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# the environmental professional quarterly

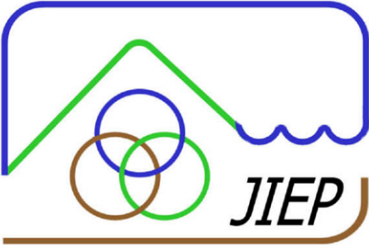
JAMAICA INSTITUTE OF ENVIRONMENTAL PROFESSIONALS QUARTERLY NEWSLETTER

## Volume 4, Issue No. 1

Welcome to the February 2014 issue of the Jamaica Institute of Environmental Professionals (JIEP) Quarterly Newsletter—The Environmental Professional Quarterly (EPQ). It is the intention that this newsletter will keep persons informed of the JIEP's activities and the environmental profession in Jamaica.

## Environmental Best Practices: Considerations for the Logistics Hub

**The aim of the public forum entitled “Environmental Best Practices: Considerations for the Logistics Hub” hosted by the Jamaica Institute of Environmental Professionals in December 2013 was to discuss the route an environmental professional would take in moving forward with the Logistics Hub Initiative, including the Port proposed for the Goat Islands.**



**JIEP MISSION STATEMENT**  
*To maintain high standards of professionalism among our members in order to improve the environmental management capacity and practices in Jamaica.*

The forum brought together 3 experts with 3 aspects of the hub that needed to be considered from an environmental and sustainable development point of view. Mrs. Eleanor Jones, Managing Director of Environmental Solutions Ltd. Discussed her experience and the need for a holistic approach beyond the siting of the Port facility (currently slated for Goat Islands), to include environmental considerations in all aspects of the Logistics Hub Initiative through a Strategic Environment Assessment (SEA) process. Whereas an Environmental Impact Assessment (EIA) provides information on the environmental consequences of decisions, an SEA incorporates environmental value in decision-making. Mrs. Jones pointed out that the Cabinet of Jamaica approved the Policy on Strategic Environmental Assessment in June 2005. Private Sector (Rose Hall, Harmony Cove) and Government Developments (Caymanas Estates, Highway 2000, Clarendon New Town) have invested in SEAs, however the examples of use by the Cabinet or in Government Corporate Plans in Jamaica are limited. She suggested that the wide-ranging Logistics Hub initiative with air, land and sea factors, needs to consider environmental aspects in detail as part of its decision-making and not as a problem to be solved when it arises.

Dr. Peter Edwards, a Jamaican Marine Scientist and Environmental Economist working for the U.S. National Oceanic and Atmospheric Administration (NOAA) told the forum about the process and challenges involved in putting a monetary value on a natural resource. He pointed out that while Natural Resource Valuations can be useful in monetizing existing ecosystem benefits or for lost benefits, NRV techniques vary and the more robust processes require an investment. He further noted that the NRV is one tool in the “decision-making toolbox” and other factors should be considered. In addition, Dr. Edwards noted that the economics of an investment such as the Logistics Hub and the Port must be carefully analysed to determine real economic value, which is not the \$1.5billion cost for the project, it must include the portion of that amount that represent revenue inflow to the country, economic multiplier effects of the hub and also the economic loss to groups like fishers, businessmen and environmental services.

The final presentation focused on the proposed Port facility. Smith Warner International Limited, coastal engineers based in

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## Tools for Environmental Decision-Making and Planning

The use of the **Environmental Impact Assessment (EIA)** tool is based on the premise that mainstreaming environment into development starts at the project level. EIAs are generally prepared for projects that the regulatory agency views as having significant prospective environmental impacts. EIAs are intended to improve project design and implementation by identifying ways to prevent, mitigate and compensate adverse environmental impacts. The EIA should provide an analysis of significant environmental impacts and reasonable alternatives (including a No Action alternative) which would avoid or minimize adverse impact or enhance the quality of the human environment. The EIA is a means of avoiding environmental disturbances that are always much more expensive to correct after their occurrence than before.

While EIA asserted its dominance as a project level tool, the growing recognition for the need to consider environmental implications of regional and sectoral development plans at the macro-level led to the Strategic Environmental Assessment (SEA). The objective of SEA is to mainstream environmental and social considerations into programs, plans and policies, mitigate negative implications and maximize potential positive synergies. This approach mainstreams environment and social issues into decision making at a strategic level.



