



WORKSHOP REPORT

GEF-IWCAM AND IABIN INDICATORS MECHANISM WORKSHOP

10 - 12 March 2008

Ocho Rios, Jamaica

INTRODUCTION

The Global Environment Facility funded Project¹ 'Integrating Watershed and Coastal Areas Management in Caribbean Small Island Developing States (GEF-IWCAM)' commissioned an assessment of indicators mechanisms and related capacity in the participating countries (PCs) and the development of an IWCAM indicators template. Drafts of the assessment report and indicators template have been prepared and distributed for comments to members of the implementing and executing agencies. This workshop was held to present the revised assessment report and indicators template to representatives of the PCs, and implementing and executing agencies. The workshop was held jointly with the GEF-funded Inter-American Biodiversity Information Network (IABIN), with joint and parallel sessions. A summary of the proceedings of the workshop is presented in this report.

WORKSHOP OBJECTIVES

The major objectives of GEF-IWCAM for the workshop were to:

- Present the findings of the IWCAM indicators mechanisms and capacity assessment in the participating countries for discussion, inputs and feedback from participants;
- Present the draft indicators template for discussion and obtaining consensus;
- Discuss the way forward for implementation of the indicators template;

The major objectives of IABIN for the workshop were to:

- Establish collaborative mechanisms especially among Caribbean states, where project proposals are developed for access to content-building grants from IABIN thematic networks. Emphasis will be placed on common areas of interest including Invasive Alien Species, Protected Areas and Ecosystems, and Pollinators;
- Establish a Caribbean management effectiveness database using the existing MPA Global database and review geospatial technologies with respect to development of monitoring and evaluation tools for protected areas management;
- Prepare Caribbean Countries to make a unified presentation on MPA databasing and management effectiveness at the 11th International Coral Reef Symposium in July 2008.

The workshop agenda and list of participants are given in Annexes I and II, respectively.

PROCEEDINGS

DAY 1

Welcome and Opening

The workshop was opened by Mr. Vincent Sweeney, GEF-IWCAM Regional Project Coordinator, who welcomed participants and provided a brief background to the workshop objectives as well as the rationale for holding a joint GEF-IWCAM/IABIN workshop. He gave an

¹Co-implemented by the United Nations Development Project (UNDP) and the United Nations Environment Programme (UNEP); co-executed by the Caribbean Environmental Health Institute (CEHI), and the UNEP Caribbean Regional Coordinating Unit (UNEP CAR-RCU).

overview of the GEF-IWCAM Project and indicators mechanism assessment objectives. Historically, the countries have adopted a sectoral approach to the management of coastal areas, watersheds, and biodiversity. Because of the small size of the Caribbean Small Island Developing States (SIDS) and the close land-sea interaction, an integrated approach is needed for the sustainable development and natural resources management of these countries. The GEF-IWCAM Project provided the conceptual and operational framework to facilitate the integrated approach to natural resources management across the 13 participating countries. The joint GEF-IWCAM/IABIN workshop was seen as one step in this integration process, as a result of a number of activities and interests in common. He drew attention to the large number of related initiatives in the region and the limited resources, and stressed the need for streamlining, integration, and capitalizing on synergies, and working together to maximize benefits and reduce costs (see slide presentation – Annex III).

Ms Dionne Newell (Member of Executive Committee / IABIN Focal Point) welcomed participants on behalf of IABIN, and noted the low rate of participation of the Caribbean SIDS in IABIN, which is a Latin American and Caribbean initiative. She described IABIN's Five-year Project Implementation Plan with its focus on the collection, exchange, and use of biodiversity data. Elements of the programme involved assisting countries to establish national databases and the development of an information structure for data exchange. One of the benefits of involvement in the IABIN processes is that it creates an opportunities for the relevant stakeholders to come together to exchange expertise, knowledge, and information. The joint staging of the GEF-IWCAM and IABIN MPA workshops was described as an opportunity to not only pool resources, but to expand the respective target audiences involved in effective biodiversity conservation.

