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"Pa 356 Emanuel Strategic Environmental Assessment - A Case Study Of Jamaica"

STRATEGIC ENVIRONMENTAL ASSESSMENT – A CASE STUDY OF JAMAICA

ELIZABETH EMANUEL
GOVERNMENT OF JAMAICA ADVISOR
CIDA/GOJ ENVIRONMENTAL ACTION (ENACT) PROGRAMME

Abstract:

Today, it is widely accepted that the integration of environment and development concerns can lead to the fulfilment of basic human needs. The Government of Jamaica has recognized that for achieving full economic and social development, the environmental costs and benefits of all processes must be evaluated. This approach towards realising that government as an entity can have negative impacts on the natural environment has resulted in the Government of Jamaica taking the appropriate steps towards incorporating environmental considerations into its policies, plans, programmes and operations.

Through the CIDA sponsored Environmental Action (ENACT) programme and its implementation by the Canadian consortium Dessau-Soprin / Marbek, the Government of Jamaica is currently implementing a Greening of Government Programme, with a major focus on Strategic Environmental Assessment (SEA) process and policy. The Cabinet Office articulated that the introduction of a SEA process would represent an explicit acknowledgment that ministries of GOJ share a responsibility for environmental protection, are partly responsible for the current state of Jamaica's natural environment, and therefore need to consider the environmental implications of their policies.

The focus on SEA has come against a backdrop of policy making in the Government of Jamaica being described as rushed, reactive, focused on short-term considerations and suffering from the absence of a common approach to guide analysis. The GOJ has now adopted a number of measures aimed at strengthening its policy-making processes in order to address the deficiencies outlined.

This paper will present and analyse the following:

- A profile of Jamaica
- The rationale for the implementation of a SEA process in Jamaica
- Factors that enabled the development of a SEA process in Jamaica
- Key elements of the GOJ SEA Process
- Activities undertaken to date in the development and implementation of the SEA Process
- Government of Jamaica's (GOJ) SEA Policy

- Lessons that can be learnt and adopted by other developing countries

Key words:

Capacity Building, Greening of Government, Strategic Assessment, Policy Making, Green Procurement, Impact on Industrial Sectors

Language of presentation: English. Questions can be taken in French or English

Conference topics:
Strategic Environmental Assessment / Environmental Law, Policies and Institutions / Capacity Building

Introduction

Jamaica is the third largest island in the Caribbean. It was discovered on May 5, 1494 by Christopher Columbus. Jamaica's name is derived from the Arawak[1] word "Xaymaca" which means *"Land of Wood and Water."* The Arawaks so called it because of the many rivers, waterfalls and streams that flowed from the forest clad mountains to the fertile plains. Up to 35 years ago, Jamaica was a leading country in the Caribbean and a model for developing countries around the world – its economy was healthy, with the Jamaican currency trading at a very favourable rate to the United States dollar; its natural environment was a source of beauty, and wealth.

Today, like many other developing countries, Jamaica stands at a crossroad in its development – facing economic, social and environmental problems – foreign debt is high, crime rates are high and many of the island's ecosystems are degrading. These contextual factors, militate both for and against the introduction of new decision-making/policy making processes, such as Strategic Environmental Assessment (SEA). There is sometimes an initial impression that seems to suggest that aggressively pursuing economic growth and development is incompatible with the goals of sound environmental management. On the other hand, it is theorized that the integration of environment and development concerns and greater attention to them can lead to the fulfillment of basic human needs, improved living standards for all, better protected and managed ecosystems, and a safer, more prosperous future.

Additionally, by converging social, economic and environmental dimensions of public policy, governments send clear signals to individuals, businesses and interest groups on the importance of their commitment to sustainable development. As a country heavily dependent on its natural resources for economic growth and development, the Government of Jamaica (GOJ) has opted to ensure the sustainability of these resources, not as a desirable environmental objective but as a vital economic imperative, as it recognizes that its natural capital, can provide the sustainable flow of goods and services needed for development.

This paper will explore the Government of Jamaica's attempt to lead by example in the integration of economic, social and environmental concerns in its policy-making/decision-making processes through the development and implementation of a Strategic Environmental Assessment

[1] Fist inhabitants of Jamaica

(SEA) Process, one of the key components of its Greening of Government programme[2] ***(See Appendix 1 for more details on this Programme).*** The paper will highlight the following:

- A profile of Jamaica
- The rationale for the implementation of a SEA process in Jamaica
- Factors that enabled the development of a SEA process in Jamaica
- Key elements of the GOJ SEA Process
- Activities undertaken to date in the development and implementation of the SEA Process
- Government of Jamaica's (GOJ) SEA Policy
- Lessons that can be learnt and adopted by other developing countries

Defining Strategic Environmental Assessment

Strategic environmental assessment is an accepted tool of environmental management for assessing the environmental implications of proposed policies, plans and programmes (PPPs). SEA is undertaken to ensure that any environmental consequences that may occur as a result of the implementation of any PPP is fully included and appropriately addressed at the earliest stage of decision-making. At its core, SEA is about sound policy making and provides decision-makers with the necessary information to make more informed decisions.

The International Study of the Effectiveness of Environmental Assessment (1995) defines SEA as follows:

"A systematic, proactive process for evaluating the environmental consequences of policies, plans and programme proposals in order to ensure that these environmental consequences are fully included and adequately addressed at the earliest appropriate stage of decision-making, on par with economic and social considerations"

Examining the above definition further, it can be articulated that:

- SEA is a systematic process as the analysis of environmental considerations are designed to be rigorous, thorough, meticulous and as precise as possible.
- It is a proactive process as the environmental considerations are considered early in the PPP development cycle and not at the end of the cycle.
- It applies to policies, plans and programmes or broad government initiatives and not physical projects for which project level assessments or environmental impact assessments (EIA) techniques are more appropriate (***(See Appendix 2 for more details on the comparisons between EIA and SEA).***
- The analysis is undertaken on par with economic and social considerations so that environmental considerations are given the same level of considerations as other factors as is appropriate.

Profile Of Jamaica

Jamaica is located 898 kilometres southeast of Miami, 144.8 kilometres south of Cuba and 160.9 kilometres south west of Haiti. It has an area of 11,420 square kilometers, with its highest point being the Blue Mountain Peak, which rises 2,256 metres above sea level. It is an archipelagic state with the marine space that is has legal jurisdiction over being about 24 times larger than the total land area of the country.