*Adapted from UK Environment Agency*

Although there are several tools for environmental decision making, EIA/SEA are the only tools whose use is required by law, in many countries, and whose results are publicly acknowledged and available. No other tool has this status, nor is any likely to achieve it in the near future (EIA is more entrenched in law than SEA, but the latter is becoming a legal requirement in more and more countries) (United Nations Environment Programme, 2004). Multilateral and bilateral lenders have included EIA requirements in their project eligibility criteria. In Jamaica, the National Environment and Planning Agency (NEPA) has prepared Guidelines for EIA which sets out the format and content of the EIA as well as the Public Consultation process. The Permit and Licence System (1997) also speaks to the requirements for the conduct of EIAs for certain types of developments.

SEA systems have been developed in North America and Europe for sustainable development since the 1970s but are generally less well established elsewhere. The development of SEA framework in Jamaica is still at an early stage. Although a Draft SEA Policy is developed for Jamaica there are few examples of truly effective use of SEAs. However, given the nature

of recent developments and the massive environmental implications of many planning decisions currently being taken, the need for effective macro-level assessment tools is highly recognized.

Despite the growing trend of several environmental analysis tools today, Environmental Valuation is viewed as a critical and emerging tool which has been used in decisions related to development of environmentally sensitive areas. EV involves a series of techniques to assess the economic value of natural resources and resource services. In other words it is putting monetary values on environ-

To help achieve environmental protection and sustainable development by:	To strengthen and streamline project EIA by:	To integrate the environment into sector-specific decision-making by:
<ul style="list-style-type: none"> <li>Consideration of environmental effects of proposed strategic actions</li> <li>Identification of the best practicable environmental option</li> <li>Early warning of cumulative effects and large-scale changes</li> </ul>	<ul style="list-style-type: none"> <li>Prior identification of scope of potential impacts and information needs</li> <li>Clearance of strategic issues and concerns related to justification of proposals</li> <li>Reducing the time and effort necessary to conduct individual reviews</li> </ul>	<ul style="list-style-type: none"> <li>Promoting environmentally sound and sustainable proposals</li> <li>Changing the way decisions are made</li> </ul>

### Aims and Objectives of SEA

(Source: UK-DETR, International Seminar on SEA, Lincoln, May 1998)

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mental goods and services (G&S), many of which have no easily observed market prices. Examples of environmental G&S include scenic views, coral reefs, biodiversity and also indirect processes, such as watersheds and water supply, forests and carbon sequestration or erosion control, and maintenance of genetic material. It applies the welfare economics concepts (Is Society better off?) of producer and consumer surplus to issues involving natural resources and state of the environment.

The basic aim of valuation is to determine people's preferences by gauging how much they are willing to pay (WTP) for given benefits or certain environmental attributes e.g. keep a forest ecosystem intact. EV is used to weigh social benefits associated with a commercial development project against the environmental benefits that would be lost should the project be implemented. Such analyses tallies the real costs associated with an activity, including the cost of lost or damaged environmental assets and quality of life. The main disadvantages of EV are that there are varied techniques that can be used to determine economic value and they are typically expensive resulting in low mainstreaming into other environmental decision making tools such as the EIA. NEPA is currently working on integrating EV into the EIA in process in Jamaica.

Prepared by: Kimberly Bryan

## Getting to know the JIEP New Council Member



Rachel D'Silva is an environmental scientist with over 5 years of experience in the environmental consulting field, currently working as an Environmental Scientist with CL Environmental. With a BSc in Environmental Science (double Major with Honours), Rachel is currently undertaking an MPhil in Coral Reef Ecology at the University of the West Indies, through which she has established the Caribbean's first Mid-water floating nursery. She is also a trained environmental biologist, certified British Sub-Aqua Club (BSAC) Sports Diver, PADI Equipment Specialist, Reef Check EcoDiver Trainer and a member of the Jamaica Coral Reef Monitoring Network (JCRMN). She has taken part in several noteworthy local and regional Environmental Impact Assessments and consulted on an array of major environmental projects, including coral and seagrass relocation works.

