## Piloting Natural Resource Valuations within Environmental Impact Assessments

## **Mid-Term Evaluation**

Official Title: Piloting Natural Resource Valuations within Environmental Impact

Assessments

Country: Jamaica

Region: Caribbean and Latin America
Project Size: Medium Sized Project

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## **Acronyms**

CDM Clean Development Mechanism
EIA Environmental Impact Assessment
ENACT Environmental Action Programme
EVPA Economic Valuation of Protected Areas

GEF Global Environment Facility GOJ Government of Jamaica JBI Jamaica Bauxite Institute

NEPA National Environment and Planning Agency

NGO Non-Governmental Organization
NRV Natural Resource Valuation
PES Payment for Ecosystem Services
PSC Project Steering Committee
QPR Quarterly Progress Reports

SEA Strategic Environmental Assessment UNDP United Nations Development Programme

## Acknowledgement

The evaluation team would like to recognize and congratulate NEPA, UNDP-Jamaica and project staff for the efficient and professional organizational support they provided during this evaluation. Their impressive efforts reflect the skilled approach taken towards overall project implementation. Hopefully this evaluation will contribute to the project's further achievements and all parties will accept the candid observations with the same collegial spirit with which they are presented.

#### Part 1: Executive summary

## 1.1 Brief description of project

The project document states:

"This project will strengthen the implementation of Environmental Impact Assessments (EIA), as well as contribute to the implementation of Strategic Environmental Assessments (SEAs) through the development and application of natural resource valuation tools. In particular, the project will work in parallel with the Environmental Action Programme (ENACT), as SEAs are undertaken on various sectoral policies, programmes and plans. The project will 'top-up' ENACT's capacity development activities of training and sensitization of the value of SEAs, and enforcement and compliance of EIAs with training and sensitization on the utility of natural resource valuation as a means to meeting both national and global environmental objectives over the long-term."

"The development of natural resource valuation tools will provide an opportunity for these to be institutionalized as part of ENACT Programme's capacity development activities. In this way, SEAs will be greatly improved in being able to make better predictions of possible consequences of policy interventions, facilitating the development of strategies to reduce policy resistances and facilitate the consideration of environmental risks and impacts associated with the implementation of government policies. By providing a more robust and comparable valuation method for natural resources, consequences of development policies, programmes and plans will be better evaluated so as to promote biodiversity conservation; minimize, if not reduce the risks associated with land degradation; encourage climate change mitigation and adaptation strategies; and promote environmentally sound and sustainable development."

"The Government of Jamaica will execute this project over a period of three years, starting in 2008 with the National Environment and Planning Agency as the main implementing partner, working closely with a Project Steering Committee (PSC) that will provide high-level policy guidance and oversight. A project management unit will execute the project. The total budget of the project is US\$ 552,250 of which US\$ 470,000 is from the GEF. The UNDP is the GEF Implementing Agency."

#### 1.2 Context and purpose of the evaluation

The purposes of this mid-term evaluation are to:

- Monitor and evaluate results and impacts;
- Provide a basis for decision making on necessary amendments and improvements;
- Promote accountability for resource use; and
- Document, provide feedback on, and disseminate lessons learned.

This mid-term evaluation follows the specific guidance of UNDP/GEF by:

- i) Identifying potential project design problems,
- ii) Assessing progress towards the achievement of objectives,
- iii) Identifying and documenting lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects), and,
- iv) Making recommendations regarding specific actions that might be taken to improve the project.

The evaluation serves as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. The evaluation provides an opportunity for project managers to assess early signs of project success or failure and prompt necessary adjustments.

This evaluation took place during month 39 - 40 of a 51-month project. This is relatively late in the project cycle to identify issues and provide meaningful course corrections.

### 1.3 Main conclusions, recommendations and lessons learned

#### The overall rating of this project is "moderately satisfactory".

This project is currently not on target to reach the project objective, results, outcomes, and/or outputs. To achieve these benchmarks will require a substantial improvement in both the effectiveness and efficiency of project implementation.

The project's original objective is "to develop a set of natural resource valuation tools, and incorporate these into policies and procedures governing the preparation and use of Environmental Impact Assessments (EIA)." The project has approximately ten months prior to close. The project may achieve the first half of this objective in that time period. It is unlikely that the project will reach the second half of this objective.

The project has labored under a long series of challenges. The project was slow to commence due to recruitment issues. The project has been slow to deliver outputs due to several factors such as a weak initial project design, a reluctance to hire international expertise, a reliance upon initiatives beyond this project's control to deliver or facilitate outputs, and a conservative approach to adaptive management.

If the project is going to progress in a meaningful way towards the objective there is a great deal that must be accomplished in the remaining ten months. This is not an impossible task. The project has ample financial resources remaining. The project concept enjoys very solid and broad-based national support from germane stakeholders, e.g., donor, government, NGO, private and academic.

The project has made headway with two main activities. The project sponsored the development of a Sourcebook to serve as a manual for the integration of NRV within EIA. The first draft presents a substantial number of case studies and models, but does not quite reach the mark of providing practical guidance for developers and/or regulators. Nor does it do a solid job of incorporating emerging market based instruments for the valuation of ecosystem services from the fields of PES, carbon, biodiversity offsets and economic valuation of biodiversity, etc.

The project has made excellent progress familiarizing national stakeholders with the basic concepts of NRV through a strong entry-level training program. The training program adapts international models to the Jamaican context. This training program is quite impressive with over one hundred stakeholders representing NGO's, academia, government, and private enterprise participating in a series of professionally organized five day NRV training courses.

The project must in the immediate term become much more strategic and aggressive about pursuing the project objective. This will require creating a very detailed and comprehensive work plan, augmenting and substantially strengthening existing NRV tools, piloting a non-binding NRV with an on-going EIA, designing a strategy for improving the EIA/SEA regulatory and administrative framework to make certain safeguards exist for NRV implementation, and upscaling training to become more focused upon the needs of

professionals who will develop and evaluate natural resource valuations. Importantly, the project seems to have reached its national capacity is ceiling. The project will likely need to recruit very skilled, international level expertise to support completion of project outputs – both training and tools - and build national capacity to design and implement the policies and procedures required for integrating and critically analyzing NRV as part of the EIA and SEA process. Finally, the project will need to become much more aggressive with capturing and disseminating lessons learned.

If these things are done, the project will have successfully educated and equipped a broad range of stakeholders with the basic knowledge and tools required for integrating NRV principles and practices within their every day decision-making processes. These stakeholders will be able to consider the basic trade-offs between ecological degradation and the maintenance of ecological integrity and associated ecosystem services. The project will have positively impacted resource use decisions related to land, water, and biodiversity across Jamaica. The project may also build enough national capacity for a cohort of stakeholders to have the tools and knowledge necessary to integrate NRV within both EIA and SEA processes. These are both solid objectives to reach. They represent a good investment and a major step towards helping Jamaica conserve globally significant natural environment. If the project is exceptionally strategic and efficient, NRV may be incorporated within EIA procedures prior to project close. However, this should only be attempted if the project has built the professional and procedural capacity required to both generate and evaluate NRV within the context of the immediate project and long and short-term cumulative impacts.

## 1.4 Table summarizing main ratings received

Explanation of Ratings	
Highly Satisfactory	HS
Satisfactory	S
Moderately Satisfactory	MS
Moderately Unsatisfactory	MU
Unsatisfactory	U
Highly Unsatisfactory	HU

Ratings		
Category	Rating	Comments
Conceptualization/Design	S	The project is well conceived. Integrating NRV within EIA and SEA would help Jamaica address conservation and sustainable development barriers. However, the project is poorly designed and does not give implementers the tools and directions necessary for success.
Stakeholder participation in the design	S	Stakeholders were actively engaged in the project design process.
Implementation Approach	MU	The project has been very slow to take adaptive measures to obvious challenges.
Monitoring and evaluation	MS	The project has followed normal UNDP/GEF M&E procedures. However, the mid-term evaluation was postponed until late in the project cycle. An earlier mid-term may have helped flag and correct implementation issues.
Stakeholder participation in the implementation	S	The project enjoys a very high level of stakeholder interest and involvement with project implementation, particularly training. The

		project would benefit from more active use of its capable steering committee.
Financial Planning	MS	The project has an ample budget. However, project management has been too conservative in using funds. The project has been hesitant to recruit international expertise. This technical assistance would be very helpful with increasing the sophistication of products and transferring higher skill sets to national stakeholders.
Attainment of Outcomes/ Achievement of project objective	MU	The project is not making very good progress towards attaining outcomes and/or the project objective. The project has faced many challenges and been slow to institute adaptive and strategic management responses to those challenges. The project will be hard-pressed to reach the outcomes and achieve the objective in the next ten months.

#### Part 2: Introduction

#### 2.1 Purpose of the evaluation

This mid-term evaluation should assist GEF, UNDP, Project Managers and other stakeholders to assess the effectiveness and efficiency of project activities in relation to the stated objective. The evaluation is an opportunity for project stakeholders to discuss and critically assess administrative and technical strategies, issues and constraints. The evaluation assesses progress in addressing the baseline, threats, and root causes. The evaluation identifies any difficulties in project implementation and their causes. The evaluation provides general and specific recommendations to improve the project's potential to achieve expected outcomes and meet objectives within the timeframe. The evaluation provides an opportunity to consider "lessons learned" to date that may be shared widely to facilitate adaptive management globally.

The mid-term evaluation process provides all stakeholders with an opportunity step back from their daily implementation efforts to reflect upon and discuss the efficacy of project activity to date. The evaluation process serves as an important learning experience for all participants. The resulting report will ideally assist the project implementation team to: (1) assess and consider project success at achieving anticipated outcomes given current benchmarks and planned activities; (2) consider possible improvements/approaches to increase the likelihood of success; and, (3) ultimately, enhance both effectiveness (The project's demonstrated ability to produce the desired outcomes) and efficiency (The project's demonstrated ability to produce the highest value result for the lowest cost). A showing of effective action to rectify any identified issues hindering implementation should be a requirement prior to determining whether implementation should proceed.

Both the assessment process and resulting report should be considered as outputs of this evaluation. The process and report should be used to (a) strengthen the adaptive management and monitoring function of the project; (b) ensure accountability for the achievement of the GEF objective, (c) enhance organizational and development learning; and (d) enable informed decision – making.

The mid-term report highlights key issues. These highlights indicate several areas where follow-up investigation and monitoring by project managers and UNDP are required.

#### 2.2 Key issues addressed

The key issues addressed by the MTE were:

- 1. Is the project "Relevant", "Effective", and "Efficient"?
- 2. Is this project "on-track" to achieving the objective?
- 3. What actions should be considered to the likelihood of success?

Project performance was measured based on the quantitative and qualitative indicators. The evaluation considered issues related to management and substantive/technical implementation, including project delivery, implementation, and finances. Particular attention was given to the strategic approaches taken relevant to achievement of project objectives.

## Part 3. Project Background

## 3.1 Project start and its duration

PPG Approved: January 2006
Project Start: June 2008
Original Close Date: June 2011
Mid-Term Evaluation: October 2011
Extension Close Date: September 2012

Mid-Tern Review: October 2011

Total Project Budget: US\$ 552,250 GEF contribution: US\$ 470,250 GEF Remaining (10/11): US\$ 388,000

## 3.2 Problems that the project seek to address

This is a "multi-focal" area project funded under GEF-3. The project falls under the strategic program for "Capacity Building" the Strategic Objective "CB 2: Cross-Cutting Capacity Development".

As stated in the project document: "The national priority of socio-economic development and Jamaica's institutional framework governing natural resource use and environmental management... is heavily biased against protection in favor of extraction and exploitation for short-term economic gains." Activities related to agriculture, forestry, mining, tourism and infrastructure development are degrading Jamaica's environmental integrity.

The EIA is the primary tool used by the Government of Jamaica to evaluate and mitigate impacts from many of these development sectors. Both the EIA and SEA processes are weak, in part, because they do not provide stakeholders with the ability to analyze the economic value of natural resources and ecosystem services potentially lost to unrestrained development. Although Jamaica would like to integrate natural resource valuation into the EIA and SEA processes, the Government and other national stakeholders do not have the capacity to get this done.

The NRV is designed to address this capacity barrier thereby strengthening the EIA/SEA process and setting in a place a tool to mitigate the adverse impacts of proposed development.

As stated in the Project Document, the project aims to "strengthen the review and approval processes of policies, programs, plans and development projects in order to promote environmentally sound and sustainable development. This development should meet national socio-economic priorities while at the same time helps satisfy Jamaica's obligations to the Convention on Biological Diversity (CBD), Convention to Combat Desertification and Drought (CCD), and Framework Convention on Climate Change (FCCC), among other multilateral environmental agreements (MEAs)."

#### 3.3 Immediate and development objectives of the project

The Project Objective is to develop a set of natural resource valuation tools, and incorporate these into policies and procedures governing the preparation and use of Environmental Impact Assessments (EIA).