[2] In response to Agenda 21, the Government of Jamaica designed, developed and began implementation of a Greening of Government Programme in 1998.

The capital and major commercial centre, Kingston, is situated on the southeast coast. Found in Kingston, the Kingston Harbour is the seventh largest natural harbour in the world, and one of the most contaminated in the wider Caribbean area. The second largest city, Montego Bay, is situated on the northwest coat, and is the centre of tourism activity.

Form of Government

Jamaica has a democratic form of government organized on the Westminster model. National legislative power is vested in the Parliament comprised of a House of Representative with 60 members, and a Senate with 21. General elections are constitutionally due every five years. The Government is headed by a Prime Minister, who is assisted by a Cabinet of fellow ministers. The Queen of England is formally recognized as head of state and is represented by the Governor General whose duties are purely formal and ceremonial. There are two major political parties.

Population[3]

Jamaica's population is estimated at 2,576,200 (2002), with 55% living in urban areas. Life expectancy at birth is 75.8 years. Mean household size was 3.5 persons in 2002, compared with 4.5 in 1970. The population density of Jamaica is 216 persons per square kilometre. This is comparatively high for the Caribbean and Latin America, and is eight times the average for lower middle income countries. Improved mortality from better health practices and declining fertility from family planning policies of the 1960's and 1970's have resulted in a shift of the population structure, with a contraction of the dependent child population (0-14 years) and an expansion of the working class (15-64 years) and the dependent elderly (65+ years).

Overview Of The Economy

Jamaica's economy depends heavily on tourism and bauxite. It also depends to a significant extent on a clean environment and healthy functioning ecosystems (coral reefs, watersheds, etc) as tourism, fisheries, agriculture and forestry account for ¼ of GDP and 60% of employment.

After years of recession, the economy showed positive growth of 0.8% in 2000, 1.7% in 2001, and 0.8% in 2002. However, the global economic slowdown, particularly in the United States after the September 11th 2001 terrorist attacks, has significantly affected the country's economic recovery. Serious problems include:

- High interest rates
- Increased foreign competition
- A pressured, sometimes sliding, exchange rate (US$1 = J$61, March 2004)
- Widening merchandise trade deficits – exports (alumina, bauxite; sugar, bananas, rum): $1.4 billion f.o.b. (2002 est.); and imports (machinery and transport equipment, construction materials, fuel, food, chemicals, fertilizers) US$3.1 billion f.o.b. (2002 est.)
- A growing internal debt
- A high external debt of US$5.3 billion (2002 est.)

Other economic statistics include:

- Purchasing power parity - $10 billion (2002 est.)
- Real growth rate: 0.4% (2002 est.)
- Per capita: purchasing power parity - $3,900 (2002 est.)
- Decline in poverty from 44.6% in 1991 to 19% in 2002. 3.2% of the population survive on US$1 per day and 25% on US$2 per day

[3] Data in this section from Planning Institute of Jamaica's website - www.pioj.gov.jm.

- Revenues - $2.23 billion; expenditures: $2.56 billion, including capital expenditures of $232.5 million (FY99/00 est.)
- 70% of public expenditures will go to debt servicing in 2004
- Industries in order of importance - tourism, bauxite, textiles, food processing, light manufactures, rum, cement, metal, paper, chemical products
- Inflation rate (consumer prices): 7% (2002 est.) and in 2004 reached double digit figures
- Labor force: 1.13 million (1998)
- Labor force - by occupation: services 60%, agriculture 21%, industry 19% (1998)
- Unemployment rate: 15.4% (2002 est.)

Depressed economic conditions have led to increased civil unrest, including serious violent crimes (33 per 100,000 intentional homicides, with direct cost of crime being about 3.7% of GDP). Jamaica's medium-term economic prospects depends upon encouraging investment and tourism, maintaining a competitive exchange rate, selling off reacquired firms, and implementing proper fiscal and monetary policies.

Current State Of Jamaica's Natural Environment

Like many other small island developing states, Jamaica has fragile ecological systems and complex environmental management problems. Many of the economic activities of the country; mining, tourism, agriculture and forestry depend heavily on the natural environment, whilst all the other productive sectors make competing demands on the country's resources.

Jamaica's environmental problems are as diverse as its ecology and life forms. Many factors contribute to environmental degradation in Jamaica – inadequate waste management systems, poor urban air quality, watershed degradation, unsustainable agricultural practices, development that occurs outside formal approval processes, national policy development that in the past excluded environmental considerations…

The following will provide a short description of Jamaica's natural environment as well as identify some of the challenges which it faces.

Freshwater Resources

Sources of freshwater in Jamaica are: rivers and streams; wells and springs; and, rainwater harvesting. 84% of freshwater is derived from groundwater sources or wells and springs. Present water production from both ground and surface water resources is 23% of total exploitable water. Only 30% of water abstracted is used to meet the demands for potable water with the remaining 70% being used by the agricultural sector for irrigation. Approximately 85% of the population receives treated water.

Water Pollution

- Over 60% of the available groundwater in the capital city (Kingston) is contaminated by high nitrate concentrations, primarily from sewage
- All the major river courses in the island received pollutants from industrial waste, sewage, silt, debris and agricultural run-off

Waste Generation And Composition

Jamaicans generate approximately 1kg/per person/day of waste (2002), with total solid waste generated in Jamaica being approximately 836,000 tonnes per annum with households contributing 60% of the total. The quantities of waste generated in Jamaica are similar to that of first world countries, high consumption patterns but inadequate infrastructure and resources to

deal with these large quantities of waste. About 70% of the total amount disposed of is actually collected and disposed off at official sites. An estimated 70% of the waste stream is organic in nature and can undergo composting or biological degradation.

With respect to hazardous waste, 10,000 tonnes is generated each year. The main types of hazardous waste generated include:

- Car batteries (120,000 discarded each year, 50% collected and exported for recycling)
- Waste oil from vehicles (this constitutes 80% of the total hazardous waste)
- PCB's from transformers
- Solvent sludge such as PERC from dry cleaning operations;
- Paint sludge;
- Pesticides from agriculture, for example, impregnated banana sleeves (plastic bags used to cover growing bananas and containing fertilizers) used in the banana industry;
- Medical waste

The island has 9 official disposal solid waste sites and one sanitary landfill. There is no identified hazardous waste disposal site as yet, although plans are in place to site and develop such a site in the near future.

