2. LEGAL AND POLICY FRAMEWORK FOR THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY

2.1 Legislation Governing Biodiversity

Jamaica’s current environmental legislation provides a basic framework for the conservation and sustainable use of biodiversity. There are at least 52 pieces of legislation which have aspects that directly relate to the management of the environment. However, very few of these statutes deal comprehensively with the protection, conservation and sustainable use of biodiversity, as they are primarily sectoral in nature.

In becoming a Party to the Convention on Biological Diversity, Jamaica bound itself to implement specific obligations under the Convention. The Convention inter alia places obligations on State Parties to:

- Put in place measures to develop or maintain the necessary legislative and or regulatory provisions for the protection of threatened species and populations.

- Take legislative, administrative or policy measures to facilitate access to genetic resources by national legislation.

- Regulate and manage the collection of biological resources from natural habitats for ex-situ conservation purposes.

- Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity.

- As far as possible introduce appropriate procedures requiring environmental impact assessments of proposed projects which may have a significant adverse effect on biodiversity and where appropriate allow public participation.

- Take such legislative, administrative or policy measures to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology, and provide for the effective participation in biotechnological research, and fair and equitable sharing of benefits arising from the commercial utilisation of genetic resources, especially by countries providing genetic resources.

The Convention only binds Parties and therefore implementation of the provisions of the Convention at a national level requires private individuals, universities and other institutions to have their rights and responsibilities clarified under national law or policy.

The legislative framework in Jamaica does not comprehensively protect ecosystem diversity, species diversity or genetic diversity. A new framework is needed that recognises the components of biodiversity and ensures the sustainable use of biodiversity in Jamaica. In this regard, Jamaica is in the process of reviewing or developing several pieces of legislation that are relevant to the conservation of biodiversity and its sustainable use. These include the review of the Forest Act (1996); the creation of a new Wild Life Protection Act, a new Fisheries Act and a new Watershed Act; and the creation of regulations under The Endangered Species (Protection, Conservation and Regulation of Trade) Act (2000). There are, however, still some gaps in the framework, which are described in Section 3.

2.1.1 The Natural Resources Conservation Authority Act, 1991

The Natural Resources Conservation Authority Act created the Government’s environmental agency, the Natural Resources Conservation
Authority (NRCA). Under this Act, the NRCA may take the necessary steps to:

- Effectively manage the physical and natural resources of Jamaica so as to ensure their conservation, protection and proper use; promote public awareness of Jamaica’s ecological systems and their importance to the social and economic life of Jamaica; manage national parks, marine parks, protected areas, public recreational facilities; and advise the Minister on general policies relevant to the management, development, conservation and care of the environment.

- Develop, implement and monitor plans and programmes relating to the management of the environment, conservation and protection of natural resources and conduct research into such matters.

- Regulate and control development so as not to cause injury to public health or to any natural resource.

Under the Natural Resources Conservation (Prescribed Enterprise, Construction and Development) Order, 1996, the island of Jamaica was prescribed, subject to special controls to minimise adverse environmental and health impacts of development. A list of prescribed types of enterprises, construction or development is contained in the Order e.g., reclamation of wetlands, construction of roads, hotel development, clear-cutting of forested areas. A permit is required to undertake any of the prescribed developmental activities. The Permit and Licensing System became effective in January 1997.

Under the NRCA Act, a licence is required to discharge any poisonous, noxious or polluting substance into waters or the ground. Licences are also used to control the quality of effluent discharged. Regulations and Standards governing the discharge of wastewater are soon to be completed.

The NRCA Act is the only legislation in Jamaica that includes a requirement to conduct Environmental Impact Assessments (EIAs). Section 10 of the Act stipulates that the Authority may require an EIA:

- By notice in writing to an applicant for a permit or a person responsible for undertaking any enterprise, construction or development in a prescribed area, or of a prescribed description or category where it is of the opinion that the activities of such enterprise, construction or development are having or are likely to have an adverse effect on the environment.