#### 3.4 Main stakeholders

The project's main stakeholders are those private, public, academic, development, and non-governmental organizations with an interest in directing the development of Jamaica's land and seascapes. This includes, but is not limited to, regulatory agencies, mining companies, local resource users, community groups, and conservationists.

Specific stakeholders identified during project design include:

Association of Development Agencies	National Environment and Planning Agency	
ENACT Programme	National Environmental Societies Trust	
Environmental Foundation of Jamaica	National Water Commission	
Forestry Department	Negril Coral Reef Preservation Society	
Jamaica Bauxite Institute	Negril Environmental Protection Trust	
Jamaica Conservation and Development Trust	Local Initiative Facility for the Local Environment	
Jamaica Environmental Trust	Planning Institute of Jamaica	
Jamaica Institute of Environmental Professionals	Sun Venture Tours	
Meteorological Service	United Nations Development Programme	
Ministry of Land and Environment	United States Agency for International Development	
	University of the West Indies	

## 3.5 Results expected

The Project Document summarizes expected results as: "At the end of the project, the Government of Jamaica will be better enabled to make more informed decisions by placing greater value to ecosystem functions within the framework of environmental impact assessments of development projects. Specifically, the environmental impacts of all major development projects would be assessed in terms of their financial and economic values, which would be used to make more informed decisions and choices about future development."

## **Project Goal:**

"To strengthen the review and approval processes of policies, programmes, plans and development projects in order to promote environmentally sound and sustainable development that meets national socio-economic priorities while at the same time helps satisfy Jamaica's obligations to the Convention on Biological Diversity (CBD), Convention to Combat Desertification and Drought (CCD), and Framework Convention on Climate Change (FCCC), among other multilateral environmental agreements (MEAs)."

#### **Project Objective:**

"The objective of this project is to develop a set of natural resource valuation tools, and incorporate these into policies and procedures governing the preparation and use of Environmental Impact Assessments (EIA)."

## **Project Outcome:**

"At the end of the project, the Government of Jamaica will be better enabled to make more informed decisions by placing greater value to ecosystem functions within the framework of environmental impact assessments of development projects. Specifically, the environmental impacts of all major development projects would be assessed in terms of their financial and economic values, which would be used to make more informed decisions and choices about future development."

Component 1: "Development of a set of actuarial data associated with ecosystem

goods and services, natural resource commodities, opportunity cost of environmental damage arising from land degradation, among

others."

Component 2: "Improving the decision-making process by using data and

information on the economic and financial value of ecosystem

functions within the framework of EIAs."

Outcome Indicator 1: The opportunity costs associated with the healthy maintenance of

ecosystem goods and services are *estimated* during the implementation of EIAs, indicated by a section of the EIA report on

natural resource valuation.

Output 1.1: "Develop a set of natural resource valuation tools, which will form

an integral part of the implementation procedures of the Environmental Impact Assessments and the Strategic Environmental

Assessments."

Output 1.2: "Pilot the incorporation of natural resource valuation tools into the

EIA process.

Outcome Indicator 2: "The opportunity costs associated with the healthy maintenance of

ecosystem goods and services are *determinant variables* in the approval processes of permitting and licensing. The extent to which meeting minutes and reports include a deliberation on the conditions of development and alternative options, including but not limited to the NRCA Board, will indicate this. The extent to which natural resource valuation data and information will result in more environmentally friendly, sound and sustainable development options

of development project is uncertain."

Output 2: "Strengthen the capacities of the NEPA to use natural resource

valuation within the EIA process in a cost-effective, transparent, and

timely manner."

#### **Summary of Outputs**

#### Summary of Output 1.1

Develop a set of natural resource valuation tools to inform implementation procedures for both Environmental Impact Assessment and Strategic Environmental Assessment. The primary tool to be developed under this output is a "Sourcebook" designed to serve as a reference document collating best national and international principles and practices relevant to NRV. The Sourcebook should be a tool to guide both the public and private sector with the completion and evaluation of NRV for both EIA and SEA. Actuarial tables are to be developed and integrated within the Sourcebook. In addition, guidelines (implementation plan) for undertaking and integrating NRV within EIA's are to be developed. This is to include making improvements to the basic enabling environment (e.g., EIA and SEA regulatory and administrative framework).

## Summary of Output 1.2

Pilot the incorporation of natural resource valuation tools into the EIA process. At the time of project design and approval, practitioners where to apply the NRV principles and practices identified within the Sourcebook to a pending EIA covering the development of bauxite mining in the Cockpit region. The pilot was to generate and record lessons learned, serving

as a capacity building and information development exercise. The output is also designed to provide recommendations for the development of SEA implementation guidelines.

## Summary of Output 2

Establish an NRV training and sensitization program along four platforms: (1) in-service training for government professionals through the Management Institute for National Development (MIND); (2) integrate NRV course offerings of other academic institutions of higher learning; (3) conduct "sensitization workshops" that target policy-makers, members of the judiciary, private sector representatives, non-governmental organizations, and government agencies; and, (4) preparation and substantial distribution of lessons learned.

#### Part 4. Evaluation Methodology

#### 4.1 Structure of the evaluation

The evaluation structure follows the guidance of UNDP and GEF, including UNDP's "Handbook on Monitoring and Evaluation for Results" and GEF's "Monitoring and Evaluation Policies and Procedures". The evaluation was guided by comprehensive terms of reference developed by the PMU and UNDP/Jamaica. These TORs defined the scope and framework for the evaluation's final report.

### 4.2 Methods employed

One international consultant was retained to conduct the evaluation. The consultant has approximately two decades of global experience supporting the design, implementation and evaluation of GEF projects. The consultant has worked within the Caribbean region and recently completed the successful design of a full-sized project for Jamaica. He is familiar with Jamaica's institutional and policy structures and many of the nation's conservation issues.

The evaluation commenced with a comprehensive desk review of all pertinent project documentation. This included an identification of preliminary focus topics/priorities and establishing the mission itinerary with the project management unit.

A ten-day mission included semi-structured interviews with primary stakeholders, beneficiaries, consultants, and implementation partners. Please see the annex for a copy of the mission schedule. Most interviews were held in a central location to avoid allocating time to driving between meetings. Evaluators interviewed small groups of stakeholders (3 - 10 persons) using a facilitated, round-table forum. Meeting agendas were organized according to topics of common interest to participants. Each 2 - 3 hour meeting was framed by a simple set of standard questions. This "standardized" approach maintained discussions "on topic", quickly revealed answers required to satisfy key evaluation needs, and allowed adequate latitude to catalyze vibrant discussions and candid responses. Great effort was made to make certain all stakeholders were given equitable opportunities to express their thoughts. The articulation of "contrary" opinions was encouraged.

UNDP staff frequently participated in the meetings. This was useful, allowing for immediate resolution of detailed project questions. In addition to roundtable meetings, frank discussions were also held with project staff and UNDP regarding progress, management, budget, and project design issues.

The mission closed with a formal presentation of preliminary findings and discussion with the Project Steering Committee.

Following the mission, a draft evaluation report was completed. This draft was circulated to all key project stakeholders. Feedback was used to strengthen the final mid-term evaluation report.

## Part 5. Findings

## 5.1 Project Formulation

#### 5.1.1 Conceptualization/Design

The project's basic premise is sound. Jamaica is faced with substantial development initiatives that impact environmental integrity. Deforestation, mining, and infrastructure associated with mass tourism are lowering the nation's ability to maintain critical ecosystem functions and to address important climate, biodiversity, water, and land degradation concerns. EIA and SEA are a main tools used to evaluate and mitigate the impact of these concerns. Although EIA's have been effective in mitigating the impact of some development projects, the overall belief is that they should be strengthened substantially. One way to strengthen the EIA process is to integrate natural resource valuation as a mechanism to more fully understand the economic losses/gains represented by various development initiatives.

The project's general **implementation framework** is very straightforward. The first "component" is designed to create the required hardware: develop tools for NRV that reflect international principles/practices and that are adapted to the Jamaica context, collate these tools within a Sourcebook to be updated regularly, integrate tools within EIA policies and procedures, and trial the approach with an NRV/EIA test-run technically supported by the project. The second component builds the "human resource capacity" required to run, adapt and improve this hardware. Representatives of government, NGO's, communities and private enterprise are each to benefit from a series of formal and "sensitization" training programs. At the end of these training programs, they should have the capacity to develop and evaluate NRV as part of the EIA process. The general framework even offers clear summary guidance regarding specific project activities.

The only real challenge is development of tools before adequate national capacity exists to evaluate and use those tools. This was to be solved by using international level expertise to help create, evaluate and improve the NRV/EIA Sourcebook, including the development of necessary procedural guidance to be integrated within EIA policies.

Although this basic premise and proposed approach for strengthening the EIA and SEA processes is good, the project document's presentation is overly complex. The three simple outputs are nested within a project goal, objective, outcome, "ancillary project outcome", two components, and two outcome "indicators". Project budgets refer to two project outcomes. Implementation is linked to another project that should complete deliverables key to NRV success. The project document promises to integrate NRV within the NAP, but fails to mention or frame this within the outputs. A number of indicators listed in the text do not precisely match indicators presented in the Logical Framework. The overall conclave makes a relatively simple project seem overly complex. This challenges the ability of national project implementers to efficiently execute the project.

The project document's **Logical Framework** is not a very practical tool for management and/or evaluation. The indicators tend to be vague rather than "SMART": specific, measurable, attainable, relevant, and/or "trackable". Many of the indicators, baseline and target values are not coherently aligned to offer a clear measurement of project success. The framework's objective level indicators are presented as "outcome" indicators. The PSC, project manager, and NEPA find the framework to be cumbersome. Managers and/or evaluators are challenged to see how the sum of achieved "target" values reflects a meaningful achievement of objective and/or outputs. In spite of this, the project has made only minor adjustments to the original logical framework since inception.

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This project is being funded to reach the following objective: "To develop, pilot, and institutionalize natural resource valuation tools, techniques, data and information within the framework of Environmental Impact Assessments (EIAs)." To verify achievement of this objective, the logical framework offers four target values: (1) capacity scorecard improved; (2) NRV "demonstrated" to 50 government representatives; (3) 50 professionals "expert" in NRV tool business planning, feasibility study and market analysis; and; (4) the ENACT program committed to piloting SEA integrating NRV. (The ENACT program and associated SEA improvements are beyond the scope of the GEF project.)

The four objective level target values presume that increased NRV capacity will logically result in the development, piloting, and institutionalization of NRV within EIA. However, the sum of these four values does not necessarily indicate achievement of the project objective. If all four values are reached, it would still be likely that NRV has not actually been developed, piloted, and/or institutionalized within EIA's and/or resulted in improved environmental management.

Many of these target values do not clearly relate back to and/or measure achievement of the objective level indicators. For instance, a key objective level indicator is "Increased selection of development alternatives that are environmentally friendly, sound, and sustainable". Although vague and difficult to measure, it could potentially be a useful indicator of success. However, the logical framework offers no measureable baseline and/or target values to track how many "environmentally friendly, sound and sustainable" alternatives were selected at project start (baseline) and will be selected by project close (target).

There are a few "verifiable" indicators. For instance, a specific and measureable indicator under Output 1.1 states: "An implementation plan developed for undertaking natural resource valuation tools within the framework of EIAs." There is no precise baseline value offered for this indicator. However, the target value is: "By the end of year 1, new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation." This is a good target. However, incorporating NRV within new EIA guidelines is likely more useful as an "objective" rather than output level target (Output 1.1: Natural resource valuation tools developed).

The project's **management scheme** was designed to have a national natural resource economist who would also serve as project manager. This was done to avoid hitting GEF's 10% project management cap. The budget allocated approximately US\$ 230,000 for this dual position (nearly 50% of the total budget). Unfortunately, Jamaica does not seem to have a qualified national economist willing and/or capable of serving as the project manager. After more than a year of searching, NEPA eventually split the position. The initial project manager left this post in January 2010. In May of 2010, a project analyst with a technical background in health/human services was hired. The natural resource economist's work was subcontracted to a national consortium.

The project is designed to **pilot NRV** in one area (the Cockpit mountains) and for one industry (bauxite mining). Within the Project Assumptions, the document reads: *The bauxite mining companies will be ready to implement the pilot EIA no later than the end of the project's second year, and not before the natural resource valuation tools have been developed.* According to NEPA, bauxite mining was suspended in the Cockpit in 2006 well prior to project implementation. This has deflated Output 1.2 (Piloting of NRV within EIA) and, to date, no specific alternative has been identified.

The project was designed to be **reliant upon a parallel "ENACT" project** funded by the Canadian Government. ENACT was to compliment the EIA/NRV project by supporting the design and adoption of comprehensive SEA procedures. The SEA guidelines generated by ENACT were to benefit from natural resource valuation tools developed under NRV.

Conversely, the NRV pilot project was to benefit from SEA guidelines formulated under ENACT. These SEA guidelines where to help make certain that EIA's are nested in broader ecosystem wider considerations, including the cumulative impact of proposed development. Unfortunately, the GoJ has been slow to take action on the SEA process supported by ENACT and the NRV project has failed to generate tools applicable for SEA.

