

**REPORT ON THE RESOURCE PERSONS' MEETING ON:
“USING INFORMATION IN DECISION-MAKING FOR
SUSTAINABLE DEVELOPMENT IN SMALL-ISLAND
DEVELOPING STATES (SIDS)”**



May 27-28th, 2003

Rex St. Lucian, Saint Lucia

Organization of American States /

United Nations Department of Economic and Social Affairs

**“USING INFORMATION IN DECISION-MAKING FOR SUSTAINABLE
DEVELOPMENT IN SMALL-ISLAND DEVELOPING STATES”**
Report on the Resource Person's Meeting

hosted by UNDESA and OAS, in collaboration with the Government of St. Lucia,
May 27th to 28th, at the Rex St. Lucian Resort, Rodney Bay, St. Lucia

Thirty-six persons from 30 organizations, including NGOs, Governmental Agencies, Consultants, and Universities, all of them involved in information production, managing, processing, and use for sustainable development in the Caribbean region, attended the meeting.

The meeting was based on presentations of experiences and was organized in ten sessions, as can be seen in the meeting agenda (*Annex I*).

All presentations highlighted in this report are available on the IDSD website under "Recent Events" at <http://www.oas.org/usde/idsd/workshops/workshop1.htm>.

The Information for Decision-making for Sustainable Development (IDSD) Project arose from a joint recognition by the United Nations and the Organization of American States that countries in the Caribbean still require support in creating mechanisms for the effective management of information for sustainable development and environmental management, and in defining ways to harness this information for decision-making purposes. It follows on from an earlier UN/CARICOM Initiative, which addressed the needs for Environment, Gender and Social Statistics.

The project aims 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 will be executed from November 2002 - October 2003.

OPENING CEREMONY - *Chaired by Mr. Bishnu Tulsie, Ministry of Physical Development, Environment, and Housing of Saint Lucia*

During the Opening Ceremony, remarks were made by the Director of the National Office of the Organization of American States (OAS) in St. Lucia; the Honorable Ignatius Jean, the Minister of Physical Development, Environment and Housing of St. Lucia; Mrs. Birgitte Alvarez-Rivero of UNDESA; and Mr. Bishnu Tulsie of the Ministry of Physical Development, Environment and Housing.

Mr. Bishnu Tulsie welcomed participants to St. Lucia and reflected on the need for SIDS to address the issue of management of information as part of the challenge in achieving sustainable development.

Mr. Antoine, the Representative of the OAS in St. Lucia, also welcomed participants to St. Lucia. He noted the importance of the workshop in bringing together experts from across the region and beyond and across various fields. He reiterated the OAS's continuing commitment to assisting the region in meeting the challenges that affect SIDS and in supporting the efforts towards sustainable development.

The Honorable Minister, in the Feature Address, reflected on the usefulness of the Barbados Program of Action as a starting point, but warned that the real challenge was not environmental protection alone, but the integration of environmental, social, and economic agendas into a long-term integrated development plan involving all sectors. As part of this challenge, he identified the availability of useful, timely information for appropriate decision-making as a key issue.

During the Opening Ceremony, the need to promote and build partnerships for collaboration in the production, use, and sharing of information was stressed, as collaboration is the only course to sustainable development. The vulnerability of small islands to climate change, population growth, natural disaster, biodiversity loss, and other threats and the critical need for information for sound decision-making were also underscored.

BRIEF OUTLINE OF THE "INFORMATION FOR DECISION-MAKING FOR SUSTAINABLE DEVELOPMENT" (IDSD) PROJECT

The IDSD Project Coordinator, Ms. Leisa Perch, OAS, began with a brief outline of the IDSD project: its objectives and some of the issues to be considered in information management for sustainable development.

- It was recognized that information will underpin all efforts towards achieving the overarching goal for sustainable development.
- The timeliness and significance of the project was stressed as it relates to the goals, targets, objectives of the Millennium Development Goals, the Johannesburg Plan of Implementation and the upcoming 10-year review of the Barbados POA+10.
- Fulfillment of such goals and targets will require mechanisms and instruments that measure and track progress, the need for data, statistics, indicators and information systems to illustrate our efforts towards sustainable development and make these readily available and accessible to decision-makers.

SESSION 1: OVERVIEW OF INFORMATION CHALLENGES FACING THE CARIBBEAN

1.1. OVERVIEW AND FINDINGS OF IDSD ASSESSMENT REPORT – *Leisa Perch, Organization of American States*

The [presentation](#) outlined a number of general issues and challenges, including technological gaps in SIDS, data compatibility and standardization, lack of a central strategy for managing information for producers and users, and thus the challenge of how this can be resolved in four pilot countries.

KEY ISSUES:

- Discussions focused on trying to meet the overwhelming reporting requirements of international agencies and the need for a harmonization of information needs, which will meet both national needs and international reporting requirements. Also, the need to incorporate a structure which will allow for civil society to be part of a decision-making framework through greater use of information.
- An attempt has been made to limit reporting requirements of countries in BPOA+10 framework into a more concise form for information gathering.
- Efforts must be made to ensure that reporting requirements are SIDS-friendly, taking into account the special circumstances of SIDS.
- There are a significant number of ongoing efforts in the region relating to information management.
- A number of systems have been developed to address issues in critical sectors such as land use planning, coastal resource management, sustainable tourism and disaster/management and climate change.
- Despite fundamental challenges, the region has made progress – demonstrated through the number of indicators' programmes in place or being developed, new institutional structures which embrace sustainable development, efforts towards integrated development planning as an overall development strategy, and the establishment of regional program to look at environment, social and gender statistics.
- Project Outputs should be made available to all CARICOM SIDS.
- Information-sharing amongst the countries participating in the project will also be critical.

1.2 GENERAL DATA CHALLENGES FACING CARIBBEAN SIDS - *Lance Busby, Economic Commission for Latin America and the Caribbean*

The [challenges](#) identified by this presenter include the need to identify data sets. It was suggested that a major obstacle confronting the identification of data sets is a closed attitude toward the sharing of information. This is attributed variously to fear of loss of confidentiality, the notion of maintaining power by keeping information within the institution, and general administrative non-strategic thinking. Developing awareness of the power of sharing information becomes essential in ensuring an attitude change.

Other challenges identified included:

- The lack of an institutionalized and integrated approach to data collection, which will ultimately avoid duplication of resources and thus reduce financial burdens on SIDS.
- The issue of governance and how to address making data available while also ensuring that confidentiality of some data is maintained.
- The need for a greater emphasis on metadata in ensuring that the user can better understand the data and the data set.
- The limitations of existing systems, which are often not hierarchical in nature and do not allow for targeted analysis of data from local level to broad national level.

KEY ISSUES/RECOMMENDATIONS

Based on the discussions following the two presentations, some key issues and recommendations were:

- Any structure, which is recommended, should have local and national relevance.
- Within the UN system, mechanisms should be established to facilitate and further cooperation with all relevant internal and external agencies in an interactive forum, which would also allow for input from national counterparts.
- Consideration should be given to the establishment of a SIDS-specific program through inter-regional cooperation for an indicator database.
- Data collection should be primarily based on national interests but should consider the reporting frameworks so that the systems created can also provide information for that purpose.
- There should be an agreement on common programs for collection and storage between agencies thereby improving the capacity to compare across data-sets and to share information more easily.

SESSION 2: DATA/STATISTICS/STANDARDIZATION - Moderated by Edwin St. Catherine, Director of Statistics, Saint Lucia

2.1 ENVIRONMENT, GENDER AND SOCIAL STATISTICS - LESSONS LEARNED FROM THE UNSD/CARICOM PROJECT- Reena Shah, United Nations Statistics Division

The [presentation](#) focused on the UNSD and CARICOM initiative on social/gender and environment statistics in the region aimed at strengthening capacity in data compilation and analysis, and the establishment of a network of regional experts.

Key lessons learnt from project included:

- the need to strengthen institutional capacity,
- the need to take a bottom-up approach to implementation,
- the need for continued communication and collaboration with regional and international institutions and the need to put in place sound structures, which will ensure sustainability.

In reference to the collection of environmental and social/gender statistics, the presenter recommended as next steps:

- The role of the national statistical offices as focal points for social/gender and environment statistics needs to be strengthened
- More methodological guidance needs to be instituted in Member States
- A regional core set of environmental statistics and indicators should be determined
- National social/gender and environment statistics compendia should continue to be published on a regular basis;
- Support should also be provided for development of social/gender and environment statistics units at the CARICOM Secretariat, which can act as repositories for these statistics once compiled at the national level.