Ms. Newell noted that IABIN provided grants on a competitive basis. She extended special thanks to Mr. Richard Huber, General Secretariat of the Organization of American States (GS/OAS) Coordinator for the World Bank implemented, GS/OAS executed GEF "Building IABIN" project.

Mr. Huber also welcomed participants and pointed out that one of the objectives of the workshop was to encourage all groups to work together.

The IABIN Marine Protected Areas Management Effectiveness workshop was a success with over 25 attendants from IABIN Countries and representative NGOs (Annex IV). The IABIN Focal Points of the Caribbean and interested NGOs designated the key Government officials and pertinent NGO representatives that work in marine protected area management for their Country. As marine protected areas are multi-jurisdictional, some IABIN Focal Points designated a mixture of government agencies and NGOs.

The pertinent countries filled in the management effectiveness database, established a baseline (2008), and analyzed management effectiveness trends. The Powerpoint presentations and the individual country databases can be found on the Webpage: <http://www.oas.org/dsd/Events/english/08.03.10.htm>

Mr. Christopher Corbin, Programme Officer, UNEP/CAR-RCU, conveyed the regrets of Mr. Nelson Andrade, who was unable to attend the workshop. Mr. Corbin welcomed participants to Jamaica and noted that this was the first GEF-IWCAM workshop to be held in Jamaica. The GEF-IWCAM/IABIN initiative was catalytic in bringing agencies together to move towards improved coordination and integration. He mentioned that UNEP/CAR-RCU held much information and a number of databases, and that information and data are needed to demonstrate the problems facing the region in order to mobilize funding. Mr. Corbin

congratulated Mr. Sweeney and others for the significant work being done in the GEF-IWCAM project and for bringing together participants from both the GEF-IWCAM and IABIN projects.

Case Study: Presentation on Cost Effective Analysis and Integrated Coastal Zone Management of Coral Reefs Decision Support Modeling

Mr. Huber presented a case study on the Montego Bay research project (see slide presentation-Annex V) in which he discussed approaches to capturing ecosystem benefits associated with marine parks for the purpose of planning and decision making. Given the conservation objective of improving ecosystem services, valuation techniques provide the means to identify the most effective policy and conservation management interventions

Following this, both groups separated and the proceedings and presented below.

GEF-IWCAM WORKSHOP

The GEF-IWCAM workshop opened with a review of the participants expectations of the workshop. This exercise was intended to highlight expectations consistent with the workshop objectives that might benefit from additional attention, and to identify and address at an early stage any misconceptions or expectations that would not be met by the workshop.

Participants made statements of their expectations of the workshop and about the indicators template in general:

- Provide assistance and guidance in selecting appropriate indicators from among the many available;
- Guidance on an indicators mechanism to involve communities (young people) in community monitoring of natural resources (Dominica). Mr. L. Walling, consultant, pointed out that it is important to include local communities in monitoring;
- Practical indicators are needed to communicate information to the public and local communities, and a standard set of indicators is needed. A challenge was to agree on a core set of indicators;
- Need to enhance ongoing dialogue between the countries;
- It is important to choose indicators that will give the best results. Indicators should be linked to clear objectives and time-bound targets;
- Concern was expressed about the long list of indicators. Ms S. Heileman, consultant, pointed out that the PCs should select the most appropriate indicators in accordance with their needs and circumstances. Mr. Walling, referring to coral reef monitoring in Jamaica, suggested that selection of indicators could begin with questions that environmental managers need to answer. Selection would also have to be based on available resources and skills in the PCs, and pooling of resources by the countries should be explored;
- Because of language and cultural barriers among the PCs, it is important to find a common ground to communicate information, which could be provided by a core set of indicators;
- Ms Heileman mentioned that among her expectations was that the PCs would help to fill the gaps, especially at the national level, in the indicators mechanisms and capacity assessment report. A few of the PCs had not responded to the survey, and responses were received from only one or a few agencies within countries that did respond, which

provide an incomplete picture of the actual situation within those countries. She urged country representatives to provide information to fill these gaps;

- Mr. Walling suggested that perhaps there was a need to whittle down the list of indicators to something more manageable.