The **Barriers Analysis** creates the foundation of any GEF project. This project's barriers analysis could have done a better job of clearly formulating a well-reasoned argument for the adoption of ultimate project investments. Having a statement that clearly says "these are the barriers" and "this is how the project will remove these barriers" helps create a context for the project implementation team. They know precisely what challenges they are to address.

### 5.1.2 Country-ownership/Driveness

This project benefits from strong national support. The concept flows from a variety of national environment and development interests. The national government, numerous NGO's, private sector, and donors are each enthusiastic about the project concept. However, most of these partners also express frustration regarding project design and implementation challenges.

## 5.1.3 Stakeholder participation in the design

According to interlocutors, stakeholders were fully briefed and engaged during the design of this project. The design process included substantial and substantive discussions with representatives of key organizations. Many of these organizations now sit on the project steering committee. The project was closely aligned with several on-going and proposed projects. There are questions as to whether the design/implementation of ENACT and NRV were well coordinated.

#### 5.1.4 Replication approach

This project has a very well intentioned replication plan. The project calls for publication of outputs, training, web-based distribution of products, generation and dissemination of lessons learned from pilot projects, etc. Unfortunately, the project has been very slow to implement the proposed replication programming. This reluctance may be traced to the project's slow progress with delivery of outputs. Regardless, the project has generated many products – including very good NRV familiarization materials - and should be following the replication approach lined out in the project document. This would include working diligently to collate and distribute lessons learned as they come on line.

## 5.2 Project Implementation

#### 5.2.1 Implementation Approach

(i) The use of the logical framework as a management tool

The PSC meetings and the APR/PIR forms refer to and use the logical framework to monitor project progress and impact. However, the project implementation unit has struggled to use the logical (results) framework as an effective management tool. As noted, the project document's logical framework does not offer strong guidance for measuring project progress and/or impact. The project uses a slightly adapted form of the logical (results) framework to measure project progress and impact.

(ii) Other elements that indicate adaptive management

A reluctance to adapt to implementation challenges is a major project shortcoming. This project has faced numerous and substantial implementation challenges, e.g., poor quality of NRV tools, failure to implement an EIA/NRV pilot, slow progress with tertiary or higher level NRV training, etc. Rather than move forward toward the project objective, the project has allowed issues related to recruitment, pilot project evaporation, and over reliance upon other projects to deliver outputs to slow project implementation.

For instance, after the NRV project commencement, a separate "Economic Valuation of Protected Areas" project was funded via a global GEF program. Project implementers decided to rely upon EVPA to deliver NRV models that could be used to inform the NRV project. The EVPA project was to deliver these tools in 3 months based upon the economic valuation of three protected areas. However, it took over 18 months rather to deliver and, when the results were delivered, Jamaican stakeholders took issue with many of the findings. The final product "Non-Market Economic Valuation of Protected Areas" was submitted in March 2011 and does contain tools and information relevant to the NRV project.

A reluctance to practice adaptive management may be linked to several factors. NEPA correctly decided to invest in value. There is very little national experience with NRV and NEPA has taken a cautious approach to make certain the right steps are followed. Unfortunately, neither of these conservative approaches – although very well intended - has moved the project closer to achieving its objective.

Perhaps most importantly, the national executing agency has not adopted a detailed, comprehensive and realistic work plan. There is a "work plan" but this is very cursory. The project does not have work plan that lays out the precise deliverables and steps, timing, and responsible parties for the achievement of these deliverables. Equally as important, the project does not have a work plan that links achievement of outputs/deliverables with achievement of project results. This stymies the ability of the project to reflect adaptive management principles and practices.

### (iii) The project's use/establishment of electronic information technologies

This project, to date, has made very little use of electronic information technologies. Electronic media use by the project is limited to periodic email communication with the PSC. The original project document called for the use of internet for publication and distribution of training materials and lessons learned.

#### (iv) The general operational relationships between the institutions involved

There are several stakeholders involved with the implementation of this project. However, the primary players may be summarized as: NEPA/PMU, PSC, and UNDP. These organizations enjoy very good professional relationships and communicate well. However, several parties expressed frustration at the slow implementation progress made by NEPA and a perceived failure to take on-board PSC recommendations.

## (v) Technical capacities associated with the project

A combination of national NRV capacity constraints and a failure to recruit international technical assistance challenges project implementation. The project was created to build capacity for NRV within Jamaica. As noted, the project management regime was inappropriately designed so that a "highly qualified" national environmental economist would serve both project manager and technical support functions. There is very limited national experience and expertise with NRV. Many of the primary stakeholders interviewed noted that

they do not have the capacity to evaluate whether the project's technical products reflect best principles and practices.

The project was designed to recruit substantial international level expertise to fill national gaps and build national capacity. To date, the project has failed to recruit international level expertise for any of the three outputs (NRV tools, EIA pilot, NRV training). The lack of national expertise makes this an even more urgent matter if the project is to make good and effective progress towards the objective.

## 5.2.2 Monitoring and evaluation

i) Evaluate if the project has an appropriate M&E system

As noted, the project's design framework and logical framework are very weak. The project has followed standard GEF and UNDP monitoring modalities. The mid-term evaluation was delayed to approximately month 38 of a 48-month project. The project would have likely benefited from a mid-term evaluation conducted during project month 28. An earlier mid-term evaluation would have ideally identified the project's implementation challenges and provided offered recommendations for remediation, including catalyzing implementation reforms.

ii) Evaluate if appropriate M&E tools have been used

As noted, the project logical framework is weak. The framework lacks a strong strategic design and does not provide indicators that offer an appropriate measurement of project progress and/or impact.

iii) Evaluate if resources and capacities to conduct an adequate monitoring are in place

Adequate resources became available for conducting the mid-term review only after UNDP and project management worked to secure additional funding from within the project budget.

#### 5.2.3 Stakeholder participation in the implementation

(i) The production and dissemination of information generated by the project

The project has generated two main products: NRV Sourcebook and NRV familiarization training program. Both products were shared with PSC members and UNDP. The Sourcebook has been shared little beyond this immediate audience. The training materials were provided to all training participants. None of this information is widely available, e.g. web-based.

(ii) Local resource users and NGOs participation in implementation and decision making

NGO's are very active members of the PSC. NGO representatives have benefitted from the familiarization training program. However, there is little participation beyond these two functions.

(iii) Partnerships and collaborative relationships developed by the project

The project has made strong partnerships, particularly within the academic communities. This is a project highlight. The level of volunteerism shown by PSC members, academic and government institutions in support of this project is excellent.

(iv)Involvement/support of governmental institutions in project implementation

Government support for this project has been excellent on both technical and managerial levels. The GoJ has firmly endorsed NRV as a tool and provides substantial support for the PMU. The challenge to date is that GOJ – and others – have capacity constraints in terms of adaptive management and technical knowledge of NRV and the ability to practice adaptive management and generate progress at a rate demanded by the GEF 3-year project timeframe.

## 5.2.4 Financial Planning

(i) The actual project cost by objectives, outputs, activities

## GEF Funds as of September 2011 (US\$)

				Total Budget		
Output	2009	2010	2011			
Outcome 1 - Output 1.1	Outcome 1 - Output 1.1					
Development of Natural Resource Va	luation Tools					
Total Project Budget as in PRODOC	85,000.00	40,000.00	30,000.00	155,000.00		
Annual Work Plan (as in Atlas)	85,000.00	35,405.19	80,956.51	204,883.22		
Disbursed	-	17,996.86	1,103.69	19,100.55		
Outcome 1 - Output 1.2						
Natural Resource Valuation Tools pil	oted into EIA					
Total Project Budget as in PRODOC	33,250.00	43,250.00	33,250.00	109,750.00		
Annual Work Plan (as in Atlas)	33,250.00	18,500.45	39,584.93	84,706.96		
Disbursed	1,026.36	1,998.33	167.98	3,192.67		
Outcome 2:						
Training and Sensitization on NRV						
Total Project Budget as in PRODOC	47,000.00	44,500.00	59,000.00	150,500.00		
Annual Work Plan (as in Atlas)	47,000.00	24,000.00	63,500.00	164,983.45		
Disbursed	0	897.97	30732.18	31,630.15		
7,777.7						
Project Management						
Total Project Budget as in PRODOC	18,334.00	18,333.00	18,333.00	55,000.00		
Annual Work Plan (as in Atlas)	18,334.00	20,562.00	20,000.00	58,896.00		
Disbursed	9,420.57	19,183.71	16,307.01	28,604.28		
Grand Total	Grand Total					
Total Project Budget as in PRODOC	183,584.00	146,083.00	140,583.00	470,250.00		
Total Annual Work Plan (as in Atlas)	183,584.00	98,467.64	204,041.44			
Total Disbursed	10,446.93	40,076.87	48,310.85	82,527.65		

## (ii) The cost-effectiveness of achievements

The project is not cost effective. The project has failed to use resources to make progress towards achievement of the project objective. Very few of the planned activities have been implemented. Outside factors often delayed and/or deflated planned project activities. However, project management has been slow to respond and successfully adapt to challenges. For instance, when it became apparent that adequate expertise could not be recruited locally, the project failed to secure international level expertise as directed by the project document. This saved project resources but stymied progress, hampered capacity building opportunities and limited the generation of international quality outputs. The project has spent approximately US\$ 82,000 or 17% of the total project budget. Nearly 30% of the project's

expenditures to date were allocated for management. While the project continues to spend on project management, progress towards achievement of outcomes is limited. The result is a project that to date has spent little on making progress and achieved little.

#### (iii) Financial management

The project follows normal UNDP and GoJ accounting procedures. Financial management appears to be quite strong with no issues of immediate concern visible.

### (iv) Co-financing

The project's co-financing is approximately US\$ 82,000 or 14% of the total project budget. The GoJ supports the project extensively with in-kind financing, provisioning of office space, etc.

## 5.2.5 Execution and implementation modalities

(i) Is project implementation being done in an efficient and effective manner?

This is a NEX project. As stated in the Project Document, NEPA is "responsible for the achievement of the results expected from the project and, in particular, for ensuring that the outputs are produce through effective management and use of project funds." NEPA is the appropriate executing agency. They have direct responsibility for EIA implementation and have practice supporting GEF projects.

The current project manager has experience overseeing the implementation of development projects. However, she is a health/human welfare expert with limited natural resource management knowledge. Her original contract began in May 2010. She is under contract to serve as project analyst until close, September 2012.

UNDP is very well suited to serve as the project's GEF implementing agency. UNDP has ample experience successfully supporting national capacity building and environment sector programming in Jamaica. UNDP/Jamaica's environment and energy officer worked in the EIA sector for several years.

The project benefits from a very strong PSC with a wide variety of qualified members representing key sectors. Many PSC members did mention that the project would benefit from more frequent meetings – the PSC currently meets quarterly – and more active involvement in supporting project implementation. In addition, the same PSC was used for the NRV and EVPA projects. Apparently implementation challenges for the EVPA frequently eclipsed NRV attention.

In spite of these factors, the project is not being implemented effectively or efficiently. There are several contributory, including poor project design, lack of a comprehensive work plan, and/or failure to practice adaptive management principles/practices.

(ii) Is there effective communication between critical actors in response to the needs of implementation?

Communication between the main implementation partners (NEPA, UNDP, PSC) is good. However, participation of PSC in project implementation is limited. The PSC meets quarterly and does not receive regular updates from project management, e.g., electronic newsletters.

(iii) Are the administrative costs of the Project reasonable and cost efficient?

The amount allocated for project management is not sufficient. For instance, the salary paid for the project manager is competitive relative to government salaries. However, government employees also receive health, retirement, and other benefits. In addition, almost the entire project management budget goes to salary. There is no allowance for vehicle, project assistant, or other support.

This low project management budget reflects the GEF 10% rule that makes it nearly impossible for a 2+ year medium-sized project to hire adequate project management staff unless a substantial amount of this budget is covered by outside sources. In most cases, government is able to offer office space and other limited co-financing. UNDP may be able to come up with some cash for project management. However, it is very rare that adequate financing can be secured.

## 5.3 Outputs and Outcomes

## 5.3.1 Attainment of Outcomes/ Achievement of project objective

Status Ratings

O	
Achieved	A
Partially Achieved	PA
Not Commenced	NC

Project Objective: The objective of this project is to develop a set of natural resource valuation tools, and incorporate these into policies and procedures governing the preparation and use of Environmental Impact Assessments (EIA).	PA
Outcome One: Developing natural resource evaluation tools and estimating the opportunity costs of healthy ecosystems	PA

Output 1.1	Natural resource valuation tools developed	PA

## Summary of Progress to Date:

The project sponsored the generation of a draft Sourcebook completed in June 2010. The current draft is primarily a literature review and assemblage of examples. However, this draft does not fulfill the requirements laid out in the Project Document. The current draft requires substantial inputs before being an appropriate tool to support the development and evaluation of EIA/NRV by project proponents and regulators. For instance, there is a substantial body of work available globally that focuses upon market based instruments for the valuation of ecosystem services. Unfortunately, the Sourcebook does not adequately incorporate emerging NRV from the fields of PES, carbon, biodiversity offsets and economic valuation of biodiversity, etc.