With respect to sewage, only 15% of the population is served by sewerage systems with the remainder of the population disposing of their sewage through soak away systems, septic tanks, tile fields and pit latrines.

Forestry

Over 30% of Jamaica is classified as forest, of which 64% is unprotected (that is, on privately or crown owned lands). Since the 1960's about 2/3 of native forest have been destroyed. Woodland, scrub forest and dry limestone forests are key components of Jamaica's forest ecology.

The entire country is divided into 26 watershed management units comprising all the land from the mountains to the sea and containing over 100 streams and rivers. 10 of these watershed management units are considered to be severely degraded. A Watershed Protection Act has been in existence since 1963. The primary focus of the Act is the conservation of water resources by protecting land in watersheds .

Fuelwood is still used as a cooking fuel in the rural areas with national monthly wood consumption estimated at 1,050 tonnes. Up to 1997, an estimated 41% of the population was still using charcoal as their main fuel for home cooking.

Biodiversity

Jamaica ranks 5th among the islands of the world with respect to endemic plants. The island has 822 endemic species of flowering plant, with this figure representing ¼ of the total number of plant species on the island. There is also a high level of endemism for many species of animals, such as snails, terrestrial grapsid crabs, amphibians, reptiles and land birds. 14 animal endemic species and 200 plant endemic species are classified as critically imperiled or especially vulnerable to extinction.

The Black River Morass was declared by the RAMSAR Convention to be a wetland of international importance.

Environmental Management Framework In Jamaica

From as early as the 1940's Jamaica began putting in place various standards, laws, and policies towards protecting the natural environment. Over the last decade however, the Government has embarked on a number of initiatives (legislative and policy initiatives) geared towards protection and conservation of the natural environment. Jamaica is also signatory to various international conventions.

Some of the legislative initiatives include:

- The Natural Resources Conservation Authority Act, 1991 – this Act provides for the management, conservation and protection of the natural resources of Jamaica
- The Endangered Species Act, 2000 – this act ensures the codification of Jamaica's obligations under the CITES Convention.
- The Beach Control Act, 1956 – this act ensures the proper management of Jamaica's coastal and marine resources through licencing activities etc.

International conventions to which Jamaica is signatory include: the Montreal Protocol; BASEL Convention on the Transboundary Movement of Hazardous Waste and their Disposal' Protocol on Land Based Sources of Marine Pollution etc.

Impacts Of Economic Sectors On Jamaica's Natural Environment

Tourism

Tourism is the foreign exchange earner in Jamaica and in 2002 accounted for 9.5% total of real GDP. Total tourist arrivals in 2002 was a little over 2 million resulting the sector earning about US$1,182.6 million. There has been continued investment in this sector with new hotels being constructed (618 new rooms were completed in 2000 for example) and new attractions being developed.

There are several negative environmental impacts associated with the growth of tourism. These include among others: the concentration of infrastructure along the narrow coastal zone; destruction of wetlands and mangrove swamps to facilitate hotel construction and the erection of piers and marinas; destruction of marine habitat due to sea grass removal etc.; and, discharge of sewage into off-shore areas.

Mining And Quarrying

Mining and quarrying are major economic activities in the country. Jamaica is the third largest producer of bauxite ore in the world and the fourth in the production of alumina. Currently, Jamaica's total bauxite reserves are estimated at approximately 2 billion tones with more than 1 billion tones (enough to last 100 years at current rates of production) being accessible. In 2002, total bauxite and alumina exports amounted to 16.7 million tones and contributed approximately 2.9% of real GDP.

Negative environmental impacts associated with mining and quarrying include: dust and noise pollution; relocation of communities; deforestation (bauxite mining is the major contributor to deforestation in Jamaica); loss of biodiversity; land and groundwater contamination form red mud disposal; scarification of the landscape; and, beach erosion.

Manufacturing And Industrial Processes

This sector involves activities of food processing, beverage and tobacco, chemicals and chemical products, petroleum products, non-metallic metals (cement), garment manufacturing; electricity generation etc.

Manufacturing and industrial processes have negatively affected water quality in both rivers and places such as the Kingston Harbour. This is primarily due to effluent discharge (sewage and trade) into water bodies, increasing BOD levels. Cement manufacturing on the other hand has generated fugitive dust, whilst the burning of fossil fuels have impacted negatively on air quality. Generation of hazardous wastes is also associated with this sector.

Agriculture

Agricultural exports constitute the third largest earner of foreign exchange and employs about 22% of the labour force. Traditional export crops are sugar, bananas, pimento, cocoa and coffee. Non-traditional export crops include: yams; mangoes; papayas; sweet potatoes; pumpkins, fish crustaceans etc.

The major environmental impacts as a result of agricultural activities include: soil erosion, excessive land clearing, uncontrolled use of fire, loss of biodiversity as well as wildlife habitat. Also the use of chemical fertilizers and pesticides has adversely affected water quality in many areas. On the south coast, there is saline intrusion due to the over abstraction of water for irrigation.

The Rationale For The Implementation Of A SEA Process In Jamaica

The rationale for the implementation of a SEA process in Jamaica is two-fold. On the one hand, it is expected to enable the development of better policies, whilst on the other hand there are significant benefits to be attained with respect to ecosystem well-being.

In the early 1990's policy making within the GOJ was described as being rushed, reactive, focused on short term considerations and suffering from the absence of a common approach to guide analysis[4]. By the mid 1990's the Government adopted various measures towards strengthening its policy-making process in order to address some of the identified inefficiencies. Some of these measures included:

- A reform of the Cabinet structure
- The addition of annual policy and legislative agendas to the policy planning cycle
- The issuance of guidelines for the preparation of Cabinet submissions and ministry corporate/strategic plans
- The strengthening of the Cabinet Office's Policy Analysis and Review Unit (PARU)[5]

Towards the end of the 1990's there was also a recognition that environmental issues should be incorporated into policies as some of the Government's existing policies developed and implemented were impacting negatively on the natural environment[6] ***(See Appendix 3 for an example of a policy that would have benefited from a SEA Process)***, as depicted in the section on the state of Jamaica's environment. It was fully acknowledged that public sector entities could, through Government policy jeopardize the integrity of the natural environment and the country's future developmental prospects. It was agreed that the many complexities of the Jamaican environment requires a focus on strategies such as SEA that would ensure that the country's development objectives are compatible with the natural environment and in keeping with the tenets of sustainable development.

