

**Evaluation of the “Information for Decision-making on
Sustainable Development (IDSD) Project”**

Report

by

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Background to the Project

One of the key aspects for achieving sustainable development is open access to reliable and accurate data and information. Small Island Developing States (SIDS) have long expressed a concern regarding the lack of readily available data and information on the environment, the human impact on the environment and the challenge this poses for charting pathways to sustainable development. There have been many efforts to address this challenge including the United Nations Commission on Sustainable Development (UN CSD) Indicators programme, the recent United Nations Statistics Division (UNSD) project on *"Strengthening Capacity in the Compilation and Dissemination of Statistics and Indicators for Conference Follow-up in the Caribbean region,"* and inputs from the United Nations Environment Programme (UNEP) in the field of environmental information management. It was evident that countries in the Caribbean still required support for creating mechanisms for the sustainable management of sustainable development information and defining ways to harness this information for decision-making purposes.

The General Secretariat of the Organization of American States (GS/OAS) signed a Memorandum of Understanding with the United Nations Department of Economic and Social Affairs (UNDESA) to act as the Field Managing Institution for a project implemented in the Caribbean entitled "**Capacity-Building in Creating Information Management Systems to Improve Decision-making for Sustainable Development for Small Island Developing States (SIDS)**" hereafter referred to as Information for Decision-making for Sustainable Development (IDSD).

The project aimed to: (i) identify and assess regional and country needs in information management systems for sustainable development; (ii) develop core curriculum and materials for regional training of trainers; and (iii) create a regional electronic site for accessing information on information management systems and techniques. The project was executed from November 2002 – December 2003 with an evaluation conducted in January/February 2004, and final completion in February 2004.

It was envisaged that the following outputs will have been achieved:

- A pilot network of national, regional and possibly local institutions involved in information management in the Caribbean region;
- Resource persons trained as trainers within the region to support national and regional training of information managers;
- Training materials on information management systems for training of trainers accessible through SIDSNET connected to regional networks and UN-system sites;
- A forum of exchange for experiences among regional and national information systems' managers; and
- Final report on implementation including an assessment and evaluation of the projects.

The project was expected to build upon work carried out by the UNSD in collaboration with the Caribbean Community (CARICOM) Secretariat and CARICOM Member States on *"Strengthening Capacity in the Compilation and Dissemination of Statistics and Indicators for Conference Follow-up in the Caribbean region"* and UNEP's work in the field of environmental information management.

Terms of Reference of the Assignment

I. Objective

Too often, projects or activities are not reviewed to assess the degree to which the project met desired outputs. The evaluation proposed is to be undertaken once all major activities have been initiated and/or completed, to conduct an independent assessment to "ascertain the project's success in meeting its goals and objectives and to attempt to evaluate any level of impact of the project on the beneficiaries, particularly in terms of capacity building".

The consultant will carry out an evaluation of the IDSD project activities and their impacts vis-à-vis the projected outputs as outlined in the Project Briefing Note. The evaluation will also facilitate the finalization of other project outputs and furnish recommendations for further activities in this area.

The results will serve to guide the finalization of the training materials for placement on the website.

The output will inform the final report of the project, which will be prepared for submission upon completion of all project activities in February 2004.

II. Consultant's Responsibilities:

- (i) The development of a brief methodology for undertaking the assignment;
- (ii) The assessment of IDSD project implementation, specifically the impact of project activities from the perspective of the IDSD participating countries and other participants in project activities through:
 - (a) a summary review of project implementation vis-à-vis the stated outputs;
 - (b) an in-depth study in two countries – Barbados and St. Lucia, which represent the range of existing capacity amongst the IDSD participating countries with regard to managing information for decision-making on sustainable development. This would allow the review to cover the range of needs and capacities that would not only serve the present group of countries but also the entire region. Selected respondents should represent a cross-section of government, NGO and agencies;
 - (c) more general interviews with participants from Jamaica and Belize in terms of their existing capacities and concerns and the identification of further areas where intervention and support would be needed. Selected respondents should represent a cross-section of government, NGO and agencies;
 - (d) review of the evaluations by participants of the October 2003 IDSD Training Workshop which took place in Trinidad and Tobago;
 - (e) a review of the IDSD website and an assessment of its capacity as a portal for methodologies and tools on information management for sustainable development.
- (iii). The preparation of an evaluation report summarizing the findings on the issues highlighted in (ii) which would include recommendations for follow-up activities in this area including areas, which will require more work and investment for sustainable capacity-building. The revision and finalization of the evaluation report should be based on comments received from the IDSD Project Manager and UNDESA.

III. Outputs

The draft and final reports associated with this assignment should be presented in electronic format in Word 2000 or higher with one (1) hard copy.

The outputs for this assignment are anticipated by:

- (i) Draft report by January 16th, 2004; and (ii) the final report by January 31st, 2004¹.

The report should consist of:

1. an introduction to the assignment,
2. an outline of the methodology utilized,
3. findings of the interviews and contact with respondents,
4. identification of both successes and constraints,
5. lessons learnt, and
6. recommendations for the way forward on this issue generally.

IV. Coordination and reporting.

¹ These dates have been subsequently changed in communications with the OAS to initiation of the process on 21 January 2004 instead of late Dec 2003 or early Jan 2004.

The consultant will carry out her activities under the supervision of the Field Manager for the IDSD Project.

A. Introduction and Context of the Assignment

The Consultant was requested to undertake a desk study for a duration of eight days using electronic means to conduct

² “a brief evaluation of the project in terms of activities and outputs. Specifically, the evaluation will seek to “ascertain the project's success in meeting its goals and objectives and attempt to evaluate any level of impact of the project on the beneficiaries, particularly in terms of capacity-building”.

Given the limited available time towards project completion and noting that we are still working on providing equipment and additional training to you, we propose to carry out an in-depth study in only two countries. Based on the assessment at the start of the project and where countries were and are, in terms of their capacity to absorb IDSD - we have chosen Barbados and St. Lucia. We feel that in this way, we could cover the range of needs and capacities that would not only serve the present group of countries but also the entire region. Further, the consultant would conduct a more general review with the Focal Points from Jamaica and Belize in terms of their existing capacities and concerns and the identification of further areas where intervention and support would be needed.

We are seeking your cooperation with the evaluation, and in making recommendations for areas of improvement, gaps and constraints and recommendations from *(sic)* the Way Forward. Particularly, we would wish you to provide input on how the IDSD website could best serve your needs and what material you would wish to see made available. We would welcome your suggestions on other persons with whom the consultant could discuss this issue.”

The limited time frame available³ underscored the fact that *traditional modes of project evaluation* could not have been utilized, to assess effectively, a project of the nature and scope of the IDSD project in four pilot Caribbean countries. Even with the expected approach that a more in-depth evaluation of two of the four participating countries, and a more general review of the other two countries would be conducted, an underlying assumption was made that attainment of the highest levels of reliability would have been constrained without field evaluations, to ground-truth activities in selected national and regional institutions. This report thus represents the best level of assessment possible, within a limited timeframe, using only virtual means of evaluation.

Despite this constraint and key challenge, the consultant’s approach was expected to be highly beneficial through the utilization of a mix of assessment tools which were intended to provide valuable snapshots of the views and impressions of beneficiaries on the impacts and effectiveness of project deliverables. Where possible the consultant focused on identifying, assessing and utilizing in-built project monitoring, feedback and evaluation mechanisms to ascertain impacts during and following the project implementation process.

B. Methodology

The consultant spent the initial period of the evaluation process obtaining and reviewing project documentation, principally from the project website www.oas.org/usde/idsd/. This was the only source of project information available to the consultant as no national or institutional visits were included as part of the assessment process.

² Excerpts from an e-mail message to focal points by IDSD Project Manager dated 16 December 2003

³ 8 person days from 21 January 2004 spread over a period of one month to final reporting on 20 Feb 2004

Internet searches of websites of participating countries and institutions, highlighted throughout the report, were also conducted to determine incorporation of IDSD documentation, references, activities or linkages to the IDSD website.

The project website was also evaluated specifically within the context of the following criteria;

- ✓ Content: scope/coverage, relevance and linkages
- ✓ Content management
- ✓ User-friendliness
- ✓ Built-in user feedback monitoring mechanisms
- ✓ Responsiveness to user enquiries

with a view to assessing its capacity as a portal for methodologies and tools on information management for sustainable development.

Based upon documentation reviewed, and on the assessment of the website, question sets were designed and developed for use in electronic questionnaires conducted via e-mail and in telephone surveys with selected participants, under the following headings;

1. Overall Project Objectives
2. Overall Project Activities
3. Facilitation of information management for effective national decision-making
4. Facilitation of reporting obligations to Multilateral Environmental Agreements (MEAs) and Donor Organizations
5. Assessment of Project Implementation Methodology (PIM)

As far as possible, the mix of questions was designed to ascertain levels of performance, effectiveness and impact of the project; relating inputs to outputs; outputs to use; and relating use to outcomes.

Some questions were designed deliberately to ascertain the respondents' knowledge of specific names of persons or institutions, in order to keep in focus the need for highlighting the fact that the traditional "people net" is an essential part of driving the sharing and decision-making processes envisaged under this project. A key methodological assumption which underscored this approach was that,

the most efficient and effective technological tools and operational systems can be limited if they are not facilitated by well oiled "people networks" and the commitment of institutional leaders with a vision that improved information management must become central to driving the process of effective decision making .

During the preliminary *telephone scoping process* to ascertain levels of involvement and participation, it was realized that, apart from resource persons used in project delivery, only *project focal points* and a limited number of *operational collaborators*, were aware of the project's existence, and thus the evaluation process would have to be limited to this group of individuals. It is therefore stressed here that use of the questionnaire was not intended as a poll, but merely to focus the attention of this selected group of respondents, on specific areas of the project implementation process, objectivities activities, outcomes and impacts. Thus, the cohort is a small one supplemented by telephone interviews with project participants which ranged from 45-75 minutes⁴ per country (Annex 1).

Results of the questionnaires and telephone surveys were assessed and evaluated for formulation into findings, identification of successes and constraints, lessons learnt and recommendations on the way forward.

⁴ This is in addition to telephone duration times spent on initial scoping and repeated contacts with respondents.

C. Findings

1. EVALUATION PROCESS

1.1. Initial contact and scoping exercise

The process of making contact with appropriate personnel proved to be a constraining factor with varying degrees of difficulty being experienced across the four countries evaluated. Numerous telephone messages left for the attention of focal points were either unanswered or were not forwarded to the intended recipients. Non-responses to all e-mail messages were also routine in all four countries. In two cases (Barbados and Jamaica) it was discovered that operational e-mail addresses differed from those supplied by the IDSD Project Manager in the 16 December 2003 e-mail communication to country focal points⁵.

In all countries, especially Belize, responses to repeated telephone messages were unsatisfactory⁶. Once direct contact was made by telephone with focal points, all except St Lucia were enthusiastic and promised early responses. In the case of St Lucia, concern was expressed about the difficult nature of the questionnaire, an experience not expressed by any other respondent. Unfamiliarity with the IDSD website was the reason cited by the St. Lucian focal point, however, the post questionnaire telephone interview was highly productive.

1.2. Participants in the Evaluation Process

It was agreed that since knowledge of the IDSD project was non-existent outside of those who participated in the project, that evaluation using questionnaires and direct telephone interviews would be limited to this group. Thus, questionnaires were sent to focal points, who were requested to engage other national collaborators in the process of responding to the questions posed. Expectations for the return of questionnaires within ten days, was somewhat ambitious and most were received 10-12 days after the initial deadline for submission⁷(see Annex 1). In all cases, focal points took the lead in responding and included the views of other institutional collaborators some of whom had limited exposure to various aspects of the project and its implementation processes. 4 completed responses from country focal points were received representing inputs from 15 persons. Telephone interviews and contacts were conducted with 6 persons for a total on-phone duration of 5 hours 25 minutes (see Annex 1).