PRESENTATIONS

Overview of GEF monitoring and evaluation process and GEF indicators: Sasha Beth Gottlieb

An overview of GEF monitoring and evaluation process for its International Waters projects was given to provide a broad conceptual context for subsequent presentations and discussions. The presentations included a review of the three types of indicators proposed by GEF (Process, Stress Reduction, Environmental Status), and the rationale for monitoring GEF projects. The slide presentation is given in Annex VI.

Comments arising from this presentation included:

- Indicators should facilitate the tracking of particular trends (timeline needed to show change in indicator), so as to help determine what actions are needed in the future. Indicators should be linked to decisions and help people decide what they want to do about their own environment;
- Indicators should go beyond the lifetime of the project.

Ms. S. Gottlieb explained the difference between project outcomes and outputs (using the GEF-IWCAM demonstration projects as examples). A number of important points and recommendations were made in the discussions that followed the presentation.

- Some indicators, such as of behavioural change, are more difficult to measure. Measurement of indicators does not necessarily require the same methodology, as long as comparisons are facilitated. However, laboratory analyses and measurements are more rigid and require standard methodologies;
- A number of indicator initiatives exist, which the IWCAM indicators should support and help to bring about integration;
- There is a need to institutionalize indicators, to mainstream them into the planning process at the national level and eventually to harmonize them at the regional level;
- The indicators mechanism(s) developed under the GEF-IWCAM project should be consistent with and support initiatives at the national level, while building on previous capacity development initiatives;
- The indicators template should be country-specific rather than GEF-IWCAM Project-specific in order to ensure that the initiatives and mechanisms developed under the GEF-IWCAM project are sustained and carried forward after the GEF-IWCAM Project has closed;
- Participants were informed of the compendia of environmental statistics and indicators that have been produced by a number of the PCs under a CARICOM/UN Statistics Division initiative. This was an important undertaking, which positioned countries to move forward, using the GEF-IWCAM project and existing institutions for the next steps;

- The OECS indicators framework was a good one, and there is a need to see how these fit at the national level;
- There are synergies between IWCAM and Multinational Environmental Conventions (MEAs) – the PCs are developing action plans, etc. under these MEAs, and there is a need to have countries/agencies collaborate in developing indicators for these various purposes.

Overview of assessment of indicators mechanisms and related capacity: L. Walling & S. Heileman (consultants)

A brief overview of the findings of the indicators mechanisms assessment was presented by S. Heileman and of the capacity assessment by L. Walling (slide presentation in Annex VII). Comments and discussion followed:

- It was felt that the list of recommendations were very long and needed to be more focused, specific, and concrete;
- Opportunities for moving forward with indicators should be identified (LW: sees opportunities for building on existing capacities. A few models should be developed, and sharing of expertise should be explored for moving forward);
- Donna Spencer (GEF-IWCAM Project Communication, Networking, and Information Specialist) informed the meeting of the GIS capacity assessment and the proposed road map. Support is needed at the national level for building capacity and data collection;
- Statistical departments are key stakeholders for indicators;
- Lessons from the groundtruthing exercises conducted under this assignment included the example of the Barbados Coastal Zone Management Unit – the value of data to decision making was recognized and Barbados is incorporating indicators into national level strategies. Also, the Dominican Republic has legislation in place for compilation and sharing of data and information at the national level;
- There is a need to create the demand by decision makers for data and information (e.g. as seen for GIS), and to think creatively about products for decision making (products should be user-friendly) and raising public awareness;
- Indicators need to be valuable tools for other reasons than just reporting;
- A core set of indicators should be approved by government ministers;
- A cadre of expertise in water resources management should also be created.

