in place	
f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities	
g) The national system of marine and coastal protected areas includes areas which exclude extractive uses	
h) The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment.	
i) Other (please describe below)	
j) Not applicable	
Further comments on the current status of marine and coastal protected areas.	

### Mariculture

<b>159.</b> Is your country applying the following techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity? Please check all that apply.	
a) Application of environmental impact assessments for mariculture developments	X
b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management	
c) Development of effective methods for effluent and waste control	
d) Development of appropriate genetic resource management plans at the hatchery level	
e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature.	
f) If seed collection from nature cannot be avoided, development of environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch	
g) Use of native species and subspecies in mariculture	
h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids.	

i)	Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity	
j)	Minimizing the use of antibiotics through better husbandry techniques	
k)	Use of selective methods in commercial fishing to avoid or minimize by-catch	
l)	Considering traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques	
m)	Not applicable	
Further comments on techniques that aim at minimizing adverse impacts of mariculture on marine and coastal biodiversity.		

### Alien Species and Genotypes


<b>160.</b> 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	X
b)	Mechanisms to control potential invasions from ballast water have been put in place (please provide details below)	
c)	Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below)	
d)	Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below)	X
e)	Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below)	X
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.		
Jamaica has a permit and licence system which regulates the introduction of species under the Natural Resources Conservation Authority Act.		

#### Box LXIV.


Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:	
<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>	



### 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)	
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.	

**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	
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 <i>In-situ</i> and <i>Ex-situ</i> conservation and sustainable use of agricultural biodiversity.	

### Annex to decision V/5 - Programme of work on agricultural biodiversity

#### Programme element 1 – Assessment

**163.** Has your country undertaken specific assessments of components of agricultural biodiversity such as on plant genetic resources, animal genetic resources, pollinators, pest management and nutrient cycling?

a) No	X
b) Yes, assessments are in progress (please specify components below)	
c) Yes, assessments completed (please specify components and results of assessments below)	
Further comments on specific assessments of components of agricultural biodiversity.	

**164.** Is your country undertaking assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance)?

a) No	
-------	--

b) Yes, assessments are under way	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).	

<b>165.</b> 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.	

<b>166.</b> Has your country been monitoring an overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993 when the Convention entered into force?	
a) No	
b) Yes, no change found (status quo)	X
c) Yes, overall degradation found (please provide details below)	
d) Yes, overall restoration or rehabilitation observed (please provide details below)	
Further comments on observations.	

<b>Programme element 2 - Adaptive management</b>	
<b>167.</b> 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.	
Integrated Pest Management (IPM)	
Good Agricultural Practices (GAP)	

Programme element 3 - Capacity-building	
<b>168.</b> 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 <i>In-situ</i> conservation, sustainable use and management of agricultural biological diversity?	
a) No	
b) Yes (please specify area/component and target groups with increased capacity)	X
Further comments on increased capacities of farmers, indigenous and local communities, and their organizations and other stakeholders.	
Scotch Bonnet Pepper seed production; Cultivars of pumpkin developed for seed production; Various Cassava planting material to farmers and stakeholders.	

<b>169.</b> 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	

<b>170.</b> 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.	

Programme element 4 - Mainstreaming	
<b>171.</b> 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	X
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)	
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.

**172.** Is your country supporting the institutional framework and policy and planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and action plans, and its integration into wider strategies and action plans for biodiversity?

a) No	
b) Yes, by supporting institutions in undertaking relevant assessments	
c) Yes, by developing policy and planning guidelines	X
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.

**173.** In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, *In-situ*, and *Ex-situ*, of the variability of genetic resources for food and agriculture, including their wild relatives?

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

Further comments on of the conservation of the variability of genetic resources for food and agriculture in their center of origin.

Conservation of germplasm Cassava, Sweet potato, fruit trees, pepper seeds, pumpkin seeds; field gene banks; Jamaica Hope cattle semen.

**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.

**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.

## 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	X
b) Yes, please describe the process used	
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	

#### 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.

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#### 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.

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#### 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.

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#### Box LXX.

Please indicate how your country has collaborated and cooperated (e.g., south-south, north-south, south-north, north-north) with other governments, regional or international organizations in implementing the programme of work. Please also indicate what are the constraints and/or needs identified.

--

## Expanded programme of work on forest biological diversity

Programme element 1 – Conservation, sustainable use and benefit-sharing	
<b>175.</b> Is your country applying the ecosystem approach to the management of all types of forests?	
a) No (please provide reasons below)	X
b) No, but potential measures being identified (please provide details below)	
c) Yes (please provide details below)	
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).	

<b>176.</b> Has your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity?		
Options	X	Details
a) Yes		Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions
b) No	X	Please provide reasons below
		No structured or formalized plans have been agreed.
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).		

<b>177.</b> Is your country undertaking any measures to protect, recover and restore 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
b) No	X	Please provide reasons below
		No structured or formalized plans have been agreed.
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).		

<b>178.</b> Is your country undertaking any measures to promote the sustainable use of forest biological diversity?		
Options	X	Details
a) Yes		Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
b) No	X	Please provide reasons below No structured or formalized plans have been agreed.
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).		

<b>179.</b> 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 No structured or formalized plans have been agreed.
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)		

<b>Programme element 2 – Institutional and socio-economic enabling environment</b>		
<b>180.</b> 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		Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
b) No	X	Please provide reasons below No structured or formalized plans have been agreed.
Further comments on the enhancement of the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs,		

tools and targets).

**181.** Is your country undertaking any measures to address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity?

Options	X	Details
a) Yes		Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities
b) No	X	Please provide reasons below No structured or formalized plans have been agreed.

Further comments on review of socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

**182.** Is your country undertaking any measures to increase public education, participation and awareness in relation to forest biological diversity?