2. EVALUATION OF IDSD PROJECT OBJECTIVES AND ACTIVITIES

2.1 Overall Project Objectives

In general, from analysis of questionnaire responses, summarized in Annex 1, three of the four participating countries felt that the project met most of the objectives established at the outset of the implementation process. In one country which consistently gave low scores for most of the questions, it was apparent that a clear understanding of what specific outcomes were to be related directly to the project, was not established at the outset. *Difficulty in separating the baseline of existing country activities from what the project was*

⁵ However, no *bouncing back* of e-mail messages was experienced except for the case of Barbados when only two formal of the four e-mail messages sent (31st January and 06 Feb 2004) were returned with the following error messages 'User mailbox exceeds allowed size: technical@meenr.gov.bb'

⁶ Blame is not being apportioned here but mention is made as others might be stimulated to consider delays in the process an interesting side study, from an information management perspective. Indeed, dates and times of contacts and names of recipients of messages were recorded after the third week of trying to fast track the rate of responses, to be pursued as a separate evaluation exercise within this broader evaluation study, in order to provide valuable insights into public sector constraints and related responses to initiatives which are not central to day to day institutional operations. This was not pursued due to time limitations, but remains an interesting idea for further study.

⁷ The initial 8 person-day time line for this evaluation more than doubled due to time delays, with the final receipt of information coming within 20 hours of reporting deadlines for the interim draft. Lessons from this process can benefit future initiatives of this nature in which public sector constraints op cit, need to be factored into evaluation timelines.

intended to accomplish, may have accounted for this outcome. Thus, during the telephone interview process, frequent remarks that the country already undertook various initiatives and that the project made no difference in some areas, were irrelevant since values added above this baseline were the focus areas of the evaluation. This experience was dissimilar to that of the other three countries which were clearer about the distinction between pre-existing conditions and those that the project were expected to address.

Notwithstanding these differences, in the consultant's experience, it is not always easy for participants to distinguish clearly between initiatives that already exist in countries and the 'topping-up' or 'value-added' received from projects such as the IDSD project. Nevertheless, the structure of the evaluation process by way of examination of publicly available country information using the internet, responses to a series of cross-linked question-sets based upon project specific activities, administered using a detailed questionnaire and the use of exhaustive free-ranging interviews, enabled the consultant to separate baseline activities and to ascertain the project value-added.

2.1.1 Training

Outputs related to training received high ratings and all countries responded positively when asked about their awareness of the identity of information managers trained under the project. Satisfactory ratings were also given about the enhanced capacity of managers to act as trainers nationally and regionally and about the adequacy of training materials on Information Management Systems (IMS) available on the IDSD website. Some concern was expressed that accessing IMS training materials was moderately difficult and it is recommended that efforts to be made in any next phase of support on IDSD must address this issue.

Moderate satisfaction was expressed about the level of training and tools received, but most respondents were reasonably satisfied with all of the technological upgrades made available for information management in these countries.

2.1.2. Electronic networking

Linkages to regional electronic networks although adequate for most countries could benefit from the development of a database to enable access to resource links using *key words* (for issues and for geographical parameters). Similar concerns were expressed about limitations in the linkages to UN system sites by at least one country, Jamaica, which made recommendations for inclusion of key sites (Annex1).

The consultant found no evidence on the development of a forum for exchanges of experiences between regional and national IMS managers other than through e-mail communications, despite the positive response of Barbados that one exists and is being utilized moderately. Time did not permit the consultant to engage in further contact with this country, or to pursue the discrepancy in a response by St. Lucia, which although initially expressing no knowledge of the existence of a forum, noted in response to a subsequent question that the forum was being used mainly by government agencies. It is recommended that further examination of this discrepancy in information be pursued as some informal mechanism might exist which can be beneficial to a wider regional grouping. Several references were made by Barbados to the E-Group managed by the Caribbean Conservation Association (CCA), but this was not viewed as a substitute for the forum envisaged under the project.

2.1.3. Active sourcing of information by decision-makers

Increased accessing of information by decision-makers has been reported although the level of feedback on the value of the information provided and ease of access for decision-making purposes, appear somewhat limited. When asked differently (Question 2s) this opinion was confirmed since levels of comfort were low with respect to the adequacy of monitoring and feed-back mechanisms for assessing levels of use of data and processed information by institutional managers and national decision-makers.

3. OVERALL PROJECT ACTIVITIES

3.1. *Needs Identification for IMS*

Countries reported that a reasonable rate of advancement was made towards identifying national and regional needs for information management systems for sustainable development. The appropriateness of core curricula for training of trainers in the development of IMS at both national and regional levels, the adequacy, effectiveness and user friendliness of training materials, all received positive responses from three countries. Despite making such strides, it was felt that provision of these inputs to training, did not result in increased developments in IMS nationally and regionally. However it is still a relatively short timeframe since project implementation and processes for public sector planning and budgeting for capital developments are somewhat lengthy in most countries.

Only one country, Jamaica, had read the draft Final Report on Implementation and had found it to be accurate, useful and adequate. In the opinion of only two countries, Barbados and Jamaica, moderate improvements had been made in information sharing and exchanges between national and regional institutions. The IDSD website was not regarded as meeting national needs in one country, Belize, but was considered to be of adequate value in Barbados and of moderate value in both St Lucia and Jamaica.

3.2. *Facilitation of information management for effective national decision-making*

Barbados, Jamaica and Belize expressed strong satisfaction with the enhanced capacity for handling and managing data and Barbados and Jamaica were also extremely positive about improvements in capacities for transforming data and information to forms that were suitable for decision-making. These countries were also very satisfied with the improved levels of involvement of civil society institutions; NGOs, CBOs, SIGs in the processes of information management for decision-making while St. Lucia was very dissatisfied with the lack of involvement of its non-governmental sector in this process.

3.3. *Data management systems*

High levels of satisfaction were expressed by Barbados, St. Lucia and Jamaica for the level of facilitation the project provided for the creation of mechanisms for long-term management of sustainable development and environmental information. Barbados was very satisfied with the training received, and access to available tools and methodologies provided for the creation of integrated data management systems, while Jamaica and Belize were also reasonably positive about these outputs of the project. Additionally, all countries except Belize were very positive about benefits received for defining ways of harnessing sustainable development and environmental information for decision-making purposes.

Only St Lucia had been unfamiliar with the recommendations of the Training Needs Report and as such did not share the positive views expressed by the other three pilot countries that their governments should give the highest priority towards investing resources to address training needs identified therein. Indeed, Jamaica and Barbados both expressed the view that such investment will lead to transformation of current modes of decision-making in their countries.

3.4. *Assessment of the IDSD Website*

3.4.1. Content: scope/coverage, relevance and linkages

Barbados and Jamaica were both highly satisfied with the levels of access to new information from sources relevant to areas of work promoted under the project and also valued highly the availability of all of the outputs of the IDSD project which are housed on the site, in particular, *Presentations from the Resource Persons Meeting; the Report on Information Needs; the Report on Pilot networks; the Report on the Training Workshop; Databases; Institutions; Methodologies; Themes; the Project Background and Related project Activities*. Despite this level of satisfaction, Jamaica also expressed the view that more country specific content will further enhance the effectiveness of this site and recommended inclusion of information to deepen and enrich the site (Annex 1).

3.4.2. Content management

Mixed reactions were received with respect to questions about the regularity of updating site content as both Belize and Jamaica were concerned about the infrequency of updates while Barbados and St Lucia were satisfied. The currency of information was generally considered to be sufficiently up to date for the purposes of providing information to decision-makers by all except St Lucia.

3.4.3. User satisfaction

Very high levels of user satisfaction were reported. Levels of comfort by users, ease of downloading PDF files and accessing other sites via links, all received very high ratings. St Lucia reported being plagued by error messages and was extremely dissatisfied with the level of user feedback and monitoring mechanisms built into the site, experiences not shared by the other pilot countries. A need for an improved human interface on the site was inherent in some of the indirectly expressed responses to the questionnaire, for example, responses/ non-responses to Questions 3.1.3f-h (Annex 1). It is recommended that online resources such as chat rooms and polling could enhance the effectiveness of the IDSD website, as collaborators would not have to use other offsite resources to communicate directly when necessary.

3.4.4. Effectiveness as a portal for methodologies and tools on information management for sustainable development

Interestingly no country felt that information obtained from the site changed the way respondents worked on a day to day basis, and as Jamaica noted, capacity had already been built within that country's baseline of existing activities. Despite no real enhancement of capacity of its focal point, Barbados reported its awareness that a fifty percent increase in capacity had been realized in collaborating institutions and individuals because of access to information on the site. Jamaica was also pleased with the level of value that NEPA realized through enhanced access to training tools and information on streamlining data and information for decision-making. Additionally, both Barbados and Jamaica were very positive about positive impacts on collaborating organizations noted.

4. FACILITATION OF REPORTING OBLIGATIONS TO MEAS AND DONOR ORGANIZATIONS

The whole question of impositions on the limited national institutional capacity for reporting to MEAs and other multilateral mechanisms has been a source of concern to three of the four pilot countries and are addressed more definitively elsewhere in this report. However, a quick overview of responses to questions on this issue revealed that the project could/should have given this issue greater priority, with a focus on early resolution. Recommendations for addressing this

issue have been made by Jamaica during free ranging telephone interviews and are reported under country sections below. Countries felt generally that opportunities may have been missed during the implementation process of the IDSD project and that donors were insufficiently involved.

4.1. Building on pre-project capacities/experiences in the region

Positive acknowledgement was expressed about the value of access to the range and volume of pre-existing materials on IMS in the region via the IDSD site. Good ratings were given by St Lucia and Jamaica on the value-added achieved through the IDSD project, which in turn might have been facilitated because of successful baseline activities resulting from the UNSD/CARICOM project on 'compilation and dissemination of statistics and indicators for conference follow-up' and from UNEP's work in the field of environmental information management in the region. This report also highlights the excellent baseline scenario for information management in Jamaica reported under the country analysis section of this report. Indeed, it is the view of this consultant that the IDSD project has been well designed to take advantage of such baselines in order to add value and make positive impacts on information systems in the four pilot countries.

5. ASSESSMENT OF PROJECT IMPLEMENTATION METHODOLOGY (PIM)

5.1. Baseline assessment of pre-existing activities and capacities

Only Barbados had read the assessment report on pre-project initiatives on the IDSD website and gave a positive evaluation of its content with regard to its comprehensiveness, accuracy and usefulness in highlighting pre-existing activities in IMS and IDSD. All countries except Jamaica also felt that the IDSD project implementation process enhanced their capacities to utilize pre-project resources more effectively. These same countries also expressed the opinion that because of the IDSD project implementation process, they have been made aware of information resources that can contribute more efficiently to decision-making in their countries. Special mention was made by St. Lucia of the use of the GEO-SEIAN project of the University of Costa Rica and by Belize of the following links, www.oas.org/publications, www.cpacc.org and www.uvic.ca/scenarios

5.2. Assessment of choices of best practices and tools for IMS and Reporting on Sustainable Development

Only Belize had reviewed the collation of best practices and tools for assisting pilot countries in managing information for and reporting on sustainable development while the other three pilot countries were unaware of the existence of this report. Its content was found to be limited and could benefit from more relevant regional best practices and case studies. Several suggestions for case studies have been made under the country specific sections of this report.

The IDSD project did not pay sufficient attention to raising awareness of links to best practices on other sites and it is recommended that direct population of the IDSD site, supplemented by links to other key sites, should be a next steps priority action.

5.3. Establishment of the Pilot Network

All countries had read the proposal for the establishment of the pilot network for decision-making for sustainable development but were all unaware whether any progress had been made on implementation of its key recommendations. This is of concern since Jamaica and Barbados are

convinced that the level of training on tools and methodologies for operation of the pilot network, received through the IDSD project were adequate. It was generally felt, with some reservations, that needs for building capacity for efficient information supply into the decision-making processes, can be achieved through the operations of the pilot network.

5.4. Process of website development

Barbados and Jamaica were aware that country personnel benefited from hands-on training on website development during construction of the IDSD website, and only Jamaica is aware that other collaborating institutions have been stimulated to develop websites for better management of their institutions' data and information. All countries except Barbados are aware of the capacity of national information providers to use the tools necessary for contributing to the content management of the IDSD website, and that adding links to the site can be streamlined by requesting participants to use of the "Development Links" Form which is readily downloaded from the site.

St Lucia feels strongly that the information management process of the IDSD site is too rigidly controlled and that like Jamaica, it feels that there should be some degree of decentralization to the pilot countries as a means of building regional capacity.