DISCUSSION

This focused on the problems generated by trying to meet the overwhelming reporting requirements of multiple international agencies and the need for a harmonization of international needs, which must meet national ones. Reporting must be a sub-product of information production for decision-making in the countries of the region and not its mere cause; so, national systems must be designed to fulfill national needs. Furthermore, reporting requirements must be SIDS-friendly, taking into account the special circumstances of SIDS.

2.2 GENERATING ENVIRONMENTAL STATISTICS/DATA - Peter Murray, Environment and Sustainable Development Unit of the Organization of Eastern Caribbean States (OECS/ESDU)

OECS/ESDU has been given a mandate to facilitate the St. George's Declaration (SGD), adopted as a broad statement of policy to guide and inform environmental management in the OECS region. The St. George's Declaration highlights the need for monitoring and reporting to track progress in achieving desired results. Progress is monitored through the use of indicators and actions to be taken by the responsible national institutions. Major challenges to the fulfillment of the mandate were identified as follows:

- Lack of human capacities in data collection
- Inadequate financial resources due to high resource requirement of the data collection
- Data collection is not recognized as significant by political directorate or the general public

DISCUSSION

The main points emerging from the discussion were:

- A number of challenges persist in the collection of accurate, timely and specific data in the region and in the fulfillment of national needs and international imperatives - in many cases relating to the lack of a standardized or well-defined methodology.

- International Agencies need to strengthen classification and coding systems, which are compatible at the local, national, and regional, as well as at the international level.
- More emphasis is required on dissemination systems which are timely and accessible to all users based on their individual needs and which are adaptable to other programs such as Geographic Information Systems (GIS).
- Countries should capitalize on the advances in technology such as the use of open-source software to resolve some of these challenges.
 - A potential solution to some of these key issues would be the sensitization of groups on the importance of data collection, both at the political and at grassroots levels, by linking it to their everyday concerns.

SESSION 3: THE DECISION-MAKING PROCESS - RELEVANT ISSUES AND CHALLENGES - Moderated by Ms. Angela Skeete, Caribbean Center for Administration and Development (CARICAD)

Three presentations were made by representatives from the Caribbean Network for Integrated Rural Development (CNIRD), the Soufriere Marine Management Authority (SMMA) and the Organization of American States (OAS) focussing on participatory processes to decision-making. Regrettably, CANARI was unable to participate due to an emergency.

- [Natasha Nunez, CNIRD](#), cited a number of key challenges in community involvement including illiteracy, non user-friendly information, exclusion from data collection, lack of proper conflict or strategic management, and lack of access to appropriate technology. A number of best practices were identified which could be replicated in local and national circumstances to overcome these challenges, including training in conflict management resolution and data collection and management techniques, establishment of community networks for consultation, community involvement in data collection, and volunteerism.
- [Kai Wulf, SMMA](#), presented a comprehensive report on participatory decision-making in action within his organization. Initially established to mediate conflicts and ensure the proper use of marine resources by ensuring stakeholder participation in decision-making, the organization encountered a few initial difficulties. These were due to a lack of a binding agreement, a lack of focus in the pursued objectives, and a loose, dispersed, and large management group. The lessons learned include ensuring a continuous stakeholder assessment, a need to establish a focused agenda, a need to balance dominance of certain groups, and the need for a strong legal basis to guarantee members' rights and to establish responsibilities clearly. Essential conditions for conflict management emerged:
 - Direct participation of resource users, because community institutions do not always provide adequate representation and because stakes/interests often vary from individual to individual.
 - Direct communication among stakeholder groups, for example, by allowing fishers to directly address conflicting interests to others, such as divers, or yachts people.

- Effective communication between stakeholders, community groups and other involved parties remains critical.
- [Claudia de Windt, OAS](#), looked at the legal aspects of Participation and cited a number of declarations and principles of the rights of citizens to participate in decision-making, from Rio 1992 to Quebec in 2001. In general, it was noted that the legal foundations for participation have been established, and that the implementation of mechanisms for participation should be seen both as a right and as a reasonable course of action for democratic governments. The challenge was identified as being the implementation of these agreements at the grassroots level.

KEY RECOMMENDATIONS

- Replicating the lessons learned from the SMMA to other local groups in St. Lucia and the rest of the region.
- Illiteracy should not be seen as a hindrance to participation. Instead the response and recommendation is consultation (as opposed to information dissemination). Open discussion with marginalized groups can clarify issues and also allows for more participatory decision-making.
- Innovative approaches should be undertaken to foster and achieve meaningful participation by all aspects of civil society.
- Legal frameworks can only be effective if they integrate and promote advocacy and reflect an understanding of the power and the role of civil society.

DISCUSSION

During the discussion session it arose that not all SIDS are well prepared to create formal participation mechanisms and that, although it is necessary, there is not a single formula to achieve effective public consultation.

SESSION 4: GENERATING INFORMATION FOR SUSTAINABLE DEVELOPMENT - NATIONAL AND INTERNATIONAL APPLICATIONS - *Moderated by Mr. Espen Ronneberg, SIDS Unit, UNDESA*

4.1 NATIONAL EXPERIENCES

Presentations were made by representatives of the Governments of [Barbados](#), [Belize](#), [Jamaica](#) and St. Lucia on challenges and experiences in information management in sustainable development.

All country representatives noted some fundamental challenges in developing and using information for sustainable development, namely:

- Lack of human, technical and financial resources,
- Low level of importance assigned to information development and management,
- Lack of awareness/attitudes to information use,

- Challenges in integrating various data sets together due to differing formats, periodicity and accuracy, and
- Lack of continuity of efforts and of personnel

At least two of the countries have established indicators programmes – Barbados and Jamaica – and these two countries were also able to contribute to the Environmental Vulnerability Index for SIDS piloted by South Pacific Applied Geoscience Commission (SOPAC). Both countries found the UN methodology useful and used many of the indicators in the UNCSD list.

KEY ISSUES

- Relationships of government agencies with environmental NGOs and the need to share information. Most of the relationships are not legally binding.
- There is a need for such information to be presented in a digital format.
- Both Barbados and Jamaica are looking at over 150 indicators. Questions were raised at the manageability and feasibility of monitoring so many.
- The acknowledgement has been made that, in many cases, indicators should be aggregated to avoid working with too many at any one time. Countries are encouraged to establish a core set of indicators and then within those note the other factors, which will contribute to the aggregated indicator.
- The lack of policy at the national level for the sharing, distribution and access to information has been a significant constraint on advances in this area.
- Partnerships with other government agencies and NGOs have proved useful in maintaining useful datasets.

4.2. EXPERIENCE OF COSTA RICA - *Edgar Gutierrez-Espeleta, Development Observatory of Costa Rica, University of Costa Rica (UCR)*

- Dr. Gutierrez-Espeleta [presented](#) on ten (10) years of experience in the systematization of indicators for the sustainability of development in Costa Rica.
- A chronological overview of the Costa Rican experience was presented beginning in 1993. Amongst the achievements noted was the establishment of a Technical Advisory Commission for Sustainable Development in 1997. One of the most significant outputs of a UNDP and University of Costa Rica (UCR) initiative was a new research unit that was created named the Development Observatory (OdD). This research unit has developed information on a user-friendly database on Costa Rican development trends, which focuses on a number of key variables, and allows users to disaggregate a number of them. Included in the database are definitions and methodologies; the database also generates graphical representations, reports and other vital statistics.
- With the support of UNDESA, Costa Rica was able to develop and test a new core set of fifty-seven (57) indicators in environment, economic, institutional, and social areas; additionally, a book with this information was published.
- As a collaborating center for UNEP-ROLAC, OdD/UCR contributed to the elaboration of GEO Costa Rica book and other GEO reports in the region. It has been maintaining an environmental database for LAC and produced a CD-ROM to present it.

- UNEP-ROLAC and OdD/UCR are in the testing phase of new software aimed to help countries to establish a model system of environmental statistics. It is available in English and Spanish, will be free and accessible, and will be made available to those interested.
- Based on this effort there is keen interest by the OdD/UCR and UNEP in the development of an environmental data hub.

4.3 UNCSO SUSTAINABLE DEVELOPMENT INDICATORS PROGRAMMES -Birgitte Alvarez-Rivero, United Nations Department of Economic and Social Affairs

The [presentation](#) focused on guidelines to the development of sustainability indicators. Guidelines include the establishment of a National Coordinating Mechanism and Focal Point. There was emphasis placed on the need to use gap analysis, which would include baseline assessment and priority selection through a consultative process. This consultative process would assist countries in determining capacity-building needs from which will emerge an action plan. Using the UK as an example, the presenter proposed a selection of indicators that were relatively dynamic for reporting purposes. The suggestion was made for periodic evaluation and reassessment of needs due to the changing nature of the political and national priorities.