Other activities under this output have not been accomplished. Administrative guidelines and regulatory processes will be very important to describe how NRV is to be utilized. Without a proper framework, there is a very real risk that ecosystem services, biodiversity conservation, and other natural resource values will be under-valued relative to high return investments such as tourism and mining. The project document states clearly "The Sourcebook and natural resource valuation tools will be integrated into guidelines for undertaking EIAs", "Integrate natural resource valuation tools and techniques within guidelines for the implementation of EIAs (i.e., an NRV/EIA implementation plan)" and "By the end of year 1, new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation."

Activity	Status	Comments
NRV Sourcebook developed/printed	PA	A draft exists that requires substantial

		upgrading
Actuarial data completed	NC	Work has not commenced
Independent (international) expert analysis of	PA	Draft TOR's exist. Recruitment has not
NRV Tools		commenced. NEPA hopes to have
		someone on board by early 2012.
Guidelines (implementation plan) for	NC	A six page working paper "Integrating
undertaking an integrated natural resource		Natural Resource Valuation into the
valuation/EIA.		Jamaican EIA Process" was drafted.
		Completing this process critical to
		making certain that the rigor of the NRV
		development process and the role of
		NRV conclusions relevant to the EIA
		process are well understood and detailed.
NRV Tools integrated within NAP	NC	This is not critical.
Socio-economic assessment of the Cockpit	NC	Not completed. However, there would
region		be little point in completing this
		assessment if the pilot project was to take
		place in another area.
Policy negotiations to integrate natural resource	PA	The strengthening of the administrative
valuation within the EIA process, particularly		and regulatory framework is critical to
the NRCA Board and private sector associations		support NRV within the EIA process.
ENACT Programme committed to piloting SEA	NC	As note, the SEA process has been slow
that integrates the use of natural resource		to gain traction.
valuation tools.		

# Output 1.2 Natural resource valuation tools piloted within the framework of an EIA

NC

Summary of Progress to Date:

The project was designed to pilot EIA/NRV using bauxite mining in the Cockpit region. Apparently, all new bauxite mining in the Cockpit region was suspended in 2006 including the new operation that was to serve as the pilot EIA/NRV. In this case, the suspension pre-dates project approval by two years. An alternative EIA site has not been identified for piloting NRV. In addition, the Sourcebook, training, and regulatory advances required to strengthen SEA and EIA processes and capacities have been slow to mature. The result is that Jamaica still lacks the NRV tools, administrative procedures, regulations, and capacity to pilot NRV as part of the EIA process. If the pilot is going to commence, it will likely need to be done as a non-binding trial using substantial international technical support to augment and build national capacity.

Activity	Status	Comments
Pilot EIA project	NC	See above
Document lessons learned from the pilot project	NC	See above
Documented lessons institutionalize the use of natural resource valuation within the EIA process	NC	See above
Recommendations for the development of SEA implementation guidelines	NC	No progress has been made. This is important in order to be certain that NRV and EIA reflect cumulative impacts to greater ecological functions, e.g., ridge to reef.
Analysis of the pilot project provides the basis for the review and	NC	See above
reform of socio-economic policies in terms of their environmental		
implications/impacts (as part of the development of SEA		
implementation guidelines under the ENACT Programme).		

PA

# Outcome 2: Better decisions made to select environmentally sound and sustainable development alternatives

Summary of Progress to Date:

The project has implemented a substantial number of excellent training programs designed to familiarize stakeholders with basic principles and practices related to NRV. A consultant recruited by the project put together a very professional, five-day training course.

As stated in the course curriculum: This course in Natural Resource Valuation has been designed to build capacity of key individuals in the public and private sectors to understand the importance of natural resource valuation to the sustainable management and use of natural resources and to support decision-aiding processes related to the environment. The course will equip participants to be able to make wise, far- reaching decisions, by being able to calculate the total economic values of a range of ecosystems and by so doing, equip these said persons with the ability to undertake the valuation of ecosystems in Jamaica. Additionally, the course will enable participants to be able to determine the types of decisions and/or actions to which natural resource valuation should be applied.

Since May of 2011, more than one hundred individuals have participated in this course. These persons represent a host of sectors including NGO's, private enterprise, academia, and government. This is a very good result.

The project has faced greater challenges when it comes to achieving higher level training, including generating professional level capacity for project proponents and regulators to develop and evaluate NRV as a formal part of the EIA process. Along these lines, the project has supported only the development of a broad stroke draft curriculum for tertiary level institutions. If rigorous and balanced NRV is to be incorporated within the EIA and SEA processes, this higher level of capacity must be reached.

Output 2.1 Capacities strengthened to use natural resource valuation within the					
framework of their review and approval proc	esses				
Activity	Status	Comments			
Develop training module/curriculum	PA	Partially compvery good NR familiarization curriculum. T training manuacompleted in N are very profes	V he als May 2011		
MIND:	PA	MIND was ap in June 2011 t this work. The have program within their in training progra April or May 2 MIND will lik introductory le training based current familia training modu	proached o begin ey plan to integrated -service am by 2012 ely be evel upon arization les		
Accreditation Training:  By the end of the project, at least five professionals trained within accredited training institutions as trainers of natural resource valuation tools.	PA	Planned to cor January 2012. However, it is under current	doubtful		

Sensitization Workshops:  Complete at least 10 sensitization workshops for policymakers, decision-makers, and other relevant stakeholders; including, Urban Development Corporation (UDC), Planning Institute of Jamaica, and NEPA Board  All NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing EIAs trained on the interpretation of natural resource valuation information.	NC	trajectory that capacity will exist to provide tertiary level accreditation training Planned to commence early 2012. This should be relatively straight forward using a version of the familiarization training.
Private Sector Workshops  • (2 per year)	PA	Many private sector representatives attended familiarization training. Practitioner level training has not taken place and is not likely to take place without substantial technical assistance
<ul> <li>Environmental and community development NGOs Training:</li> <li>"Training the trainers" so as to impart the value of natural resource valuation to local communities.</li> <li>NGOs involved in community-based development trained and undertaking public awareness and sensitization workshops on valuation tools to civil society.</li> <li>(2 per year)</li> </ul>	PA	The project supported the design of a substantial "Training Manual for Communities" completed in May 2011.
NEPA/Government Staff training  Government staff involved in the EIA review and approval process (2 per year)  A minimum of 30 other government staff trained in the application of natural resource valuation tools as part of their career development.	NC/PA	NRV is not integrated within EIA process. No in service training occurring.  MIND training planned (see above)
Jamaica Institute of Environmental Professionals:  By the end of the project, at least 20 professionals trained in natural resource valuation tools and techniques  (2 per year)	PA	Many JIEP members participated in the NRV familiarization training
Lessons Learned: - Preparation, publications and distribution of Lessons Learned Material - Lessons learned presented to at least one international (regional) conference/workshop Media outlets publish regular accounts of the issues concerning developments, subjected to EIAs, with particular reference to the opportunity costs of natural resource and environmental degradation.	NC	This is not in process, e.g., NRV familiarization training manual not available on internet

# 5.3.2 Sustainability

Ratings	
Likely (L)	There are no risks affecting this dimension of sustainability.
Moderately Likely (ML)	There are moderate risks that affect this dimension of sustainability.

Moderately Unlikely (MU)	There are significant risks that affect this dimension of sustainability.
Unlikely (U)	There are severe risks that affect this dimension of sustainability.

Sustainability Factor	Rating	Comments
Financial Resources	L	NEPA oversees the EIA process. The Prime Minister's office oversees SEA. Both offices will continue to support EIA/SEA after project close. If the project is able to generate capacity for integration of NRV within the EIA/SEA process, both offices will support NRV. In addition, project proponents will be responsible for developing and funding an NRV analysis as part of the EIA process.
Sociopolitical	L	Stakeholders strongly support the concept of NRV. However, the project must make greater progress at building more sophisticated skills regarding the development and analysis of NRV. If this does not occur, it is unlikely that stakeholders will have the capacity to utilize NRV in a meaningful way.
Institutional Framework and Governance	ML	The project must hasten the improvement of the administrative and regulatory framework relevant to both EIA and SEA. If this is not done, NRV will not benefit from a coherent development and evaluation process. Without regulatory guidance for administrative procedures, NRV risks becoming a liability for evaluating and mitigating the environmental impacts of proposed developments.
		The project is providing substantial familiarization training to government staff and other stakeholders. This is excellent. Concepts delivered through the NRV training will be applied to numerous permitting decision-making processes covering issues such as water resources management, fisheries, forestry, etc.
Environmental	MU	See above.
		Without a highly skilled cohort of NRV specialists and clear regulatory guidance for administrative procedures, NRV risks becoming a liability for evaluating and mitigating the environmental impacts of proposed developments.

#### Part 6. Lessons learned

1. Carefully write and analyze project documents to be certain they are well reasoned and offer lucid implementation guidance

This project suffers from a very weak project document. This creates a substantial handicap for national implementation teams that may not have the strong depth of knowledge required to strengthen and adapt an inadequately designed/written project document.

2. Do not hesitate to hire an international Chief Technical Advisor

Sourcing national level technical expertise to support project implementation has been a project challenge. This has hampered the initial implementation, design of a project work plan, adoption of adaptation measures, creation of terms of reference for technical advisors, and evaluation and technical support for the development and assessment of project activities and outputs. This project would have benefitted greatly if an international CTA had been secured from the beginning to provide short-term technical support at specific times throughout the implementation period. Having the support of a competent international CTA would have likely helped the project to identify and respond to implementation issues early on and improved project effectiveness and efficiencies.

3. The 10% cap on project management challenges implementation effectiveness

GEF limits the total allocation to project management to 10% or less of the total GEF project budget. This may work in countries where substantial cash co-financing is available. However, in nations that lack cash sources of co-financing, the 10% rule puts a substantial strain on project management effectiveness. Ironically, these nations with limited cash available are most likely the nations that require greater project management support. The 10% rule is particularly difficult for medium-sized GEF projects. If the medium-sized project has duration of three years or more, the annual project management budget will likely be less than US\$ 30,000. This is not sufficient, particularly if M&E is properly allocated to the management budget line.

4. Projects should not be designed to rely upon other projects to deliver critical outputs

In at least two instances, this project became reliant upon the outputs of other projects to achieve desired outcomes. This is the equivalent of spending US\$ 500,000 on a soda-bottling factory in hopes that someone else would supply the syrup. It's not a very wise investment.

5. Acquire necessary international-level technical assistance

This project was designed as a capacity building investment to make certain best international principles and practices related to NRV are integrated within Jamaica's EIA and SEA processes. The underlying purpose of the investment is to help Jamaica fulfill national responsibilities to international level conventions. This presumes that national level capacity does not exist to complete the tasks required. This project would have made substantially more progress had international-level expertise been acquired to provide technical support, review and capacity transfer for both the "Sourcebook" and training program.

6. Create by-laws to govern roles/responsibilities of Project Steering Committees

At project inception, it may be prudent for Project Steering Committees to draft and adopt simple by-laws to fully clarify their form/function following the guidance of the Project Document. Both the CEO Request and the Project Document contain boilerplate language regarding the roles/responsibilities of various management entities, including Project Steering Committees. This boilerplate language may not always provide adequate detail covering PSC functions such as review and advise on project outputs. Nor does the boilerplate language offer guidance regarding number of meetings, quorums and other basic functional guidance basic to the operation of any committee. Finally, the boilerplate does not provide clear directions regarding project management's reporting responsibilities to the PSC. The potential for conflict and misunderstanding between PSC's and management bodies rises without agreed guidelines, particularly if the project is implemented under NEX.

#### 7. Actively involve project designer/drafter in project inception/implementation

These projects are usually developed with the assistance of international or national consultants, regional-technical advisors, or national agencies. Regardless of who assisted project design, the person who ultimately sat down to write the CEO Request/Project Document should be brought in during project inception to support implementation. This should include offering background information regarding design and expectations. The person should assist project management address any immediate implementation challenges, help make necessary adaptations and support the creation of a detailed work plan.

## 8. Always require a detailed work plan at project inception

Every project should generate a very comprehensive and detailed work plan during the inception phase. The work plan should be vetted with key stakeholders, including the implementing agency, executing agency, project steering committee, and other key stakeholders. The work plan should be time bound and have solid lines of responsibility. The work plan should be linked to the project's logical framework (results framework) and show how the completion of activities and achievement of outputs will lead to achievement of success indicators and the overall project objectives/outcomes. The completion of a project workplan should be an executing agency's pre-requisite for the release of project implementation funds. The work plan should be reviewed and revised regularly during project implementation.