[4] Bregha, Francois. 2001. ..

[5] This unit is the key focal point for policy making in Jamaica. They act as the liaison between the Cabinet and the rest of the ministries and agencies of Government.

[6] Examples of such polices include the Government's Motor Vehicle Import Policy and its Telecommunications Policy related to cellular phones

Additionally, whilst the Government has a well-defined EIA process there was greater recognition that the EIA methodology was only applicable to discrete projects and does not have the scope within its methodology to analyze PPP, and therefore does not guarantee improvements in environmental quality.

To demonstrate its commitment to sound environmental management and to the integration of economic, social and environmental issues into decision-making processes, the Cabinet Office in 2001 commissioned a review and feasibility study of the integration of environmental considerations into its decision-making machinery as a first step in developing guidelines for a SEA process. This review, supported by the Canadian Government through the Environmental Action (ENACT)[7] Programme was entitled *"The Integration of Environmental Considerations into Decision-Making: Review of Practices in the Government of Jamaica and Preliminary Recommendations"*. This paper formed the basis for the approach in the development of the Government's SEA process.

Factors Facilitating/Impeding The Implementation Of A SEA Process In GOJ

The report *"The Integration of Environmental Considerations into Decision-Making: Review of Practices in the Government of Jamaica and Preliminary Recommendations"* involved a systematic review of the opportunities and constraints of the GOJ policy-making system, and analyzed five principal variables: people, ideas (objectives, laws, policies), institutions, processes and information to determine whether the timing was right for moving towards the implementation of a SEA process within Government.

The report articulated that the GOJ policy process related to environmental issues exhibited strengths, weaknesses, opportunities and challenges

Strengths Identified

Some of the strengths and opportunities identified included:

- Recognition by officials within Government of the importance of sustainable development and environmental management to national development objectives
- The existence of an extensive policy framework to protect the environment
- The prior inclusion of environmental considerations in various policy areas before this Study was undertaken (e.g. government procurement and contracting policy includes environmental considerations)
- The existence of a government-wide policy analysis network whose mandate is facilitate discussions and share common interests amongst GOJ policy analysts
- The existence of a well-established process for public consultation

[7] The Environment Action (ENACT) Programme is a seven year programme promoting sustainable development through supporting the sound management and use of Jamaica's natural resources. Its objective is to develop the capacity of key strategic players at the government, private sector, community and general public levels to identify and solve their environmental problems, in a sustainable way. With funding of over CDN$15 million and J$100M, it is implemented by a Canadian Consortium (Dessau Sprin and Marbek Resource Consultants) and the National Environment and Planning Agency of Jamaica (the government's lead environmental management agency). The ENACT Programme has provided full financial support to the GOJ's SEA Process.

- The existence of various reforms towards improving policy process and cabinet decision-making (e.g. Cabinet has 7 committees, as early as 1998, there was a committee of Cabinet [Land and Environment Committee] focusing on environmental issues)
- The existence of a well-defined Greening of Government Programme, implemented by the GOJ and supported by CIDA through the ENACT Programme.

Weaknesses Identified

Some of the weaknesses identified included:

- The absence of overarching environmental objectives that have set goals guiding overall policy development
- The paucity of environmental data
- Lack of clear policy development guidelines resulting in weak policy development and coordination processes as well as accountability mechanisms

Challenges Identified

Some of the challenges identified included:

- Changing attitudes towards environmental protection and policy coordination
- Tightening the rigour of the policy making process
- Increasing the accountability of officials and ministers for the environmental implications of their decisions

Key Principles Adopted In The Design And Implementation Of GOJ's SEA Process

Armed with strengths, weaknesses, and challenges in its policy making system, the Government of Jamaica in 2001 opted to design and implement a SEA process. The general approach for the introduction of SEA into GOJ was built on a series of key principles. These included:

- Anticipation and Prevention – goals must be set and policies and progammes implemented that anticipate and prevent environmental problems rather than trying to remedy problems after the fact.
- Shared responsibility – all ministries and agencies need to share responsibility for environmental protection, and development ministries (water, housing, energy, tourism, mining etc.) can no longer pass on to others the environmental consequences of their actions
- Building on existing processes and institutions – the introduction of SEA to be integrated into existing decision-making processes and institutions, so as to avoid ambiguity and overlapping mandates that can result from the insertion of a new process into an existing system of governance
- A simple process as GOJ has limited human and financial resources and is constrained by fiscal deficits, thus the SEA process is to be simple to use and not impose a burden on the existing policy process, but create an opportunity for enhancing policy development
- Consultation processes as the promotion of sustainable development involves arbitrating among competing values, a process in a democratic society that needs to be informed, transparent and accountable.

It was further recognized that even with the adoption of the key principles identified above, the introduction of SEA or these new values to the decision-making process would disturb existing procedures while at the same time legitimize the contribution of new players, such as environmentalists. Although it was expected that both outcomes would challenge the status quo, surprisingly enough, SEA has not been resisted.

Key Elements Of The GOJ SEA Process

The process that introduced SEA into the Government of Jamaica was inclusive and transparent and was quickly owned by the government's focal point for policy making – the Policy Analysis and Review Unit (PARU) of the Cabinet Office. They then spearheaded the involvement of the government ministries and agencies in the design and implementation of the process. Steps in the development of the GOJ SEA process are outlined as follows:

Step 1: (February 2001) Presentation and discussions of the report *"The Integration of Environmental Considerations into Decision-Making: Review of Practices in the Government of Jamaica and Preliminary Recommendations"* amongst senior government officials, policy analysts, corporate planners, environmental officials, etc. Once discussed by key players, the consensus was to proceed to acquire more information on SEA and to determine how it would fit within the existing policy framework, processes and institutions.

Step 2: (July 2001) The formation of a GOJ SEA Steering Committee that would guide the development and implementation of an SEA process in Jamaica. This committee was led by the Principal Director in the Policy, Analysis and Review Unit of the Cabinet Office and includes officials from various ministries and agencies, such as the Ministry of Land & Environment, the National Environment and Planning Agency etc.