- A number of action areas were identified, including support for regional indicator networks, a regional network for sustainable information specifically aimed at SIDS, and the use of disaster-reduction indicators based on SIDS' unique vulnerabilities.
- There is a need for a sub-regional training programme in the development and implementation of national strategies for sustainable development.

GENERAL COMMENTS

The concept of development seems to be skewed towards environmental and economic aspects of development. For development to be truly sustainable, it must have a more holistic, integrated approach. It was recommended that more focus be placed on social aspects of the environment such as population, health, education and violence which all impact on development.

As a result of this concern, a [presentation](#) was developed by the representative of CAREC, and circulated to all participants.

SESSION 5: INFORMATION NETWORKING AT NATIONAL AND REGIONAL LEVELS - LESSONS LEARNED - Moderated by Harold Gepaul, Caribbean Environmental Health Institute

5.1 THE JAMAICA SUSTAINABLE DEVELOPMENT NETWORK PROGRAMME - NETWORKING AT THE NATIONAL LEVEL - Valerie Gordon, Jamaica Sustainable Development Network Program

Ms. Valerie Gordon talked about the power of Information and Communications Technologies (ICT) to facilitate cost-effective access to and dissemination of sustainable development information, as well as to promote non-discriminatory dialogue and to establish communities of interest across borders. In this vein, she spoke about the [Jamaica Sustainable Development Network Program \(JSDNP\)](#) and its activities in promoting the development of ICT in Jamaica, by providing connectivity and developing networking capacity at the local level at relatively low cost.

The JSDNP has thus been active in the establishment of community focal points as rural telecenters involving local partners and stakeholders, has aided in the development and hosting of community websites, and has developed and made available an information management database and a website. The JSDNP provides training and equipment to community centers that have an information dissemination mandate, and that serve a wide constituency of community interests. The JSDNP ensures that the community websites developed are kept community owned and maintained, that communities make use of Geographic Information System (GIS) as a community sustainable development information tool, and that the websites contain issues, projects, and events of interest to the community.

Among the important lessons learned by JSDNP from its efforts are:

- CBOs, NGOs and others have a role to play in the sustainable development process
- CBOs at the community level are well placed to introduce the technology
- ICTs are a valuable support system for sustainable development
- Capacity-building is an ongoing process
- Empowerment of civil society for sustainable development decisions is a time-consuming process and should not be sacrificed for short term gains

5.2 CEPNET - SUCCESSES, CONSTRAINTS, AND LESSONS LEARNED - Luc St-Pierre, United Nations Environmental Programme/Regional Coordinating Unit

Mr. Luc St.-Pierre discussed the role of the Caribbean Environmental Programme Network (CEPNET) as a facilitator for the better management of environmental information for the Caribbean Environmental Programme (CEP). The CEP is an action plan, in force since 1986, signed by more than twenty (20) countries in the Caribbean to work in the implementation of the Cartagena Convention and its three (3) protocols on: oil spills, wildlife and protected areas, and pollution from land-based sources.

[CEPNET](#) has contributed to improving the management and availability of information for sustainable development in the Caribbean by:

- Establishing an internet-based environmental information system
- Strengthening coastal marine resources management
- Creating a CEP website at www.cep.unep.org
- Creating a pilot network programme that included internet and GIS training

Among the lessons learned in its efforts, procuring funding bridges early on in the development of an information project and establishing a committee that ensures the maintenance of the information networks stand out. Other lessons learned:

- Ensure the support of decision-makers
- GIS and internet technologies are readily available, therefore do not justify big investment
- CAR/RCU must emphasize its role as facilitator and be less involved in implementation
- Train webmaster to coordinate and maintain website, database development at SIDS level
- Establish small scale and short time goals
- Build on experiences and replicability
- Use existing human resources
- Try to develop synergies to develop other programs
- Implement activities to increase access to information
- Build a network of networks with the most complete information, in the most efficient way possible

5.3 NETWORKS: EFFECTIVENESS IN IMPROVING ACCESS TO INFORMATION -

Mrs. Maritza Hee-Houng, IDSD consultant

Mrs. Maritza Hee-Houng gave an overview of past and current activities and strategies in the region to improve access to information in sustainable development. As a background, the presenter discussed the role of the United Nations' Agenda 21 in establishing a framework to satisfy information demand through bridging the data gap and improving information availability, and how Agenda 21 has been implemented in the Caribbean SIDS.

Ms. Hee-Houng discussed the development of several information initiatives and networks in the region, including SIDSNET. She mentioned the fact that, although these may not address all needs, some of these are still ongoing and collecting data, and they should be part of any new network.

One issue that has arisen with these initial networks is that technology caught up with them; since anyone can have their own information online, institutions stopped participating in them. CARISPLAN best responded to this new challenge, as it has its own online search-engine for finding Caribbean-relevant material from other institutions, and requests institutions to put their documents in their network. Also discussed was the need for assessing the impact of networks on improving access to information for decision-making.

At the operational level, this is very costly, limiting the ability of institutions to perform evaluations.

General recommendations coming out of this [presentation](#) were to:

- Define the problem areas to be addressed
- Determine the type of information needed
- Determine who will participate: researcher, policy maker, NGO
- Establish a consultation process
- Take full advantage of information technology
- Ensure that information is shared
- Train users in new technologies.

SESSION 6: THE MANAGEMENT OF INFORMATION - THE POTENTIAL FOR MULTI-DIMENSIONAL SYSTEMS. - Moderated by Mr. Bishnu Tulsie, Saint Lucia.

Current regional efforts in designing and developing integrated information systems - issues and challenges

6.1 MANAGEMENT INFORMATION SYSTEM FOR TOURISM (MIST) - Ms. Gail Clarke, Caribbean Tourism Organization (CTO)

Ms. Gail Clarke discussed the challenge of translating information into practical-oriented solutions within the context of the tourism industry in the Caribbean. The CTO has adopted a number of regional technology strategies to address the issue. These include a consumer Internet system with information on resorts supporting official websites from member countries, and CTONet Caribbean, a regional intranet system that shares regional tourism statistics and reports and provides market research and metadata.

The presenter then turned to a discussion of the [Management Information System for Tourism \(MIST\)](#), developed to provide an integrated strategy for collecting, analyzing, and disseminating information on tourism. MIST allows for managing tourism data at the national or regional levels, operating through a network. Although MIST is accessible to the general public, levels of access vary according to the user, with organizations having higher degrees of access than private individuals.



MIST has had an impact on, among other things, the standardization of methods for data collection, the centralization of data collection activities, and the introduction of information technology to the least developed countries.

MIST started in 1998-99, and is now actively being used by Saint Lucia, Turks & Caicos, Trinidad & Tobago, Grenada, Dominica, Montserrat, St. Vincent & The Grenadines, St. Kitts & Nevis; it has recently been installed in Antigua and Barbuda, and Suriname; Barbados presently only uses the inventory system, and different CTO-written systems are in place in Guyana and Belize.

CTO has looked at the possibility of creating a system to work with sustainable tourism information, but had to think in terms of consumer demands. MIST's modular design makes it a flexible instrument, which might enable it to handle indicators of sustainable development, for example, through the development of a new module or modules. At the time, however, it is geared toward satisfying consumer demand for localization of tourist destinations, and providing marketing and planning information for the hotel industry.

NEXT STEPS

- 2003-2004 - Upgrade of MIST: new technologies of internet and intranet systems will enhance CTOs ability to maintain the system
- Training: increase in in-house capability within CTO and National Tourism Offices to manage the system
- Regional MIST: establish the CTO system as the database for tourism information in the Caribbean

6.2 THE COASTAL RESOURCES INVENTORY SYSTEM (CRIS): AN APPROACH TO THE DEVELOPMENT OF A DECISION SUPPORT SYSTEM - *Ian King, CARICOM/ACCC*

The presenter discussed the development and use of the Coastal Resources Inventory System (CRIS) and its potential as a decision-support system. The CRIS was designed and implemented as a component of the CPACC project, which had as an objective "to support Caribbean countries in preparing to cope with the adverse effects of global climate change (GCC), particularly sea level rise, in coastal and marine areas, through vulnerability assessment, adaptation planning, and capacity building linked to adaptation planning. "

The CPACC Component 3 goals included the development of a facility to enable wide access to spatial and monitoring data for the purpose of decision-making in a format that the users could understand and utilize, and the development of the capacity within local institutions to apply and adapt the facility - CRIS - to meet institutional and national needs.

The CRIS was designed for the storage, retrieval, updating, analysis, manipulation, and sharing of coastal and marine data. It includes and links together a spatial database and an attribute database that handles non-spatial data.