## 9. Implement Mid-Term Evaluations on time and as planned and begin recruitment oneyear in advance.

There is a general hesitancy in projects with slow start-ups to delay the mid-term evaluation until a few results are realized. In addition, projects usually do not actively recruit independent evaluators more than 2 – 3 months in advance of the planned evaluation. This is not a very strategic evaluation approach. There are generally reasons for slow initiation that will likely be revealed and improved with a mid-term evaluation conducted earlier, rather than later. For instance, this project's mid-term evaluation should have taken place at least one year earlier as planned in the project document. If this had occurred, earlier course corrections would have likely resulted in better implementation and greater objective/outcome progress. Scheduling and planning mid-term evaluations at least one year in advance, regardless of project progress, would allow project management units to recruit qualified evaluators well in advance. Recruiting evaluators one year in advance would increase the likelihood of having a well-planned evaluation supported by a highly qualified international/national evaluation team.

#### Part 7. Conclusions and Recommendations

#### 7.1 Conclusions

#### 7.1.1 Relevance

The project is relevant. Integrating NRV to strengthen the EIA and SEA processes would help Jamaica to better conserve natural resources and ecosystem services.

#### 7.1.2 Effectiveness

The project is not highly effective. The project is not on-track to reach the objective of "developing a set of natural resource valuation tools, and incorporate these into policies and procedures governing the preparation and use of Environmental Impact Assessments (EIA)." It will be difficult for the project to achieve the intended result of "the environmental impacts of all major development projects would be assessed in terms of their financial and economic values, which would be used to make more informed decisions and choices about future development."

The project is on track to greatly increase the general level of knowledge regarding the identification and valuation of natural resources and ecosystem services. The result will not likely be a strong cohort of persons capable of both generating NRV and evaluating NRV as part of the EIA. Increasing knowledge regarding NRV across a broad base should be considered an outstanding achievement. The training program will almost certainly have very positive implications for a wide range of decision-making beyond EIA's.

If the project implements an adaptive management strategy that follows an aggressive implementation approach, the project objective may be reached. This will require substantial government support and commitment for key factors such as strengthening the EIA/SEA administrative and regulatory framework to incorporate NRV, identifying an appropriate EIA pilot, recruitment of international expertise, and the adoption of a detailed and time-bound work plan.

### 7.1.3 Efficiency

The project is not highly efficient. The project has a more than adequate budget to achieve the three primary outputs. However, the project has spent very little of this budget. There were several reasons for this. The project was very slow to start due to recruitment challenges. The project chose to rely upon other projects to deliver critical outputs that did not materialize. The project chose to save resources by hiring national rather than international expertise. Certain key activities such as the pilot project deflated when the potential EIA pilot site evaporated.

The project has also benefited greatly from a wonderful group of stakeholders eager to participate in project management and activities, including training. The dedication of NEPA, UNDP, PSC members, the dozens of training participants, and other stakeholders to this project is certainly a highlight. It is clear that many people in Jamaica want to see this concept succeed.

Although the conservative management approach is well intended and both stakeholder and project management dedication is quite high, the fact is that very little progress has been made towards the project objective. This is partially a problem with an initial project design that did not adequately cover variables and hazards associated with NRV, e.g., requires a strong administrative and regulatory framework to guide decision-making process, requires

SEA to make certain cumulative impacts are considered, that capacities are built to both develop and evaluate EIA/NRV, failure to foresee certain project risks, etc.

Ultimately, the project has not maintained adequate momentum towards the project objective because management has not been able to nimbly adapt to implementation challenges. Management has been overly patient with the delivery of products that are not necessarily "international caliber". Management has been too slow to formulate a plan, identify causes of delay and take adaptive responses. The project would have certainly benefitted from an earlier mid-term evaluation to assist management to identify challenges and propose alternative solutions. In the final analysis, the project that is running out of time and seems to be slowly drifting rather than pushing upstream towards the objective.

#### 7.2 Recommendations

## 1. Generate a strategic work plan to support adaptive management

The existing project work plan was reviewed during the evaluation is considered somewhat lacking in strategic detail and should be revisited. The project manager should consider completing a thorough and detailed project work-plan identifying precise outputs required within the project document and steps that will be taken for their completion. The revised work plan should be completed before the end of November 2011 or earlier if possible. The work plan should be quickly vetted with NEPA, Project Steering Committee and UNDP to make certain they understand the project's benchmarks and how they can best support movement towards the project objective. Each party should agree to the work plan and the benchmarks it sets. The work plan should be streamlined to focus upon achieving critical and prioritized outputs. For instance, if the pilot EIA/NRV is outside the Cockpit, there is little reason to conduct a socio-economic assessment of the region.

## 2. Revise the results (logical) framework

Once the work plan is completed, the project managers should revisit and improve the project's results framework. The current framework is not coherent and does not reflect current approaches, e.g., "SMART" indicators. Achievement of indicators will be critical to the final evaluation and should be guiding project implementation. Simply adding the following indicator would be helpful: "Percentage of EIA's that integrate NRV." The baseline value would be zero. The target value may be 100%. Even more useful would be an indicator that measures the effectiveness of NRV to promote decision-making that results in maintained or improved social welfare and ecological integrity, e.g., water quality/quantity, rate/impact of landslides, carbon sequestration, biodiversity risk/conservation, food security, etc. These seem to be some of the ultimate objectives of integrating NRV within the EIA process. If these objectives are not being met, then NRV may not be serving its purpose.

## 3. Improve NRV Tools/Sourcebook to serve as NRV manual

The Sourcebook should be revised and improved within the next three months so that it may be used as a practitioner's manual for integrating and evaluating NRV as part of the EIA process. Revision was foreseen in the Project Document, but this presumed a much more sophisticated draft that would be improved after being diligently tested during the pilot EIA. The revised Sourcebook should be designed based upon a deeper consideration of the audience and the objective. The revised Sourcebook should include greater examples of current international principles and practices related to NRV and market based instruments for the valuation of ecosystem services, e.g., carbon, biodiversity conservation and offsets, water resources management, etc. The Sourcebook should be closely linked to the training program and become a reference manual used during tertiary and accreditation training.

Importantly, the Sourcebook is to complement and inform EIA guidelines. The project document states: "The Sourcebook and natural resource valuation tools will be integrated into guidelines for undertaking EIAs", "Integrate natural resource valuation tools and techniques within guidelines for the implementation of EIAs (i.e., an NRV/EIA implementation plan)" and "By the end of year 1, new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation." The current Sourcebook is not designed to serve the function of informing EIA procedures. The Sourcebook does not offer guidance to make certain administrative safeguards are in place for rigorous NRV generation and assessment. These safeguards should include public notice and comment based upon principles and practices presented in the Aarhus Convention.

# 4. Strengthen EIA/SEA administrative and regulatory framework to incorporate NRV safeguards

If not designed carefully, NRV may result in calculations that inappropriately favor the immediate profits offered by unmitigated development over the long-term financial and social benefits of maintaining ecological integrity. These risks may be alleviated with proper administrative and regulatory safeguards designed to direct the development, analysis, and "weight" of NRV. The Project Document discusses the creation of implementation guidelines for incorporation of NRV with both SEA and EIA processes. This should be a project priority and include the design of administrative and regulatory improvements to guide the application of NRV and associated administrative procedures. These administrative improvements should serve as safeguards to alleviate risks associated with NRV, making certain NRV becomes a balanced tool for improving the evaluation of development and conservation options. NEPA is in the process of reviewing the overall EIA process. This review presents an opportunity for incorporating sound NRV principles and practices.

## 5. Pilot a non-binding NRV within an on-going EIA

The project should pilot NRV within an ongoing EIA if the project can access and/or build enough capacity to make this pilot meaningful. Nearly any on-going EIA could serve as the pilot. The pilot would be financially supported by the project and would utilize both national and international level expertise. The challenge will be identifying a pilot site where adequate data exists or can be easily generated to inform the NRV process. The NRV would not be used to formally sway the actual EIA process. The pilot would be a non-binding exercise designed to test theories, build national capacity through practice, and generate lessons learned to inform further programming.

## 6. Build capacity of EIA practitioners and regulators

The current training program is doing a very good job familiarizing a broad spectrum of stakeholders with basic NRV knowledge. However, the indicator for output 2.1 is "capacities strengthened to use natural resource valuation within the framework of their review and approval processes." The next focus should be making certain that practitioners and regulators exist within the Jamaican system that can apply and analyze NRV within the EIA and SEA Process. This will require revising and upgrading the project's training plan based upon the detailed project work plan, identifying training/capacity building priorities and defining pathways to meet these needs prior to project close.

#### 7. Improve efficiency of product delivery and quality

The project has substantial funding remaining, a long ways to go before reaching the objective, and a short period to get there. Simultaneous to these challenges, the project seems to be hitting a national capacity ceiling.

Perhaps the most efficient and practical way to reach the objective is to recruit and hire international level technical expertise as recommended in the original project document. Although recruitment might be difficult at this late date, the project should consider retaining two part-time experts. One expert would focus primarily upon supporting the economic side of EIA/NRV and the other would be responsible for making certain administrative and regulatory safeguards are in place for the use of NRV. Both should have strong backgrounds in natural resource conservation. They would each be tasked with supporting all three outputs: tools, pilot, training/lessons learned. They would assist project management to make certain that the project delivers international quality outputs in a timely manner. The roles of these experts should be primarily capacity building. Their ultimate responsibility should be transferring skills/knowledge that will help Jamaica institutionalize EIA/NRV.

Another track to helping make certain that the project outputs are achieved is to make better use of the PSC. The PSC currently meets quarterly. Over the last ten months of the project, the PSC should consider convening monthly to make certain members remain current on project activity and are able to offer expertise and support for implementation of next steps. These monthly meetings may even be augmented by weekly electronic updates submitted by project management detailing the past weeks' accomplishments and next weeks' planned activities.

## Annexes

- Logical Framework
   Evaluation of Results Indicators
   Evaluation TORs
- 4. Itinerary
- Capacity Development M&E Scorecard

# **Annex One: Strategic Results Framework**

Project	Objectively verifiable indicators						
Strategy Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.						
- Goul	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions		
Objective of the project To develop, pilot, and institutionalize natural resource valuation tools, techniques, data and information within the framework of Environmental Impact Assessments (EIAs).	<ul> <li>NEPA, NRCA Advisory Board, and Technical Review Committee (TRC) capacitated to interpret natural resource valuation</li> <li>Increased selection of development alternatives that are environmentally friendly, sound, and sustainable.</li> <li>The financial and economic values of ecosystem goods and services are determinant variables in the permitting and licensing process of development projects.</li> <li>A cadre of local expertise developed to apply natural resource valuation skills within the framework of EIAs.</li> <li>Actuarial data developed</li> </ul>	<ul> <li>EIAs are limited to the scientific assessment of possible environmental impacts that could arise from proposed development.</li> <li>The recommendations and conditions included in EIA reports do not provide a financial or economic assessment of the opportunity costs saved by pursuing alternative options to development.</li> <li>Government capacities to interpret economic and financial values associated with development are weak.</li> <li>The capacities of NEPA are insufficient to implement EIAs for all development projects otherwise required. The ENACT Programme is implementing capacity development activities</li> </ul>	<ul> <li>By the end of the project, natural resource valuation tools and techniques will have been demonstrated to at least 50 government representatives</li> <li>By the end of the project, training will have been provided to at least 50 professionals expert in the performance of business plans, feasibility studies, and/or market analyses on the application of natural resource valuation tools and techniques</li> <li>By the end of year 1, the ENACT Programme has committed to the piloting of an SEA that integrates the use of natural resource valuation tools.</li> </ul>	<ul> <li>PSC Meeting Minutes.</li> <li>Technical Review Committee and NRCA Advisory Board meeting minutes</li> <li>UNDP Quarterly reports.</li> <li>APRs and PIRs</li> <li>Independent midterm and final evaluation reports.</li> <li>Rio Convention national reports and communications</li> <li>Newspaper</li> </ul>	<ul> <li>There is a risk that the decision-makers will not adequately consider the estimated economic values of ecosystem goods and services.</li> <li>The project will be executed in a holistic, adaptive, collaborative, integrative, and iterative manner.</li> <li>The GoJ and UNDP-GEF continue to support this project strategy, in particular key agencies such as PIOJ, and key Ministers, such as the Minister of Land and Environment.</li> <li>Long-term sustainability of project benefits assured by GoJ budgetary appropriations and not by extra-budgetary resources.</li> </ul>		

Project Strategy	Objectively verifiable indicators						
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.						
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions		
	are readily available and accessible for use in future EIAs.  Capacity development monitoring scorecard rating	Ratings to be completed at projet inception phase	■ Targerts to be completed at projet inception phase	articles	<ul> <li>Relevant individuals         within key government         agencies actively         participate in the training         and sensitization         workshops.</li> <li>Recommendations for the         institutionalization of best         practices from the piloting         of natural resource         valuation tools and         techniques are politically,         technically and financially         feasible</li> </ul>		

