



**REGIONAL WORKSHOP ON ECOSYSTEM-BASED MANAGEMENT AND APPLICATION OF DECISION
SUPPORT SYSTEMS IN THE WIDER CARIBBEAN REGION**

4-6 December 2017, Panama City, Panama
Crowne Plaza Panama Hotel

WORKSHOP AGENDA

4 December - DAY 1

1. INTRODUCTION AND WORKSHOP BACKGROUND

09:00-09:30 hs 1.1 Welcome Remarks

- UN Environment representatives, Caribbean Environment Programme (CEP), Jamaica and Regional Office for Latin America and the Caribbean (ROLAC), Panama
- Panama Authorities
- Italian Agency for Cooperation and Development (IACD), Ministry of Foreign Affairs and International Cooperation

09:30 - 10:00 hs 1.2 Short introduction by participants

- Goals and expectations

10:00- 10:30 hs 1.3 Organisation of the Workshop

- Adoption of the Agenda
- Review of workshop objectives, work in plenary and in break-out groups, expected results

10:30 – 10:45 hs Coffee Break

10:45 -11:45 hs 1.4. Ecosystem-based Management (EBM) and Decision Support Systems (DSS)

- Key features of EBM and DSS methods, tools and template
- The Project: “*Biodiversity for Sustainable Development in the Caribbean through Ecosystem Based Management*” Overview, and Status (project objectives, implementation strategy and overall progress), including the application of DSS methodology through a pilot demonstration project in the Dominican Republic.

2. BASIC TRAINING ON THE USE THE EBM METHODS, TOOLS AND TEMPLATES: SIMULATION OF AN EBM-DSS PROJECT

11:45-13:00hs 2.1 Preliminary phase: thematic scoping and establishment of EBM multi-disciplinary working group.

- Identification of the key components of relevant biophysical systems, infrastructural networks and socio-economic sectors
- Stakeholders analysis
- Establishment of an EBM multi-disciplinary working group

13:00 – 14:30 hs Lunch

2. CONTINUED - BASIC TRAINING ON THE USE THE EBM METHODS, TOOLS AND TEMPLATES: SIMULATION OF AN EBM-DSS PROJECT

14:30 -15:30 hs 2.2 *Phase 1 - Ecosystem Context Analysis. Recognising connections within and across ecological and human systems spanning over a focused area.*

- Drafting System Matrices: developing a set of tables listing all structural components of the relevant biophysical and human systems, together with their succinct descriptions.



(cont'd) 2.2 *Phase 1 - Ecosystem Context Analysis. Recognising connections within and across ecological and human systems spanning over a focused area.*

This session will be introduced in plenary by a presentation of examples of System Matrices, based on the experience from the Dominican Republic pilot project, and by illustrating how to develop them.

Participants will then form three break-out groups, each assigned with the preparation of the System Matrices relevant to a given thematic sector (e.g. components of biophysical and human; infrastructural networks and economic sectors).

15:30 -15:45 hs Coffee Break

15:45 -16:30 hs CONTINUED.

5 December - DAY 2

09:00 – 10:00 hs CONTINUED - BASIC TRAINING ON THE USE THE EBM METHODS, TOOLS AND TEMPLATES: SIMULATION OF AN EBM-DSS PROJECT

2.2.1 Plenary discussions on day 1 break-out groups

The workshop will re-convene in plenary and each group will report back and illustrate at least one of the System Matrices drafted in the break-out groups, with question, discussion and general feedback from participants.

10:00 - 10:30hs 2.3 *Phase 1 - Ecosystem Context Analysis. Recognising connections within and across ecological and human systems spanning over a focused area.*

- Development of System box-and-arrows Diagram: describing the dynamics (arrows) between the biotic and abiotic components (boxes) of the natural ecosystems, the services that ecosystems provide to sustain life (boxes), and the uses that human society makes of these services (boxes).