As part of its capacity-building strategy, CPACC also facilitated the implementation of CRIS and training in its use in the participating countries, by identifying and involving key agencies for participation in the process; complementary activities to CRIS, such as supporting the development of labs with GIS, were also included as activities, to facilitate and enhance its impact.

Varying capacities amongst countries to absorb technology transfer and participate in the process, an almost universal lack of national data access policy, and uncertainty about existence and/or status of data, which is generally limited, have proved to be important challenges to overcome. However, CRIS has succeeded in establishing a community of GIS practitioners in the Caribbean, has developed capacity at the regional/national levels to manage coastal and climate data, and has created a foundation upon which countries can develop their own environmental resource decision support systems

[Mr. King](#) concluded that CRIS has had a very positive improvement on the access to management of information for coastal and climate resources for decision-making. For this to further improve, he noted a need for the establishment of a national policy on data and information management, as *ad hoc*, institution-specific approaches create tremendous challenges. As an example, the creation of metadata and data dictionaries could vastly improve the usefulness of existing data and data yet to be collected.

6.3 LAND-USE PLANNING IN THE OECS USING THE AUTOMATED LAND EVALUATION SYSTEM (ALES) - Dr. Lystra Fletcher-Paul, Food and Agricultural Organization, Subregional Office for the Caribbean

Dr. Lystra Fletcher-Paul presented an [overview](#) of the information needs for land use planning and the use of the Automated Land Evaluation System as an approach to sustainable land use.

In her presentation, she discussed the needs for information on biophysical and socio-economic factors that interact to determine and influence a land production system. The challenges in the Caribbean to the collection of data on these factors were examined, including time gaps in records, incompleteness in the range of attributes, inconsistencies in data categories between countries, and a lack of resources to measure and monitor environmental data. In addition to these, existing challenges to data management included: lack of basic information on environmental requirements for non-traditional crops, lack of practical descriptions of land use and productivity, lack of georeferenced data, lack of mechanisms for updating existing, time-sensitive databases on biophysical and economic data, dispersion of data amongst different agencies, and inadequate communications means for data sharing.

Following this, the development and use of ALES and its capacity as a multidimensional, multi-use system was discussed. ALES is a computer program that allows land evaluators to build expert systems to evaluate land according to the method presented in the FAO "Framework on Land Evaluation." ALES works in two stages:

1. Physical evaluation: matching soil, climate, and land use with crop requirements
2. Socioeconomic evaluation next derives the suitability of the land unit for specific land utilization types: e.g. rain-fed agriculture with low inputs or commercial agriculture with high inputs, etc.

Dr. Fletcher-Paul concluded by presenting suggestions for basic principles to be considered to measure sustainable land use:

- Information needs should drive data collection; only collect data that would be used
- Build on existing systems
- Develop awareness among users of utility of the system
- Support institutional strengthening and capacity building
- Support networking and information-sharing efforts
- Develop common data exchange formats and protocols
- Establish common land classification systems to allow comparison amongst countries
- Update soil and land use information
- Research to develop methodologies and validate models so that they are relevant to the region
- Develop metadatabases and skills banks

EFFORTS AT CREATING DECISION-SUPPORT SYSTEMS FOR DISASTER MANAGEMENT - *Sheldon de Four, Caribbean Disaster Emergency Response Agency*

An intervention by Mr. de Four was made regarding efforts at creating decision-support systems for Disaster Management. CDERA has, in collaboration with SouthCom, pioneered an Integrated Decision Support System (IDSS). It is anticipated that the IDSS would assist decision-makers in the Disaster management cycle in its entirety and reflects a need to ensure a participatory course of action in planning and in response. A brochure on IDSS is available.

DISCUSSIONS/RECOMMENDATIONS

- The ALES system clearly seems to have moved the issue of land evaluation significantly forward - it is key that systems be developed that can facilitate decision-support in such a manner.
- In the development of systems with an approach such as this, the involvement of the research community, particularly the University of the West Indies, is critical.
- For decision-support systems to be effective, common data exchanges will be critical
- Common land classification systems which presently does not exist across the region will improve the effectiveness of systems for decision-making and land use.
- Research is necessary to validate models and to ensure that models effect changes
- Next steps could include the development of holistic scenarios so we can look at decision-making based on future possibilities.
- Continued links with UWI will be useful for the further development and enhancement of ALES, MIST, & CRIS.

SESSION 7: TECHNOLOGY AS A BRIDGE TO THE INFORMATION GAP

7.1 ICT FOR DEVELOPMENT- OVERVIEW OF THE SCHOOL-WIDE AREA NETWORK (SWAN) PROGRAM IN BELIZE AND POTENTIAL FOR EXPANSION

Mustafa Toure, IDSD Consultant

Mr. Toure discussed [information technology \(IT\) and telecommunications](#) as the center of a new technological revolution. According to the World Bank, the range and impact of telecommunications reform and the introduction of a sound IT sector are intrinsically linked to enhancing economic efficiency, as a prerequisite toward increasing national welfare.

The presenter presented the policy and development uses of IT, including:

- As an instrument to make existing productive sectors more efficient
- As an area of economic activity in its own right
- As a tool of training and education

Mr. Toure then discussed the [School Wide-Area Network \(SWAN\) project](#) as an example of IT implementation, designed to provide computers and internet access to schools and at all levels in Belize, and by establishing wireless and fiber optic wide area network (WAN) connecting schools, libraries, hospitals, and governments.

The expected benefits from SWAN included:

- High speed internet access for schools and distance-learning centers country-wide
- Country-wide computer network links to all major population areas
- Complementing of existing IT initiatives in education: schools will get hardware and unlimited internet access at no cost
- NGOs and civil society will receive hardware plus unlimited Internet access at low monthly per unit user fees.

The presenter concluded by stating that IT should be embraced by using it to promote sustainable development, and to upgrade the education sector, and as such should be marketed to entrepreneurs, investors, students, etc.

Mr. Toure then presented [an overview of the UNCSD Resolution on ICT](#), noting that:

- Countries should report on mechanisms to update and implement strategy - all sectors must be involved
- The idea of a global information infrastructure must be developed and implemented
- Government and stakeholders must be called upon to develop new roles for integration of IT, each country must develop strategies and have task forces and commissions - some guidelines came a little too late.

SESSION 8. PRIORITY NEEDS FOR TRAINING AND CAPACITY BUILDING IN INFORMATION MANAGEMENT - *Mustafa Toure, IDSD Consultant.*

The consultant [presented](#) on the preliminary conclusions of his work based on discussions with regional contractors, institutions, and agencies. Amongst the recommendations presented:

- Information Management/Information Technology (IM/IT) education and training certification in priority areas: web development and network technical operations and management.
- Incorporation of IT training into increasingly lower levels of national school systems.
- Establishment of functional IM/IT linkages between regional CARICOM and related SD agencies that are responsible for SIDS-POA, including IDSD Project
- Development of Caribbean regional SD-related content software and linkages
- Development of national information infrastructures/books on digital libraries/portals, databases
- Provision of IM/IT training in the use and application of remote sensing and geographic information systems (GIS) in coastal zone management
- Harmonization of national priorities/contacts with regional priorities/contacts at CEP meetings and fora
- SD/SIDS-POA website content, including IDSD Project thematic areas, development
- Increased revenue generation for programme sustainability
- Provision of greater public access to relevant SD/SIDS-POA data
- More community reporting activities
- Provision of IM/IT training in software development, certified Linux open-source software development courses and courses in “e”-Commerce software development & use
- Continuous updating of regional SD websites’ content, including IDSD Project thematic areas
- Streamlining of regional SD websites
- Provision of greater data storage & conversion services to relevant SD/SIDS-POA data nodes
- IM/IT training in Security/vulnerability issues

The consultant also distributed a brief questionnaire on existing gaps and training needs to the participants of the workshop, asking for their insights and recommendations in these areas. The results of these responses would be included in his final report.

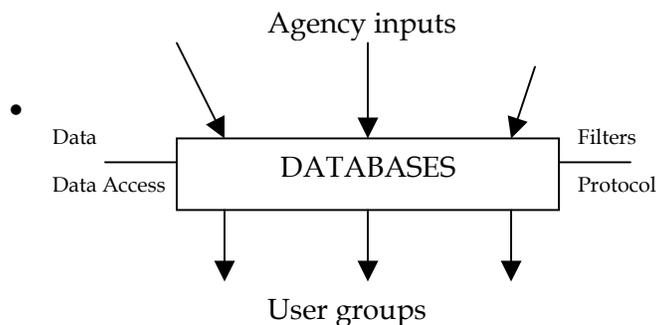
SESSION 9. WORKING GROUP CONCLUSIONS AND THEIR FINDINGS

After the presentation sessions were concluded, the participants were assigned to three groups in order to discuss the final recommendations of the meeting. To guide and focus the discussion, a list of [guidance questions](#) with relevant topics to be considered were distributed; these questions are included in the report as Annex II. The working groups had a limited time for their deliberations.