BREAK OUT GROUPS

Participants were placed into four break-out groups (1 group consisting of the demonstration projects, 2 of the PCs, and one of regional agencies: CARICOM, CEHI, University of the West Indies, UNEP/CAR-RCU) - to discuss the assessment report and present a summary of their discussions at plenary. A handout with guidelines for use in the break-out group discussions was provided (Annex VIII).

Summary of break-out group discussions and recommendations:

- In general, the indicators mechanism assessment is an accurate reflection of the existing situation regarding indicators mechanisms at national, regional and global levels. These mechanisms are relevant to IWCAM;

- The assessment report should be more succinct, with an executive summary;
- Best practices and lessons learned should be shared among the demonstration projects - sharing of best practices on how to utilize environmental indicators in a socio-economic framework;
- Further discussions are needed on how to move forward. There is a need for focused actions and selection of appropriate indicators (a road map on how to move forward, how to prioritize, how to establish national indicator mechanisms in a timely and realistic manner, using 'SMART' indicators);
- Better coordination is needed among national and regional agencies;
- Development of indicators should focus at the national, sub-regional and regional levels (it should not be donor or internationally driven, or project driven);
- Indicators have to be seen as valuable tools by stakeholders at all levels (from local to regional). They form an essential component of Decision Support Systems. The question was raised about how to present indicators so that they gain resonance with decision makers, and how to integrate indicators into broader decision making processes. A political process is needed to achieve this. Case studies and best practices could be used to help mainstream indicators into decision making processes;
- Indicator initiatives should be nationally driven and then regionally driven;
- The appropriate capacity of different stakeholder groups must be built – there is need to define groups, skill sets, etc. A significant capacity constraint exists in data interpretation;
- National and regional information management systems need to be strengthened. Lack of indicators weakens countries' ability to put their cases forward at international fora, e.g. to the World Trade Organization;
- Are decision makers interested in more indicators, are they aware of existing indicators. There needs to be appreciation of the value of these indicators and an understanding of the linkages between indicators and economic sectors - agriculture, tourism, etc. Indicators should be used strategically, e.g. how much water will be required for tourism;
- How are indicators used? A different set of skill-sets will be required to identify linkages between indicators and impacts;
- Indicators from several projects should not be considered in isolation - i.e. harmonization is necessary. Mechanisms for harmonization is needed at the regional level, including harmonization of data collection methods;
- Environmental indicators tend to be negative (e.g. solid waste/sewage) or seen as impediments to development; these need to be viewed in a positive light, and linked to positive management actions;
- Knowledge, analysis, translation of data for adaptive management - there needs to be a roll-down approach, i.e. impact on activities, and prioritization of agency resource use;
- Countries' priorities change over time but periodic reviews should be conducted to assess progress from the baseline status;
- Legal obligation of countries to collect and share information is recommended, e.g. Freedom of Information Act. Dissemination might be more difficult;
- Valuation of natural resource use is required; it is being conducted but needs to be institutionalized and more training in valuation is required. Academic institutions exist for training and service provision-valuation, e.g. UWI;
- Resource-managers training can be considered weak but economic programmes are now including environment valuation;
- National accounting systems are insufficiently sophisticated; green accounting has not been fully taken on board. These systems would generate a need for indicators as they would be based on values of the resources being monitored and the services that they

provide. The region has not presented any submissions before WTO relating to environmental goods and services;

- Marine environment can be considered for Clean Development Mechanism/Carbon Trade initiatives, e.g. climate change and use of coral reefs/forests as carbon sinks. Thus, it is important to study and value the resources;
- How are data translated to information, knowledge, and decision? Needs to be collaboration between scientists, statisticians, decision makers, etc.
- On the issue of policy relevance, it was suggested that a national indicators mechanism must be linked to the overarching national policy mechanism comprising a framework of well defined national goals and objectives. In such a context indicators could be used to tell a “story” that is linked to national concerns.