5.5. Identification of gaps in information

Generally all countries except St Lucia are satisfied with the system for addressing gaps in knowledge and information necessary for national decision-makers to function, however *all of the pilot countries noted that such gaps in information which remain are significant enough to influence negatively, decision-making for sustainable development at the national level.*

5.6. Links to other information portals and hubs

IDSD website hyperlinks to virtual information centers have greatly enhanced the capacity of Barbados to provide information for decision-making. It has had a more moderate impact on national capacity in St Lucia and has not added significant value to the baseline capacity in Jamaica. Regular use is made of access to related information hubs by all countries except Belize although St Lucia reported visiting the following sites regularly, not necessarily using the IDSD portal, but going directly to sites for UNDESA; St Lucia Statistics Dept; UNEP/ROLAC; OECS and ECLAC. Jamaica uses both the IDSD site as well as making direct access to the following sites which it uses regularly, IISD <http://www.iisd.org/>, and csd <http://www.un.org/esa/sustdev/>. It was felt by the latter country that these sites should be linked to the IDSD site.

5.7. Procurement process for new hardware and software and training for enhancing technical capacity

All countries except St. Lucia have already received some of their provision of operational hardware and software systems under the project and St Lucia's is expected within the near future. Without exception all countries were very satisfied with the level of provision of technological upgrades for information management for their countries under this project.

6. Impact of IDSD Project Activities vis-à-vis Projected Outputs

6.1. Participating Countries In General

6.1.1. Learning through direct contact.

All countries reported that participation in various meetings and training workshops convened through the IDSD project added significant value to their knowledge and experiences on the value of information management systems (IMS). Special mention was made of exposure through the project to methods and tools for IMS which *served to raise awareness of options available for upgrading hardware/software, information needs and inputs for government and other national institutional strategies for effective decision-making, and knowledge of other professionals in neighbouring countries.*

Host country advantages were also realized by countries in which regional activities were convened. For example, although four persons in St Lucia were the designated partners in the project, hosting of the Resource Persons Meeting there in May 2003, afforded exposure to several other persons from various sectoral departments including statistics and tourism.

6.1.2. Collaboration between pilot countries

An *enhanced process of collaboration* between pilot countries has also been fostered through direct contact among professionals under this project. Sharing experiences on *the development and use of sustainable development indicators*, was especially evident. Focal points in Barbados and St. Lucia have already taken steps beyond initial contacts made during the Resource Persons Meeting in St. Lucia to hold dialogue on next steps towards deepening collaboration. Formal procedures are being developed by St Lucia to obtain guidance from Barbados, which is among the most advanced in the region in its indicators programme. Belize has also expressed an interest in receiving support from other Caribbean countries in this regard and Jamaica proposes that it is also in a good position to share its experience and expertise with others and to learn from regional countries which have made strides in reducing the long lists of indicators to more manageable lists for which actual data can be collected and processed into usable information.

6.2. BARBADOS

6.2.1. In-country-status of the process of managing information for decision-making on sustainable development

An examination of the process of information dissemination in Barbados through its publicly accessible official government websites demonstrates a vision that is noble and infrastructure that can become a potentially powerful tool for use by decision-makers.

Vision of the Barbados Government Information Service (BGIS)

<http://www.barbados.gov.bb/bgis.htm>

To Be The Communication Hub Of Government,

An Agency Which Drives National Development
In Ways That Make The Business Of Government,
"A Vibrant Living Thing"

and of the Government of Barbados Information Network (GOBINET)

<http://www.barbados.gov.bb/>

"In this era of globalisation, it is important that Barbados positions itself to serve the global public with information on demand. The Government of Barbados Information Network (GOBINET) in seeking to accomplish this goal will also achieve, for its users, more transparency of government operations.

While government will be pushing its information out to the world, users of the websites under the GOBINET banner will have a medium through which they

can correspond easily with government. This interchange of information can only be to the benefit of government and its customers.”

Despite such ideals, content and content management of sites appear to have limited sustainable development focus. Environment and development are insufficiently integrated and the sites reflect the traditional sectoral focus of most governments. Notwithstanding this, the potential is great for using existing information infrastructure to assist in national decision making on sustainable development. Greater use of electronic linkages between sites will enhance the value of existing infrastructure for sharing information on sustainable development. Nowhere were links readily visible to resources such as those available through the IDSD website, although links on national environmentally related sites led *indirectly* to portals such as SIDSNET.

Since 1998, the Government of Barbados (GOB) had embarked upon a process of collecting data and processing it into information for addressing sustainable development goals and objectives through its national sustainable development indicators programme. It therefore had in process, as in all of the countries evaluated under this project, a viable baseline of activities with similar objectives as envisaged under the IDSD project. However, mechanisms for making relevant information available for guiding decision-making processes remain a challenge.

The IDSD project implementation process gave the institutions involved an opportunity to focus on addressing gaps in existing processes, related mainly to information sharing among existing institutions. The Ministry of Housing, Lands and the Environment (MHLE) receives on a regular basis many requests for information on environment and development from other government institutions, the private sector, NGOs and CBOs. Responding via the use of e-mail, photocopying and by telephone put an added strain on the thin human resource capacity of the Environmental Division of that Ministry. Referral to the IDSD website or downloading required information on behalf of agencies making requests, became a method of choice and a viable strategy for responding to information needs of the wider community in Barbados.

However, it is underscored that this consultant found no clear structures or mechanisms for channeling information in electronic form directly to decision-makers. Traditional means of requests/ response are utilized, and technical recommendations continue to be made in reports and in formal notes to Cabinet. Several government sites evaluated contained documents and reports as downloadable pdf files but links to sources of processed data collected on a routine basis by various government departments are unavailable.

The role of the media for influencing decision making for sustainable development can be significant. However, in Barbados it is reported that its media has not played the role envisaged for the dissemination of information on sustainable development even when invited as participants in various fora. Often, coverage tends to be limited to activities of politicians and it is not uncommon to witness the departure of media personnel following the end of participation by a politician. *Strategies to enhance the role of media personnel in making information available through public dissemination are crucial and should be addressed through future phases of the IDSD process.*

The consultant was advised that few people outside of the project participants and related institutional colleagues were aware of the IDSD project and its outputs so that informational letters would be prepared for dissemination via the Ministry’s regular mailing list.

It was recommended by this consultant that the opportunity of the formal launch, through a press conference, of the *National Policy on Sustainable Development* scheduled for Wednesday 18 Feb

2004 by the Honourable Minister of Housing Lands and the Environment should also be utilized as an opportunity for wider publicity on the resources available through the IDSD website. This was accepted and information on the IDSD project would be included in press kits for attending media. Additionally, development of a website for the Ministry, cross-linked to key national institutions, is envisaged as a tool for facilitating public access to information.

6.2.2. National and institutional needs

The thematic area for Barbados under the project was sustainable tourism. However, the training under the IDSD project using the CTO MIST system was not seen as relevant to the routine operational needs of stakeholders within the tourism sector in Barbados. It is felt that a series of brain-storming sessions within a focus group comprising representatives of the tourism sector is a necessary next-step for fine-tuning needs under the sustainable tourism indicators programme. Such facilitated dialogue sessions will serve to identify country-oriented specific needs for data gathering and information processing within the tourism sector. It is envisaged that persons trained under the IDSD Project should be used to guide the local dialogue on information systems for sustainable tourism.

On the broader issues of addressing institutional needs for human resource capacity building through training, it was felt that the IDSD project added significant value. It was also noted that a great mix in the selection of persons for training provided a basis for on-going capacity building within and outside of the government institutional framework. Two persons with strong IT backgrounds from the Environment Special Projects Unit of the Ministry and one from the Coastal Zone Management Unit (Travis Sinclair and Ron Goodridge respectively) and a civil society representative from the Barbados National Trust (Debra Branker) now form an invaluable core of trained trainers.

A major drawback, from an operational perspective, is that the MHLE does not have a website apart from its link through the BGIS and GOBINET. Time devoted to sending e-mails, faxing and photocopying in response to requests for information makes for an inefficient use of limited human resources. It is envisaged by the Ministry that establishment of a functional website will address this constraint. One key objective of the Ministry is for the *Environment Division to become a Clearing House for Information on Sustainable Development for Barbados* with the website operating as the major tool in this process. The Ministry's role as facilitator for the work of the Commission on Sustainable Development will be enhanced significantly when it becomes sufficiently tooled to become a genuine information clearing house for information. The process of fostering partnerships with the media can also be enhanced through ready access to information for wider public dissemination.

6.2.3. Capacities for data and information processing and sharing

Significant capacity for data gathering and information processing had already been built in Barbados under the National Sustainable Development Indicators Programme. However many gaps remained and tools and methodologies provided under the IDSD project training modules were utilized to address some of these needs.

Information sharing has been somewhat more problematic and as cited above, URLs to the IDSD website are being forwarded in response to requests for information from various sources in Barbados. However, specific data and information generated as a result of day to day operations of governmental agencies are not yet being shared in any systematic manner by the Ministry.

Methods are still very much response-specific and the need for establishing a network of national institutions remains a key objective. The Ministry also intends to address the issues of gaps in information dissemination through the establishment of its own website on sustainable development. Support for this activity has not yet been accessed and has been identified as one of the needs for next steps in the IDSD implementation process.

The IDSD E-Group coordinated by the CCA Technical Officer has met an important need for information sharing among participants exposed to IMS processes during project implementation. A professional relationship has been fostered so that requests for information or guidance on issues related to data management can be requested of fellow participants using this mechanism. However, because of the sheer volume of e-mail traffic, keeping up with information generated through the e-group has become problematic; routine monitoring without active participation has therefore been adopted as a coping strategy. Active intervention is only made if direct assistance to a query can be offered or if a specific request needs to be made.

The input of the IDSD project in providing state of the art computers and a digital camera was identified as the high point of the implementation process. The MHLE had identified many years ago specifications for the type of equipment necessary for addressing its IT needs but it was only through the timely intervention of the project that these needs have been met. Each staff member of the Environment Special Projects Unit will now have an individual computer.

6.2.4. *Institutional landscape (status, collaboration, coordination: government, NGOs and CBOs)*

Sustainable development is still perceived as a largely secular activity in Barbados despite major strides towards addressing such issues since the SIDS Conference and more specifically, through the establishment of the Commission on Sustainable Development, which was structured to have a broad base of institutional and sectoral representation. Collaboration across the hemisphere through the work of the Earth Council based in Costa Rica has been of major benefit to the work of the CSD.

The MHLE remains the major institutional framework for fostering and managing the process of inter-institutional collaboration around the issues of sustainable management of the country's natural and human resources. The Environmental Division is the secretariat for the work of the CSD and provides logistical support for the work of the various sub-committees established under its National Sustainable Development Indicators Programme. The National Steering Committee on Indicators established in 1998 also has broad base representation from government and private sector institutions. The work of the Trade and Environment Committee which is Chaired by a private sector industry captain and which comprises a broad range of governmental and private sector interests, utilizes significant amounts of information accessed via the IDSD website.

Collaboration at the intergovernmental and donor level on information management for sustainable development has not been formalized but remains project and process specific. For example UNEP has provided support for the state of the environment reporting (SOER) process but this is not conducted in a vacuum since outputs of the support received from UNDESA and UNSD on the National Sustainable Development Indicators Programme are germane to the SOER process.

A government initiative spearheaded through the Environment Division on "Greening of Government Procedures" utilizes information resources available through the IDSD site and staff

members often direct their governmental institutional colleagues to this resource to address their queries and requests for information.

Good relationships between government institutions and NGOs and CBOs, as expected, pre-existed the IDSD project but collaboration was ad-hoc and information sharing was reactive. However it was felt that relationships between one NGO in particular was strengthened through the IDSD project. Staffing of the Barbados National Trust is relatively thin on the ground due to financial resource constraints. However their needs for information management are great and through the IDSD project one of the non-staff members of the Trust was trained in aspects of IMS. This has fostered a working relationship between the Environment Division of the MHLE and this NGO. Relationships with other NGOs are not as strong, but ad hoc responses for information are made regularly. A stronger relationship exists with CBOs especially with community based fishing groups and with trade unions where information exchanges are now routine.