The following [preliminary recommendations](#) resulted from their discussions:

Group 1: Basic Principles: Strategies for Improving Information for Sustainable Development in the IDSD thematic areas

- Sustainable Development Information should be regarded as a national asset
- Information must be open and inter-sectoral
- Hence, SIDS must establish national information for sustainable development policies
- Besides, appropriate forums must be developed to enable stakeholder participation
- Information should be built through the application of linkages and filters
- Consequently, protocols must be developed to assure compatibility of sources and databases
- Quality control should be covered by protocols
- SIDS must develop sets of sustainable development goals and targets in order to assess effectiveness of development according to the set of indicators being monitored
- Information should be used for decision making, so ways must be found to make information useful for this purpose; make use of graphic and cartographic presentations as much as possible
- Accordingly, strategies should be developed making clear who the target groups are
- Information systems must be sustainable in the long-term
- A general model for the information system could be the one shown in the following figure:



- Systems should also enhance\enrich user skills
- Systems should use a multiplicity of sources
- Information should be generated for decision-making support and not only for reporting
- Use best-and-worse case scenarios

Strategies for improvement

- Recognition of the values of the data collection process and of the data itself
- Need to inform government executives
- Only agree to collect data that reflects sustainable development goals

- Strategies for sustainability of the information systems must be developed (fees, user contributions, budgetary lines, project surcharges)

Recommendations coming out of the ten (10) year review of the Barbados Plan of Action

- Raise awareness of importance of knowledge societies
- Establish virtual data centers
- Establish national focal points
- Establish mechanisms for information sharing at the national, regional and inter-regional levels
- Use a bottom-up approach to gather and build information, supported by regional agencies
- Support SIDS training program for:
 - Analysis, case studies
 - Dissemination
 - Presentation
 - Communication
- Disseminate information for decision-making at all levels
- Establish comprehensive yet accessible training facilities

Group 2: National Information Strategy Policy Issues

- National policies should be based on best practices: ISP, stats. legislation, UNESCO
- Access initiative: www.wri.org
- Some information should be free, e.g. environmental impact assessment; some could have nominal cost based on users (structured)
- Introduce information issues into school curricula
- To build consensus: consultation, transparency
- National structures must have the mandate (e.g. Barbados) or the capacity to review/revisit existing frameworks
- Remember to manage technology
- Principles for National Information Strategies must be developed
- Services provided should include training and ideas for standards
- Networks are useful for:
 - Dissemination of information
 - Consensus-building
 - Creating awareness

Group 3: Priority Training Needs for IDSD in addressing Sustainable Tourism, Land use Planning, Coastal Zone Management and Disaster Management/Climate Change

	Sustainable tourism	Land use planning	Coastal zone management	Disaster Management
Gaps	<ul style="list-style-type: none"> • Lack of indicators to measure sustainable tourism • Lack of consensus about indicators • Inadequate knowledge of MIST by end users 	<ul style="list-style-type: none"> • No linking of decision making with data • Absence of systems with applications to Land Use Planning • Inadequate participation of stakeholders in planning process • Outdated maps 	<ul style="list-style-type: none"> • Lack of adequate biophysical data/info • Lack of integrated policies to guide CZM • Unclear, poorly defined institutional frameworks 	<ul style="list-style-type: none"> • Inadequate vulnerability assessment systems
Constraints	<ul style="list-style-type: none"> • No integrated applications to information management • Lack of standardized formats • Short term planning horizon for political benefits • Lack of common understanding of meaning of data • Narrow focus of tourism managers 	<ul style="list-style-type: none"> • No integrated applications to information management • Lack of standardized formats • Short term planning horizon for political benefits • Inadequately designed data systems to support decisions • Inadequate participatory approaches 	<ul style="list-style-type: none"> • No integrated applications to information management • Lack of standardized formats • Lack of human resources to monitor and manage coastal zone • Short term planning horizon for political benefits 	<ul style="list-style-type: none"> • No integrated applications to information management • Lack of standardized formats • Short term planning horizon for political benefits • Lack of scenario development in applications
Training needs	<ul style="list-style-type: none"> • Environmental-awareness building of end users of eco-tourism products • Assessing sustainability of tourism • Policy formulation • Link Resource Management to product promotion and use to generate financial support 	<ul style="list-style-type: none"> • Participatory approaches to planning • Networking to share experiences 	<ul style="list-style-type: none"> • Awareness building among decision-makers and planners • Use of CZM guidelines e.g. EIAs 	
Building sustainable capacity	<ul style="list-style-type: none"> • Investment in regional approaches • Inter country collaboration and capacity training • Database of resource persons 	<ul style="list-style-type: none"> • Investment in regional approaches • Inter country collaboration and capacity training • Database of resource persons 	<ul style="list-style-type: none"> • Investment in regional approaches • Inter country collaboration and capacity training • Database of resource persons 	<ul style="list-style-type: none"> • Investment in regional approaches • Inter country collaboration and capacity training • Database of resource

	Sustainable tourism	Land use planning	Coastal zone management	Disaster Management
				persons
Functional capacity to support Decision-making	<ul style="list-style-type: none"> • Certification 			
Priority Technical training				

GENERAL CONCLUSIONS AND RECOMMENDATIONS EMANATING FROM THE MEETING - All

There were a number of conclusions and recommendations, which can be identified from the presentations, discussions and the findings of the working group that will serve as the basis for further discussion amongst participants:

Conclusions

- The determination of who should collect data should be done by national assessments rather than by an organization.
- Information collection should serve national needs but structures put in place should also reflect the need for information for reporting at the regional and international level.
- In assessing the needs for information management, use and generation, definitions can often differ, even within sectors. Often this is as a result of the lack of clarity in parameters to be used in defining the problem.
- Presently, there is a proliferation of technology and databases to manage and store data and information. However, not all of these are of equal quality or are compatible with each other. Appropriate database management and design will allow offices to use information more efficiently and effectively.
- The development of websites is useful in meeting the objective of information dissemination but needs to be recognized as one of a number of options. Since many communities do not have the necessary technology or infrastructure to support websites, other methods and approaches should also be considered.
- The development of networks for dissemination of information, building of consensus, creation of awareness, training, and establishment of standards is critical in improving our information management and generation capacity.
- Appropriate time is required if programs are to achieve their full potential - quick and easy solutions often are not sustainable or effective in the long-term.
- National Councils for sustainable development may be effective forums for dialogue and should be established.
- Political will for maintaining sustainable structures is key for information management programs to succeed.
- In any discussion on information and decision-making, it is critical that civil society be involved from the conceptual stage.
- In the context of the discussion on information for decision-making, one needs to identify the real and critical issues, particularly those affecting local and civil society.
- Innovative mechanisms and approaches to information management will assist Caribbean SIDS in building flexible systems.

Recommendations

- Caribbean SIDS should develop sets of sustainable development goals and targets in order to assess effectiveness of development according to the set of indicators being monitored.
- While countries may be at different levels of informational development, they often face similar issues. Inasmuch as this is so, countries should, where possible, seek to coordinate the development of information strategies through horizontal cooperation.

- Countries must also contribute to the discussions at the international level on the harmonization of reporting formats if these systems are to improve.
- The users and producers of information must work together if systems are to be relevant, effective, efficient and sustainable.
- A set of principles for National Information Strategies should be developed to guide the countries during the development of their own strategies.
- Data and Computer Systems that can communicate to, and are compatible, with each other should be the focus of information technology, which is put in place to support information management.
- A common environmental hub, at the national and regional level, should be established.
- A clearinghouse that compiles databases should be developed and the structure and policy that supports that mechanism must be part of a common framework.
- Technicians should be encouraged to design ways to enhance existing programs, infrastructure and technology in order to serve the widest possible needs for information management.
- Metadata should be integrated as part of information management strategic approaches.

SESSION 10: WAY FORWARD

Clearly, there is a need for continued efforts in the field of IDSD and for promoting the greater use of databases, metadata, and applications that support decision-making.