Presentation on indicators template: L. Walling & S. Heileman

An overview of the indicators template, consisting of GEF process indicators (PIs), stress reduction indicators (SRIs), and environmental status/socio-economic indicators (ESIs/SEIs), was presented by the consultants (slide presentation in Annex IX). Some explanation and clarification was given on the difference between SRIs and ESIs, as well as on the relationship between indicators and data. Following this, the participants were divided into four break-out groups to discuss the template and present a summary of their discussions at plenary.

DAY 2

Continuation of break-out groups discussion of indicators template.

Summary of break-out group discussions and recommendations:

General Comments and Recommendations:

- In general, the themes and concerns under which the indicators are arranged were considered to be comprehensive and adequate, and it was thought that the template was broad enough for countries to be able to select a sub-set of indicators to meet their needs;
- The menu of indicators was accepted as a starting point to build capacity for integrated management and work at the country level for development of a system of data collection;
- More information and guidance are needed regarding the process of selection and prioritization of indicators, and how to interpret the results especially when faced with conflicting environmental, economic and social objectives;
- Data monitoring and compilation capacity is limited and countries should focus on a small set of indicators to begin with; capacity for developing and using indicators needs to be strengthened in the PCs. Capacity constraints in data interpretation exist;
- Indicators should also be applicable to fresh and brackish water;
- Indicators should be arranged according to short, medium, and long term indicators;
- It would be useful to rate/rank the indicators in terms of resource (financial, data) intensity;
- In the case of Jamaica, producing Green Papers is helpful to get the process moving forward, not so much about reforming policies;

- Enforcement processes are weak and implementation lengthy (while environmental stress continues). There are also overlapping responsibilities, conflicting mandates of agencies, weak political will, and limited resources – these constraints to progress need to be rectified;
- Before GEF-IWCAM and other projects are introduced to a country the capacity must be developed to receive and meet the project-related objectives. This was seen to be a critical element to ensuring the successful transition from project to programme;
- The objective ‘Ecosystem conservation...’ Should be changed to ‘Ecosystem integrity, goods and services’. However, the consultants felt that this was very broad and implies a number of other indicators that are not currently feasible and practical for the countries;
- In addition to implementing an IWCAM indicators framework, there is need to look at frequency of monitoring, standards, and data sharing among the countries (work on these aspects has already started in a number of the countries);
- A question was raised about choosing the baseline year for indicators - need to be careful of false baselines.

A number of additional indicators were proposed for inclusion in the template:

Environmental State and Socio-Economic Indicators:

- ESIs/SEIs: Crop production/unit area; production cost/unit area; % coastline affected by erosion; reduction in number of unofficial dump sites; reduction in vector populations; reduction in exposure to natural disasters; water temperature; mangrove area per type.

Stress Reduction Indicators:

- Increase in buffer zone along river banks and reservoirs; reduction in incidence of forest fires; increase in crop rotation practices; increase in efficiency of fuel combustion; improvement in identification of disaster high risk zones; increase in disaster response/early warning systems; increase in number of coastal protection/stabilization measures; increase in number of alternative livelihood opportunities available; change in the number of acres where sustainable agricultural practices are adopted/practiced; increase in all types of forests under sustainable management or protected; increase in measures to protect threatened and/or indigenous species; increase in number of industries adopting cleaner production technologies and/or environmental management standards/system; increase in number of sanitary landfills; % of population with access to solid waste collection;
- Increase in protected areas (SRI) might not be feasible in small islands (because of small land mass) – improved enforcement and management of protected areas might be a better indicator (but how to measure this is a challenge).