"Environmental Valuation has an important role to play in environmental planning and management activities because it helps to answer many questions including the following about any given natural resource:

What is the value of conserving a certain natural resource (e.g. forest)?

To whom does the value accrue?

How does degradation and loss of the natural resource lead to costs to different segments of society?

Who gains and who loses when a natural resource is conserved or degraded?

How can natural resource conservation be efficiently and equitably financed?

How can people be motivated to take into account natural resource benefits and costs of its loss in the course of their economic activities?

How can policy, planning and decision making with regard to natural resources be better influenced?"

(Source: Abilah, et al. - German Ministry of Education and Research (BMBF))

**“It is not reasonable that art should win the place of honor over our great and powerful mother Nature. We have so overloaded the beauty and richness of her works by our inventions that we have quite smothered her.”**

– MICHEL DE  
MONTAIGNE, CANNIBALES –

## Upcoming Events

**FEBRUARY** *World Wetland's Day (February 2)*

**MARCH** *World Water Day (March 22)*

**APRIL** *Earth Day (April 22)*

**MAY** *International Day for Biological Diversity (May 22)*

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Jamaica, worked with Masters' students from the University of Delft (Holland) to develop site options for a transshipment port giving consideration to the needs of a logistics hub, and to assess possible approaches to develop the Goat Islands as this was the expressed favourite site. The options developed were based on technical knowledge of port developments around the world. The major conclusion of this research, and indeed all the presentations, was that options to Goat Island exist, but moreso that much more information on the throughput of the port development and the component of the logistics hub are required for effective analysis and critical decision-making.

Prepared by: Karen McDonald Gayle



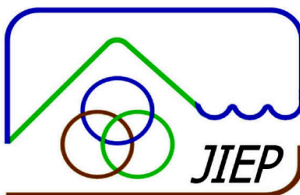
## The Blue and John Crow Mountains National Park – a history and possible future for environmental professionals

The Blue and John Crow Mountains National Park designated on 26<sup>th</sup> February, 1993 is Jamaica's only national park and one of our oldest protected areas. Most of the 486 km<sup>2</sup> was protected as Forest Reserve in 1927 under the Afforestation Law following the passage of various laws between 1871 and 1889 which allowed the colonial government to relinquish lands formerly patented to coffee farmers. This move was the result of an 1885 report which recommended, "the reservation of the highlands of the Blue Mountains ... to protect the springs from drying up and regulate the flow of the Portland rivers". This is an example of an early environmental professional conducting a study and making recommendations which guided government policy, legislation and action.

The area was later designated a Forest Reserve in 1950 under the Forest Act of 1937. In 1991 the Natural Resources Conservation Authority (NRCA) Act was passed and with it the ability of the then Natural Resources Conservation Department (now National Environment and Planning Agency) to designate marine parks, national parks and protected areas. The Protected Areas Resource Conservation (PARC) Project followed shortly and established the Montego Bay Marine Park and Blue and John Crow Mountains National Park with their own detailed regulations. Thus began the establishment of the type of protected area which was strategically and actively managed in comparison to most other protected areas at the time, which would easily have met the description of a "paper" park. By the time the 1996 Forest Act was promulgated bringing the concept of biodiversity conservation and stakeholder participation into forest management, the NRCA had already moved ahead with the delegation of protected areas to non-government organisations (NGO). This increased the opportunities for employment for many more environmental professionals than previously existed, even though positions in the NGO sector might not be as permanent and long-term as those in the public sector.

There is clearly, a lack of understanding in Jamaica, about protected areas and their management, amongst the general public and perhaps even more so, within some arms of government. Despite this, historically in Jamaica and still today all over the world, the protection of special areas to secure the provision of ecosystem services and to preserve unique species and habitats in relatively pristine condition, is standard, proven practice for sustainable development. The management of the Blue and John Crow Mountains National Park by an NGO - the Jamaica Conservation and Development Trust, for almost all the Park's 21 years, is often used as a case study for effective management and successful co-management. The challenges are often glossed over but as all protected areas in Jamaica are under increased threat, the successful management of the Blue and John Crow Mountains National Park and soon to be Protected National Heritage is also at risk.

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