Among the next steps highlighted for the project were:

- *The development of training materials.* Based on the priority training needs identified by the questionnaire and the interviews with agencies, efforts would be made to make available relevant opportunities, materials and media over the web. Further, the results of the assessment would inform the development of specific training materials on information for decision-making, particularly on the generation and use of economic, social and environmental data/information as well as on the four IDSD thematic areas.
- *Dissemination of methodological approaches and best practices.* Clearly, there have been a number of relevant efforts to develop and promote methodological approaches to information for decision-making to varying levels of success. It is also possible to extract lessons learnt from these efforts, particularly those of relevance to the Caribbean. As part of the IDSD project, a team of consultants will undertake an assessment of relevant approaches and best practices to the issues and challenges of Caribbean SIDS. These results will be made available on the web and, where possible, integrated into the training materials developed and utilized as the basis for training under the IDSD project.
- *Broad participation in the training course to be held in October 2003.* The training workshop to be held in October 2003 will be made available to the widest possible group and combination of persons, mainly from the four participation countries. Nominated persons are expected to be representative of government, the NGO community and

regional specialized institutions. The course and training will be presented in the form of “train the trainers”, expecting to create a cadre of persons capable of furthering capacity building at the national level.

- *The provision of equipment (hardware and software) to support the training provided.* It is clear that information and communication technologies must play a key role in information management and decision-making for sustainable development. The IDSD project will seek to provide support to countries, in their chosen thematic area and on a general basis, by supplying software and hardware, as necessary. In particular, the project will support equipment which can further access to information and to information dissemination and which can also widen the user base of critical information management and decision-support systems. Technologies and mechanisms that can facilitate capacity building in key methodological approaches and best practices will also be supported, where possible.
- *Further training at the national level.* Further to the cadre of persons trained at the regional level, additional training will be made available at the national level as part of the installation of desired software and hardware to support the IDSD activities at the national level. This will allow for the participation and the exposure of other ministries, agencies, NGOs and potentially civil society to approaches and practices relating to information management.

Although there was not enough time to fully review the recommendations in order to identify key principles, there was general commitment to the process by participants. In this vein, it was suggested that an e-group be set up to further discuss these issues and to facilitate a continued exchange between practitioners, producers, and users. The representative of the Caribbean Conservation Association (CCA) proposed that the existing CCA list server and the newly established Regional Environmental Information Network could provide a home/operational basis for the e-group forum.

CLOSING REMARKS

The project manager for IDSD thanked all participants for their contributions and noted that efforts such as these would be supported, where possible, by the project.

Thanks and appreciation were also extended to the Government of Saint Lucia for their gracious hospitality and visible support for the process.

The representative of UNDESA also thanked the IDSD coordinator for the organization of the successful meeting.

ANNEX I. AGENDA FOR RESOURCE PERSONS' MEETING

Day One – May 27 th , 2003		Information Challenges for Sustainable Development
8:30a.m – 9:00a.m	<i>Opening Ceremony</i>	Chaired by, Ministry of Physical Development, Environment and Housing of St. Lucia
9:00 a.m. – 9:15 a.m.	<i>Opening of Meeting</i> 1.1 Introduction of Participants 1.2 IDSD Project and Workshop Objectives	Ms. Leisa Perch, OAS/USDE
9:15 a.m – 10:15 a.m.	<i>Session 1: Overview of Information Challenges for Caribbean SIDS</i> - 10 minute overview from IDSD Assessment Report - General Data Challenges facing the Caribbean <i>* Plenary discussion</i>	Ms. Leisa Perch, OAS Mr. Lance Busby, UN/ECLAC
10:15 a.m. –10:40 a.m.	Coffee/Tea Break	
10:40 a.m. – 12:00 p.m.	<i>Session 2: Data/Statistics/Standardization</i> - Environment, Gender and Social Statistics - Lessons Learned from the UNSD/CARICOM Project - Generating and Using Social and Environmental Data <i>* Plenary Discussion Addressing Data Quality, Quantity and Standardization</i>	Moderated by Mr. Edwin St. Catherine, Dir. Of Stats (St.Lucia) Ms. Reena Shah, United Nations Statistics Division Mr. Peter A. Murray, OECS/ESDU
12:15 p.m. – 12:45 p.m.	<i>Session 3: The Decision-making Process – Relevant Issues and Challenges (Part 1)</i> - Participatory Approaches and Mechanisms for Decision-making – Panel Discussion: <ul style="list-style-type: none">••• consensus-building	Moderated by Ms. Angela Skeete, CARICAD Ms. Natasha Nunez, CNIRD Mr. Allan Smith, CANARI Mr. Kai Wulf, SMMA Ms. Claudia de Windt, OAS/USDE
12:45 p.m. – 14:00 p.m.	Lunch Break	
14:00 p.m. – 14:40p.m.	<i>Session 3 (cont'd): The Decision-making Process – Issues and Challenges</i> - Panel Discussion cont'd	CNIRD, CANARI, SMMA, OAS

Day One – May 27th , 2003		Information Challenges for Sustainable Development
14:40 p.m. – 15:40 p.m.	<p><i>Session 4 – Generating Information for Sustainable Development – National and International Applications</i></p> <ul style="list-style-type: none"> - Country perspectives on issues and challenges in generating and using information for decision-making – land use planning, sustainable tourism, disaster management and coastal zone management - UNCSD Sustainable Development Indicators Programme – Outputs and Guidelines 	<p>Moderated by Mr. Espen Ronneberg, SIDS Unit, UNDESA</p> <p>Representatives of IDSD Participating Countries – Barbados, Belize, Jamaica and St. Lucia</p> <p>Mrs. Birgitte Alvarez-Rivero, UN Division for Sustainable Development</p>
15:40 p.m. – 15:55 p.m.	Coffee/Tea Break	
15:55 p.m. – 17:15 p.m.	<p><i>Session 4 (cont'd) – Generating Information for Sustainable Development – National and International Applications</i></p> <ul style="list-style-type: none"> - Information for decision-making – Experience of Costa Rica - Summary of Present Reporting for Major UN Conference and Follow-up and Outcomes of the UNCSD Discussion on Reporting <p>*followed Plenary Discussion</p>	<p>Dr. Edgar Gutierrez-Espeleta, Sustainable Development Observatory</p> <p>Mrs. Birgitte Alvarez-Rivero</p>
17:15 p.m. –17:30 p.m.	Summary of the Day's Discussions	Leisa Perch, OAS

End of Day One

Day Two – May 28th, 2002		“Responding to the Challenges of Information Generation and Management”
8.30 a.m. – 10.00 a.m.	<p><i>Session 5: Information Networking at National and Regional Levels – Lessons Learned</i></p> <ul style="list-style-type: none"> - The Jamaica Sustainable Development Network Programme – Networking at the National Level - CEPNET – successes, constraints and lessons learnt - Networks: effectiveness in improving access to information 	<p>Moderated by Mr. Herold Gopaul, CEHI</p> <p>Ms. Valerie Gordon, Jamaica Sustainable Development Network Program</p> <p>Mr. Luc St. Pierre, UNEP/RCU</p> <p>Mrs. Maritza Hee-Houng, IDSD Consultant</p>
10:00 a.m. – 10:30 a.m.	<p><i>Session 6: Management of Information – The Potential for Multi-dimensional systems</i></p> <ul style="list-style-type: none"> - Current regional efforts in designing and developing Integrated information systems –issues and challenges <ul style="list-style-type: none"> • Tourism • (ALES) • (CRIS) 	<p>Moderated by Mr. Bishnu Tulsie, Ministry of Physical Development, Environment and Housing</p> <p>Ms. Gail Clarke, CTO</p> <p>Dr. Lystra Fletcher-Paul, FAO</p> <p>Mr. Ian King, CARICOM/ACCC</p>
10:30 a.m. –10:50 a.m.	Coffee/Tea Break	
10:50 a.m. – 11:45 a.m.	<i>Session 6 (cont'd): Management of Information – The Potential for Multi-dimensional systems</i>	CPACC, CTO, FAO and CDERA
11:45 a.m. – 12:30 p.m.	<p><i>Session 7: Technology as a Bridge to the Information Gap</i></p> <ul style="list-style-type: none"> - ICT for Development – overview of the SWAN Project in Belize and the potential for expansion/Overview of UN Resolution 	Mr. Mustafa Toure, Consultant
12:30 p.m. – 13:35 p.m.	Lunch Break	
13:35 p.m. – 14:00 p.m.	<p><i>Session 8: Training and Capability – Critical Needs</i></p> <ul style="list-style-type: none"> - Indicative Priority Needs for training and capacity-building in information management 	Presentation and Discussion led by Mr. Mustafa Toure, Consultant

Day Two – May 28th, 2002		“Responding to the Challenges of Information Generation and Management”
14:00 p.m. – 16:00 p.m.	<i>Session 9: Recommendations and Way Forward</i> (1) Break Out Groups: - Strategies for Improving Information-sharing on Sustainable Development - Development of National Information Policies - Priority Training Needs for IDSD to address in key thematic areas	All
16:00 p.m. – 16:15 p.m.	Coffee/Tea Break	
16:15 p.m. – 17:00 p.m.	<i>Session 9 cont'd</i> (2) Report from Breakout Groups	
17:00 p.m. – 17:20 p.m.	<i>Session 10: Conclusions, Recommendations and Next Steps</i>	Leisa Perch, OAS
17:20 p.m. – 17:30 p.m.	<i>Closure of the Meeting</i>	Government of St. Lucia and OAS/UNDESA

***** End of Meeting *****

ANNEX II. GUIDING QUESTIONS/COMMENTS FOR THE WORKING GROUPS

Working Groups/Break-out Sessions

Group 1: Topic – Strategies for Improving Information for Sustainable Development – in the IDSD thematic areas

- Identify mechanisms to address key challenges in information generation.
- What are some basic principles that countries can follow/should consider in developing information for sustainable development?
- Propose Key strategies for improving information for sustainable development for Caribbean SIDS.
- What some key considerations that should be raised at SIDS +10 in the area of information for decision-making?
- How can information be improved so that it is useful for decision-making?
- Identify approaches to data gathering.
- How should issues of design be addressed in terms of information gathering and storage so that extraction can be simplified?
- How should issues of quality and quantity be addressed in data generation and use?
- Identify the potential roles of technology, policy and strategic planning in the context of information management.