Step 3: (May 01 – Present) Development of training materials and delivery of training in SEA. This course entitled "Strategic Environmental Assessment" forms part of the GOJ Environmental Training Strategy for public sector officials. Delivery of this course began in 2001 and up to March 2004, there had been over 14 such deliveries with over 200 persons being trained. The course, a 36 hour course includes the following key topics:

- SEA as a Tool of Environmental Management
- Comparisons Between SEA and EIA
- Process to Conduct SEAs
- Process and Methodological Issues Related to SEA
- SEA and its Relationship with Sustainable Development
- Country Case Studies in SEA
- The Policy Making Process within GOJ and the Rationale for SEA
- Group Exercise – Conducting a SEA of a PPP

Step 4: (Sept. - Dec 2001) This involved a comparative analysis study of international experiences with SEA. The Study entitled *"The Strategic Environmental Assessment of Polices, Plans and Programmes: Introduction to the Concept and Review of Selected International Experiences"*, was prepared with technical assistance from the ENACT Programme. The focus of this Study was to provide GOJ officials with a sense of the ways in which various countries have institutionalized SEA. Comparisons of SEA regimes in selected jurisdictions were analyzed. Countries

presented in the Study for detailed discussion were Canada, United States, New Zealand, South Africa, the Netherlands, United Kingdom and Denmark. Factors presented to guide the analysis and comparison among the countries included: status of SEA (cabinet directive, legislation etc.) within the countries identified; Scope of SEA; supporting institutions/processes (guidelines, case studies, sourcebook of information etc.); Experience (mix results, too early to tell etc.);

Step 5: (Feb. 2002)

Development of a database of materials and web sites/links presented to the Cabinet Office by the ENACT Programme for use by the GOJ.

Step 6: (March 2002)

Having pored through the Steps 1 and 3, it was agreed that officials needed to consider design and implementation issues in introducing a SEA process. To this end, a report *"The Design and Implementation of a Strategic Environmental Assessment Process for the Government of Jamaica"* was prepared through technical assistance from ENACT and presented to the SEA steering committee. The report articulated that the design of an SEA process should address a series of design issues as presented below:

- Coverage – what organizations should be required to conduct SEA's
- Focus – to what decisions and instruments should SEA apply
- Application – to what issues should SEA apply
- Status – what status should an SEA process receive
- Principles – what principles should underlie SEA
- Roles and responsibilities – what should be the roles and the responsibilities of the main actors
- Form – how should SEA be documented
- Transparence – what part of the process should be opened to the public
- Quality control – how can the quality of SEAs be enhanced
- Resources – what resources would the implementation of a SEA process require

Step 7:(Sept. 02 – Oct. 03)

The design issues presented above formed the basis for the development of the GOJ SEA Policy. It was agreed that policy development should be undertaken in tandem with education and training of public officials in the area. The drafting of the policy was done under the leadership of PARU with technical support being provided by the ENACT Programme. A GOJ Policy Writing Group was formed and included officials from both the Cabinet Office and the Environment ministry. The next section will discuss the policy in more detail.

Step 8: (Nov - Dec. 03) Review of draft SEA Policy by all ministries and agencies of Government. Activities like these throughout the process increased stakeholder buy-in and contributed many invaluable ideas to the process. These consultations also built support for the policy and helped inform its application.

Step 9: (Before June 2004) Promulgation of GOJ SEA Policy. Whilst the policy is still in its penultimate draft, it is expected to be reviewed and approved by Cabinet before June 2004.

Step 10:(After July 2004) Ministry-specific training in SEA to be provided to the pilot ministries and agencies identified in the policy. This training is expected to begin in July 2004.

Whilst the various steps identified above focused on SEA, it is believed within GOJ that because SEA is intended to affect the way in which GOJ develops policy, it will over time also contribute to positive policy outcomes.

Government of Jamaica Policy On SEA

The development of the GOJ SEA policy began in late 2002, and was finalized in 2003, It is important to note that the actual writing of the policy was undertaken by officials within the public sector and was led by the Cabinet Office with technical assistance provided by the ENACT Programme. Though time consuming, this process assisted in building capacity of key players in policy writing, SEA and environmental management issues. Key elements of the policy will be presented in the following paragraphs. A full copy of the policy document can be obtained at www.cabinet.gov.jm or www.enact.org.jm.

The SEA process was incorporated within and fits well with the GOJ national policy framework as illustrated in Figure 1 on the corresponding page, which depicts a Road Map of the GOJ SEA Process and the National Policy Making Framework.

SEA Policy Statement

The SEA Policy Statement developed through various consultations and workshops reads as follows:

As part of Government of Jamaica's commitment to sustainable development, the GOJ will ensure that all its policies, plans and programmes geared towards national development adequately consider potential environmental effects and impacts and where these are adverse, incorporate appropriate measures to reduce or eliminate these effects and impacts.

The policy identifies a series of goals which it expects the implementation of the policy to achieve. These are:

- Improvements in environmental quality over time
- Protection and conservation of the environment, ensuring adequate protection of the health and well-being of Jamaicans
- Keeping within the country's carrying capacity recognizing that there are finite limits to Jamaica's ecosystems and therefore ensuring that resources are used sustainably and waste is minimized
- Savings in time and money by drawing attention to potential liabilities for environmental clean-up and other unforeseen concerns

Issues Related To Policy Implementation

The policy will be promulgated through a Cabinet Directive as this combines both political commitment and process flexibility. This implies that any sectoral PPP requiring Cabinet Approval emanating from a ministry/agency that is required to conduct SEA in the first phase, must be accompanied by a SEA.