Private sector collaboration occurs primarily through the work of the multi-sectoral Working Group on Trade and Environment chaired by an influential private sector representative, the CEO of Mt Gay Rum Refinery. The IDSD site is used as a portal for information in support of the work of this Group, in particular for accessing and sharing information on Environmental Management Systems, specifically, assistance to companies with their progress towards ISO 14000 certification. Mt Gay which is the only ISO 14000 certified company in the country freely shares its expertise with others supplementing its information with other relevant inputs accessed through the IDSD site.

Relationships with the Hotel and Tourism association are also greatly enhanced through the sharing of information and providing inputs on the Green Globe Certification process.

6.2.5. Applicability of Barbados' experience to the region

Barbados' experience in articulating its National Sustainable Development Indicators programme along with that of Jamaica are probably the most advanced among Caribbean SIDS. Collaboration on sharing these experiences with St Lucia has already been initiated as a result of exposure during the IDSD process. Barbados felt that its personnel trained under the IDSD project are now fully capable of training others in the region. The capacities of two persons in particular, whose backgrounds were strong on IT, were greatly enhanced. Formal mechanisms should be explored for making this trained resource available to others in the region on a south-south co-operative basis.

6.3. ST. LUCIA

6.3.1. In-country-status of the process of managing information for decision-making on sustainable development

As is the case with Barbados, the Government of St. Lucia (GOSL) expressed noble intentions of using information technology to address its goals for sustainable development. The following excerpt from the GOSL website articulating this vision is reproduced in full to highlight the cogency of the message and its relevance to the context of the objectives of the IDSD project.

http://www.stlucia.gov.lc/pr2004/february/caribbean_ready_to_reap_the_benefits_of_Egovernme nt.htm

“Tuesday, February 10, 2004 - The Government of St. Lucia and it’s counterparts from the Caribbean are well on their way to providing the much needed environment that would make their services more accessible, responsive and cost efficient. St. Lucia’s Communications, Works, Transport and Public Utilities Minister, Honourable Felix Finisterre made the disclosure today, as he addressed a three-day regional workshop on E-Government and Sectoral Development at the Cara Suites Hotel in Castries.

Minister Finisterre told the regional grouping that new information and telecommunication technologies (ITCs) were facilitating the acquisition and adoption of information, thereby offering developing states unprecedented opportunities to enhance their education systems, improve policy formulation and execution, while expanding the possibilities for social change.

The Caribbean, he said, had proven itself ready to reap the benefits of E-government Readiness, placing second only to North America with respect to the human capacity index for e-government, while outperforming regions, such as South and Eastern Asia, South-Central Asia, Western Asia, South and Central America, and Europe. “The development of St. Lucia as a service-based or information and knowledge-based economy, therefore, aims at exploiting digital technologies to stimulate the achievement of the country’s development objectives,” Minister Finisterre said.

He noted that the establishment of a knowledge-based society “was the platform on which the region must foster, accelerate and sustain long-term social, cultural and economic development.” He admitted however, that much work still needed to be done to realize the goal of shaping a new economy, predicated fully on information and communication technologies.

Government, the Communications Minister pointed out, was seeking to create an enabling environment to attract local and foreign investors through appropriate policies, legislation and improved public sector efficiency. That note struck a cord with officials of the Commonwealth Secretariat, who are sponsors of the three-day event. “E-government without the culture change becomes expensive government and I think we have to focus not so much on the technology, but on the re-engineering of processes, of regulations, of information and data sharing, and those are always the tough issues,” said Henry Alamango of the Commonwealth Network for Information Technology for Development (COMNET-IT)

E-Government is a concept aimed at encouraging governments to use less ink and paper and more electronic information technology in their day-to-day affairs.”

Although this vision is clear, its operationalization into action within the various structures of government still lags way behind the objectives of this IDSD process. Despite this, a definitive baseline of activities exists in St Lucia which augurs well for making e-government a reality in the short to medium term future. Principal among these is the *Integrated Development Planning (IDP) for Sustainable Development Project*. This project has passed through a lengthy period of gestation, emerging from a long process in which St. Lucia has been engaged, facilitating the integration of various phases of sectoral development. The actual IDP project was initiated in

2000 as an expansion of the 1998 OECS⁸ Integrated Planning for Environmental Sustainability programme, and received from the GOSL in 2001 an additional allocation of staff resources. Further support was received through UNDESA, which also served to enhance the evolution of integrated planning for sustainable development in St. Lucia. The IDP process was officially launched in November of 2003 and this programme is expected to be the major platform for promoting information suitable for decision-making on sustainable development in St Lucia. Failure of an earlier mechanism for promoting integrated decision-making for development in St. Lucia, initiated since 1995, the *Economic Social and Development Council*, appears to have its genesis in the lack of information technology management which accompanied the process.

6.3.2. *National and institutional needs*

St Lucian participants believed that the IDSD project added some value to the process of national information management through its training component but more particularly through its provision of hardware for data and information back-up. The latter is valued highly since a long recognized, but un-addressed concern for St. Lucia, was that potential threats to efficient decision-making at institutional and political levels, could be a major constraining factor if losses of data and information were realized. The GOSL is exceedingly pleased with the provision of technology to ensure continued back-up storage of data and information.

Additional needs for data management software developed by the University of Costa Rica, are being sourced with funding support from UNEP/ROLAC⁹. This technology is expected to enhance the value of data storage hardware provided under the IDSD project.

The country is also planning to advance its needs for information for decision-making through its National Sustainable Development Indicators Programme. The IDSD project enhanced the process of collaboration between pilot countries on indicators. Focal points in Barbados and St. Lucia have taken steps beyond initial contacts made during the Resource Persons Meeting in St. Lucia. Formal procedures are being developed by St Lucia to obtain guidance from Barbados, which is among the most advanced in its indicators programme. Similar arrangements with Barbados for the development of Indicators for Coastal Zone Management and for its State of the Environment Reporting (SOER) process are engaging the attention of the focal points of both countries.

6.3.3. *Capacities for data and information processing and sharing*

Four persons in St Lucia participated in the IDSD project and because the country was host to the Resource Persons Meeting held there in May 2003, six other persons also benefited from participation in this meeting. Exposure through the project to methods and tools for IMS has served to raise awareness of options available for upgrading government and other national institutional strategies for effective decision-making for sustainable development. In particular, expectations exist for enhanced training on IMS for coastal zone management, the thematic area chosen for St Lucia under the IDSD project, notably indicators for CZM. The Ministry of Physical Development, Environment and Housing (MPDEH) has shared the value and role of indicators in decision-making for sustainable development with other government institutions, and there has been significant buy-in by the Ministry of Finance. Thus, support from UNDESA for the National Sustainable Development Indicators Programme is being topped up by funding from the Ministry of Finance in the budget for 2004.

⁸ Organization of Eastern Caribbean States

⁹ Regional Office for Latin America and the Caribbean

It was felt that the IDSD project built upon pre-project activities in St. Lucia which was already far along the road in establishing its IDP programme with objectives similar to those of the IDSD project. The focus on coastal zone policy formulation and management was also well advanced through funding support from the European Union since 1998 and it is expected that the Coastal Zone Management Project will be incorporated by June 2004 into the Sustainable Development and Environment Unit (SDE) of the MPDEH. The coastal zone theme, selected by default¹⁰ for St. Lucia under the IDSD project, has therefore found resonance with on-going work on data processing and information management planned within the SDE. It was proposed that the US\$1500 made available for the national training component under the IDSD project would be used more effectively for assessment of software packages for development within the CZM indicators programme rather than for use for which it was originally intended, as funding might not have been adequate for this purpose.

St. Lucia is now poised to take advantage of UNDESA Phase 2 funding for its SD Indicators programme with added funding from government. It is also expected that the SDE will be in a position to articulate the Sustainable Development Strategy for St. Lucia by 2005 as envisaged under the Millennium Development Goals (MDGs).

This consultant felt it necessary to engage the St. Lucian focal point on the value of indicators as key inputs to the information for decision making for sustainable development process, and a rich discourse emerged.

A shift from the widespread use of economic indicators for decision-making in government must be made to the use of sustainable development indicators. This presents a unique opportunity for governments who must now seek to take into account the challenges for identifying suitable indicators for addressing goals for sustainable development adopted by governments through a range of intergovernmental processes. Principal among these are the MDGs and those outputs of the Johannesburg meeting which related to the sustainable development of SIDS. Support for identifying data and information processing needs with respect to developing country specific indicators for each developmental goal remains a major challenge to be addressed under the IDSD project.

It is clear that sustainable development goals are located within the context of long term time frames, which are precisely the opposite to the goals of political decision-makers. It also appears that transforming the thinking of decision-makers at every level within governments and within the other driving sectors of the economies of all the participating IDSD pilot countries, as is the case in most other SIDS, to think and plan long-term has not been realized.

Opportunities must be created to address this crucial issue that continues to have significant negative impacts upon realizing sustainable development objectives in SIDS. It is recommended that an essential next step in the IDSD process, must be a major drive towards publicizing the role of sustainable development indicators in effective decision-making for SD. This is quite apart from the on-going technical and financial support that either should or could continue to be facilitated through the IDSD in collaboration with others to enable countries to,

- (i) Collect data suitable for use within SD indicators programme and

¹⁰ As host of the Resource Persons Meeting in May 2003, the other three pilot countries were given the opportunity to choose IDSD themes, and CZM was selected as the last of four topics by St. Lucia.

- (ii) Process such data into useful and easily understood information for decision makers at both government managerial and political levels.

National capacity issues related to processing and generating information for the purposes of reporting to MEAs are being addressed actively through the GEF funded project on National Capacity Assessment. Concerns have repeatedly been articulated at meetings of the Conference of Parties of the various MEAs and collaboration is ongoing with Convention Secretariats. Opportunities exist for the IDSD project to make inputs for action at the regional level to address this capacity constraining issue that continues to plague under resourced SIDS.

6.3.4. Institutional landscape (status, collaboration, coordination: government, NGOs and CBOs)

The MPDEH remains the principal government Institution with the mandate for facilitating the process in St. Lucia through its Sustainable Development and Environment Unit (SDE). Its high priority goal is to facilitate integration of government's sectoral development activities under the IDP *op cit*.

Prior to the IDSD project, information was shared among professionals within the SDE Unit on its server on which a long list of Favourites has been earmarked for ease of reference and access. SIDSNET was also utilized very heavily prior to the IDSD project for information and especially for tracking proceedings of international sustainable meetings in which SDE staff were participants. The advent of the IDSD website has not changed this scenario as a high level of satisfaction exists about use of these resources.

Involvement of civil society in information management appears to be very limited. The proposed development of the Ministry's website, which is already in progress, will be used as a tool to foster engagement of all national groups in sharing information on environment and development.

An over-reliance on the use of e-mail is evident and part of the problem with regard to poor response rates to the questionnaire and other communications sent via e-mail by this consultant was that the majority of e-mail received is never read by the focal point who admitted to being overwhelmed by sheer volume. Frightening statistics were provided to illustrate this. On the day of the telephone interview the respondent's in-box contained had 627 pieces of mail and after 2 hours of addressing this correspondence, had only managed to reduce this volume to 530 messages. It was recommended that a filter system be programmed into his e-mail programme in order to direct selected mail to folders as this would aid in prioritizing just what were the most important pieces of mail for quick review daily. One solution preferred by the focal point was for use of his home e-mail for important follow-up. It is recommended that periodic refresher programmes on the management of e-mail systems be provided to professionals.

6.3.5. Applicability of St. Lucia's experience to the region

The evolution of St. Lucia's IDP process can be considered a seminal experience in which a regional country has been able to advance its efforts towards practical integration of sectoral institutional arrangements for sustainable development. Its approach towards integrating sectoral planning as a means of fostering a more holistic public sector management framework represents a landmark in the region. It is still too early to see radical transformation of entrenched patterns of institutional operations, so sectors still continue to operate independently, but the St. Lucia experience represents a learning opportunity for other SIDS. Modern methods and tools for

effective information management for decision making on sustainable development appears to be insufficiently incorporated into the IDP process, so a greater level of awareness needs to be promoted within the country. Nevertheless, evolution of the St. Lucian experience on integrated planning for sustainable development remains a regional best practice that is worthy of further analysis and sharing on the IDSD website.