Group 2: Topic - Development of National Information Policies including issues such as access, information-sharing, reporting and participation.

- Identify/Propose Best Practices/Ideas for address critical information management issues at the policy level and how these could be integrated into policy.
- Are policies required for any specific areas of sustainable development?
- How can the issue of access to information be addressed sustainably?
- Define potential structures and policy frameworks in which these issues can be accommodated.
- Identify approaches to building consensus on information needs.
- Role of Sustainable Development Councils and Committees.
- Strengthening of existing structures and mechanisms for collaboration.
- Effective function cooperation
- Identify approaches and mechanisms for effective networking – Is there a larger role for networks in addressing some of these issues?

Group 3: - Priority Training Needs for IDSD in addressing Sustainable Tourism, Land use Planning, Coastal Zone Management and Disaster Management/Climate Change

- Identify major gaps in existing capacity.
- What are the key constraints to the effective use of existing data? What other prohibitive factors limit decision-making?
- Training Needs – in what areas and at what levels. Suggestions should reflect steps that are not already being taken in other projects and activities.
- How can Caribbean SIDS build sustainable capacity?
- How can we build functional competencies in areas to support information for decision-making in these areas?
- What types of technical training should be given priority?

ANNEX III.

ADDRESS BY THE HONOURABLE IGNATIUS JEAN
MINISTER OF PHYSICAL DEVELOPMENT, ENVIRONMENT AND HOUSING
OF SAINT LUCIA
TO THE OPENING OF THE REGIONAL WORKSHOP ON
INFORMATION FOR DECISION MAKING
27 - 28 MAY, 2003
REX ST LUCIAN HOTEL

Salutation

On behalf of the Government of Saint Lucia and the Ministry of Physical Development, Environment and Housing, it gives me great pleasure to share some thoughts with you at the opening of your workshop on Information for Decision-Making.

The concept of sustainable development, though not new, took center stage on the global development agenda during the United Nations Conference on Environment and Development in Rio in 1992. Since that time, countries around the world, and in particular developing countries have invested much energies in coming to terms with modalities for operationalizing sustainable development. Now, by definition, sustainable development is about pursuing our development goals without compromising the ability of future generations to do the same. The concept recognizes that its achievement requires the integration of social, economic, and environmental considerations in development planning. At first these may seem to the uninformed to be uncomplicated issues, but it is when you try to put the theory and concepts into practice that the difficulties raise their ugly heads.

These difficulties are both institutional and cultural. We have a history of thinking and acting along narrow, sectoral or portfolio paths. This modus operandi has led over the years to the creation of structures that are sector focused, designed to address either a single, or tight cluster of related issues on the development agenda. This, in turn, nurtured the evolution of a mind set, particularly in the public sector, that does not lend itself readily to the integration of the many non-sectoral issues that are integral to the attainment of sustainable development goals. The challenge, therefore, is to fashion, or indeed re-fashion, governments in ways that will break down the compartmentalization that characterizes the way the public sector functions – a task easier articulated than achieved.

Notwithstanding what I have just said, national efforts are further complicated by global issues. The end of the cold war brought a false, but short-lived sense of relief to the world. It was quickly replaced by the greater threat of global instability, which, in a very real sense, calls into question the ability of governments to govern. We have lost the ability, or indeed the right to define our own political, social and economic agendas. And lest I be mistaken, I am not referring only to global terrorism, but also to globalization, the World Trade Organization (WTO) processes, the influence of powerful states on the policies and freedoms of the lesser, the power of the Bretton Woods institutions and a myriad of other international structures and processes over which we have little control, but which bring to bear considerable influences on how we pursue our development agendas.

These are indeed difficult times, but rolling over and letting events dictate our future is not an option. Developing countries, and indeed small island developing states must fashion responses that go beyond being reactionary - we must transcend the status quo and fashion our own approaches, within the context of the global environment, but unique to our own circumstances, strengths and abilities. We have a good blue print in the Barbados Programme of Action, but this, I suggest focused too heavily on environmental issues. The Programme itself needs to better reflect the sustainable development paradigm and we should use the upcoming review next year to address this. Notwithstanding, as I said earlier, it does provide a useful starting point - what we need to do is to start to seriously making it the centerpiece of our development agendas.

In addition to the Barbados Programme of Action, SIDS have joined a number of multilateral environmental agreements - perhaps too many for us to deal with all of them effectively - as part of a strategy to achieve sustainable development. But remember that sustainable development is not about environmental protection - it is about integrating environmental, social and economic agendas in a mix that will allow us to achieve our development goals without compromising the ability of future generations to do the same.

In responding to this challenge, my Ministry has decided that the way forward is to change the way national development planning takes place and the way development is pursued. We are of the view that we must start with a long-term vision for our development. This vision, we feel, must then be deliberately translated into non-sectoral development principles, developed on a platform of social, economic and environmental considerations, as a means of forcing the integration of sectoral efforts in the achievement of wider national development goals. The output of this process we will call our sustainable development strategy, from which we will extract our medium term development strategies.

What I just described is bold, challenging and novel, but we feel that we must build sustainable development principles into our development planning processes and that this is the best approach to doing so. One of the challenges we will face in this exercise will be the availability of appropriate, timely information to inform the decisions we must make along the way. To this end we have compiled our first compendium of environmental statistics and will soon produce our first State of the Environment Report. We also have annual publications of our Economic and Social review and have recently completed a poverty assessment for the country. There is much information out there for us to draw upon as we pursue our integrated approach to national development planning. The problem is that the information is not all in one place and often difficult to pull together as and when needed. In addition, the presentation is generally for reporting purposes and not for decision-making. We will therefore have a major challenge on our hands to redesign our information collection, storage, analysis and reporting procedures to ensure that we can get what we want, when we want it and in a form that will suit our purposes.

It is against this background that I welcome this initiative you are launching here today. Information for decision-making will be a key ingredient in the work that lies ahead for us here in Saint Lucia. In the final analysis, the quality and relevance of the decisions we will be called upon to make will depend on the quality of the information available to inform them. But lest I appear to be selfish, let me quickly add that this is not true for us in Saint Lucia alone. All countries will need access to quality information for decision making. This workshop is therefore important, not only because it highlights the significance of information in decision-making, but also because it helps consolidate,

and even reassert our commitment to sustainable development, which has been a recurring theme for good governance for at least the last decade. This workshop will therefore serve as the beginning of the action that we need to take to improve the quality of, and access to the information needed by citizens, the private sector and governments to make better decisions and to take action to support our sustainable development aspirations.

It is against this background that I welcome you to this workshop. I especially welcome participants from our neighboring islands and trust that you will leave this experience better informed on the subject of your discussions over the next two days. I also extend a warm welcome to the representatives of the OAS, the SIDS office in New York, the UN Department for Economic and Social Affairs, the UN Statistics Division, CARICOM and UNEP/ROLAC. Your support for this initiative underscores the commitment of your organizations to the sustainable development of Small Island Developing States. Obviously we have good friends in our corner and we will continue to call upon you for support as we pursue our sustainable development goals.

It now gives me great pleasure in declaring your workshop open, and wish you an enlightening experience.

Thank you.