2.1.2 The Wild Life Protection Act, 1945

The Wild Life Protection Act is the only statute in Jamaica that specifically protects designated species of animals and regulates hunting in Jamaica. The main provision that ensures the protection of animals is found in Section 6 of the Act, which makes it a criminal offence for any person to be in possession of any protected animal, or part thereof. A person may be liable on summary conviction to a fine of one hundred thousand dollars.

The Act includes a list of fourteen animals that are designated as protected in the Third Schedule of the Act. All birds in Jamaica except those in the second part of the Second Schedule of the Act are protected.

The Act also regulates the hunting of game birds and provides for the declaration of game sanctuaries and games reserves in which no hunting is allowed. The First Schedule of the Act declares all Forest Reserves as Game Reserves.

Specific provisions are also in place for the protection of fish and the protection of turtles including the taking of turtle eggs.
2.1.3 The Watershed Protection Act, 1965

The Watershed Protection Act provides a framework for the management of watersheds in Jamaica. There are 26 watershed management units declared under the Act. The Act governs the entire island of Jamaica and makes provisions for the intervention of the Government in regulating uses of private land including the clearing of land and implementing appropriate agricultural practices. There are also provisions for intervention through assisted improvement agreements whereby improvement works can be carried out on land to protect watersheds.

No regulations have ever been prepared under this Act and therefore voluntary compliance and training have been the only measures available to ensure appropriate management practices in watersheds in Jamaica. Proposed amendments to the Watershed Act have been completed to remedy the deficiencies in the Act, as there is currently no legal framework for appropriate soil conservation and land use management measures that can be implemented.

2.1.4 The Beach Control Act, 1956

The Beach Control Act regulates rights to the foreshore and the floor of the sea in Jamaican waters. Provisions contained in the Act govern commercial and recreational activities; the control and management of development on the beach through licensing provisions and the protection of the marine ecosystem. Marine protected areas may be declared under the Act to:

- Control the disposal of rubbish or other waste matter;
- Control dredging or disturbance in any way of the floor of the sea;
- Prevent or control the destruction or removal of sea fans and sedentary marine animals; and
- Control the searching for or removal of any treasure or artefact from the floor of the sea.

This Beach Control Act is limited in its mandate to govern development and commercial activities on the foreshore and floor of the sea, and does not appropriately address larger issues of the proper management of the coastal zone and marine resources.

2.1.5 The Forest Act, 1996

The Forest Act is the only piece of legislation in Jamaica that uses the word ‘biodiversity’. This Act sets out the role and function of the Forestry Department and the Conservator of Forests.

The Act vests responsibility in the Conservator of Forests for developing and maintaining an inventory of forests and lands suitable for the development of forests.

The Forestry Department is required to make an assessment of forestry lands to determine their potential for maintaining and enhancing biodiversity. Provisions have been made in the Act for the controlled utilisation of forest resources in a rational manner.

Jamaica has over 100 gazetted forest reserves. Under the Act private lands may be acquired for declaration as forest reserves. One of the purposes of forest reserves is to protect and conserve endemic flora and fauna.

The Act calls for the creation of forest management plans, which stipulate the allowable annual cut where appropriate, conservation and protection measures and the roles of other Government departments. The purpose of forest management plans is to ensure the protection and conservation of forests, soil, water, wildlife, and forest products.

The Act makes it an offence to: destroy trees, cause damage, light fires, carry axes, kill or injure wild birds or animals in a forest reserve or forest management area.
2.1.6 The Fishing Industry Act, 1975

The taking and catching of fish are regulated by the Fishing Industry Act. A licence is required to catch fish utilising one of the prescribed methods under the Act.

The Act provides for the protection of fish through the designation of fish sanctuaries and the declaration of open and closed fishing seasons (for conch and lobster). Two Fish Sanctuaries have been declared under this Act.

Regulations are being created for the management of the conch fishery. For the lobster fishery, the Act stipulates the size of lobsters to be caught and mesh size for nets. The fines under this Act are extremely low ranging from one hundred to one thousand Jamaican dollars.

A Fisheries Bill has already been drafted to replace the Fishing Industry Act (1975); the 1976 Regulations; sections of the Wild Life Protection Act dealing with fish; and the Morant and Pedro Cays Act. The Morant and Pedro Cays Act provide a licensing system for fishing and prohibit the killing of turtles and birds on the Cays.