Process Indicators:

- These indicators should not only be relevant to the GEF-IWCAM project, but should be applicable to national and regional sustainable development issues;
- Suggestions regarding the PIs included: Private sector stakeholders should be given more emphasis; need for a regional partnership forum; enforcement – environmental inspection is important to ensure compliance; need to be able to quantify stakeholder perceptions;
- As far as possible, PIs should be linked to the SRIs and PIs (recognizing the linkages between different processes that require similar actions);

- Concern was expressed about the language used for some of the PIs, i.e. might not be politically feasible or acceptable, and whether some of them are feasible at the regional level (e.g. regional mechanism for IWCAM should be regional coordinating mechanism);
- Distinction should be made about what is required for IWCAM under the GEF project, and what already exists – a number of the bodies/processes exist, but do not function effectively. Therefore, an indicator of effectiveness of these bodies is needed.

Presentation on IWCAM demonstration project in Trinidad & Tobago: Sandra Timothy

Ms Timothy was invited to give a presentation on the demonstration project in Tobago (Buccoo Reef) to illustrate the use of the three types of GEF indicators (slide presentation – Annex X).

Caribbean Environmental Forum

Mr. Sweeney informed participants of the upcoming 4th Caribbean Environmental Forum being staged in conjunction with the 14th Annual Caribbean Waste Management Forum and the Global Energy Forum, from June 23rd to 27th 2008 (Annex XI).

Discussion on GEF-IWCAM/IABIN collaboration

A number of the indicators in the IWCAM template are relevant to biodiversity (the biodiversity-related indicators in the template are based on the CBD indicators). Protected areas should be considered within national frameworks. The indicators will help to evaluate biodiversity/protected areas / IWCAM management. Indicators can also be used to evaluate protected areas management effectiveness.

The IABIN marine experts meeting encouraged the Countries to present advancements in their marine biodiversity programmes and the NGOs to present their decision support tools. The pertinent countries filled in the management effectiveness database, established a baseline (2008), and analyzed management effectiveness trends (Webpage: <http://www.oas.org/dsd/Events/english/08.03.10.htm>).

There are several areas where the IWCAM indicators framework has synergies with marine park management effectiveness. Key biological findings included in the presentations and deduced from the individual country management effectiveness data included:

1. Marine reserves particularly those with no-take zones can increase fish biodiversity and abundance and recovery of habitats from fishing disturbance;
2. Networks of marine reserves can help fishery populations recover; protect reserve habitats from damage by fishing gear; and increase the probability that rare and vulnerable habitats, species, and communities are able to persist;
3. Over-fished populations in protected areas will recover following a decrease of fishing and recovery of spawning stock biomass;
4. Marine reserves support fished species outside reserves;
5. Average sizes of many larger carnivorous fishes increase within protected areas;
6. Marine reserves contribute to increase in population density, biomass, individual size, and diversity.

Key management effectiveness findings included:

1. Unmanaged artisanal fishing around coral reefs results in resource degradation in the coastal commons;
2. Enforceable governance systems are required, e.g. regulating access (e.g. fishing effort) — that do not undermine local cultural values and practices;
3. MPAs are complicated governance structures. Ongoing stakeholder participation in co-management arrangements with authorities and adequate resources to enforce limited entry and use is required;
4. MPAs require substantial resources beyond the initial investment in order to operate and retain their effectiveness and achieve public acceptance, and as a result sustainable budgets are essential. In response to financial sustainability the following objectives were discussed:
 - By capturing a portion of the economic value of the benefits derived from the local marine environment, ecotourism will be better able to finance management activities to protect natural and cultural resources and fulfill broader social objectives of providing for scientific research and education;
 - Given the current inadequate investment in sustainable ecotourism, reflected by overcrowding, poor infrastructure, and resource deterioration, benefit capture can be effective in aligning social costs with private costs to improve economic decision making and provide sustained revenues for management authorities;
 - Benefit capture and market based instruments (MBIs) are effective tools as they apply to the socio-economic and institutional context of two sites -- Montego Bay Marine Park Trust, Jamaica, was presented as a case study. The recommended instrument for the Montego Bay Marine Park is an earmarked hotel room fee of US\$1 per bed-night, to lead to annual revenue of approximately US\$1.5 million. Key in the recommendations is the provision of information to hotel guests regarding management activities and the benefits of forests, rivers, and coral reefs. An independent administration of the programme by the Montego Bay Marine Park Trust, in cooperation with the hotel sector, is necessary to ensure accessible and sustained funding;
5. There is a wealth of biological information and management experience in marine parks in the Caribbean that involve:
 - Frameworks primarily for biodiversity conservation and habitat protection;
 - Multiuse marine management characterized by balanced conservation and sustainable use;
 - Frameworks primarily designed for extractive purposes within a framework of managed use;
 - Culture-ecological and social protection reserves set up primarily to protect cultural heritage or land/seascapes and the use rights of traditional peoples.