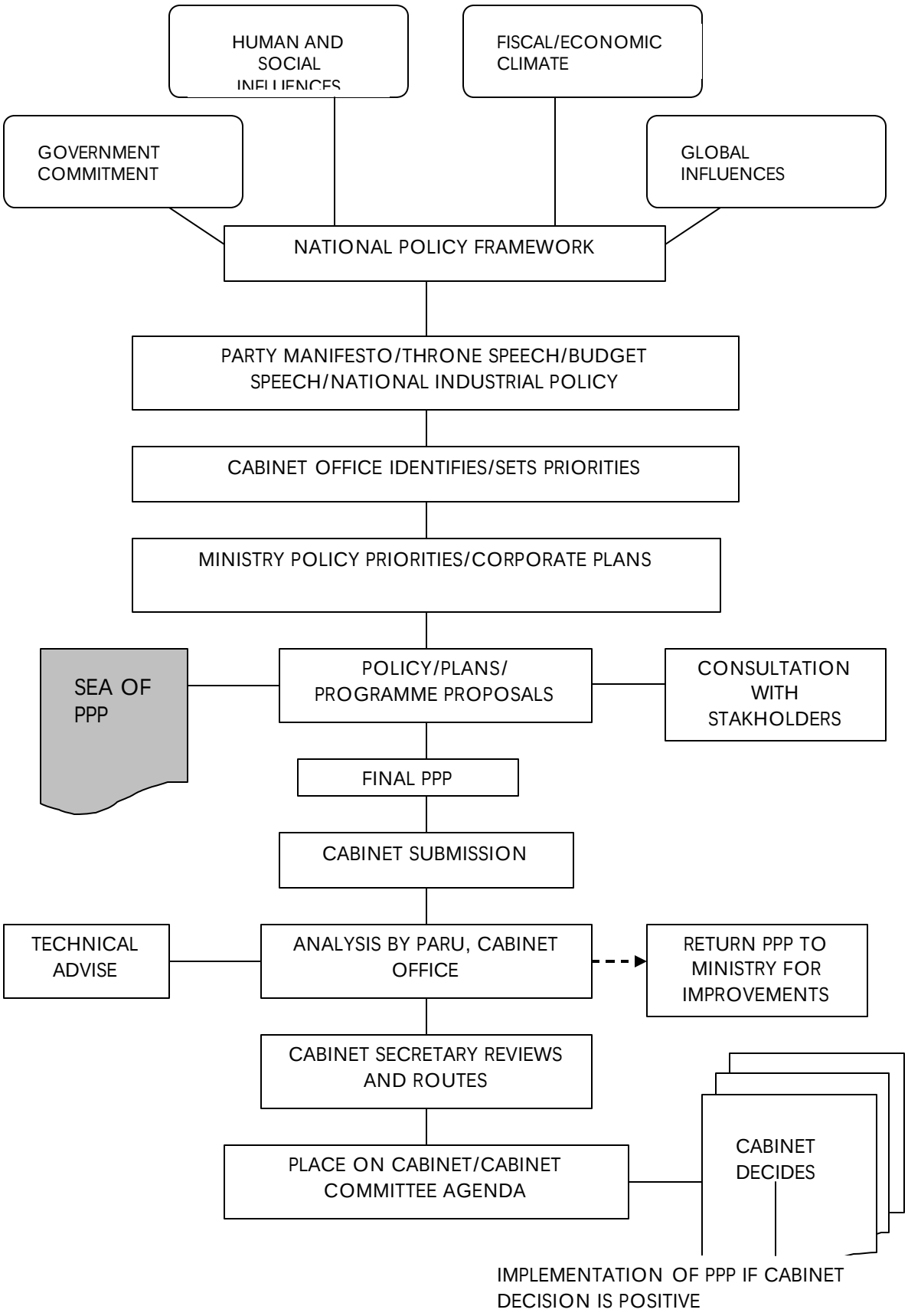

Figure 1: Road Map National Policy Making Framework

With respect to application, SEA will be applied in the first instance only to sectoral PPPs of ministries/agencies whose primary mandate is geared towards national economic development. These ministries and agencies include:

- Finance and Planning
- Transportation and Works
- Water and Housing
- Commerce, Science and Technology
- Agriculture
- Tourism and Industry
- Office of the Prime Minister
- Jamaica Promotions (primarily responsible for foreign direct investments)
- All local planning authorities (there are 14 islandwide)

For the ministries/agencies identified above, conducting a SEA will be mandatory if the PPP to be undertaken:

- Will affect natural resources (e.g. increased production of timber in a watershed area)
- Will affect particularly vulnerable or sensitive areas such as the coastal zone, habitats for endemic species or areas of recreational/tourism value
- Is expected to cause considerable adverse effects on the natural environment
- Is likely to affect the achievement of set environmental quality goals
- Will involve a new process or technology (e.g. FDI encouraging the setting up of cellular companies) with important environmental implications
- Presents any particular risk or may be particularly harmful or irreversible (e.g. emission of heavy metals or toxic substances)

Exemptions of conducting SEA by the said ministries/agencies can occur if there is a clear and immediate emergency (e.g. hurricane or other natural disaster) or where a matter is of such urgency that the normal process of Cabinet considerations is shortened anyway or where issues have been assessed previously because they ere considered in an earlier Cabinet submission.

The implementation of the policy is to be guided by some key principles including among others:

- Early integration – the considerations of environmental effects to be undertaken early in the conceptual/planning stages of the proposed PPP
- Flexibility – initiating ministries/agencies to decide how their SEA should be conducted
- Accountability – SEA to be part of an open and accountable decision-making process within the GOJ

The key players in the implementation of GOJ's SEA process and their roles and responsibilities as articulated in the policy include:

- The Cabinet Office – to have dual responsibility of articulating the policy and monitoring their implementation. The first role requires the Cabinet Office to set out clear guidelines to ministries/agencies on the incorporation of environmental issues into proposed PPP and consequently Cabinet Submissions. The second, more difficult role will require the PARU to ensure adherence to the process by turning back, where necessary Cabinet Submissions with inadequate SEAs. The policy articulates that PARU will only be able to accomplish the latter if it has the full backing of the Cabinet Secretary[8] and ministers of Cabinet.

[8] The Cabinet Secretary has played a very active and supportive role in the implementation of the ENACT Programme and is fully sensitized to issues related to the environment. As a key advisor to the Prime

- Initiating Ministries/Pilot Ministries – to be responsible for incorporating environmental considerations into their PPP to the standard set out by the Cabinet Office.
- All Ministers – to be responsible for ensuing that all PPPs submitted for Cabinet approval are assessed for their effect on the environment. In additional ministers from initiating ministries will be accountable for ensuring that SEAs of relevant PPPs are conducted.
- The Minister with the responsibility for the environment – to have a lead role in establishing the environmental management framework for Jamaica and in the promotion of the application of SEAs.
- Officials of initiating ministries/agencies to ensure that, when appropriate, a SEA of proposed PPPs is conducted.
- Technical agencies (National Environment & Planning Agency, Statistical Institute of Jamaica etc.) to make available the necessary environmental and socio-economic data to facilitate the conduct of SEAs.