Project Strategy	Objectively verifiable indicators						
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.						
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions		
Outcome 1 Output 1.1: Natural resource valuation tools developed	<ul> <li>A primer/sourcebook on tools and techniques for the use of natural resource valuation specific to the Jamaican context developed</li> <li>Guidelines developed for the application of natural resource valuation tools and techniques within the EIA process</li> <li>Development of actuarial products initiated</li> <li>Independent expert analysis of natural resource valuation tools confirms their high scholarship</li> <li>An implementation plan developed for undertaking natural resource valuation tools within the framework of EIAs</li> </ul>	-The evaluation of development projects are skewed towards short-term socio-economic benefits  -The cost-basis of environmental impacts are not assessed  -Significant experience exists in the application of natural resource valuation tools and techniques in other countries  - Actuarial data on ecosystem functions not available	-Within six months of project initiation, an assessment of current experiences and theories in the use of natural resource valuation tools and techniques conducted  - By the beginning of year 2, an independent assessment of the natural resource valuation sourcebook conducted  -By the end of the project, the natural resource valuation sourcebook updated to incorporate lessons learned from the pilot EIA project  -By the end of year 1, actuarial products will be available for testing in pilot EIA project  -By the end of year 1, new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation	-Sourcebook prepared, with accompanying in-depth review of literature -Evaluation report	- The use of natural resource valuation does not represent too high a transaction cost in the EIA process, e.g., furthering delaying the review and approval timeline of EIAs or making EIAs prohibitively expensive		

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and ap	proval processes of development projection		mentally sound and	sustainable development.
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions
Output 1.2:  Natural  resource valuation tools piloted within the framework of an EIA	<ul> <li>Pilot EIA project proposal that integrates the use of natural resource valuation developed and approved</li> <li>Independent evaluation of the pilot EIA project conducted</li> <li>Lessons learned from pilot project are widely disseminated</li> <li>Recommendations for the development SEA implementation guidelines provided</li> <li>Actuarial products developed in Output 1.1 are tested in pilot EIA project.</li> </ul>	Bauxite mining companies have already secured leases in the Cockpit Country. Bauxite mining will therefore proceed  EIA guidelines wee updated in 2005  Bauxite mining companies are required by law to finance the undertaking of an EIA of proposed future operations in the Cockpit Country  No actuarial data on the economic value of Jamaican ecosystem goods and services	<ul> <li>By the end of year 1, the pilot EIA project proposal is developed</li> <li>By the end of year 2, the pilot EIA has been implemented</li> <li>By the end of year 2, actuarial products updated</li> </ul>	Independent evaluation of the EIA pilot project     Technical Review Committee and NRCA Advisory Board meeting minutes     Consultations with local stakeholders (Public review workshops)	The bauxite mining companies will be ready to implement the pilot EIA no later than the end of the project's second year, and not before the natural resource valuation tools have been developed  No waiver to undertake an EIA in the Cockpit Country
Outcome 2 Output 2: Capacities strengthened to use natural resource valuation within the framework of	<ul> <li>Curriculum on natural resource valuation developed and incorporated as a course offering in MIND.</li> <li>Natural resource valuation curriculum integrated into course offerings of other</li> </ul>	<ul> <li>No training available on natural resource valuation</li> <li>Local communities recognize and appreciate the socio-economic values of ecosystem good and services, but not in terms of replacement and opportunity costs</li> </ul>	<ul> <li>By the end of year 1, MIND has a course offering on natural resource valuation</li> <li>By the end of year 2, at least four training sessions conducted, and at least 10 people in each trained</li> </ul>	<ul> <li>Course offerings publications</li> <li>Monitoring and evaluation reports (e.g., APR/PIR, UNDP quarterly</li> </ul>	Trainees are willing to learn natural resource valuation tools and techniques      Stakeholders remain committed to the use of natural resource valuation

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and ap Indicator	proval processes of development proj <u>Baseline</u>	ects in order to catalyze environ <u>Target</u>	Sources of	sustainable development.  Risks and Assumptions
their review and approval processes	academic institutions of higher learning  NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing proposed developments are trained on interpreting natural resource valuation data and information  NGOs involved in community-based development actively participated in sensitization workshops on valuation tools.  Media outlets publish regular accounts of the issues concerning developments, subjected to EIAs, with particular reference to the opportunity costs of natural resource and environmental degradation.  Lessons learned publication widely disseminated		<ul> <li>By the end of the project, all NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing EIAs trained on the interpretation of natural resource valuation information.</li> <li>By the end of the project, at least 50 professionals trained in natural resource valuation tools and techniques.</li> <li>By the end of the project, at least five professionals trained within accredited training institutions as trainers of natural resource valuation tools.</li> <li>By the end of the project, at least 10 sensitization workshops on natural resource valuation</li> <li>By the end of the project, at least 10 sensitization</li> <li>By the end of the project, at least 10 sensitization</li> <li>By the end of the project, lessons learned presented to at least one international (or regional)</li> </ul>	verification progress reports, independent evaluations)	Trained professionals remain available for future subcontract opportunities     Low NEPA staff turnover

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions
			conference/workshop		

## **Annex Two: Progress Towards Result Indicators**

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and ap development.	oproval processes of development proje	ects in order to catalyze enviror	amentally sound and sustainable	
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid-	
Objective of the project To develop, pilot, and institutionalize natural resource valuation tools, techniques, data and information within the framework of Environmental Impact Assessments (EIAs).	NEPA, NRCA Advisory Board, and Technical Review Committee (TRC) capacitated to interpret natural resource valuation	Government capacities to interpret economic and financial values associated with development are weak.  The capacities of NEPA are insufficient to implement EIAs for all development projects otherwise required. The ENACT Programme is implementing capacity development activities	By the end of the project, natural resource valuation tools and techniques will have been demonstrated to at least 50 government representatives	Term Status  The target of "demonstrated to at least 50 government representatives" is being met through familiarization training.  There is no precise target value for the baseline "capacities of NEPA are insufficient to implement EIAs." As noted, The NRV project is separate from ENACT Programme.  To date, familiarization training has contributed to capacity improvements. More sophisticated training planned for 2012 will ideally increase NEPA capacity to professionally apply NRV to the EIA process.	

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status	
	A cadre of local expertise developed to apply natural resource valuation skills within the framework of EIAs.		By the end of the project, training will have been provided to at least 50 professionals expert in the performance of business plans, feasibility studies, and/or market analyses on the application of natural resource valuation tools and techniques	The target of "least 50 professionals expert in the performance of business plans, feasibility studies, and/or market analyses " is not being met.  There is no such training planned or in pipeline.	
	Increased selection of development alternatives that are environmentally friendly, sound, and sustainable.	The recommendations and conditions included in EIA reports do not provide a financial or economic assessment of the opportunity costs saved by pursuing alternative options to development.		There is no target value for "recommendations and conditions included in EIA reports provide a financial or economic assessment of the opportunity costs saved by pursuing alternative options to development." The value would likely be some measurement of number of "development alternatives that are environmentally friendly, sound, and sustainable". Although difficult to objectively verify, it seems substantial course-corrections will be required to bring the project on-track to deliver this indicator.	

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status	
	The financial and economic values of ecosystem goods and services are determinant variables in the permitting and licensing process of development projects.	EIAs are limited to the scientific assessment of possible environmental impacts that could arise from proposed development.		There is no apparent target value for the indicator "financial and economic values of ecosystem goods and services are determinant variables in the permitting and licensing process of development projects". See above for project progress.	
			By the end of year 1, the ENACT Programme has committed to the piloting of an SEA that integrates the use of natural resource valuation tools.	The target of "the ENACT Programme has committed to the piloting of an SEA" is not being met.  The NRV project is separate from ENACT Programme. Adoption of SEA is stalled within GOJ.	
	Actuarial data developed are readily available and accessible for use in future EIAs.			There is no precise baseline and/or target value for development of actuarial data. However, no such data existed at project start and the project is currently not on track to deliver this product.	
	Capacity development monitoring scorecard rating	Sum of Capacity Scorecard completed in 2008: 20 points	No target set.	The sum of the Capacity Scorecard completed November 2011: 21	

Project Strategy	Objectively verifiable indicators						
Goal	To strengthen the review and ap development.	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.					
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status			
Outcome 1 Output 1.1: Natural resource valuation tools developed	A primer/sourcebook on tools and techniques for the use of natural resource valuation specific to the Jamaican context developed	The evaluation of development projects are skewed towards short-term socio-economic benefits  The cost-basis of environmental impacts are not assessed  Significant experience exists in the	Within six months of project initiation, an assessment of current experiences and theories in the use of natural resource valuation tools and techniques conducted  By the end of the project, the natural resource valuation sourcebook updated to incorporate lessons learned from the pilot EIA project  By the beginning of year 2,	No assessment of current experiences and theories in the use of natural resource valuation tools and techniques" was conducted.  A Sourcebook was drafted and contains many international examples.  The target "natural resource valuation sourcebook updated" has not yet occurred due to delayed pilot EIA.  An "independent assessment of the			
	of natural resource valuation tools confirms their high scholarship	application of natural resource valuation tools and techniques in other countries	an independent assessment of the natural resource valuation sourcebook conducted	natural resource valuation sourcebook conducted" did occur. UNDP sent draft Sourcebook for external review. Independent expert as foreseen by the project document not yet hired.			

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status	
	Development of actuarial products initiated	Actuarial data on ecosystem functions not available	By the end of year 1, actuarial products will be available for testing in pilot EIA project	The target value "actuarial products will be available for testing in pilot EIA project" has not been achieved. There are no plans to develop actuarial tables.	
	An implementation plan developed for undertaking natural resource valuation tools within the framework of EIAs				
	Guidelines developed for the application of natural resource valuation tools and techniques within the EIA process		By the end of year 1, new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation	The target "new guidelines for EIAs developed that incorporate natural resource valuation, and updated periodically during project implementation" is not on-track.  There are no new guidelines for EIA's incorporating NRV. The EIA committee is reviewing EIA guidelines.	

Project Strategy	Objectively verifiable indicators						
Goal	To strengthen the review and ap development.	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.					
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status			
Output 1.2: Natural resource valuation tools piloted within the framework of an EIA	Pilot EIA project proposal that integrates the use of natural resource valuation developed and approved  Independent evaluation of the pilot EIA project conducted	Bauxite mining companies have already secured leases in the Cockpit Country. Bauxite mining will therefore proceed  Bauxite mining companies are required by law to finance the undertaking of an EIA of proposed future operations in the Cockpit Country	By the end of year 1, the pilot EIA project proposal is developed  By the end of year 2, the pilot EIA has been implemented	The target "the pilot EIA project proposal is developed" is not on track.  The target "The pilot EIA has been implemented" is not on track. The pilot EIA is stalled.  All mining was suspended in the Cockpit Country several years ago.  No specific alternative NRV/EIA pilot site has been identified.  There are no baseline and/or target values provided for the indicator "Independent evaluation of the pilot EIA project conducted." However, this not on track due to the pilot EIA being stalled.  There are no baseline and/or target			
	Lessons learned from pilot project are widely disseminated			values provided for the indicator "Lessons learned from pilot project are widely disseminated." However, this not on track due to the pilot EIA being stalled.			

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and ap development.	proval processes of development proj	ects in order to catalyze environ	mentally sound and sustainable	
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status	
	Recommendations for the development SEA implementation guidelines provided	EIA guidelines were updated in 2005		There are no baseline and/or target values provided for the indicator "Recommendations for the development SEA implementation guidelines provided". No progress was reported.	
	Actuarial products developed in Output 1.1 are tested in pilot EIA project.	No actuarial data on the economic value of Jamaican ecosystem goods and services	By the end of year 2, actuarial products updated	Achievement of the target value "actuarial products updated" is not on track. There are no plans for actuarial tables.	
Outcome 2 Output 2: Capacities strengthened to use natural resource	Curriculum on natural resource valuation developed and incorporated as a course offering in MIND.	No training available on natural resource valuation	By the end of year 1, MIND has a course offering on natural resource valuation	MIND intends to have a course offering on natural resource valuation in 2012.	
valuation within the framework of their review and approval processes	Natural resource valuation curriculum integrated into course offerings of other academic institutions of higher learning		By the end of the project, at least five professionals trained within accredited training institutions as trainers of natural resource valuation tools.	The project will be challenged to complete the target "five professionals trained within accredited training institutions as trainers of natural resource valuation tools" prior to project close.	

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid-	
	NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing proposed developments are trained on interpreting natural resource valuation data and information		By the end of the project, all NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing EIAs trained on the interpretation of natural resource valuation information.	Progress is being made on the target "all NEPA staff and members of the NRCA Advisory Board and TRC responsible for reviewing EIAs trained on the interpretation of natural resource valuation information."  A training consultant was hired in April 2011. To date, this training has been familiarization training only. It is difficult to assess whether more sophisticated training planned for 2012 will actually lead to ability to professional level capacity to "interpret" NRV information.	
			By the end of year 2, at least four training sessions conducted, and at least 10 people in each trained	Progress is being made towards the target "at least four training sessions conducted, and at least 10 people in each trained". This includes a manual developed.	