Recommendations made by the marine park experts included:

- Encourage more Caribbean-wide databases like the IABIN management effectiveness database that will help in reporting to CBD, the Millennium Development Goals, and the World Parks Congress;
- Promote the use of science and traditional knowledge to network adjacent or close proximity Marine Parks to achieve greater effectiveness at a larger scale;
- Explore partnerships to help finance the policy reform, institutional arrangements, and sustainable financing agenda required to implement integrated coastal management and create a viable governance framework;
- Invest in creating sustainable alternative livelihoods and social protection for those affected by reallocation of use rights;

- Establish new biodiversity conservation-oriented marine parks to meet “representative system” targets;
- Look into transforming and scaling up community-based resource reserves to mainstream biodiversity protection in the production landscape;
- Explore community-driven development as a platform for mainstreaming local coastal zone initiatives.

Mention was made of the Caribbean Marine Atlas (UNESCO/IOC pilot initiative in some of the Caribbean SIDS), with suggestion that linkages should be established between this and GEF-IWCAM and IABIN.

Plenary discussion on the way forward: opportunities, entry points, and barriers to the adoption and integration of the IWCAM and IABIN indicators with national and regional initiatives: C. Corbin & S. Heileman

Mr. Chris Corbin (UNEP CAR RCU) began this session by pointing out that IWCAM embodies a number of economic sectors and environmental themes. The IWCAM approach is particularly relevant to SIDS, because of their small physical size and close inter-linkage between watersheds and coastal areas. Currently there is a call at all levels for an ecosystem, holistic approach to environmental and natural resources management; IWCAM represents an opportunity to implement this approach in a practical, ‘do-able’ way. Indicators are an effective means of tracking the impacts of land-based pollution in the marine environment.

Ms. Heileman added that the indicators in the template were selected based on existing national, sub-regional, regional, and international frameworks – therefore developing an indicators mechanism should not place an added burden on the PCs. Opportunities should be explored for bringing all these indicator initiatives under a common, well-coordinated framework or mechanism. A culture of environmental monitoring and performance evaluation and adaptive management is needed in the region; indicators must form an essential component of any monitoring and evaluation framework. Indicators could also help to effectively communicate information at all levels. A number of the PCs have advanced indicators initiatives, and could assist the other PCs in developing indicators frameworks. Countries often cite the lack of data and information as a major constraint to better environmental and natural resources management, but the review of indicators mechanisms revealed that a substantial amount of data and information are available (albeit with gaps) that, in general, could form an adequate baseline. A suite of standard, robust indicators could help to focus data collection efforts, avoid the dispersion of effort on less meaningful data and *ad hoc* data collection, and better inform decision making. Indicators should be linked to clearly defined goals and objectives, which themselves are sometimes not clear or explicitly stated. There is a need to sensitize all stakeholders (especially decision makers) on the need for and utility of indicators.