6.4. JAMAICA

In general Jamaica was satisfied that the project fulfilled promises made at the outset of the implementation process and was pleased that it benefited greatly from its selection of the physical planning thematic area of the IDSD and the related support it received for the provision of software and hardware.

6.4.1. *Existing capacities and concerns*

Review of publicly available information, adopted as part of this evaluation process revealed that many of the ideals of the IDSD project were already in place in Jamaica

6.4.1.1. *Existing capacities*

Jamaica has perhaps made the greatest advancements in the region, possibly even among all developing countries, with regard to the use of information technology and information management systems for sustainable development. The website for the National Environment and Planning Agency (NEPA), www.nepa.gov.jm is a decision-makers dream. It is comprehensive in its coverage and can be considered as an efficient and effective portal for data and information to all facets of the national community. The site is interlinked in the most effective manner across a range of national, regional and global institutions. Additionally, access exists to a myriad of NGOs, CBOs and several other civil society structures enabling decision-makers to have knowledge of and the ability to communicate if necessary with a range of publics.

This leading edge information network did not happen by accident but resulted from a continuously evolving creative process initiated in 1992 that benefited from the vision and strong dynamic leadership of the present CEO of NEPA. Encapsulated in the approach was a vision that sustainable development could only be achieved if information was made available as widely as possible to all actors both within government and to all non-government sectors, and that such widespread dissemination was only possible through the development and use of a strong IT platform. Although the website forms the cornerstone of information sharing, its effectiveness is supplemented through wide dissemination of CDs of every project undertaken by NEPA¹¹ and with hard copies if necessary, especially to communities and institutions which might be constrained by lack of ready access to the internet or through limitations of internet download time.

Management of the governance process has therefore been transparent, fostering an ethic of openness by government institutions, which has paid significant dividends in promoting sustainable approaches towards the use of natural, human and financial resources in Jamaica. Not only is the public well informed through projects, programmes and activities of NEPA by both direct means and virtually through its website, but sharing of information has become routine between units of NEPA and between other government institutions and civil society structures, a process that is literally state of the art in Jamaica.

¹¹ CDs are compiled to include all inputs and outputs of projects including copies of the approved source project document.

Jamaica's Information Management Systems for environment and sustainable development is a best practice that can contribute to wider Caribbean/global adoption of IT mechanisms for improving environmental governance, and enabling greater transparency of government operations. Many great stories exist of Jamaican citizens being able to take actions against government decisions because of their empowerment through transparent access to information. It is recommended that next steps of the IDSD process take the Jamaican example of the effective use of IMS for promoting environment and sustainable development as a Best Practice for sharing with other SIDS. It will be necessary to address some process issues prior to sharing /promoting the model as best practice. Principally, this will revolve around documentation of the key elements of this revolutionary public sector management process, through the formulation of a case study.

6.4.1.2. Areas of concern

Constraints imposed upon small states for reporting on MEAs and other global conventions and agreements should be addressed through the use of available advanced information technological and methodological tools. A clear case of modernization is recommended. It has been the experience of Jamaica that many international organizations, including secretariats of conventions have not made best use of available information technology. Efforts to use information adequately and effectively for decision-making within these intergovernmental and donor institutions must be directed there primarily. Under the IDSD project, this issue was identified as a major concern and has engaged the attention of IDSD participants in general. Except for the focal point in St. Lucia, the level of satisfaction with intergovernmental and donor efforts towards addressing this issue remains low.

Solutions to reporting problems must be anchored in the development of digitized record systems for all government technical departments. Integrating existing paper records into digital modes are necessary first steps for many such departments throughout the Caribbean. The IDSD project exposed participants to methods and tools in this regard but much support is necessary for transforming existing operations.

NEPA has had occasionally to refuse donor aid in the past where its staff was aware that their own internal information technology knowledge exceeded that of consultants. Often 1st or 2nd generation information products were offered when Jamaica was already using newer top market products. In a more general sense, international consultants frequently underestimate technical competencies of recipient country professionals¹². This is not only relative to aid linked support but also to commercial providers of information technology and equipment suppliers. NEPA has had the experience of having to teach consultants to move from paper mapping to digital mapping and in 1995, had to assist a group of consultants, unfamiliar with the use of e-mail, to establish e-mail addresses to streamline communications with them.

¹² An interesting anecdote was provided by the CEO, who reported on support from a northern European University to NEPA. Included in the project offerings was arc info software, but NEPA's specifications for advanced GIS software were ignored and the arc info was promoted as being the most appropriate and within the technological capability of staff. The project refused to provide NEPA with the \$4000 budget line so the Department used instead other funds to source appropriate GIS tools and populated the site for themselves with relevant information. The consultant was in great shock when his recommended package arrived and there was no need for that aspect of project inputs as the fully populated system was already up and running. Similar experiences under other projects in which donors were advised that the provision of inappropriate footscap size scanners requiring that maps be folded into quarters, would constrain the effectiveness of service, were ignored. Internal resolve to get the best technology resulted in the sourcing of scanners which could scan whole maps.

NEPA has adopted an approach of obtaining leading edge knowledge and information from relevant public sector operations in developed countries and from among brilliant intellectuals in technologically advanced 'smart cities' of the north. For example, ideas for upgrading services on physical planning processes in Jamaica benefited from both formal and informal bi-lateral collaboration with Her Majesty's Planning Office in London.

NEPA underscored the point that much of its IT advancement would not have happened without the support of donors and indeed its experiences with UNEP RCU¹³ and with CIDA¹⁴ have been outstanding.

The project approach to IT development rather than a programmatic approach might well be responsible for the many constraints experienced by intended beneficiary countries. Fruitless attempts to harmonize the range of ad-hoc methods, tools and technology received under various projects are legion around the region. Software provided under one project which may or may not work with hardware provided under another or worst yet, within the same project; or hardware which might become obsolete before the end of the life of the project. It is recommended that the IDSD project assist Caribbean countries on a regional basis in drafting guidelines and policies on the acquisition of information technology. This can be expected to strengthen countries' capacity for avoiding past disasters and will go a long way towards alleviating most of the problems highlighted in this report.

6.4.2. Areas of need for further intervention and support

Notwithstanding the high level of experience with IT for sustainable development in Jamaica, the NEPA team were exceedingly pleased with the outputs of the IDSD project and felt that there has been significant valued added to the baseline of activities in that country. Of note were the opportunities provided for exchanging experiences on its Indicators for Sustainable Development programme with contacts in Barbados and St. Lucia. An *Issues Paper on Indicators for Sustainable Development* has already been prepared by the Sustainable Development Unit (SDU) of the Planning Institute of Jamaica (PIOJ) which has responsibility for sustainable development in the country. NEPA and the PIOJ have already embraced the potential which exists under the IDSD project for opportunities for further advancement on its indicators programme and have expectations for these to be fulfilled through collaboration with counterparts in the Caribbean, fostered under the IDSD project.

170 indicators have been signaled by a range of development sectors as being important for Jamaica. However, information managers recognize the unmanageability of this long list and have begun the process of interagency collaboration to pare down this list to the more manageable 60 as recommended by the UN Commission on Sustainable Development (CSD). Initial objectives are to reduce the list to address indicators for which data is already being collected. Thus, adoption of the use of indicators, which are based upon data that are routinely collected by several agencies, will serve to provide information that will serve to influence changes in behaviour, in the targets groups of relevant agencies, from decision-makers to users of services.

The Jamaican participants also cited one major benefit under the IDSD project as being the provision of additional GIS tools for use in management of its physical planning application and approval procedures. Physical planning had been the thematic area selected by Jamaica for

¹³ Regional Coordinating Unit

¹⁴ Canadian International Development Agency

implementation under the IDSD project, and inputs have provided significant valued added to operations of NEPA in addressing its mandate for physical planning. Improved systems for tracking development approvals were facilitated by the software provided. Further needs were identified for;

- ✓ The provision of technology to provide greater public access to information on progress of their applications.
- ✓ The provision of software to assist in processing the wealth of data generated in its application process, for further integration into GIS and streamlining licensing and permit procedures.

Expected outcomes would be the facility of applicants for planning permission to track progress in approvals and for enforcement personnel to track violations of approved plans.

6.4.3. Institutional landscape (status, collaboration, coordination: government, NGOs and CBOs)

NEPA's 200 staff complement, one-third of whom are in the technical and professional cadre, all have varying degrees of familiarity with GIS. This capacity was built largely in-house to enable all NEPA staff to become frontline information disseminators. Data management and information processing are managed through a professionally led and staffed, IT department within NEPA and this has been the 'engine room' of innovation under the visionary guidance of the CEO. Prior to the development of the strong IT platform within NEPA, all EIA information was scanned but was not available to the public.

In keeping with government's strategy for modernization of the public sector through the provision of computers to facilitate electronic communications, NEPA adopted the vision 10 years ago that development of a website would be its key strategy not only for integrating the work of its departments, but also for use as a public interface for information dissemination. Recognizing that it did not have adequate resources to acquire the services of a consultant, NEPA took an approach that "we will do as much as we can do ourselves" and set about building its internal capacity for website development and management using any means that became available, through workshops, seeking free assistance etc. Hands on processes afforded all staff to develop an IT savvy that is uncommon within most public sector institutions across the region and internationally. NEPA's capacity built as a result of these internal processes, both on the technical side of information management and on the content management side, has meant that every unit manages its own information and do not have to always depend upon the services of its dedicated IT Unit.

All EIAs are now publicly available on NEPA's site, and feedback is routine, especially from overseas Jamaicans who have adopted the culture of developed countries in which they reside, to publicly comment on EIAs. Electronic methods do not replace public consultations but supplement this essential public process.

Jamaica has also been a beneficiary of UNDP support for information sharing through its SDNP¹⁵ programme in the early nineties. At the time of its establishment, the SDNP was intended to provide broad based public access to the Internet and achieved that objective, prior to Jamaica's up tooling in the late nineties. Its impact has been supplemented by Government provision of Internet access in schools, libraries, agricultural and other rural based societies and groups.

¹⁵ Sustainable Development Networking Programme

Additionally, UNDP's SIDSNET is utilized heavily and is readily accessed through the NEPA and IDSD sites.

The Jamaican Government remains committed to the use of the Internet as an essential means of disseminating information quickly and cheaply. Journalists have begun to rely on the use of the NEPA site, and to utilize e-mail frequently to access additional information to facilitate their work. An interesting example was provided of how access to information influenced official decision-making on a proposed housing project in Hope Gardens recently. When plans were disclosed by the Ministry of Housing that it proposed to build houses on lands which appeared to be part of the historic, century old Botanic Gardens, there was a major public outcry from concerned citizens and groups against the proposal. Swarms of e-mail were received seeking further information on the issue and NEPA's response was merely to place the location of the proposed development on a GIS map of the area. This factual information showed that the proposed project was indeed located within the boundaries of the Gardens, and the end result was that the Minister demitted Cabinet! The intervention of NEPA in any other manner was unnecessary as transparent use of its information tools under its mandate is a routine practice.

The NGO community makes heavy use of all resources available on electronic sites throughout Jamaica and NEPA as an information portal, serves this need almost as a "one stop shop". The Documentation Centre of NEPA has a small staff which supplements the use of the website, with copies of CDs and hard copies of e-mail and other information as necessary.

Draft policy documents are posted on the site immediately upon completion of the drafting process, as readily downloadable files, with requests for feedback. Responses are usually prompt from large sections of the national community at both institutional and personal levels.

A remarkable milestone has been achieved by Jamaica in its quest to promote transparency in information dissemination for effective environmental management within the context of sustainable development. It produced a CD with 10 years of publications and other documentation on environment and development that have been produced by Jamaica since the Rio Conference in 1992, covering the period 1992–2002. This CD had been distributed free of charge to NGOs and other government departments. This is another example of a best practice that can be of significant benefit for SIDS and other developing countries and it is recommended that the IDSD project promotes this practice in the next steps of its programme. The practice of creating CDs as an *end of project product* for all NEPA projects has already been cited and its influence and impact on enhancing environmental /sustainable development education and awareness in Jamaica can be phenomenal.