Project Strategy	Objectively verifiable indicators				
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status	
			By the end of the project, at least 50 professionals trained in natural resource valuation tools and techniques.	Familiarization training is taking place.  More sophisticated training required for actual completion and assessment of NRV/EIA is planned for 2012.	
			By the end of the project, at least 10 sensitization workshops on natural resource valuation	"Sensitization workshops" are planned for 2012.	
	NGOs involved in community-based development actively participated in sensitization workshops on valuation tools.	Local communities recognize and appreciate the socio-economic values of ecosystem good and services, but not in terms of replacement and opportunity costs		There is no target value for "Local communities recognize and appreciate the socio-economic values of ecosystem good and services in terms of replacement and opportunity costs."  However, NGO's are benefitting from familiarization training.	

Project Strategy	Objectively verifiable indicators									
Goal	To strengthen the review and approval processes of development projects in order to catalyze environmentally sound and sustainable development.									
	Indicator	<u>Baseline</u>	<u>Target</u>	Mid- Term Status						
	Media outlets publish regular accounts of the issues concerning developments, subjected to EIAs, with particular reference to the opportunity costs of natural resource and environmental degradation.			No progress is being made towards the indicator "Media outlets publish regular accounts of the issues concerning developments, subjected to EIAs".						
	Lessons learned publication widely disseminated		By the end of the project, lessons learned presented to at least one international (or regional) conference/workshop	The target "lessons learned presented to at least one international (or regional) conference/workshop" does not seem to be in pipeline.						

## **Annex 3. Mission Itinerary**

Date	Day	Location	Activity	Agencies	Participants
10/18	Tue	UNDP	8:30am- UNDP Inception	Environment and	Margaret Jones Williams
			Meeting	Energy Unit	Nicole Brown
		UNDP	10am- Security briefing		
		CINDI	LUNCH		
		UNDP	2pm-Meeting with PM	Project Manager, NEPA	Rosemarie Bryan
					-
10/19	Wed	NEPA	10:30- PSC Focus Group	NEPA,	Shani Parchment
			1		Sheries Simpson
					Novelette Douglas Kereen Senior
					Carla Gordon
				MoF	Barrington Hall
				UNDP	Margaret Jones Williams
					Nicole Brown
			LUNCH		
		UNDP	2:00pm- PSC Focus	MoA,	Georgia Marks Doman
			Group 2	EMD	Jerome Smith
		UNDP	4:00pm- NRV cons	JBI, ISD-UWI	Avian Johnson- Maurice Mason
		CNDI	4.00pm NKV cons	ISD-O WI	David Smith
10/20	Thu	UNDP	8:30am- NRV	MIND	Mrs Ruby Brown
			institutionalisation		Lesley Ennover
					Ann Marie Smith
		UNDP	10:00am- PSC Focus Group 3	JCDT, , TNC	Marlon Beale, Donna Blake
			Group 3	Forestry	Owen Evelyn-
				WRC,	Michael Schwartz
				LINIDD	M
				UNDP	Margaret Jones Williams Nicole Brown
			LUNCH		THE DIG WIL
		UNDP	2:00pm- Private sector	Participants from	Cleo Samuels
				Private sector training	Sacha Todd
10/21	Fri	Telephone	4pm- NRV	UWI	Professor Dale Webber
			institutionalisation		
10/04	3.6	Inibb	0.20 B	) (III)	r 1 D
10/24	Mon	UNDP	8:30 am -Presentation to Stakeholders	MIND	Lesley Ennover
				TNC	Donna Blake
				JCDT	Marlon Beale
				MOF	Barrington Hall
				MOA	Georgia Marks Doman
				PIOJ	Delores Wade
				NEPA	Rosemarie Bryan
					Sheries Simpson
				EMD, GEF Operational	Leonie Barnaby
				focal point	
				UNDP	Akiko Fujii
					Margaret Jones Williams
		UNDP	Closeout meeting with	UNDP	Nicole Brown Akiko Fujii
		UNDI	UNDP	O NDI	Margaret Jones Williams
					Nicole Brown

	UNDP	Closeout meeting with UNDP, and NEPA	Akiko Fujii Margaret Jones Williams Nicole Brown
			Rosemarie Bryan Sheries Simpson

## Annex 4. **Capacity Development M&E Scorecard**

Project/Programme Name: Piloting Natural Valuation into Environment Impact Assessment Project/Programme Cycle Phase: Start-up Date: 2008

Capacity Result / Indic	ator Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 1: Capacities for en	gagement					
Indicator 1 – Degree of legitimacy/mandate of lead environmental organizations	Organizational responsibilities for environmental management are not clearly defined	0				
S	Organizational responsibilities for environmental management are identified	1				
	Authority and legitimacy of all lead organizations responsible for environmental management are partially recognized by stakeholders	2	2			
	Authority and legitimacy of all lead organizations responsible for environmental management recognized by stakeholders	3				
Indicator 2 – Existence of operational co-	No co-management mechanisms are in place	0				
management mechanisms	Some co-management mechanisms are in place and operational	1				Output 1.2: Natural resource
	Some co-management mechanisms are formally established through agreements, MOUs, etc.	2	2			valuation tools piloted within the framework of an EIA
	Comprehensive co-management mechanisms are formally established and are operational/functional	3				

Capacity Result / Indica	tor Staged	Indicators	Rating	Score	Comments	Next Steps	<b>Contribution to which Outcome</b>
Indicator 3 – Existence of cooperation with stakeholder groups	Identification of stake participation/involver poor	cholders and their nent in decision-making	is 0				
	Stakeholders are iden participation in decisi		1	1			
	Stakeholders are iden consultations mechan		2				
		tified and they actively ned participative decision	3				
CR 2: Capacities to gene	rate, access and use in	nformation and knowle	edge				
Indicator 4 – Degree of environmental awareness stakeholders		not aware about global sues and their related s	0				
	environmental is solutions	aware about global sues but not the possible	1	1			
	Stakeholders are environmental is solutions but do participate	aware about global sues and the possible not know how to	2				
	environmental is participating in the related solutions	aware about global sues and are actively ne implementation of	3				
Indicator 5 – Access and sharing of environmental information by stakeholder	not identified and	al information needs are d the information astructure is inadequate	0				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
	The environmental information needs are identified but the information management infrastructure is inadequate	1	1			
	The environmental information is partially available and shared among stakeholders but is not covering all focal areas and/or the information management infrastructure to manage and give information access to the public is limited	2				
	Comprehensive environmental information is available and shared through an adequate information management infrastructure	3				
Indicator 6 – Existence of environmental education programmes	No environmental education programmes are in place	0				
	Environmental education programmes are partially developed and partially delivered	1	1	This is limited by financial and human resources		Output 2: Capacities strengthened to use natural resource valuation within
	Environmental education programmes are fully developed but partially delivered	2				the framework of their review and approval processes
	Comprehensive environmental education programmes exist and are being delivered	3				
Indicator 7 – Extent of the linkage between environmental research/science and policy	No linkage exist between environmental policy development and science/research strategies and programmes	0				
development	Research needs for environmental policy development are identified but are not translated into relevant research strategies	1	1	Some research needs identified in existing policy and plans but		

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
	and programmes			these do not seem to get translated into research priorities.		
	Relevant research strategies and programmes for environmental policy development exist but the research information is not responding fully to the policy research needs	2				
	Relevant research results are available for environmental policy development	3				
Indicator 8 – Extent of inclusion/use of traditional knowledge in environmental	Traditional knowledge is ignored and not taken into account into relevant participative decision-making processes	0				
decision-making	Traditional knowledge is identified and recognized as important but is not collected and used in relevant participative decision-making processes	1	1			
	Traditional knowledge is collected but is not used systematically into relevant participative decision-making processes	2				
	Traditional knowledge is collected, used and shared for effective participative decision-making processes	3				

Capacity Result / — Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome			
CR 3: Capacities for strategy	CR 3: Capacities for strategy, policy and legislation development								
Indicator 9 – Extent of the environmental planning and strategy development process	The environmental planning and strategy development process is not coordinated and does not produce adequate environmental plans and strategies	0							
	The environmental planning and strategy development process does produce adequate environmental plans and strategies but they are not implemented or used	1							
	Adequate environmental plans and strategies are produced but there are only partially implemented because of funding constraints and/or other problems	2	2	Several issues with implementation including timing and influences of other internal factors.					
	The environmental planning and strategy development process is well coordinated by the lead environmental organizations and produces the required environmental plans and strategies; which are being implemented	3							
Indicator 10 – Existence of an adequate environmental policy and regulatory frameworks	The environmental policy and regulatory frameworks are insufficient; they do not provide an enabling environment	0				Output 1.2: Natural resource valuation tools piloted within the framework of an EIA			

	Some relevant environmental policies and laws exist but few are implemented and enforced	1	1	Several policies drafted but not finalized eg: Fisheries bill in draft for 10 years. Issues with capacity to implement some laws		
	Adequate environmental policy and legislation frameworks exist but there are problems in implementing and enforcing them	2				
Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
	Adequate policy and legislation frameworks are implemented and provide an adequate enabling environment; a compliance and enforcement mechanism is established and functions	3				
Indicator 11 – Adequacy of the environmental information available for	The availability of environmental information for decision-making is lacking	0				Output 1.1: Natural resource valuation tools developed
decision-making	Some environmental information exists but it is not sufficient to support environmental decision-	1	1			

Relevant environmental information is made available to environmental decision-makers but the process to update this information is not functioning properly	2		
Political and administrative decision-makers obtain and use updated environmental information to make environmental decisions	3		

Capacity Result / Indicator	Staged Indicators		Rating	Score	Comments
CR 4: Capacities for manage	ment and implementation				
Indicator 12 – Existence and mobilization of resources	The environmental organizations don't have adequate resources for their programmes and projects and the requirements have not been assessed	0			
	The resource requirements are known but are not being addressed  The funding sources for these resource requirements are partially identified and the resource requirements are partially addressed	2	2		
	Adequate resources are mobilized and available for the functioning of the lead environmental organizations	3			
Indicator 13 – Availability of required technical skills and technology transfer	The necessary required skills and technology are not available and the needs are not identified	0			
	The required skills and technologies needs are identified as well as their sources	1			Output 2: Capacities strengthened to use natural resource valuation within
	The required skills and technologies are obtained but their access depend on foreign sources	2			the framework of their review and approval processes
	The required skills and technologies are available and there is a national-based mechanism for updating the	3			

required skills and for upgrading		
the technologies		

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments						
CR 5: Capacities to monitor and evaluate										
Indicator 14 – Adequacy of the project/programme monitoring process	Irregular project monitoring is being done without an adequate monitoring framework detailing what and how to monitor the particular project or programme	0								
	An adequate resourced monitoring framework is in place but project monitoring is irregularly conducted	1								
	Regular participative monitoring of results in being conducted but this information is only partially used by the project/programme implementation team	2	2							
	Monitoring information is produced timely and accurately and is used by the implementation team to learn and possibly to change the course of action	3								
Indicator 15 – Adequacy of the project/programme monitoring and evaluation	None or ineffective evaluations are being conducted without an adequate evaluation plan;	0								

process	including the necessary resources			
	An adequate evaluation plan is in			
	place but evaluation activities are	1	1	
	irregularly conducted			
	Evaluations are being conducted as			
	per an adequate evaluation plan			
	but the evaluation results are only	2		
	partially used by the	2		
	project/programme			
	implementation team			
	Effective evaluations are			
	conducted timely and accurately			
	and are used by the			
	implementation team and the	3		
	Agencies and GEF Staff to correct	3		
	the course of action if needed and			
	to learn for further planning			
	activities			

Project/Programme Name: Piloting Natural Valuation into Environment Impact Assessment Project/Programme Cycle Phase: Mid-Term Date: November 2011

Note:

There is some discussion whether this project has one or two outcomes. To simplify, the "contribution" column uses the projects three outputs for reference.