ANNEX IV. LIST OF PARTICIPANTS

Name	Title	Institution	Address	Telephone	Fax	Email
Barbara Tillet Abdulhadi	Physical Planner	Land & Surveys Dept	Min. of Natural Resources & Environment & Industry, Market Square, Belmopan Belize	(501) 822- 2598/22249	(501) 822- 22333/1526	lincenbze@btl.net
Birgitte Alvarez-Rivero	Sustainable Development Officer	United Nations Division for Sustainable Development	2 UN Plaza, DC2-2262 New York, NY 10017 USA	(212) 963-8400	(212) 963- 1267	alvarez_riverob@un.org
Beverly Andrews	Bio-statistician	Caribbean EPID Centre	16-18 Jamaica Blvd Federation Park St. Clair	(868) 622-4261 ext 345	(868) 622- 1008	Andrewbe@carec.paho.org
Natalie Boodram	Information Officer	Caribbean Environmental Health Institute (CEHI)	P.O.Box 1111 The Morne, Castries, St. Lucia	(758) 452-2501	(758) 453- 2721	cehi@candw.lc
Lancelot Busby	Economic Affairs Officer	United Nations ECLAC	P.O. Box 1113, Port of Spain, Trinidad	(868) 623-5595	(868) 623- 8485	lbusby@eclacpos.org
Fiona Christopher	Research Officer	Ministry of Physical Development Environment & Housing	Greaham Louisy Administrative Building P.O. Box 709	(758) 468-4490	(758) 458- 2330	Fchristopher@planning.gov.lc
Gail Clarke	Marketing Research Specialist	Caribbean Tourism Organization	1 Financial Place, Collymore Rock, St. Michael, Barbados	(246) 427 5242	(246) 4293065	gclarke@caribtourism.com
Shelton DeFour	Programme Officer	CDERA	The Garrison , St. Michael, Barbados, W.I.	(246) 436- 9650/1	(246) 437 7369	cdera@caribsurf.com
Cornelius Fevrier	Environment & Sustainable Dev. Officer	Ministry of Physical Development Env. & Housing	P. O. Box 709	(758) 468-4463	(758) 468- 4522	fevrierc@planning.gov.lc
Dr. Lystra Fletcher-Paul	Integrated Natural Resources Management Office	Food & Agriculture Organization of the U.N.	United Nations House, Marine Gardens Christ Church, Barbados	(246) 426-7110	(246) 427- 6075	lystra.fletcherpaul@fao.org

ANNEX IV. LIST OF PARTICIPANTS

Name	Title	Institution	Address	Telephone	Fax	Email
Jacinta Francis	Tourism Officer	Ministry of Tourism	3rd Floor, Sir Stanilaus James Bldg. Waterfront, Castries	(758) 468-4619/1/0	(758) 451-7414	aureifrancis@hotmail.com
Jose L. Gerhartz	SIDS Net Information Officer	SIDSNET/UWICED	c/o UWICED , UWI Mona Campus, Jamaica	(537) 202-7970	(537) 204-0798	gerhartz@ama.cu
Herold Gopaul	Director of Information Services	Caribbean Environmental Health Institute (CEHI)	P.O. Box 111, The Morne Castries	(758) 452-2501	(758) 453-2721	hgopaul.cehi@candw.lc
Valerie Gordon	Coordinator	Jamaica Sustainable Dev. Network	c/o Liguanea Cybercentre 891/2 Half Way Tree Rd, Kingston Jamaica	(876) 968-0323	(876) 968-1125	vgordon@jsdnp.org.jm
Dr. Edgar E. Gutierrez-Espeleta	Director	Development Observatory	University of Costa Rica	(506) 207-4878	(506) 207-4854	egutierr@ucr.ac.cr
Maritza Hee-Houng	Information Specialist	Consultant to OAS	3, Hillside Ave. Cascade, Trinidad & Tobago	(868) 624-8280	N/A	heehoung@tsst.net.tt
Sharon Hutchinson	Lecturer	University of the West Indies	SEDU (Sustainable Economic Development Unit), UWI- St.Augustine, Trinidad	(868) 662-2002/2444	-	shutchinson@fans.uwi.tt
Ian C. King	Project Officer	Caricom RPIU for the ACCC Project	Lazaretto Complex, Black Rock, St. Michael Barbados	(246) 417-4579/80	(246) 417-0461	kingcpacc@sunbeach.net
Vidyaratha Kissoon	Co-ordinator	SDNP	c/o UNDP, 42 Brickdam, 2 UN Place, Georgetown	(592) 227-6198	(592) 226-2942	co-ordinator@sdpn.org.gy
Peter A. Murray	Programme Officer	OECS, ESDU	Morne Fortune, P. O. Box 1383 Castries, St. Lucia	(758) 453-6208 ext. 29	(758) 452-2194	pamurray@oecsnrmu.org
Jeanne Majella Louis	Statistician	Gov't Statistics Dept.	Chreiki Bldg. 55 Micoud Street, Castries, St.Lucia	(758) 452-3716/24410	(758) 451-8254	majellalouis@hotmail.com
Anthony McKenzie	Manager Strategic Planning & Policy	NEPA	10 Calidonia Ave. KGN 10 Jamaica	(876) 906-5787	(876) 754-7594	amckenzie@nepa.gov.jm

ANNEX IV. LIST OF PARTICIPANTS

Name	Title	Institution	Address	Telephone	Fax	Email
Kakuko Nagatani-Yoshida	Junior Professional Officer	UNEP- Regional Office for Latin American and the Caribbean	Blvd. de los Virreyes, No. 155 Lomas de Virreyes, Mexico, D.F. Mexico	(525) 55202-4841	(525) 55202-0950	kakuko.nagatani@pnuma.org
Natasha Nunez	Programmes Associate	Caribbean Network For Integrated Rural Development (CNIRD)	40 Eastern Main Road, St. Augustine, Trinidad	(868) 662-6473	(868) 645-5963	cnird@carib-link.net
Kemraj Parsram	Technical Officer	Caribbean Conservation Association	Chelford, Bush Hill, The Garrison St. Michael, Barbados	(246) 426-5373	(246) 429-8483	ccatechofficer@ccanet.net
Leisa Perch	Project Manager/Environmental Specialist	Organization of American States	1889 F Street NW. Rm 622-A Washington DC 20006	(202) 458 3228	202 4583560	lperch@oas.org
Martina Regis	Economist	Ministry of Physical Dev. Env. & Housing	Graham Louisy Administrative Building P.O. Box 709	(758) 468-4463	(758) 452-2506	mkregis@planning.gov.lc
Espen Ronneberg	Inter-Regional Advisor for SIDS	SIDS Unit, DESA, United Nations	2 UN Plaza, DC2-2082 New York, NY 10017	(212) 963 - 2043	(212) 963-4340	ronneberg@un.org
Susanna Scott	Fisheries Biologist/Coastal Zone MGT. Project Coordinator	Ministry of Agriculture & Fisheries	Point Seraphine, Castries	(758) 468-4138	(758) 452-3853	deptfish@slumaffe.org
Reena Shah	Statistician	United Nations Statistics Division	DC2-1412, 2 UN Plaza, New York, NY 10017, USA	(212) 963-4586	(212) 963-0623	shahr@un.org
Amrikha D. Singh	Environmental Officer	Ministry of Housing, Lands and Environment, Barbados	First Floor, S.P. Musson Building, Hincks Street, Bridgetown, Barbados	(246) 467-5705	(246) 437-8859	technical@meenr.gov.bb
Angela R. Skeete	Regional Programme	CARICAD	Weymouth Corporate Centre Roebuck Street	(246) 427-8535	(246) 436-1709	askeete@caricad.org

ANNEX IV. LIST OF PARTICIPANTS

Name	Title	Institution	Address	Telephone	Fax	Email
	Coordinator		St. Michael Barbados			
Cletus I. Springer	Principal Consultant	Impact Consulting Services Incorporation	P.O. Box 1410 Castries	(758) 4521007	(758) 452-1007	springer@candw.lc
Edwin St. Catherine	Director	Statistics Dept	Chreiki Bldg, Castries	(758) 453-7670	(758) 451-8254	edwin_St._Catherine@msn.com
Luc St.Pierre	CEPNET Programme Office	UNEP - Caribbean Regional Coordinating Unit (UNEP-CR/RCU)	14-20 Port Royal Street, Kingston, Jamaica	(876) 922-9267	(876) 922-9292	lsp.uneprcuja@cwjamaica.com
K. Mustafa Toure	Consultant	IDSD Project	P.O. Box 984 Belize City, Belize	(501) 610-2197	(501) 223-1762	mustafa@belizeit.bz
Bishnu Tulsie	Chief Sustainable Development & Env. Officer	Ministry of Physical Development, Environment & Housing	Graheam Louisy Administrative Building, P.O. Box 709. Waterfront Castries	(758) 451-8746	(758)4516958	btulsie@planning.gov.lc
Claudia S. de Windt	Proj. Attorney Inter-American Forum on Env. Law	Organization of American States	1889 F Street NW. Rm 623 Washington DC 20006	(202) 458-6914	(202) 458-3560	cdewindt@oas.org