The consultant found that appropriate tools for evaluating the various mechanisms of information dissemination and their impacts upon decision-making at all levels have not been built into IMS processes in Jamaica, as indeed in many other countries. It is uncertain how routine internal advice and formal recommendations, as well as public comments fed to decision-makers, are utilized within higher-level decision-making processes of public institutions and within the political process. Face to face feed-back from superiors appears to predominate, as are traditional cabinet decisions, which drive governance processes. *Cabinet notes are fantastic compendia of information and it is posited in this report that periodic five year reviews of this important category of documentation can serve to provide very interesting and useful retrospective analyses on the outcomes and impacts of the use of information which had been fed into political decision making processes within countries.* It is recommended that the IDSD project takes up this challenge of learning from the rich sources of cabinet led decision-making in selected SIDS by using retrospective analyses of how information in-puts influenced those decisions.

Use of appropriate feedback mechanisms to determine the effectiveness of end use of information continues to remain a challenge. Despite this, it is necessary for Caribbean countries to initiate the process in order for them to adopt the best approaches for use of scarce use of human and technological resources for information management. The Jamaica model is the best example in the region of maximized use of IT for decision-making. It is therefore recommended that the IDSD project uses Jamaica as a case study for beginning the process of designing and building monitoring and evaluation systems to assess the use and value of information in decision-making.

6.5. BELIZE

Support was provided to Belize through the Ministry of Natural Resources, Environment and Industry (MNREI), which is comprised of the Central Administration and the following six Departments;

[Ministry of Natural Resources \(Central Administration\)](#)
[Ministry of Commerce and Industry](#)
[Lands and Survey Department](#)
[Geology and Petroleum Department](#)
[Forest Department](#)
[Department of the Environment](#)
[Bureau of Standards](#)

6.5.1. *Existing capacities and concerns*

Past technical support for enhancing the capacity of government institutions in Belize for managing its data processing and information systems tended to be in the area of managing Government statistics with beneficiary institutions being the Central Statistical Office of the Ministry of Finance. Respondents were not aware of technical assistance for IMS within natural resource agencies and felt that the IDSD project was the first of its kind to do so in Belize.

Thus, the value-added of the IDSD project outputs were considered to be significant. Specifically access to methods and tools on information, and to information on sustainable development via the IDSD website are invaluable. It was felt that links on the site afforded easy access to project reports and facilitated acquisition of a wide range of environment and sustainable development information. Despite such knowledge, it is apparent that irregular use is made of resources on the IDSD website (Annex 1).

The training workshop on Climate Change and Disaster Management provided through the project on 6 February was well received and active participation by some of the larger NGOs, which have information management capacities, is expected to raise the level of their effectiveness. NGOs in general are not yet aware of the IDSD website and it is the intention of the Ministry of Natural Resources, Environment and Industry to correct this situation through public awareness programmes.

Technical equipment received under the IDSD project was considered the most beneficial of the products of this project as it met outstanding needs within the Physical Planning Section and Lands Department. Three computers, a hand held GIS plotter and related GIS based software are all intended to enhance the capacity and efficiency of the Land Information System of the Physical Planning Section.

Belize is proud of progress it has been making through its internationally well respected *Protected Area Conservation Trust*, a fund established to support the work of CBOs, some NGOs and a few government departments for implementation of conservation activities in protected areas. Funding for this activity is through a legislated taxation mechanism for collecting an environmental tax on tourist arrivals. Management of the Trust is effected through a Board which oversees the provision of project support up to a maximum of Bz.\$35,000 (US\$ 2:1) per project. *Because of the many requests it receives for information on the work of this Trust, the MNREI seeks to find a mechanism of sharing its experience and explored opportunities for proposing this case as a Best Practice for sharing across SIDS and other developing countries. It is recommended that this initiative be examined and written up as a case study, perhaps by a national or regional academic or research institution, and promoted electronically through an enhanced MNRE website with appropriate links through websites such as the IDSD and SIDSNET sites.*

Processes used to access information and to communicate with colleagues are predominantly via the e-mail route and because of the fluctuating volumes of e-mail, can become very onerous at times. All requests to the MNREI for information are received by the Communications Officer whose task is to direct such requests to relevant persons within the Ministry. Responding using traditional means consumes significant staff time.

It was apparent that use of information technology has not been the means of choice by the MNREI for responding to the information needs of the public and governmental partners. Use of its own website is very limited as are the use of the Internet in general. Respondents to this evaluation process admitted their own limitations on knowledge of the full value and potential of IDSD website as it was not used regularly. Indeed, for purposes of answering the evaluation questionnaire, project participants were compelled to revisit the site regularly. Also, the CCA-managed E-Group established to facilitate communications between project participants, is not used.

Exposure of Belizean participants to the IDSD process therefore did not have a lasting impact on changing behaviours or changing working modalities with respect to the use of information technology for data management, information processing and sharing.

6.5.2. Areas of need for further intervention and support

High priority has been attached to the need for establishment of a sustainable development council or commission and a proposal has been developed to this end. Assistance will be necessary to examine suitable structures that will formalize mechanisms for integration, planning and information sharing between Belizean governmental and non-state institutions. Many models exist and recommendations were made to source information using the IDSD site and SIDSNET which both provide useful links to best practices on countries' efforts to meet this important goal of Rio and Johannesburg. Next steps under the IDSD project could be assistance to Belize in fostering active networking between countries in the Caribbean and Latin America which have made great advancements in establishing formal structures for sustainable development collaboration.

Establishment of a national sustainable development indicators programme was also identified as a high priority goal of the government. Interest was strengthened following Belize's active participation in the January 2004 Sustainable Development Indicators Workshop held in St. Lucia. CEOs of MNREI Units have already held meetings with colleagues in other ministries and

there is general buy-in for the process in Belize. To date no assistance has been sourced for this purpose outside of the country, and any guidance will be welcomed. *The work of Barbados in advancing its sustainable development indicators programme is viewed as a best practice in the region and, among SIDS globally, the role of SPREP has also been flagged as another best practice for sustainable development indicators.*

Hardware and software needs are always ongoing especially after exposure under the IDSD training elements where participants were made aware of a significant range of tools and methods for IMS. Acquisition of additional plotters and related software were identified as priorities for the government.

Additional training is proposed and anticipated under any further phase of the IDSD project. It was felt that the one day training session on climate change and disaster management held on 6 Feb 2004 was inadequate. Perhaps one and a half days would have been more effective. Additionally, topics should be expanded to include training on sustainable tourism and land use practices.

Improved content management of the Ministry's Website is seen as a crucial need. The site has been established but updating of information is not as active as expected. Constraints are imposed by the limited human resource capacity available for this purpose in the Ministry's Public Education and Communications Unit which comprises one Communications Officer. The unacceptably intense workload of this officer whose responsibilities include media communications, speech writing and website management has led to a recommendation for an additional staff member in this department whose focus will be upon website management, leaving the other traditional communications role of the Ministry to the incumbent. This position is still only a proposal and has not yet been budgeted. *Training of the new staff member in website content management will be necessary and recommendations for a cost effective approach to this would be an attachment to one of the leading IT departments, either in-country, or elsewhere in the Caribbean.*

A Clearing House Mechanism under the National Biodiversity Project is expected to be established within one year and it will be monitored keenly to determine its applicability for other sectors or for providing information inputs for meeting the country's sustainable development objectives. It was considered to be too early to assess specific needs for this level of data processing, information management and information sharing required within Belize. Satisfaction with the existing process of bilateral cross sharing of data and information between Ministries and agencies, both formally and on an ad hoc basis, has proven beneficial and effective in a small government administration, and provided recipients with great results. *The greater efficiencies that can be achieved from the use of more cost effective information tools and technology must be promoted in Belize as the approach taken that because of smallness, there is no need to up tool, can continue to constrain data and information inputs for effective decision making on sustainable development.*

Additionally, interagency sharing of information within government does not necessarily engage collaboration and participation of non-government actors within this existing framework of governance. Good governance practices must be anchored in processes of transparent information gathering and dissemination in which all sectors of the national community must participate. Although there is a Freedom of Information Act, as in many other countries, it could not be ascertained how much this was used, should any member of the non-state sector wish to access information that was only shared inter and intra ministerially.

The value of electronic networking for engaging active public participation in sustainable management of natural resources and other national assets needs to be highlighted in Belize perhaps through a next phase of the IDSD project on a bilateral basis with countries such as Jamaica or Costa Rica.

6.5.3. Institutional landscape¹⁶ (status, collaboration, coordination: government, NGOs and CBOs)

The Policy Unit of the MNREI is central to the work of the Ministry in its support of both administrative and technical arms of the institution. An internal network server links all departments so intra-ministerial information is readily available to all staff.

In addition to such electronic means, face-to-face contacts are maintained within what is considered to be a small close-knit organization. Information is shared directly in regular monthly meetings between the CEO of the Policy Unit and senior staff of the Ministry.

The information gathering role of the Policy Unit leads to filtered and analyzed information being provided for the benefit of decision-making by the CEO.

Inter ministerial information sharing and exchanges are also considered effective via the ‘people net’ since the Belizean government is relatively small and all ministries interact on a regular basis. The system of Cabinet meetings every Tuesday and Cabinet De-briefings for CEOs every Wednesday is considered to be an effective form of sharing the end results of inputs of information to the decision-making process. As in all countries, Cabinet decision-making is a political process which may or may not reflect inputs from all factions of a country. Thus, as recommended elsewhere in this report, [Belize can also benefit from a retrospective analysis of Cabinet decisions to determine whether information inputs to this process led to greater sustainable approaches to decision-making.](#)

6.5.3.1. Collaboration with Civil Society Institutions

Involvement of NGOs, CBOs and private sector interests ranges from a mix of active participation within certain fora, to reactionary responses to public sector decisions or activities. In general when included as members of councils/ task forces/ boards or committees, there is active engagement. In this manner a good working relationship has been fostered with larger more organized environmental NGOs such as the Belize Audubon Society, Programme for Belize and Wild Tracks all of which have representation in the National Biodiversity project and its related Clearing House Mechanism. It is reported that these groups find ways of getting their agendas onto the table and although NGOs are often times reactionary, some have adopted progressive approaches to collaborating with government on environmental management.

¹⁶ Excerpts from website www.mnrei.gov.bz The Department of Environment (DOE) of the MNREI has as its major functions as described by the Environmental Protection Act:

- (1) To advise government on the formulation of policies relating to good management of natural resources and the environment;
- (2) To foster, through Inter-Ministerial Cooperation, the prudent use and proper management of the natural resources of Belize, the control of pollution and re-establishment of an ecological equilibrium;
- (3) To provide decision-makers with the necessary information and direction so as to achieve long-term sustainable development;
- (4) To provide information and education to the public regarding the importance of protection and improvement of the environment;

Experience with trades unions and similar groups have been through their formal participation as members of government convened councils/ task forces/ boards such as the Human Development Advisory Council and the Economic Council. Support for the work of these *fora* imposes a measure of strain on the limited human resource capacity of government, and in response to specific questions on information management to facilitate such processes, it was revealed that no electronic means of shared access to data and information exists. Traditional modes are utilized, distributing hard copies of minutes, responding directly to requests for information and using other bi-lateral means for information exchanges between government departments and forum memberships.

Creating awareness and knowledge of the power, cost effectiveness and value of electronic networking in support of the work within these several *fora* must be of top priority to assist Belize in transforming from such time consuming and inefficient means of making information available and engaging in IT facilitated two-way flows of communication with its civil society partners.

In response to specific questions on transparency of information management and whether a Freedom of Information Act was utilized by the public, the consultant was informed of the role of the new Ministry of National Development which incorporated a good governance focus and which has responsibility for operations of the FIA.

7. Review of Evaluations by Participants of the October 2003 IDSD Training Workshop in Trinidad and Tobago

The consultant was guided by e-mail communications from the Project Manager for the IDSD Project, Leisa Perch that an evaluation of this Workshop was no longer necessary as originally conceived since this was subsequently undertaken by OAS staff. Following an overview of the original questionnaire forms completed by participants, and of the summary of comments prepared by OAS Staff, it was agreed that this summary is adequate for inclusion in the final report of the project and no further action was required.