Process To Conduct SEA's

As part of the policy document, the process/steps to conduct SEAs is outlined. The methodologies to be employed in the GOJ will include:

- Conduct of a preliminary scan – appropriate checklist have been included in the policy document. The preliminary scan would consider whether the PPP: has outcomes that would affect natural resources; has a known direct or indirect outcomes that is likely to affect the achievement of the country's environmental quality objectives; could result in significant interactions with the environment as a result of scale and time. The policy also states that if the preliminary scan does not identify the potential for important environmental considerations, no further analysis is required.
- Scoping – once the preliminary scan indicates that interactions with the environment will occur, the next step is the conduct of a scoping exercise which is intended to identify and provide in-depth analyses of the proposed environmental effects.
- Identification of mitigation measures – once the scoping exercise is complete, this should lead the way for the identification of mitigation measures where possible. The result here is the identification of measures that could reduce or eliminate potential adverse environmental consequences of the PPP proposal or recommendations that could result in changes in the proposal.

The promulgation of the policy in the next few months is being highly anticipated by senior government officials, policy analysts and environmentalists. It is expected that this all encompassing policy will better facilitate the integration of economic and environmental concerns into development, thereby leading to more sustainable outcomes.

Lessons Learned And Applicability To Developing Countries

Developing countries face a myriad of common challenges such as:

- Difficulties in achieving economies of scale
- Environmental degradation and often a lack of resources to address this problem
- Reducing poverty
- Developing strong human resources bases,
- Meeting the challenges of globalization and taking advantage of its opportunities.

Minster and head of the public sector, his expected contribution to the success of the SEA process will be invaluable

Of course, the problems faced by developing countries and the solutions required are all linked as environmental problems have social and economic implications; social problems have environmental and economic implications; and, economic problems have environmental and social implications. The very nature of SEA enables it to facilitate the integration of economic, social and environmental issues. To date, Jamaica has experienced a smooth implementation of its SEA programme and progress. Due to the similarities of developing countries, it is worthwhile to share some of the lessons we learned. These lessons learned represent the knowledge acquired by GOJ and its officials and we share them with you to promote repeat application.

Lessons Learned At the Individual Level

- Using training to raise skills and knowledge base of individuals in the area, important for raising commitment to the process
- Developing the necessary training tools and resources, making them easily accessible for use by individuals
- Creating an atmosphere of trust amongst stakeholders
- Good internal leadership at the senior level within ministries and agencies

Lessons Learned At the Systemic Level

- High levels of political will, buy-in and support from the prime minister, cabinet secretary and key ministers
- Foster ownership of the process by the key individuals
- Involving key stakeholders in a meaningful way from the design phase - thereby producing collaboration rather than confrontation
- Ensure that the process is inclusive and involve all actors who want to participate
- Link the SEA intervention to existing primary processes and to create new processes
- Ensure that timing of the introduction of SEA is right and fits in with other reforms underway in the public sector
- Build on early successes and sustain momentum gained
- Set realistic targets as overambitious targets can stretch the capabilities of public officials and as well as public sector machinery, and cause disruptions in the smooth functioning of the government or result in compromised quality of output
- Ensure adequate funding for the process as this dictates the pace and momentum of the process

The menu of lessons learned presented above is intended to provide a menu of options for discussions for developing countries that are either considering the development and implementation of a SEA Process or are just about embarking on such a venture.

Conclusion

Like other developing countries, Jamaica's first priority to address the economic and social hardships it faces, makes it difficult to focus on integrating environmental and developmental considerations. However, the GOJ's commitment to integrate environmental considerations into policy making needs to be seen against a context of gradual environmental degradation, low levels of economic growth, high debt and on-going public sector reforms as discussed previously. On the one hand, the importance of natural resources and a clean environment to the Jamaican economy formed the basis for considering environmental issues in policy making; whilst on the other hand, the economy's poor performance continues to put pressure on the Government to

increase economic growth and create jobs, and in some instances even where there may be environmental risks attached.

Notwithstanding, the GOJ continues to demonstrate its commitment to environmental protection and sustainable development and is one of the leading models in the Caribbean for the implementation of progammes, policies etc. towards a sustainable future for its people. Development and implementation of this SEA process only strengthens its position in the Caribbean and among the CARICOM (Caribbean Single Market and Economy) countries.
In conclusion, the development and implementation of a SEA process in Jamaica is the first of its kind in the CARICOM Region and one of the few of developing countries around the world. It is hoped that the ideas shared in this paper, the experiences and lessons learned can be translated into similar initiatives in other developing countries.

The responsibility for protecting our earth requires a collective effort that knows no country, religion, class …It is everyone's responsibility. As you continue to embark on your own initiatives, remember the old American Indian proverb:

"The earth is not given to you
by your parents,
it is loaned to you
by your children"
and we have only one Earth
that we call home.

APPENDIX 1

GREENING OF GOVERNMENT PROGRAMME IN JAMAICA

Greening of Government is defined as the process of integrating environmental considerations into the decision-making processes at the policy, strategic planning and operational levels of government. Every sector including governments has aspects of their core operations that interact with the environment and these interactions can have negative impacts if not managed properly. Greening of Government is not concerned with developing new environmental policies or procedures but focuses on integrating environmental issues and concerns into existing and new socio-economic policies and procedures.

The Greening of Government programme in Jamaica is supported by the Canadian International Development Agency and is implemented through the Canadian Executive Agency, Dessau-Soprin and Marbek Resource Consultants.

The following table will highlight the activities that constitute the Greening of Government Programme in Jamaica.

PROJECTS	ACTIVITIES AND INITIATIVES
Environmental Stewardship of Government Operations	**Development of Environmental Stewardship Policy for Government, including 11 policy guidelines** – the environmental stewardship guidelines identifies procedures for all government ministries and agencies to follow with respect to: energy, water, waste, emergency & disaster, special/sporting events and fleet management; occupational health and safety, including indoor air quality; use, management and disposal of hazardous substances; and, green procurement
	Development and Implementation of Environmental Stewardship Action Plans (environmental management systems – EMS) - for some ministries and agencies of Government. The Action Plans, entitled "Towards Resource Efficiency and Environmental Excellence", focus on defining activities which ministries can undertake towards energy management, pollution prevention, occupational health and safety of workers etc.
	Training Programmes and Materials in Environmental Stewardship for all levels of public sector employees. Training programmes have been designed targeting managers and directors; principals and teachers; technical staff; administrative staff; and, ancillary staff. Between May 2001 and March 2004, over 1000 public sector personnel were trained in this area. A *"Handbook on Environmental Stewardship"* and an *"Environmental Stewardship Guide"*, was developed to support this training.
	Development of **"GOJ Environmental Guide to Green Procurement",** to support reforms identified in current GOJ procurement policy (2000). One of the objectives of the new procurement policy is the minimization of negative impacts on the environment due procurement of goods and services, with Government being the largest procurer in the economy.
Incorporating Environmental Issues in the GOJ Corporate/Strategic	**Incorporation of Environmental Issues into the GOJ Corporate Planning Template.** Ministries of GOJ are required to develop Sustainable Development strategies as part of their corporate plans. These strategies are geared towards ensuring in the pursuit of their day to day operations minis tries integrate environment with economy; protect the health