Capacity Result / Indic	ator Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 1: Capacities for eng	gagement					
Indicator 1 – Degree of legitimacy/mandate of lead environmental organizations	Organizational responsibilities for environmental management are not clearly defined	0				
	Organizational responsibilities for environmental management are identified	1				
	Authority and legitimacy of all lead organizations responsible for environmental management are partially recognized by stakeholders	2	2	The authority and legitimacy of NEPA is well recognized by stakeholders. However, the broader information generation, decision-making, and financial support duties for implementation of EIA procedures that integrate NRV are not clarified enough	Trial NRV/EIA and capture lessons     Update administrative procedures/practices for incorporation of NRV/EIA	Output 1.1: Natural resource valuation tools developed  Output 1.2: Natural resource valuation tools piloted within the framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval processes

Capacity Result / Indic	ator Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
				to justify the next indicator rating.		
	Authority and legitimacy of all lead organizations responsible for environmental management recognized by stakeholders	3				
Indicator 2 – Existence of operational co-	No co-management mechanisms are in place	0				
management mechanisms	Some co-management mechanisms are in place and operational	1				Output 1.2: Natural resource
	Some co-management mechanisms are formally established through agreements, MOUs, etc.	2	2	No new co- management mechanisms have materialized since the project commenced.	1. Clarify administrative procedures/practices for any co- management as it may relate to NRV/EIA implementation	valuation tools piloted within the framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval processes
	Comprehensive co-management mechanisms are formally established and are operational/functional	3				
Indicator 3 – Existence of cooperation with stakeholder groups	Identification of stakeholders and their participation/involvement in decision-making is poor	0				Output 1.2: Natural resource valuation tools piloted within the
	Stakeholders are identified but their participation in decision-making is limited	1	1	The stakeholders are mostly indentified, but there is not a regular consultation mechanism established for participatory	Trial NRV/EIA     Update     administrative     procedures/practices     for incorporation of     NRV/EIA	framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval processes

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
				decision-making with regards to NRV/EIA		
co	akeholders are identified and regular onsultations mechanisms are established	2				
co	akeholders are identified and they actively intribute to established participative decisionaking processes	3				
CR 2: Capacities to generat	e, access and use information and knowledg	e				
Indicator 4 – Degree of environmental awareness of stakeholders	Stakeholders are not aware about global environmental issues and their related possible solutions	0				Output 2: Capacities strengthened to
	Stakeholders are aware about global environmental issues but not the possible solutions	1				use natural resource valuation within the framework of their review and approval processes
	Stakeholders are aware about global environmental issues and the possible solutions but do not know how to participate	2	2	Training has contributed to advancement. There is better awareness of global environmental issues. Mechanisms for applying training do not exist. Therefore, the next indicator stage of "actively participating in	Trial NRV/EIA     Update     administrative     procedures/practices     for incorporation of     NRV/EIA     Implement     increasingly     sophisticated     training/capacity     building program	

Indicator 5 – Access and sharing of environmental information needs are not identified and the information management infrastructure is inadequate  The environmental information management infrastructure is inadequate  The environmental information needs are identified but the information management infrastructure is inadequate  The environmental information management infrastructure is inadequate  The information needs are somewhat identified in the sourcebook. However, the information required is not fully identified and/or partially information needs of NRV/EIA  Addition, NEPA. completed an MOU with with windsor Research Center on information sharing for Cockpit region pilot that did not materialize.  The information of related solutions" is not yet reached.  1. Trial NRV/EIA  2. Update administrative procedures/practices to identify information needs of NRV/EIA and adata generation/manage ment required for informed NRV/EIA decision-making information information in the framework of their review and approval processes	Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
environmental issues and are actively participating in the implementation of related solutions  The environmental information needs are not identified and the information management infrastructure is inadequate  The environmental information needs are somewhat identified in the Sourcebook. However, the information required is not fully identified and/or partially available. In addition, NEPa completed an MOU with Windsor Research Center on information materialize.  1					implementation of related solutions"		
sharing of environmental information by stakeholders  The environmental information needs are identified but the information management infrastructure is inadequate  The environmental information needs are identified but the information management infrastructure is inadequate  The environmental information needs are identified but the information management infrastructure is inadequate  The information needs are somewhat identified in the Sourcebook. However, the information needs of required is not fully identified and/or partially available. In addition, NEPA completed an MOU with Windsor Research Center on information sharing for Cockpit region pilot that did not materialize.  The information needs are somewhat identified in the Sourcebook. However, the information needs of NRVEIA  Sourcebook and data generation/manage ment required for informed NRV/EIA decision-making information within the framework of their review and approval processes		environmental issues and are actively participating in the implementation of related solutions	3				
identified but the information management infrastructure is inadequate    1	sharing of environmental	not identified and the information management infrastructure is inadequate	0				
The environmental information is partially 2		identified but the information management	1	1	needs are somewhat identified in the Sourcebook. However, the information required is not fully identified and/or partially available. In addition, NEPA completed an MOU with Windsor Research Center on information sharing for Cockpit region pilot that did not	2. Update administrative procedures/practices to identify information needs of NRV/EIA  3. Improve "Sourcebook" and data generation/manage ment required for informed NRV/EIA	valuation tools developed  Output 1.2: Natural resource valuation tools piloted within the framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
	available and shared among stakeholders but is not covering all focal areas and/or the information management infrastructure to manage and give information access to the public is limited Comprehensive environmental information is available and shared through an adequate information management	3				
Indicator 6 – Existence of environmental education programmes	infrastructure  No environmental education programmes are in place	0				
F2	Environmental education programmes are partially developed and partially delivered	1	1	Familiarization training is occurring. The advanced training is in the pipeline, but not yet developed and/or delivered. Advanced training planned for 2012. This will likely move capacity to next stage indicator.	Design, implement and institutionalize an increasingly sophisticated training/capacity building program	Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval processes
	Environmental education programmes are fully developed but partially delivered	2				
	Comprehensive environmental education programmes exist and are being delivered	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
Indicator 7 – Extent of the linkage between environmental research/science and policy	No linkage exist between environmental policy development and science/research strategies and programmes	0				Output 1.1: Natural resource valuation tools developed  Output 1.2: Natural resource
development	Research needs for environmental policy development are identified but are not translated into relevant research strategies and programmes	1	1	The project has helped move forward knowledge tools (e.g., draft sourcebook) and knowledge capacities (e.g., familiarization training), but has not fully identified research needs and/or strategies programs required to support NRV/EIA environmental policy. Policies are being considered, but not yet in place. So no movement to next rating level.	Clarify administrative procedures/practices for incorporation of NRV/EIA, including detailing of information required for informed decision-making and acquisition process.	valuation tools piloted within the framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval processes
	Relevant research strategies and programmes for environmental policy	2				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
	development exist but the research information is not responding fully to the policy research needs  Relevant research results are available for					
	environmental policy development	3				
Indicator 8 – Extent of inclusion/use of traditional knowledge in environmental	Traditional knowledge is ignored and not taken into account into relevant participative decision-making processes	0				Output 1.2: Natural resource valuation tools piloted within the
decision-making	Traditional knowledge is identified and recognized as important but is not collected and used in relevant participative decision-making processes	1	1	The Cockpit pilot NRV/EIA would have likely incorporated traditional knowledge within the decision-making process. This pilot has not advanced nor have other elements related to the capture and use of traditional knowledge.	Trial NRV/EIA with incorporation of traditional knowledge  Integrate lessons learned within NRV/EIA administrative procedures/practices , NRV tools, and training	framework of an EIA
	Traditional knowledge is collected but is not used systematically into relevant participative decision-making processes	2				
	Traditional knowledge is collected, used and shared for effective participative decision-making processes	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome				
CR 3: Capacities for strategy	CR 3: Capacities for strategy, policy and legislation development									
Indicator 9 – Extent of the environmental planning and strategy development process	The environmental planning and strategy development process is not coordinated and does not produce adequate environmental plans and strategies	0				Output 1.1: Natural resource valuation tools developed  Output 1.2: Natural resource valuation tools piloted within the				
	The environmental planning and strategy development process does produce adequate environmental plans and strategies but they are not implemented or used	1				framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and				
	Adequate environmental plans and strategies are produced but there are only partially implemented because of funding constraints and/or other problems	2	2	There are no EIA or SEA administrative procedures or practices that fully incorporate NRV as part of the assessment process	Clarify administrative procedures/practi ces for incorporation of NRV/EIA	approval processes				
	The environmental planning and strategy development process is well coordinated by the lead environmental organizations and produces the required environmental plans and strategies; which are being implemented	3								
Indicator 10 – Existence of an adequate environmental policy and regulatory	The environmental policy and regulatory frameworks are insufficient; they do not provide an	0				Output 1.2: Natural resource valuation tools piloted within the				

frameworks	enabling environment					framework of an EIA
	Some relevant environmental			No substantial	Clarify	
	policies and laws exist but few are			change to	administrative	Output 2: Capacities strengthened to
	implemented and enforced	1	1	policies/laws	procedures/practi	use natural resource valuation within
		I	1	regulating EIA and	ces for	the framework of their review and
				incorporating NRV.	incorporation of	approval processes
					NRV/EIA	
	Adequate environmental policy	2				
	and legislation frameworks exist					
	but there are problems in					
	implementing and enforcing them					
	Adequate policy and legislation					
	frameworks are implemented and	3				
	provide an adequate enabling					
	environment; a compliance and					
	enforcement mechanism is					
	established and functions					
Indicator 11 Adagua f	The evailability of environment - 1					Output 1 1 National magazines
Indicator 11 – Adequacy of the environmental	The availability of environmental information for decision-making is	0				Output 1.1: Natural resource valuation tools developed
information available for	lacking	U				valuation tools developed
decision-making	Some environmental information			Draft exists of	Complete draft	Output 1.2: Natural resource
decision making	exists but it is not sufficient to			"Sourcebook" to	NRV tool,	valuation tools piloted within the
	support environmental decision-			support NRV, but not	including source	framework of an EIA
	making processes	1	1	sufficient to support	book.	
				and/or guide		Output 2: Capacities strengthened to
				informed	Trial NRV/EIA	use natural resource valuation within
				environmental	and record	the framework of their review and

		decision-making process. The trial NRV/EIA has not taken place to generate lessons and protocols for required information and dissemination. In addition, resource valuation has occurred through other projects and will occur through this project (e.g., Cockpit valuation and EIA trial to be	Clarify administrative procedures/practi ces for generation and dissemination of information required for NRV/EIA  Review and apply Aarhus principles for public notice and	approval processes
Relevant environmental information is made available to environmental decision-makers but the process to update this information is not functioning properly	2	determined).	comment	
Political and administrative decision-makers obtain and use updated environmental information to make environmental decisions	3			

					Contribution to which
Capacity Result / Indicator	Staged Indicators Rating	Score	Comments	Next Steps	Outcome

Indicator 12 – Existence and mobilization of resources	The environmental organizations don't have adequate resources for their programmes and projects and	0		
	the requirements have not been assessed  The resource requirements are	1		Output 1.1: Natural
	known but are not being addressed	I	NEDA LOOT GIVE IN	resource valuation tools developed
	The funding sources for these resource requirements are partially identified and the resource requirements are partially addressed	2	NEPA and GOJ know the general costs for EIA. There will likely be financial support for incorporation of NRV, but costs and responsibilities are not yet identified.  Clarify administra procedures/practic for incorporation NRV/EIA	es Output 1.2: Natural
	Adequate resources are mobilized and available for the functioning of the lead environmental organizations	3		
Indicator 13 – Availability of required technical skills and technology transfer	The necessary required skills and technology are not available and the needs are not identified	0		
	The required skills and technologies needs are identified as well as their sources	1	Skills transfer is occurring with support from the project. The training has generated improvements. However, individual and institutional capacity has not been built to fully support an EIA incorporating rigorous NRV.  The project should on-track to reach a higher rating with development and implementation of more advanced training programs the next 12 month	Output 2: Capacities strengthened to use natur resource valuation within the framework of their review and approval

The required skills and		
technologies are obtained but their	2	
access depend on foreign sources		
The required skills and		
technologies are available and	3	
there is a national-based		
mechanism for updating the		
required skills and for upgrading		
the technologies		

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments		
CR 5: Capacities to monitor and evaluate						
Indicator 14 – Adequacy of the project/programme monitoring process	Irregular project monitoring is being done without an adequate monitoring framework detailing what and how to monitor the particular project or programme	0				Output 1.1: Natural resource valuation tools developed  Output 1.2: Natural resource valuation tools piloted within the framework of an EIA
	An adequate resourced monitoring framework is in place but project monitoring is irregularly conducted	1				
	Regular participative monitoring of results in being conducted but this information is only partially used by the project/programme implementation team			Project monitoring is not adequate, e.g., the results framework is not used as monitoring tool.	Improve results framework and use as active tool for monitoring progress.	Output 2: Capacities strengthened to use natural resource valuation within the framework of their review and approval
	•	2	2	This is not leading to program sustainability whereby project monitoring segues into NRV/EIA monitoring by national stakeholders.	Complete "close-out" plan for monitoring implementation of established NRV/EIA program	processes

	Monitoring information is produced timely and accurately and is used by the implementation team to learn and possibly to change the course of action	3		
Indicator 15 – Adequacy of the project/programme monitoring and evaluation process	None or ineffective evaluations are being conducted without an adequate evaluation plan; including the necessary resources	0		Output 1.1: Natural resource valuation tools developed
	An adequate evaluation plan is in place but evaluation activities are irregularly conducted	1	The mid-term evaluation occurred during month 40 of a 50 month project. Not yet clear of evaluation results will be used to support necessary course corrections.  Improve reporting and evaluation frequency, e.g., regular reporting by PMU to NEPA, UNDP, and PSC based upon results framework progress.	Output 1.2: Natural resource valuation tools piloted within the framework of an EIA  Output 2: Capacities strengthened to use natural resource valuation within
	Evaluations are being conducted as per an adequate evaluation plan but the evaluation results are only partially used by the project/programme implementation team	2		the framework of their review and approval processes
	Effective evaluations are conducted timely and accurately and are used by the implementation team and the Agencies and GEF Staff to correct the course of action if needed and to learn for further planning activities	3		