8. Facilitation of the Finalization of Other Project Outputs

- 1) Outstanding deliverables under the project relate to the delivery of additional training modules under the Project themes, specifically for St Lucia under its Coastal Zone Management Theme. However, as mentioned previously under the country analysis section, St. Lucia would rather utilise the training budget line for additional hardware and software since the quantum was considered inadequate for training.
- 2) Completion of the procurement process for hardware and software acquisitions was expected within the near future by all countries.
- 3) Top priority was assigned to initiation of recommendations for the establishment of the Pilot Network.
- 4) The E-Group managed by CCA has not been as effective as anticipated since it is e-mail based and overload using this means of communication has been cited as a major constraining factor by respondents. Thus, establishment of a more effective Forum for exchanges of experiences between persons trained in IMS is still seen as high priority.

- 5) Expansion of the value of the IDSD website through increasing links to UN sites and populating it with more region-specific information is necessary.
- 6) Increased access to Best Practices of relevance to the region need to be developed through appropriate links on the IDSD website.
- 7) Mechanisms for monitoring and evaluating information flows into decision-making processes and outflows from decision-makers are yet to be addressed under the project.
- 8) Additional support was requested to address more effectively reporting constraints to MEAs and other global agreements, experienced by SIDS on an ongoing basis.

9. Recommendations For Further Activities

9.1. *Areas requiring more work and investment for sustainable capacity building*

Recommendations for action have been provided throughout the text and are not summarized here. However, because of the importance of a major information gap facing the region, which needs to be addressed as part of a *programmatic framework rather than through discrete projects*, only one recommendation is offered as a major next step as determined through this evaluation process.

Overwhelmingly, the role of indicators in decision making for sustainable development was seen as the major area of information management requiring further support in the Caribbean (see Country analysis sections of the report).

Despite substantial support from UNDESA and UNSD for building capacity in some Caribbean countries, much more support for national indicators programmes has been identified as a priority for countries. It is recommended that a programmatic approach be undertaken to ensure that incremental progress is made in transforming approaches to data collecting and processing and in converting such processed data to information that can be utilized effectively within an indicators programme.

Respondents were all cognizant of the need for building national capacity for undertaking the careful process of selecting those indicators for which data is either already being collected or for which data can be or needs to be collected.

It is therefore recommended that priority attention be given under any new phase of an IDSD programme to;

- ✓ Providing opportunities for south-south technical assistance for scoping needs for national sustainable development programmes - matching countries with advanced progress in developing and implementing national sustainable development indicator programmes with those seeking assistance. The outstanding value of such bilateral collaboration at the country level is that practical insights, constraints, pitfalls can be flagged in the early stages for the guidance of the beneficiary country.
- ✓ Making technical support available for paring down lengthy lists of indicators to relevant and manageable levels. Too often, countries preference for quantity and comprehensiveness under indicators programmes are counterproductive as data collection

and information processing for large numbers of indicators cannot be implemented cost-effectively.

- ✓ Assisting countries with implementing the process of linking indicator selection to country specific sustainable development goals that have been identified within the framework of the Millennium Development Goals
- ✓ Building capacity for prioritizing indicators to be addresses on an incremental basis.

All efforts should be made to ensure that all of the above elements are incorporated into a programme rather than as one off projects.

10. Recommendations For Training Materials To Be Placed on The IDSD Website

It was not possible to assess effectively specific additional training needs for placement on the website. Existing resources and access to others via the IDSD website were considered to have been adequate for all participating countries. Participants have not exhausted the use of training materials made available under the project. However, it was recommended, in response to specific questions on the subject, that great benefits would be realized if urgent action is taken to increase the numbers of links to a range of other websites with tools and methodologies for IMS.

11. Overall Conclusion

The IDSD project contributed significantly to raising awareness of the need for improving information management systems in the Caribbean countries which participated in the pilot programme. The establishment of a website which houses most of the resources produced during the project development process has also added significant value through providing access to tools, methodologies and other training materials that are important reference sources for use by participants and other collaborators.

The project built upon pre-existing experiences and addressed needs for equipment and training in each of the pilot countries.

With some exceptions, which were mentioned within the report, participants received deliverables promised at the outset of the project implementation process. A new baseline has been established under this project which demonstrates a positive impact upon the process of information management for the region. Clear mechanisms for monitoring how information is fed into national decision-making machineries, and for determining how much of that information is actually utilized in making decisions have not been articulated in the project and a special focus is necessary to examine this aspect of information for decision making for sustainable development.

ANNEX 1- SUMMARY OF QUESTIONNAIRE RESPONSES

Question Number	Responses			
	Barbados	St . Lucia	Belize www.mnrei.gov.bz	Jamaica www.nepa.gov.jm

1. Overall Project Objectives				
1a Have overall project objectives been achieved? _____ (Scale of 1-10) ¹⁷	7	4	6	6
1b Has the project stimulated development of an operational network of information management institutions at the <u>national</u> level? Yes ____/ No ____/ Don't know	No	yes	No	No
1c If yes, kindly provide the name / website URL of the network and name/contact information of its principal facilitator/s		In progress www.planning.gov.lc		
1d Has an operational network of information management institutions been established at the <u>regional</u> level? Yes ____/ No ____/ Don't know	Yes	Don't know	Don't know	Don't know
1e If yes, kindly provide the name / website URL of the network and name/contact information of its principal facilitator/s	CCA E-Group	-		
1f Name the local level institutions (NGOs, CBOs, SIGs) involved in the pilot network of information management institutions within the country and name their principal collaborators	Bdos Nat Trust; Regional; CCA	Work in progress		
1g Are you aware of who the information managers trained under this project are? Yes ____/ No ____/ Unaware of training programme	Yes	yes	Yes	Yes
1h If yes, are personnel trained under the project capable of training information managers <u>nationally</u> ? _____ (Scale of 1-5)	4	2	3	4

¹⁷ On scales of 1-5 and 1-10 throughout this document the higher number refers to the most positive/favourable assessment and 1 refers to the least. Respondents are free to use minus 1 if absolutely convinced that the action/output is well below par and deserves to be highlighted in this manner.

1i Are personnel trained under the project capable of training information managers <u>regionally</u> ? (Scale of 1-5)	4	1	2	4
1j Are training materials on Information Management Systems (IMS) adequate? _____ (Scale of 1-10)	8	1	7	6
1k Comment on the degree of accessibility of training materials on IMS for use by trainers; Select ONE: Easy? _____ Moderately difficult? _____ Very Difficult? _____ Inaccessible? _____ Unavailable? _____	Easy	Very difficult	Moderately difficult	Moderately difficult
1l Are electronic linkages to regional information networks Adequate? _____ Limited? _____ Inadequate? _____ (Select ONE) Expand on what is missing and what needs to be prioritized. Missing links (with URLs where possible)	Adequate; - -	Adequate; - -	Adequate; - -	Inadequate – database must be developed to find resource links using keywords (for issues, geographical references)
1m Are electronic linkages to United Nations System sites and information networks adequate? _____ Limited? _____ Inadequate? _____ (Select ONE) Expand on what is missing and what needs to be prioritized. Missing links (with URLs where possible)	Adequate; - -	adequate	Adequate; - -	Limited
1n Has a forum for the exchanges of experiences between regional and national IMS managers been developed? Yes ____ / No ____ / Don't know	Yes	Don't know	Don't know	No
1o If yes, is it being utilized, Select ONE: sufficiently? _____, moderately? _____, rarely? _____, not at all? _____ / Don't know	Moderately	-		
1p What institutional groups constitute the <u>main</u> participants of the forum; government? _____ Multilateral? _____ NGO? _____ CBO? _____ SIG? _____ (weight EACH on a scale of 1-10)	Multilateral no weighting	Government 4		
1q Have national decision-makers begun to source and utilize information from institutions	5	3	5	6

and resource persons more frequently? _____ (scale of 1-10)				
1r Are you satisfied with the level of feed-back by decision-makers on the value of information provided? ____ (scale of 1-10) or made accessible? ____ (scale of 1-10)	5; 5	1;1		5; 5
1a (s/b 1s) Have your expectations been satisfied with the level of training ____ tools ____ and technological upgrades ____ for information management for your country provided under this project? ____ (scale of 1-10)	5;5;8	3;2;2	7; 10; 10; 9	6; 6; 7
2. Overall Project Activities				
2a Have <u>regional</u> needs for information management systems for sustainable development been identified adequately? ____ (scale of 1-10) or Don't know	8	2	Don't know	5
2b Have <u>national</u> needs for information management systems for sustainable development been identified adequately? ____ (scale of 1-10) or Don't know	5	2	6	5
2c Was the core curriculum for training of trainers suitable for developing IMS at the <u>national</u> level? ____ (scale of 1-10) or Don't know	7	3	7	5
2d Was the core curriculum for training of trainers suitable for developing IMS at the <u>regional</u> level? ____ (scale of 1-10) or Don't know	7	2	Don't know	5
2e Are training materials adequate? ____ (scale of 1-10) or Don't know	8	2	7	6
2f Are training materials effective? ____ (scale of 1-10) or Don't know	5	2	7	6
2g Are training materials user friendly? ____ (scale of 1-10) or Don't know	8	2	7	7
2h Are training materials available to others as a means of addressing the train the trainers goal of the project? ____ (scale of 1-10) or Don't	8	1	7	6

know _____				
2i Have training and training materials led to the development of IMS <u>in- country</u> ? _____ (scale of 1-10) or Don't know _____	Don't know	2	3	5
2j Have training and training materials led to the development of IMS <u>regionally</u> ? _____ (scale of 1-10) or Don't know _____	Don't know	Don't know	Don't know	5
2k Is the draft Final Report on Implementation Accessible? Yes / No _____	Not sure	no		Yes
2l On a scale of 1-10, is the draft Final Report on Implementation accurate? _____; Useful? _____; Adequate? _____; Readily understandable by the un-initiated? _____				7; 7; 7 -
2m Is the IDSD website meeting national needs adequately? Yes ___ / No ___ Moderately? Yes ___ / No ___ Not at all? Yes ___ / No ___;	Adequately; yes	Moderately -Yes	Not at all	Moderately -Yes
2n Have information sharing and exchanges between <u>national</u> institutions improved? (scale of 1-10)	5	3	3	6
2o Have information sharing and exchanges between <u>Caribbean</u> institutions improved? (scale of 1-10)	5	2	(Self marker used) DK -Don't know	6
2s (s/b 2p) Have adequate monitoring and feedback mechanisms been developed to monitor the use of data and processed information by institutional managers and national decision-makers? _____ (scale of 1-10)	5	1	3	3
3. Facilitation of information management for effective national decision-making				
3a Has the capacity of collaborating institutions in your country been enhanced for the handling and management of data? _____ (Scale of 1-10)	10	3	7	8
3b Has the capacity for transforming data and information suitable for decision-making improved? _____ (scale of 1-10)	9	3		7
3c How satisfied are you with the level of involvement of civil society institutions; NGOs,	9	0	4	7

CBOs, SIGs in the processes of information management for decision-making in your country? ____ (scale of 1-10)				
3d What is your level of satisfaction with the training and access to available tools and methodologies provided for the creation of integrated data management systems ____ (Scale of 1-10)	8	2	6	5
3e Has the IDSD project facilitated your country to create mechanisms for long-term management of sustainable development and environmental information. ____; (scale of 1-5) or Don't know	3	3	1	4
3f Has the IDSD project assisted /facilitated your country to define ways of harnessing sustainable development and environmental information for decision-making purposes? ____; (scale of 1-5) or Don't know	3	3	1	4
3g Are you familiar with the findings /recommendations of the training needs report? Yes ____/ No ____ Unaware of its existence	Yes	no	Yes	Yes
3h If yes, what level of priority should governments give to investing resources to address training needs identified? ____ (scale of 1-10)	9	(2)	6	8
3i Will such investment lead to transforming current modes of decision-making in your country? ____ (scale of 1-10)	9	(2)	4	8
<i>3.1. Assessment of the IDSD Website</i>				
3.1.1 Content: scope/coverage, relevance and linkages				
3.1.1a Has the site exposed you to new information from sources relevant to your area of work? ____ (scale 1-10)	10	4	3	7
3.1.1b How useful for your work are the outputs of the IDSD project which are housed on the site?	10	4	6	8

