At the 1992 Earth Summit in Rio de Janeiro, the world leaders agreed on a comprehensive strategy for "sustainable development". One of the key agreements adopted at Rio was the Convention on Biological Diversity (CBD). This is to ensure that all governments remain committed to reducing the loss of global biological diversity and the establishment and maintenance of global ecological equilibrium.

In simple terms, biological diversity or ‘biodiversity’ refers to the richness of species composition of all living organisms (plants, animals etc.). The maintenance of ecological equilibrium while adapting to ensure future viability is an important, but daunting task for any country. Despite global biodiversity being the subject of many debates, the populace remains ignorant of its importance to their existence and livelihood in many instances. The fact is, there has always been a complex relationship between man and his environment, as man has always exploited his environment in pursuit of better living. However, there has been little consideration of the impacts of the environment as a result of this quest. It was once thought that climate change and ozone depletion were just scare tactics used by environmentalist to bring about a certain awareness of the importance of the environment and the need for conservation. These manifestations as well as degradation of natural vegetation, soil erosion, accelerated species extinction and acid rain are no longer myths but are a result of the increased pressure on environmental resources with little sustainable planning and can no longer be ignored. Within the last two decades the world’s population has tripled and hence there is a constant need for accommodation. This has resulted in destruction of acres of ‘virgin forests’ and many before they could have been properly explored and documented, hence the vulnerability of species could have already been in question.
Separate and apart from the aesthetic beauty of biological diversity, each species has its unique role within its ecosystem, and if we continue to eliminate species faster than we can discover new ones, as well as polluting our environment faster than nature can respond, then, of course that is a recipe for environmental disaster.

In Jamaica there are a number of organizations that promote biodiversity awareness/education to prevent or reduce this potential disaster. Some of these include: the Jamaica Environment Trust (JET), the Jamaica Conservation and Development Trust (JCDT), The Ministry of Education (MoE), and the Natural History Division (NHD).

Take for example, the Education Department (ED) and the Jamaica Clearing House Mechanism (JA-CHM), two departments of the Natural History Division (NHD), are pivotal in helping to secure and promote awareness of Jamaica’s Biodiversity. The ED has a number of educational programmes that incorporate biodiversity. These include: ‘An Afternoon with a Scientist’, monthly programme offered to students from schools within the environs of the Institute of Jamaica.

Photograph 1: Students participating in “Afternoon with a Scientist” programme
Additionally, the Earth Day Essay and Poster competition is an annual event held on April 22 of each year. This competition allows students from all over Jamaica to use their creativity and knowledge of Jamaica’s biodiversity to produce pieces of work which seek to bring about increased environmental awareness. The competition has a multimedia approach to environmental stewardship and has been expanded the competition to include a photography component.

Photograph 2: Recipients of award at the Earth Day Essay and Poster competition 2007

February 2, 2007 was hailed as World Wetlands Day to commemorate this event Institute of Jamaica through the Natural History Division hosted activities at Mason River Protected Area, one of the division’s field stations in Clarendon in order to bring about awareness of this unique feature. The Mason River Protected Area is Jamaica’s only upland peat bog. In addition to this, the division conducts regular island-wide outreach activities which include presentations and exhibitions geared at the youths of our country. If we are able to change the mindset of the youth by making them aware of the importance of the environment then there is hope.

The JA-CHM facilitates the exchange of biodiversity information around the world. Based on the available resources it was directly created to meet the needs of its users in a decentralized way which are driven by focal points in networking at all levels. This department also has on-going educational outreach programmes, some of which include outreach to secondary schools; collaboration with resorts to educate staff on current status of Jamaica’s coastal environment especially its coral reefs; and participating in general outreach programmes as requested by different organizations/institutions. The entity also seeks to bring about awareness through its website.
The Jamaica Environment Trust’s (JET) educational activities include: Bi-annual Teacher training workshops on various environmental themes which facilities over 350 primary and secondary schools that are a part of its Schools' Environmental Programme (SEP). JET also produces the SEP newsletters each school term and quarterly newsletters "Earth Notes” which are distributed to JET members and the public. They also conduct various educational activities in observance of Earth Day, Caribbean Endemic Bird Festival, World Wetlands Day and World Oceans Day.

The Blue and John Crow Mountains National Park is under the management of the JCDT and has several education outreach programmes aimed at making 1) Jamaicans understand the importance of, and are practicing sustainable use of their natural resources in their daily lives; 2) Jamaicans recognise the importance of the Blue and John Crow Mountains National Park as a national asset. Outreach activities include a programme aimed at primary, all-age and junior high schools located in the buffer zones (i.e. within 1 km) surrounding the national park. Thirty-four (34) schools are currently enrolled in this programme and are visited once per year to promote the goals of the JCDT and in so doing promote environmental stewardship. The park also offers a service to interested schools to visit the park where students would traverse the nature trail at Hollywell and are taught to recognise the flora and fauna in the area as well as play an interactive bird identification game.

Photograph 3: JCDT on School’s Outreach activities

The trust is also involved in holding regular community meetings in 4 communities in the area. These include Milbank and Cascade in Portland and Woodford and Iris Town in St.
Andrew. The rangers of the park are actively involved in community outreach. As a part of their surveillance they identify the impacts of the community or groups on the area and hold impromptu meetings to inform these persons of their impact and provide alternative solutions.

Photograph 4: JCDT-Community Meeting

The MoE has made a significant step in infusing topics relating to biodiversity into the school’s curriculum. In fact, nine teachers' colleges across Jamaica will participate in the second phase of a project to infuse topics on the country's biodiversity in their teaching curricula. The project is coordinated by JET and the Joint Board of Teacher Education (JBTE) and is funded by the Environmental Foundation of Jamaica (EFJ). The project is geared towards early childhood and primary school educators and seeks to develop activities that go beyond the confines of science into all disciplines, to explore the economic, social, cultural and political aspects of biodiversity. It aims to empower future teachers with the knowledge and skills to include topics on biodiversity in their teaching curriculum when they leave the college. Some very important initiatives have been implemented and/or will be introduced for educating the Jamaican populace in biodiversity. These include:

- Introduction of Marine Parks
- Recovery of critically endangered species
- Criteria for sustainable use of resources
- Management of game bird population
- Ecological Zonation and land use for protected areas
- Sustainable tourism practices
- Sustainable use for ecotourism
- Promote development in biotechnology and benefit sharing

In our need for environmental conservation and sustainable development, it has become necessary not only to engage the populace in concepts of biodiversity but also to infuse these theories into the curriculum of all educational institutions. The link between biodiversity and education has always existed, in fact, now our very existence depends on it.

**Contact and References**

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Reference:

Websites

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