The Fisheries Bill addresses fishery management plans, declaration of fishery management areas around the island and the establishment and operation of aquaculture facilities. It will also include provisions for conservation and management measures and licensing of all fishing activities to ensure enforcement of the controls. This Bill is currently being reviewed.

2.1.7 Endangered Species (Protection, Conservation and Regulation of Trade) Act, 2000

The Endangered Species Act provides for the conservation, protection and regulation of trade in endangered species. The Act was prepared to allow the Government of Jamaica to fulfil its obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

There are four Schedules. The First Schedule governs endangered species that are threatened with extinction and which may be affected by trade. The Second Schedule governs species which could become extinct if trade is not regulated. The Third Schedule governs species which any contracting party wishes to regulate within its own jurisdiction. The Fourth Schedule is particular to Jamaica and lists Jamaican indigenous species. Domestic trade in these endangered species is controlled under the Regulations.

2.1.8 Other Legislation Relating to Biodiversity

There are several other Acts that relate to the preservation/conservation of Jamaica’s biodiversity (also see Table 4).

2.1.8.1 Town and Country Planning Act, 1948 (amended in 1999)

Substantial amendments were made to the Town and Country Planning Act in 1999 to provide for effective enforcement. The Act is currently being revised to provide a more comprehensive control over planning in Jamaica.

The objective of this Act is to ensure the orderly development of land. This is achieved through Development Orders which are legal documents used by the planning authorities to inter-alia provide for protection of amenities and conservation and development of the resources of the prescribed area. Development Orders are the main means of control of land use in Jamaica.

Presently the entire island is not covered by Development Orders. Existing orders are not updated regularly. In areas covered by a Development Order planning permission is
required from the local authority or from the Town and Country Planning Authority if the area is “called in” or if the development does not conform to the zoning in the Development Order. In considering development applications the planning authorities taking into account the Development Order and other material consideration.

The Act also provides for the making of Tree Preservation Orders (Section 25) whereby a local authority may seek to preserve trees or woodlands in their area and prohibit wilful damage or destruction of trees, or require the replanting of trees. The Act provides for notification of, designation, and the right to submit objections to the declaration of such an Order including provisions for compensation. These Orders are not widely used.

2.1.8.2 The Mining Act of 1947 (amended in 1988)

The Mining Act regulates mining activities in Jamaica and establishes that the rights to minerals belong to the Crown. Licences to extract minerals from Jamaica are granted by the Mines and Geology Division. Under the Act and its associated Regulations, the holder of a mining lease is required to restore all mined lands to at least the level of agricultural or pastoral productivity or of suitability for afforestation, which existed before mining. However, the penalties for non-compliance are low and this has affected the performances of mining licencees.

Under Section 9 of the Mining Act, the Minister by Gazette may declare an area, for which there is no existing licence or mining lease, to be closed to prospecting and mining. Such areas or sections of the area may be reopened by Gazette, with terms and conditions related to prospecting or mining.

2.1.8.3 The Quarries Control Act (1983)

The Quarries Control Act was amended in 1994. The Act provides for the establishment of a Quarries Advisory Committee (Section 6) to designate quarrying zones and to license operators. It makes provisions for written notice to be served on persons operating quarries if the operation is detrimental to the fauna and flora of the neighbourhood (Section 29). Where illegal quarrying activities exist the Court may order that any fine imposed under the Act may be directed towards the rehabilitation of the illegally operated quarry.

2.1.8.4 Water Resources Authority Act, 1995

The Water Resources Authority Act was promulgated to regulate and manage the abstraction and allocation of water resources through the establishment of the Water Resources Authority. The Act also governs the preservation of water quality and the conservation of such resources. The Authority is required to gather data on the quantity and quality of water in above ground and underground resources. A Master Plan, as required under the Act, has been developed to allow the proper management of such resources. It evaluates and recommends how Jamaica should use its water resources. A licensing system is in place to govern the allocation of water resources.
### Table 4  Other biodiversity related legislation