(scale 1-10)				
3.1.1c Rate the usefulness of each of the following site resources on a scale of 1-10; <i>Presentations from Resource Persons Meeting</i> ; <i>Report on Information Needs</i> ; <i>Report on Pilot networks</i> ; <i>Report on Training Workshop</i> ; <i>Databases</i> ; <i>Institutions</i> ; <i>Methodologies</i> ; <i>Themes</i> ; <i>Project Background</i> ; <i>Related Activities</i>	8; 8; 8; 8; 9; 9; 8; 9; 9; 9	6; 3; 2; 5; -; -; 4; 4; -	6; 7; 4; 7; 8; 7; 8; 8; 7; 7	8; 9; 9; 8; 7; 8; 7; 7; 8; 8
3.1.1d What is missing? Specify				More country specific content, content must be deepened, enriched
3.1.2. Content management				
3.1.2a Is updating of the site sufficiently regular? infrequent? inadequate?	Regular	regular	Infrequent	Infrequent
3.1.2b Are you satisfied that the information provided is sufficiently up to date for the purposes of providing information to decision-makers? (scale 1-10)	9	3	6	7
3.1.3. User satisfaction				
3.1.3a Are you comfortable using the site? (scale 1-5)	5	3	5	4
3.1.3b Are you plagued by error messages? Yes / No	No	yes	No	No
3.1.3c Are PDF files downloaded easily? (scale 1-5)	4	4	4	4
3.1.3d Do the links to other sites work? (scale 1-5)	4	4	4	4
3.1.3e Are you satisfied with the level of user feedback and monitoring mechanisms built into the site? (scale 1-10)	9	1		7
3.1.3f How important is the need for mechanisms to monitor responsiveness to user enquiries for information? (scale 1-10)	9	5		9
3.1.3g Are responses to online enquires prompt? Slow? None?	Prompt	N/a		Did not try

3.1.3h Have you ever been directed to suitable linkages when the site does not address your queries? Yes ____ / No ____	No		(Self Marker) - Haven't used online requests	No
3.1.4. Effectiveness as a portal for methodologies and tools on information management for sustainable development				
3.1.4a Has information obtained from the site changed the way <u>you</u> work on a day to day basis? Yes ____ / No ____	No	no	No	No (mainly because NEPA was already applying this)
3.1.4b If yes, what has been the degree of this change? ____ (scale of 1-10)				
3.1.4c Are you aware whether information on the site has changed the way <u>institutions/ individuals</u> with which you collaborate work? Yes ____ / No ____	Yes	no	No	
3.1.4d If yes, what has been the degree of this change? ____ (scale of 1-10)	5			
3.1.4e Have the enhanced access to training tools and information made an in-put to streamlining data and information for decision-making in your organization? ____ (scale of 1-10)	5	2	3	8
3.1.4f And in other organizations with which you collaborate? ____ (scale of 1-10) do not know ____	8	1	Do not know	8
4. Facilitation of reporting obligations to MEAs and Donor Organizations				
4a Was the training provided to personnel for identifying effective approaches to MEA mandatory reporting processes satisfactory? ____ (scale of 1-10)	7	1	(Self Marker) Don't know of training	3
4b Has such training led to the adoption of more sustainable approaches to the challenges of annual reporting in different formats of MEAs and donors? ____ (scale of 1-5) or Don't know ____	2	1	Don't know	4
4c Have any opportunities been missed during project implementation to address the challenge of streamlining/ harmonizing data and information inputs to the varying reporting formats of MEAs and donors? Yes ____ / No ____	Yes	Yes	Not sure	Yes

Not sure				
4d If yes, have MEAs and donors been sufficiently involved in the process of correcting a process which constrains the limited human and institutional resources of SIDS? _____ (scale of 1-10)	5	9		3
4.1. Building on pre-project capacities/experiences in the region.				
4.1a Has the IDSD project added value to the work of the UNSD/CARICOM project on 'compilation and dissemination of statistics and indicators for conference follow-up? Yes ____/ No ____ Not sure	Not sure	Yes	Not sure	Yes
4.1b Has the IDSD project added value to UNEP's work in the field of environmental information management? Yes ____/ No ____ Not sure	Not sure	Yes	Not sure	Yes
4.1c Has the IDSD project improved access to the range and volume of pre-existing materials on IMS in the region? (scale of 1-5) _____ or Don't know	3	3	3	4
5. Assessment of Project Implementation Methodology (PIM)				
5.1 Baseline assessment of pre-existing activities and capacities				
5.1a Have you read the assessment report on pre-project initiatives on the IDSD website? Yes ____; No ____; Unaware of its existence	Yes	Unaware of its existence	Unaware of its existence	Unaware of its existence
5.1b Is the assessment report on pre-existing activities in IMS and IDSD comprehensive? ____; limited? ____; accurate? ____; useful? ____ (scale of 1-5 for each)	3; -; 4; 4			Limited (no scale given)
5.1c Has the IDSD project implementation process enhanced your capacity to utilize pre-project resources more effectively? Yes ____; No ____;	Yes	yes	Yes	
5.1d What information resources are you now aware of that can contribute more efficiently to decision-making in your country because of the	Comprehensive listing of resource sites especially	GEO-SEIAN project by the Univ. of Costa Rica	www.oas.org/publications www.cpacc.org	

IDSD project? Provide names (and URLs where possible)	regional sites are very useful		www.uvic.ca/scenarios	
5.2. Assessment of choices of best practices and tools for IMS and Reporting on SD				
5.2a Have you reviewed the collation of best practices and tools for assisting pilot countries in managing information for and reporting on sustainable development? Yes ____; No ____; Unaware of its existence ____	No	Unaware of its existence	Yes	Unaware of its existence
5.2b Is this collation of best practices and tools comprehensive? ____; limited? ____; accurate? ____; useful? ____; useless? ____ (scale of 1-5 for each)			Limited	
5.2c Is access by information managers to information on these best practices and tools adequate for all stakeholders? ____ or limited to selected government or other official stakeholders? ____ (scale of 1-5) or Don't know		Don't know	3, Limited to selected gov't or other official stakeholders	
5.2d Was the collation of best practices and tools sufficiently collaborative? ____ (scale of 1-5) or Don't know		Don't know	Don't know	
5.2e Are you aware of relevant practices and tools that may have been omitted or missed? Yes ____; No ____;		no		
5.2f If yes, provide details or links to missing but useful practices/ experiences / tools for managing information and for reporting on sustainable development.				
5.3 Establishment of the Pilot Network				
5.3a Have you read the proposal for the establishment of the pilot network for decision-making for sustainable development? Yes ____ / No ____ Do not know of its existence ____	Yes	Yes	Yes	Yes
5.3b If yes, are you aware of the level of progress made on implementation of key	No	No	No	No

recommendations? Yes _____ / No _____ Do not know				
5.3c Has the level of training on tools and methodologies been adequate for operation of the pilot network? _____ (scale 1-10)	7	3		7
5.3d Will the full operationalization of its recommendations satisfy needs for building capacity for efficient information supply into the decision-making processes of your country? _____ (scale 1-10)	5	2	4	6
<i>5.4. Process of website development.</i>				
5.4a Are you aware whether the process of development of the IDSD website was used as a training opportunity for pilot country personnel? Yes / No Do not know	Yes	No	Don't know	Yes
5.4b If yes, have institutions with which you collaborate been stimulated to develop websites for better management of their institutions' data and information? Yes ___ / No _____ Do not know	Don't know	No		Yes
5.4c Is the "Development Links" Form on the IDSD site adequate for adding your link to this site? Yes _____ / No _____ Not aware of this form	Yes	Not aware of this form		Yes
5.4d Do information providers in your country have tools necessary for contributing to the content management of the IDSD website? Yes / No Do not know	Do not know	Yes	Yes	Yes
5.4e Is the information management process of the IDSD site too rigidly or controlled? Yes _____ / No _____ or; Should there be some degree of decentralization to the pilot countries Yes _____ / No _____ Do not know	No; don't know	Yes; yes		-; yes
<i>5.5 Identification of gaps in information</i>				
5.5a Has the system in your country been	3	1	3	3

satisfactory for addressing gaps in knowledge and information necessary for decision-makers to function? (scale of 1-5)				
5.5b Are those gaps in information which remain, significant enough to influence negatively decision-making for sustainable development in your country? Yes _____ / No _____ Do not know _____	Yes	Yes	Yes	Yes
5.6 Links to other information portals and hubs (e.g. how were these selected?; why SIDSNET)				
5.6a Have IDSD website hyperlinks to virtual information centers enhanced your capacity to provide information for decision-making? (scale of 1-5)	4	3		2
5.6b Were you involved in the selection of these sites for linkage? Yes _____ / No _____	No	Yes	No	No
5.6c Name related information sites and hubs (names and URLs) which you visit regularly for information on sustainable development	All are already listed on the IDSD website	UNDESA; St Lu Statistics Dept; UNEP/ROLAC; OECS; ECLAC		IISD http://www.iisd.org/ , csd http://www.un.org/esa/sustdev/
5.6d How do you access these sites? Via the IDSD site? _____ or directly?	Directly	DIRECTLY	Via the IDSD site	Via the IDSD site & DIRECTLY
5.6e Name key sites which should be linked to the IDSD site (names and URLs).				IISD http://www.iisd.org/ , csd http://www.un.org/esa/sustdev/
5.7. Procurement process for new hardware and software and training for enhancing technical				
5.7b s/b 5.7a Has your country received operational hardware and software systems under the project Yes / No Do not know _____	Yes	No	Yes	Yes
5.7c s/b 5.7b If No, are you aware when these would be expected? Yes / No Do not know _____		Yes		
a) 5.7d s/b 5.7c Have your expectations been satisfied with the level of provision of technological upgrades for information management for your country under this	5	4 on order	4 Procurement process ongoing	X (5) after phone dialogue. What we obtained through the project has enhanced our capacity, but more resources

project? _____ (scale of 1-5)				will be required to set up the IT systems necessary for effective decision making.
<i>NAME OF RESPONDENT</i> ¹⁸ <i>JOB DESIGNATION:</i> <i>ADDRESS:</i> Phone: _ Fax: _ e-mail: _ <i>Website:</i> <i>Date:</i> _ <i>Signature:</i> _____	Amrikha D Singh Environmental Officer Ministry of Housing Lands and the Environment 1 st Flr. S.P. Musson Bldg. Bridgetown, Barbados Ph. 246 467-5704 Fx. 246 437-8859 singha@gob.bb Sgd. 13 Feb 2004 Fx. Rec'd 13Feb04 1:45 p.m.	Bishnu Tulsie Chief Sustainable Development & Environment Officer Ministry of Physical Development, Environment & Housing ----- Ph. 758 451-8746 Fx. 758 451-6958 btulsie@planning.gov.v.jc Sgd. 16 Feb 2004 Fx. Rec'd 16 Feb04 3:30 p.m.	Sharon Lindo Sustainable Development Officer ----- Market Sq., Belmopan, Belize Ph. 501 822-2082 Fx. 822-2333 policy@mnrei.gov.bz www.mnrei.gov.bz Sgd Feb 16 2004 Fx. Rec'd 18Feb04 Missing page received 19 Feb 04	Franklin Mc Donald CEO NEPA 10 Caledonia Avenue, Kingston 5 Ph. 876 754-7526 Fx. 876 754-7495 fmcdonald@nepa.gov.jm www.nepa.gov.jm 16 Feb 2004 unsgd & received as a pdf file via e-mail 17 Feb 2004 1:00 a.m.
SPACE FOR ADDITIONAL COMMENTS IF NECESSARY	NOT USED	You may call me at 3:30 p.m. today or tomorrow at 2:00 p.m. sgd and dated 16 Feb 2004	Illegible but clarification sought and advice received clarified that some equipment was received and others were in various stages of procurement.	NOT USED
Total Telephone Duration Times: (i) Initial Contacts and Follow-Up; (ii) Formal Interviews	18 mins; 45 mins	26 mins; 52 mins	16 mins; 54 mins	27 mins; 1 hr. 15 mins.

¹⁸ In all cases this person represented the team of respondents who collaborated on responding to the questionnaire. Team members are listed above.