Government of Saint Lucia

TERMS OF REFERENCE

Consultancy for conducting Environmental Information Management Training Workshops – Phase II

Increase Saint Lucia’s Capacity to Monitor Multilateral Environmental Agreements (MEAs) Implementation and Sustainable Development Project

1 Background

During the 2007 National Capacity Self-Assessment (NCSA) project development process, capacity limitations to implement the obligations arising from Multilateral Environmental Conventions and other environmental initiatives critical to the island's sustainable development were underscored. These capacity needs were to be addressed at all levels (namely, systemic, institutional and individual). Addressing these needs would allow Saint Lucia to optimally utilize the opportunities for synergistic relationships. In addition, specific areas of training in information management, research techniques and analysis would help address the gaps, and improve the islands’ capacity to achieve its obligations under Multilateral Environmental Agreements (MEAs). In particular, the Report highlighted a number of gaps in acquiring and enhancing skills needed to ensure effective implementation of MEAs and environmental management initiatives.

While MEAs reflect a high level of awareness regarding global environmental threats and set an agreed framework for action in the research, policy and financial areas, it is recognized that many agencies face challenges with data access, monitoring and evaluation, as well as capacity to utilize information in decision-making processes.

1 Simmons and Associates Ltd (2014) Update: 2007 National Capacity for Self-Assessment Report; ‘List of training areas include: negotiating, information management, understanding and applying convention methodologies, technology development and transfer, research techniques and analysis, monitoring and evaluation’.
Environmental Information Management Training – Phase 2

In Saint Lucia, many of the agencies engaged in data collection and management lack the required capacity and/or ability to effectively interpret and utilize available data in the decision-making process and transform environmental information into decision making tools.

Stakeholders observed the dire need for effective monitoring of MEAs and proposed capacity building among local experts to fill the gap.

The Government of Saint Lucia (GOSL) is therefore seeking to address the national need for decision makers to have access to science-based information to inform decision making, as well as to enhance its ability to meet its reporting requirements regarding MEAs. The Department of Sustainable Development, with support from the Global Environmental Facility (GEF) and the United Nations Environment Program (UNEP) through the Increase Saint Lucia’s Capacity to Monitor MEAs implementation and Sustainable Development Project, is increasing its efforts to institute efficient measures for monitoring the MEAs through targeted interventions and enhanced capacity building. Accordingly, this Project calls for training of all key agencies engaged in environmental management and reporting.

In 2017, Phase One was conducted, involving a series of five (5) workshops aimed at enhancing skills needed to ensure effective implementation and monitoring of MEAs and environmental management initiatives in Saint Lucia. Some areas of training covered were: (1) Understanding Convention Environmental Assessment Methodologies (2) Monitoring and Evaluation of Environmental Management Programmes (3) Records Management (4) Data Analysis & Interpretation (SPSS), (5) Communicating Environmental Information and Risks. In designing the workshops, close attention was paid to the synergistic relationships between committing to, implementation monitoring of, collecting and analyzing data for, and communicating environmental information and risks under MEAs. Emphasis was placed on the Environmental Conventions: United Nations Convention for Biological Diversity (UNCBD), United Nations Framework Convention on Climate Change (UNFCCC), and United Nations Convention to Combat Desertification (UNCCD).
For Phase Two, a Consultant is sought to provide expert training in some of the areas identified for capacity building during the 2007 National Capacity Self-Assessment (NCSA) Project. The project thus seeks a suitably qualified Consultant Team or Firm to provide the requisite training as detailed in Table 2.

2 Objectives

The objectives of this Consultancy are as follows:

1. To conduct training and equip public and private sector, civil society and nongovernmental officers in the use of environmental information to facilitate national, indicator-based reporting on Conventions.

2. To facilitate advanced training workshops in information management in meta data and statistical analysis, research methods and techniques, project management, the conduct of vulnerability assessments, and development of environmental indicators, and;

3. To undertake cutting edge and future focused training which could be practically transferred into the workplace and facilitate training of trainers to serve as focal points for internal agency transfer of skills.

3 Scope of Services

Training sessions will be facilitated by the contracted Consultant. The targeted agencies are listed in Table 1.
<table>
<thead>
<tr>
<th>Areas of Training</th>
<th>1. Central Statistics Office</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Water Resources Management Agency</td>
</tr>
<tr>
<td></td>
<td>3. Saint Lucia Meteorological Services</td>
</tr>
<tr>
<td></td>
<td>4. Piton Management Authority</td>
</tr>
<tr>
<td></td>
<td>5. Water and Sewerage Company of St Lucia</td>
</tr>
<tr>
<td></td>
<td>6. Department of Environmental Health</td>
</tr>
<tr>
<td></td>
<td>7. Department of Tourism, Information &amp; Broadcasting</td>
</tr>
<tr>
<td></td>
<td>8. Forestry Department</td>
</tr>
<tr>
<td></td>
<td>9. National Conservation Authority</td>
</tr>
<tr>
<td></td>
<td>10. Saint Lucia National Trust</td>
</tr>
<tr>
<td></td>
<td>11. Department of Agriculture</td>
</tr>
<tr>
<td></td>
<td>12. Department of Fisheries</td>
</tr>
<tr>
<td></td>
<td>13. Department Physical Planning</td>
</tr>
<tr>
<td></td>
<td>14. Saint Lucia Solid Waste Management Authority</td>
</tr>
<tr>
<td></td>
<td>15. Coalition of Civil Society Organizations</td>
</tr>
<tr>
<td></td>
<td>16. Department of Commerce</td>
</tr>
<tr>
<td></td>
<td>17. Department of Public Service</td>
</tr>
<tr>
<td></td>
<td>18. Department of Economic Development</td>
</tr>
<tr>
<td></td>
<td>19. Department of Finance (Research &amp; Policy)</td>
</tr>
<tr>
<td></td>
<td>20. WASCO</td>
</tr>
</tbody>
</table>
### Research Methods & Techniques