<table>
<thead>
<tr>
<th>Other Legislation</th>
<th>Impact on Biodiversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals (Disease) and Importation Act, 1969</td>
<td>Allows for controlling the spread and treatment of diseases within the island via importation controls on animals, and the eradication and disposal of infected animals or where such infection is suspected.</td>
</tr>
<tr>
<td>Black River (Upper Morass) Reclamation Act, 1941</td>
<td>Empowers the Black River Drainage and Irrigation Board to regulate and maintain water courses and damming structures; keep the Black River clean, clear and navigable to a certain point; and can require landowners to clean canals, trenches, etc. located on their lands.</td>
</tr>
<tr>
<td>Clean Air Act, 1964</td>
<td>Makes provision for the prevention of the discharge of noxious or offensive gases into the air including fumes and dust from alumina, cement, lime, petroleum and gypsum works.</td>
</tr>
<tr>
<td>Harbours Act, 1874</td>
<td>Regulates activities within harbours through the Marine Board by regulating the movement of boats and vessels in harbours, channels or approach thereto; the placement of buoys and removal of sunken structures from harbours; penalties for the depositing of refuse and waste matter from vessels; and removal of sand, stone, ballast, etc., from harbours, reefs or shoals.</td>
</tr>
<tr>
<td>Institute of Jamaica Act, 1978</td>
<td>Promotes Literature, Science and Art, with responsibility for national museums.</td>
</tr>
<tr>
<td>Jamaica National Heritage Trust Act, 1985</td>
<td>Establishes a statutory body to protect Jamaica’s national heritage, including any place, animal or plant species or object/building.</td>
</tr>
<tr>
<td>Litter Act, 1985</td>
<td>Defines what constitutes litter on private and public property and prescribes penalties for offences against the Act and the provision of receptacles for proper disposal.</td>
</tr>
<tr>
<td>Local Improvements Act, 1914</td>
<td>Governs all development of lands within Kingston or other such Ministerial prescribed areas via the requirement for subdivision approval from the relevant local authority.</td>
</tr>
<tr>
<td>Morant and Pedro Cays Act, 1907</td>
<td>Affirms the status of the Morant and Pedro Cays and prohibits fishing inside certain limits, slaying or catching of birds on the Cays or the catching of turtles within the territorial limits of the Cays.</td>
</tr>
<tr>
<td>Petroleum Act, 1979</td>
<td>Vets all petroleum in the State and makes provisions for the creation of Regulations which prevent pollution and orders remedial action where this takes place, as well as the protection of fishing, navigation, etc.</td>
</tr>
<tr>
<td>Plants (Importation) Control Regulation, (1997)</td>
<td>Outlines the role of the National Biosafety Committee in monitoring and regulating the importation of Living Modified Organisms for research only.</td>
</tr>
<tr>
<td>Plant Quarantine Act, 1993</td>
<td>Provides protection for Jamaica’s flora from imported diseases or pests transported via plants, plant products, and soil or via other means as well as the course of action to be taken when these are discovered within the island.</td>
</tr>
<tr>
<td>Public Health Act, 1985</td>
<td>Allows for the establishment of Local Boards to regulate activities carried out in private or public buildings or properties where such activities prove injurious to public health.</td>
</tr>
<tr>
<td>Urban Development Corporation Act, 1968</td>
<td>Establishes the Urban Development Corporation as a statutory body, which has amongst its functions the duty to carry out construction, maintain public parks, car parks, etc. in such manner to ensure preservation of architectural or historical objects or sites.</td>
</tr>
</tbody>
</table>

Source: Natural Resources Conservation Authority, 1999
2.2 The Jamaican Constitution

The Constitution protects property rights and establishes the principles on the ownership of the property in Jamaica. The legal status of owned property applies to the ownership of flora and fauna in Jamaica. The proprietor owns all flora on his/her property and if he/she catches wildlife on his/her property (subject to the Wild Life Protection Act) then he/she owns these wild animals.

The Constitution prohibits the taking of property by compulsory acquisition. However, it provides exceptions including taking possession of property to prevent activities injurious to the health of animals and plants and, where necessary, for carrying out an investigation for the conservation of natural resources.