This session will be introduced in plenary by a presentation of examples of System Diagrams, based on the experience from the Dominican Republic pilot project, and by illustrating how to develop them.

Participants will then be divided in three break-out groups, each assigned with the development of a System Diagram starting from a sub-set of the System Matrices drafted during the previous session (DAY 1).

10: 30 – 10:45 hs Coffee Break

10:45- 13:00 hs CONTINUED

2.3.1 Plenary discussions

The workshop will re-convene in plenary and each group will report back and illustrate at least one of the System Diagrams prepared in the break-out groups, with question, discussion and general feedback from participants.

13:00 – 14:30 hs Lunch

2. CONTINUED - BASIC TRAINING ON THE USE THE EBM METHODS, TOOLS AND TEMPLATES: SIMULATION OF AN EBM-DSS PROJECT

14:30 -15:30 hs 2.4 *Phase 2 - Setting-up of an EBM Decision Support System. Development of indicators, construction of an EBM database and implementation of an EBM-DSS application.*

Participants will be divided in three break-out groups; each of these will be assigned with: i) the development of a small list of indicators to support a number of items of the System box-and-arrows Diagram (which represent the elements of the relevant biophysical and human systems); ii) the construction of database tables and GIS layers for handling the data for these indicators; and iii) linking these database tables and GIS layers to the EBM-DSS software to visualize the indicators' spatial distribution and temporal trends (maps, tables, charts).



15:30 -15:45 hs Coffee Break
15:45 -16:30 hs CONTINUED.
6 December - DAY 3
2. CONTINUED- BASIC TRAINING ON THE USE THE EBM METHODS, TOOLS AND TEMPLATES: SIMULATION OF AN EBM-DSS PROJECT
09:00-10:30 hs 2.5 <u>Phase 3 - Assessment of ecological risks and socio-economic stresses and identification of management interventions.</u>
<ul style="list-style-type: none">• System Cause-Effect Analysis: assessment of threats to the sustainability of ecological and human systems and development of an integrated set of management measures. <p>The session will be held in plenary to perform participative analyses using the EBM-DSS software to carry out an integrated quantitative assessment of: i) the conservation status of the biotic and abiotic components of the natural ecosystem (e.g. favourable/unfavourable); ii) the use of ecosystem services (e.g. untapped-potential/ sustainable use/overexploitation); iii) livelihood levels (e.g. adequate/inadequate; increasing/decreasing). These assessments will lead to the identification of an integrated set of EBM measures directly derived from (and targeted) to the relevant components of the ecological and human system (or interaction between them); the System Diagrams and the Indicators developed in the previous phases will also serve as a reference framework to monitor the performance of the EBM measures adopted.</p>
10: 30 – 10:45 hs Coffee Break
10:45- 12:00 hs 3. THE ROLE AND ESTABLISHMENT OF REGIONAL EBM NETWORK NODES IN THE WIDER CARIBBEAN
<ul style="list-style-type: none">• Presentation of the EBM Regional Nodes concept: role, institutional profile, capacities needed
12:00- 13:00 hs 3.1 Developing a Technical and Budget Template for the replication of an EBM-DSS project
<ul style="list-style-type: none">• The experiences of the pilot project in the Dominican Republic
3.2 Open discussion and recommendations
13:00 – 14:30 hs Lunch
14:30 -15:30 hs 4. THE WAY FORWARD AND UP-SCALING OF EBM IN THE WIDER CARIBBEAN
<ul style="list-style-type: none">• Plenary discussion: Conclusions, lessons learned challenges and limitations, recommendations, next steps and road map for the sustainability and replication of the EBM-DSS approach, both at national and regional scales.
15:30 -15:45 hs Coffee Break
15:45 -16:20 hs CONTINUED - THE WAY FORWARD AND UP-SCALING OF EBM IN THE WIDER CARIBBEAN
16:20 - 16:30 hs 5. CLOSURE OF THE WORKSHOP