Options	X	Details
a) Yes		Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
b) No	X	Please provide reasons below No structured or formalized plans have been agreed.

Further comments on measures to increase public education, participation and awareness in relation to forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

### Programme element 3 – Knowledge, assessment and monitoring

**183.** Is your country undertaking any measures to characterize forest ecosystems at various scales in order to improve the assessment of the status and trends of forest biological diversity?

Options	X	Details
a) Yes		Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
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	<input type="checkbox"/>	Please identify priority actions in relation to each objective of goal 2 and describe measures undertaken to address these priorities
b) No	<input type="checkbox"/>	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	<input type="checkbox"/>	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
b) No	<input type="checkbox"/>	Please provide reasons below

Further comments on the improvement of the understanding of the role of forest biodiversity and ecosystem functioning (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

**186.** Is your country undertaking any measures at national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity?

Options	X	Details
a) Yes	<input type="checkbox"/>	Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
b) No	<input type="checkbox"/>	Please provide reasons below

Further comments on the improvement of the infrastructure for data and information management (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints,

needs, tools and targets).

**Box LXXI.**

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

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

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

**187.** Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? (decisions V/23 and VII/2 )

a) No

X

b) Yes (please provide details below)

Further comments on scientific, technical and financial support, at the national and regional levels, to the activities identified in the programme of work.

**188.** Has your country integrated actions under the programme of work of dry and sub-humid lands into its national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD? (decisions V/23, VI/4 and VII/2)

a) No

X

b) Yes (please provide details below)

Further comments on actions under the programme of work of dry and sub-humid lands integrated into national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD.

**189.** Has your country undertaken measures to ensure synergistic/collaborative implementation of the programme of work between the national UNCCD process and other processes under related environmental conventions? (decisions V/23, VI/4 and VII/2)

a) No

X

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	X
b) No, but assessment is ongoing	
c) Yes, some assessments undertaken (please provide details below)	
d) Yes, comprehensive assessment undertaken (please provide details below)	

Further comments on the relevant information on assessments of the status and trends and dissemination of existing knowledge and best practices.

**Programme Part B: Targeted Actions**

**191.** Has your country taken measures to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences? (part B of annex I of decision V/23, activities 7 to 9)

a) No	X
b) Yes, some measures taken (please provide details below)	
c) Yes, many measures taken (please provide details below)	

Further comments on the measures taken to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences.

**192.** Has your country taken measures to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work?

a) No	X
b) Yes, some measures taken (please provide details below)	
c) Yes, comprehensive measures taken (please provide details below)	
d) Yes, all identified capacity needs met (please provide details below)	

Further comments on measures taken to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work.

**Box LXXII.**

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

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

### Mountain Biodiversity

**Programme Element 1. Direct actions for conservation, sustainable use and benefit sharing**

**193.** Has your country taken any measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity?

- |  |   |
|--|---|
| a) No  |   |
| b) No, but relevant measures are being considered          |   |
| c) Yes, some measures taken (please provide details below) | X |
| d) Yes, many measures taken (please provide details below) |   |

Further comments on the measures taken to prevent and mitigate the negative impacts of key threats to mountain biodiversity

The Ridge to Reef Watershed Project had five key areas which were to contribute to improved environmental management; improved governance, effective institutional arrangements; enhanced public awareness; improved policy, legislation, compliance and enforcement; and capacity building.

**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) |   |
| d) Yes, many measures taken (please provide details below) | X |

Further comments on the measures taken to protect, recover and restore mountain biodiversity

Work of the Forestry Department; protected areas and the management plan developed by the JCDT. Work of TNC; Fairchild Tropical Gardens endemic plant project which is to commence in 2005.

**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  | X |
| b) No, but some measures are being considered              |   |
| c) Yes, some measures taken (please provide details below) |   |
| 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

**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	X
b) No, but some measures are being considered	
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

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

Further comments on the legal, policy and institutional frameworks for conservation and sustainable use of mountain biodiversity and for implementing the programme of work on mountain biodiversity.

**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	X
b) No, but some cooperation frameworks are being considered	
c) Yes (please provide details below)	

Further information on the regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity

**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	X
b) No, but relevant programmes are under development	
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

**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  | X |
| b) No, but relevant programmes are under development                       |   |
| 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 improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity

**201.** Has your country taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems?

- |  |   |
|--|---|
| a) No  | X |
| b) No, but relevant programmes are under development                       |   |
| 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.

**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.

Jamaica attended the regional preparatory meeting for COP in Argentina in 2004.

**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.

The IOJ continued to work on the regional programme with IABIN for data sharing and networking focused on invasive species.

*The following question (204) is for DEVELOPED COUNTRIES [N/A]*

**204.** Is your country supporting the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes? (decision VI/27 B)

a) No

b) No, but programmes are under development

c) Yes, included in existing cooperation frameworks (please provide details below)

d) Yes, some cooperative activities ongoing (please provide details below)

Further comments on support for the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes.

**205.** Is your country working with other Parties to strengthen the existing regional and subregional mechanisms and initiatives for capacity-building? (decision VI/27 B)

a) No

b) Yes

**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)

Further comments on contribution to the assessment of the regional and subregional mechanisms.

**Box LXXIV.**

Please elaborate below on the implementation of the above decisions specifically focusing on:

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

## F. COMMENTS ON THE FORMAT

### Box LXXV.

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

Persons who assisted in the completion of this report noted the following:

- the questions in the report are long winded, very general and repetitive
- the report was too long
- not user friendly
- the questions were very difficult and ambiguous
- the section on targets was extremely difficult to complete; as the targets set and documented in the National Biodiversity Strategy and Action Plan were not developed in this format.