2.3 International Agreements

Environmental management in Jamaica is guided not only by national policies and legislation but also by several international and regional agreements. The island’s commitment to a number of international agreements relating to biodiversity is shown in Table 5.

2.3.1 The Convention on Biological Diversity

The Convention on Biological Diversity creates the framework for Parties to implement national legislative, policy and administrative measures. The Government of Jamaica intends to fully implement the provisions of this Convention by carrying out the necessary legislative changes required to fulfil our obligations.

2.4 National Policies and Strategies

The policies and strategies that guide Government action in the conservation and sustainable use of biological resources are outlined in the following sections.
### Table 5  International/regional agreements to which Jamaica is a Party*

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convention Concerning the Protection of the World Cultural and Natural</td>
<td>Acceptance: 14 June, 1983</td>
</tr>
<tr>
<td>Heritage, Paris, 1983</td>
<td></td>
</tr>
<tr>
<td>Other Matter (as amended), London, Mexico City, Moscow [Washington], 1972</td>
<td></td>
</tr>
<tr>
<td>London, 1973</td>
<td></td>
</tr>
<tr>
<td>Prevention of Pollution from Ships, London, 1973</td>
<td></td>
</tr>
<tr>
<td>Convention for the Protection and Development of the Marine Environment</td>
<td>Ratification: 1 May, 1987</td>
</tr>
<tr>
<td>of the Wider Caribbean Region, Cartagena de Indies, 1983</td>
<td></td>
</tr>
<tr>
<td>Protocol Concerning Cooperation in Combating Oil Spills in the</td>
<td>Entry into Force: 1 May, 1987</td>
</tr>
<tr>
<td>Wider Caribbean Region</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td></td>
</tr>
<tr>
<td>London Amendment to the Montreal Protocol on Substances that Deplete the</td>
<td>Ratification: 31 March, 1993</td>
</tr>
<tr>
<td>Ozone layer, London</td>
<td></td>
</tr>
<tr>
<td>Convention on Biological Diversity, Rio de Janeiro, 1992</td>
<td></td>
</tr>
<tr>
<td>Fauna (CITES)</td>
<td></td>
</tr>
<tr>
<td>Convention on Wetlands of International Importance especially as</td>
<td>Accession: 7 October, 1997 Entry into force: 7 February, 1998</td>
</tr>
<tr>
<td>Waterfowl Habitats (RAMSAR Convention)</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Ministry of Land and Environment, 1999*
2.4.2 Jamaica National Industrial Policy (1996)

The National Industrial Policy was developed by the GOJ to focus on issues of investment, productivity and growth. After an extensive consultation process, this document was presented to the nation to provide the necessary basis for a clear, coherent and consistent set of policies to guide the economy on a path of renewed growth and development into the 21st century. The Policy states that environmental management plays an important role in industrial development by ensuring the implementation of cleaner production and the appropriate standards.

2.4.3 Jamaica National Land Use Policy (1996)

The comprehensive National Land Use Policy was developed after an assessment of the physical resource and socio-economic needs of the country. This assessment underscored the need for a more complete understanding and appreciation of the finite nature of land resources and advocacy for its sustainable use.

This Policy establishes the framework for the planning, management and development of Jamaica’s resources. It takes into consideration that Jamaica, including the foreshore, territorial waters and exclusive economic zone is a finite resource and a national asset. This asset must be used for sustainable development of the island.

2.4.4 Policy for Jamaica’s System of Protected Areas (1997)

After an extensive consultation process, this Policy was adopted by the GOJ as the official policy framework for the establishment of a National System of Protected Areas. The Policy is of paramount significance to the implementation of the CBD, since the establishment of protected areas may be one of the most effective mechanisms to support the conservation of Jamaica’s biodiversity.

The goals of the Protected Areas Policy encompass issues related to economic development, environmental conservation, sustainable resource use, recreation, public education, public participation, local responsibility and financial sustainability.

The successful implementation of the Protected Areas Policy will depend on the co-ordination of policy, planning and implementation among the agencies with responsibility for the different types of protected areas. The following documents have been prepared for implementation: Black River Protection Area Management Plan; St. Elizabeth Environmental Policy Framework; Palisadoes/Port Royal Environmental Policy Framework and draft guidelines.