Mr. Walling noted that the development of policy relevant core indicators will be driven by national needs, capacities, and priorities. He noted the practical challenge that countries might perceive in moving from the seemingly conceptual exercise of formulating indicators to applying indicators in the national development context. A way of overcoming this challenge was seen to be the recognition of the fact that countries are already collecting and using environmental data that can serve as indicators. The transition from data collection to indicators development and use was seen to be dependent on adoption of adaptive management practices that require indicators of effectiveness.

It was suggested that one of the next steps might be the development of national indicators templates based on the data that is already being collected within each country. The national indicators templates could serve as the focus and point of departure for national capacity development workshops designed to promote awareness and understanding of indicators concepts and benefits, and the adoption and further development of a national indicators template and mechanism. This approach supported the point that an indicators template should be seen as an opportunity to identify a small, manageable suite of essential indicators to inform sustainable national development.

Mr. Corbin pointed out the need to distinguish between the GEF-IWCAM project indicators and IWCAM programme indicators. The selection of some of the indicators is based on country's reporting requirements, but it must be clear what countries are reporting on. Countries should have the ability to choose indicators based on specific goals and objectives. He again stressed that indicators must be mainstreamed into decision making processes. Countries must decide if the issue of indicators should be brought to the political level, and how this could be accomplished. The national data and information management process is important – how are indicators and data and information brought together at the national level? Is a network of agencies needed? How better to network, rather than relying on one agency? UNEP is working on databases (e.g. for SPAW Protocol, etc.). Other opportunities include the UNEP Regional Seas programme. UNEP is updating the pollution loading of the Caribbean Sea, in collaboration with other agencies. However, it is difficult to obtain data from the Caribbean SIDS. Specialized agencies such as CEHI could be used for monitoring.

Specific to IABIN/IWCAM collaboration, the group called for:

- Greater coordination between IABIN and IWCAM in order to strengthen the region's capacity in data collection, assimilation, and consolidation to prevent the duplication of efforts;
- Collaborative mechanisms with IWCAM, especially among smaller Caribbean states, where project proposals are developed for access to content-building grants from IABIN thematic networks. Emphasis will be placed on common areas of interest including Invasive Alien species, Protected Areas and Ecosystems, and Pollinators.

Comments from participants:

- It was suggested that GEF-IWCAM, in collaboration with IABIN, could work on the preparation of a meta-database and protocol for sharing of and access to information;
- Indicators already exist in the PCs, but often not formalized;
- A consultative process at different levels is needed to identify a suite of national level indicators; all stakeholders should be engaged;
- National workshops on indicators were recommended to set up decision support systems;
- Resources are needed for more focused actions;
- Countries need to move from being reactive to being able to plan ahead with better tools to inform decision-making;
- Countries need to know what data are being collected, including by external agencies, universities, in Environmental Impact Assessments, etc. and have access to this;
- In general, funds are lacking for data collection and entering data into database, and making data accessible;

- Indicators template presents an opportunity to identify key types of data needed and to focus data collection on these;
- UNEP/CAR-RCU will be launching a marine litter and pollution database in 3 pilot countries.

CONCLUSION AND NEXT STEPS

Mr. Sweeney again stressed the need for integration, synergies and streamlining among the various initiatives, and informed participants of the proposed next steps:

1. Pilot testing of a suite of indicators in one of the PCs, to be determined in consultation with the IWCAM indicators working group;
2. More focused training for the PCs on indicators (with IABIN) using existing data and case studies;
3. GEF-IWCAMIWCAM representatives (Jose Valenzuela and Adrian Cashman) to be involved in the IWCAM indicators working group – a joint working group would be set up;
4. GEF-IWCAM to conduct laboratory assessment to support monitoring efforts;
5. Dissemination of lessons learned and best practices of management effectiveness, time-bound performance indicators, and synergies between the IABIN and GEF-IWCAM projects with a view towards a follow up workshop in early 2010.

CLOSING

Ms Dionne Newell thanked participants of both groups (GEF-IWCAM and IABIN) on behalf of IABIN.

Mr. Sweeney thanked all participants and closed the workshop.

ANNEXES