PROJECTS	ACTIVITIES AND INITIATIVES
Planning Process	and well-being of Jamaicans; manage the use of environmental services (water, energy etc.), and prevent pollution.
Strategic Environmental Assessment	**Development and Implementation of GOJ SEA Policy –** thereby enabling the integration of environmental issues into strategic level decision making within government. This initiative also includes the development of training materials and associated training in SEA and policy development. Between August 2001 and March 2004, over 200 policy analysts have been trained in SEA.
Implementation of the GOJ Environmental Training Strategy "Holistic Governance: Sustainable Development in Action" Programme	Based on the findings of an environmental training needs assessment of GOJ conducted in 2000, an environmental training programme was designed, developed and implemented. This programme "**Holistic Governance: Sustainable Development in Action"**, includes ten environmental training courses for varying levels of public sector officials. Accompanying training materials have been developed for each course. Courses vary from a minimum of 18 hours to 42 hours. Some of the training courses include, among others: ☞ Environment and Sustainable Development ☞ Environmental Business Management ☞ Environmental Stewardship for Senior Management ☞ Environmental Economics ☞ Introduction to Environmental Accounting ☞ Integrated Environmental Management and Planning ☞ Strategic Environmental Assessment To date over 3,000 public sector officials have been trained under this progrmme.

APPENDIX 1

SEA AND EIA – A COMPARISON

SEA and EIA differ fundamentally in scope and in the nature of their approach, as the framework within which SEA is carried out is much larger than EIA and allows consideration of alternatives and a better view of the "Bigger Picture". EIA is carried out once a policy has already been decided. The EIA provides information, including direct and indirect effects about the likely environmental impacts of any individual project and can be useful in the identification of necessary mitigation, while the SEA is used in system-wide reviews. SEA addresses the limitations of project EIA, as EIAs occur at a late stage in the decision making process.

However, many of the steps employed in the SEA process are the same as in the project EIA.

COMPARATIVE CRITERIA	STRATEGIC ENVIRONMENTAL ASSESSMENT	ENVIRONMENTAL IMPACT ASSESSMENT
Application	Policies, plans and programmes	Physical/discrete projects
Legal Status	Seldom legislated	Often legislated
Stage of Decision-Making	As early as possible in the policy development process. Can frame subsequent EIAs	Usually conducted after a project design is well advanced
Scope of Analysis	Can be broad, both in time and space. Can consider cumulative, synergistic and environmental effects	Geographically specific. Focus tends to be on direct physical effects of the project.
Consideration of Alternatives	Can address whether an initiative can go forward, plus where an what type of projects should be implemented	Focus is primarily on how to design a project to reduce adverse environmental effects
Procedures	Procedures must be adapted to decision-making process within ministry	Standard government-wide procedures
Mode of Application	Self-assessment	Self-assessment with third party assessment for selected projects

A SEA answers the following questions:

- What are the potential direct and indirect outcomes of the PPP?
- How do the PPP outcomes interact with the environment?
- What is the scope and nature of the environmental interactions?
- Can the adverse environmental effects be mitigated?
- What are the overall potential environmental effects of the PPP after opportunities for mitigation have been incorporated?

EIA answers the following questions:

- What will be the key impacts on the environment?
- Who will be affected and how?
- How can the development be modified to remove or reduce these negative impacts?

APPENDIX 3

AN EXAMPLE OF A POLICY IMPLEMENTED THAT WOULD HAVE BENEFITTED FROM A SEA PROCESS

Two policies implemented in Jamaica in the later 1990's that would have benefited from the inclusion of SEA include:

- The Foreign Direct Investment Facilitating the Introduction of Cellular Services to Jamaica

Foreign Direct Investment in Jamaica increased up to 200% over the last five years. Based on the 2002 World Investment Report, Jamaica now stands 26 internationally and fifth in Latin America and the Caribbean for FDI inflow performance in 2001, despite the global slow down of economic growth in that year. A look at the level and quality of investments that have been flowing into Jamaica, one can conclude that this augurs well for the country's future.

Jamaica's largest foreign investors are concentrated in telecommunications, mining, and financial services. In recent years, the telecom sector has become one of the fastest growing sectors in Jamaica. U.S.-based Oceanic Digital Jamaica and Irish-owned Digicel, respectively paid US$45 million and US$47.5 million for mobile licences Today, Digicel is one of the fastest growing mobile telephone companies not just in Jamaica, but also in the world.

Whilst these two main cellular companies have contributed to economic growth, increases in employment etc. there are serious environmental issues that have arisen as a result of these FDI agreements, namely:

- Increase in the quantities of hazardous waste being generated (cell phone batteries, cell phones etc)
- No defined hazardous waste disposal site, thus resulting in these forms of waste being disposed off at solid waste disposal sites
- The increase in the number of cell towers (no sharing of cell towers stipulated at the signing of FDI agreements) resulting in lowering of property values, civil protests etc and unnecessary use of valuable lands

If SEA had been included before the signing of the FDI agreements the following could have been done:

- Institute a deposit-refund scheme to be managed by the cell companies to collect hazardous components of cell phones etc. until such time as a hazardous waste disposal site is developed
- Sharing of cell towers amongst the various companies

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LIST OF ACRONYMS

CARICOM	Caribbean Common Market
CIDA	Canadian International Development Agency
EIA	Environmental Impact Assessment
ENACT	Environmental Action Programme
f.o.b.	freight on board
FDI	Foreign Direct Investment
FY	Fiscal Year
GDP	Gross Domestic Product
GOJ	Government of Jamaica
J$	Jamaican Dollar
NEPA	National Environment and Planning Agency
PARU	Policy Analysis and Review Unit
PCB	Polychlorinated biphenyls
PPP	Policy, Plan, Programme
SEA	Strategic Environmental Assessment
US$	United States Dollar