2.4.5 The National Physical Plan (1978)

The National Physical Plan was developed to foster orderly development in the country. It focuses on physical planning, settlement, conservation, income generators (i.e. agriculture, forestry and fisheries, mineral industries, tourism and manufacturing) and public utilities through the use of Development Orders.

There are six Confirmed Parish Development Orders, six Confirmed Coastal Orders, thirteen Petroleum Filling Station Orders and four Confirmed Development Orders.

Parish Development Orders are still required for Hanover, St. Mary; Portland; St. Thomas; Kingston and St. Andrew; St. Catherine; and St. Elizabeth.

2.4.6 Management and Recovery Plans for Endangered Species

Management and recovery plans for endangered species have been completed over the last few years. These include: the Crocodile Action Plan; the Giant Swallowtail Butterfly Recovery Action Plan.
Plan; the Jamaican Iguana Conservation Strategy; the Sea Turtle Recovery Action Plan; the Jamaica Coral Reef Action Plan; and the Plan for Managing the Marine Fisheries of Jamaica. In addition, management plans have been developed for other, non-threatened species such as the Sooty Tern and the Brown Noddy.

These policies and action plans:

- identify projects and programmes to protect species which are endangered and threatened;
- seek to mitigate adverse impacts on and the destruction of habitats across the country;
- aim at changing behaviour and educating the public on aspects of biodiversity; and
- recommend increased means of protection under the law for our natural resources and the environment.

### 2.4.7 Biosafety

The National Biosafety Committee (NBC) was formed in 1996 with a mandate to develop clear procedural guidelines for the importation of transgenic plants for experimental use. In 1997, through the efforts of the National Commission on Science Technology (NCST) and the NBC, regulations were gazetted under the Plant Quarantine Act to permit entry of transgenic plant material for contained experimentation.

The NBC is uniquely placed to monitor and control the importation, use and handling of genetically modified organisms in Jamaica; however, to effectively fulfil its mandate, an appropriate national policy is necessary. The Government of Jamaica, through the NCST, has recently mandated the preparation of a national Biosafety Policy to guide the safe transfer, handling and use of the products of biotechnology.

### 2.4.8 Access to Genetic Resources and Fair and Equitable Sharing of Benefits

Bioprospecting and the use of genetic resources in biotechnology open up a wealth of potential uses, particularly in agriculture, the pharmaceutical industry, botanical medicine, and the cosmetic industry. There are currently no legislative or policy measures on access and benefit sharing of genetic resources in Jamaica.

Recognition of the importance of genetic resources to local industries will give urgency to the conservation of these resources for future sustainable use. At present there is very little research being carried out on genetic resources in Jamaica.

### 2.4.9 Future Initiatives

#### 2.4.9.1 Traditional Knowledge

Much traditional knowledge exists in Jamaica for the different uses and properties of local genetic resources. If this knowledge is not preserved and access regulated it might be lost or be entered into the public domain, which could diminish its value. However, the obligation to protect and preserve this traditional knowledge has not been addressed in any systematic manner and there is no standard definition of what traditional knowledge should include.

There is a need for the protection of traditional knowledge through national policy and legislation to ensure equitable access and benefit sharing.

#### 2.4.9.2 Draft Policies and Guidelines

There are various draft policies that have been prepared concerning the conservation and sustainable use of Jamaica’s biodiversity. These policies are primarily sectoral in nature and include:
• Forest Policy 2001 (updated Forest Land Use Policy, 1996)
• Watershed Policy
• Ocean and Costal Zone Management Policy
• National Policy and Strategy on Environmental Management Systems
• Draft policies on mangroves and coastal wetlands, coral reefs, protected animals in captivity orchids, seagrass protection, and mariculture.

Several draft guidelines are also being considered including:

Protected Areas Management and Operation Plans
• Delegation and Compliance
• Integrated Pest Management
• Protection of Private Lands
• Disaster Preparedness and Natural Disaster
• Human Resources Management
• Fire Management
• Financing and Land Acquisition
• Resource Users and Special Users
• Research

There is currently no policy governing the protection of rivers and caves or offshore cay.