1. Central Statistics Office  
2. Water Resources Management Agency  
3. Saint Lucia Meteorological Services  
4. Piton Management Authority  
5. Water and Sewerage Company of St Lucia  
6. Department of Environmental Health  
7. Department of Tourism, Information & Broadcasting  
8. Forestry Department  
9. National Conservation Authority  
10. Saint Lucia National Trust  
11. Department of Agriculture  
12. Department of Fisheries  
13. Department Physical Planning  
14. Saint Lucia Solid Waste Management Authority  
15. Coalition of Civil Society Organizations  
16. Department of Commerce  
17. Department of Public Service  
18. Department of Economic Development  
19. Department of Finance (Research & Policy)  
20. WASCO  
21. Office of the Prime Minister

### Geographic Information Systems (GIS)

1. Central Statistics Office  
2. Water Resources Management Agency  
3. Saint Lucia Meteorological Services  
4. Piton Management Authority  
5. Water and Sewerage Company of St Lucia  
6. Department of Environmental Health  
7. Department of Tourism, Information & Broadcasting  
8. Forestry Department  
9. National Conservation Authority  
10. Saint Lucia National Trust  
11. Department of Agriculture  
12. Department of Fisheries  
13. Department Physical Planning  
14. Saint Lucia Solid Waste Management Authority  
15. Coalition of Civil Society Organizations  
16. Department of Commerce  
17. Department of Public Service  
18. NEMO  
19. WASCO
### Conducting Vulnerability & Adaptation Assessments

1. Central Statistics Office  
2. Water Resources Management Agency  
3. Saint Lucia Meteorological Services  
4. Piton Management Authority  
5. Water and Sewerage Company of St Lucia  
6. Department of Environmental Health  
7. Department of Tourism, Information & Broadcasting  
8. Forestry Department  
9. National Conservation Authority  
10. Saint Lucia National Trust  
11. Department of Agriculture  
12. Department of Fisheries  
13. Department Physical Planning  
14. Saint Lucia Solid Waste Management Authority  
15. Coalition of Civil Society Organizations  
16. Department of Commerce  
17. Department of Public Service  
18. NEMO  
19. Department of Equity, Social Justice, Empowerment and Human Services  
20. WASCO  
21. Soufriere Marine Management Association (SMMA)

### Development of Environmental Indicators

1. Central Statistics Office  
2. Water Resources Management Agency  
3. Saint Lucia Meteorological Services  
4. Piton Management Authority  
5. Water and Sewerage Company of St Lucia  
6. Department of Environmental Health  
7. Department of Tourism, Information & Broadcasting  
8. Forestry Department  
9. National Conservation Authority  
10. Saint Lucia National Trust  
11. Department of Agriculture  
12. Department of Fisheries  
13. Department Physical Planning  
14. Saint Lucia Solid Waste Management Authority  
15. Coalition of Civil Society Organizations  
16. Department of Commerce  
17. Department of Public Service  
18. Department of Economic Development  
19. WASCO  
20. Office of the Prime Minister
Environmental Information Management Training – Phase 2

The Consultant is required to undertake the following tasks:

**Task 1** - Create a training action plan, which must ensure that the necessary systems are in place, resources are accessible, and training can be sourced or designed, coordinated, delivered and positioned for greatest impact.

**Task 2** - Develop a training module based on the requirements identified in appended extract.

**Task 3** - Identify areas where a training of trainers’ approach can be adopted and identify funding for ongoing training in key areas.

**Task 4** - Undertake a cross agency approach to training and ensure that all key agencies engaged in environmental management and reporting are targeted.

**Task 5** - Evaluate the training administered by assessment and verification
4 Proposed Training Areas with Objectives, Target Group and Strategy

A training plan is strategic to increasing the capacity of stakeholders engaged in MEA implementation and monitoring. Targeted agencies will receive training to improve information management, reporting for MEAs and sustainable development. The Consultant may propose additional training strategies which will improve the training that may not have been considered by the Department.

**Key defining training levels:**

Basic (B) Understands what the issues are; Aware of the range of possible approaches; Able to perform the tasks in a simple environment, or with supervision;

Intermediate (I) Able to perform the task in medium complexity environment; Able to make a decision and choose an approach where several approaches are available;

Advanced (A) Able to train others; Able to manage others in performing the task; Able to apply the learning/do the task in a complex environment

Mode of Training
The training program will be based in Saint Lucia and be as hands on and practical as possible. All sessions will be face-to-face interaction.

---

## Environmental Information Management Training – Phase 2

### Table 2 - Information Management Training Plan

<table>
<thead>
<tr>
<th>Area of Training</th>
<th>Course Objectives</th>
<th>Expected Outcomes</th>
<th>Target Group/Level of Training for Target Group</th>
<th>Suggested Training Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta Data &amp; Statistical</td>
<td>This course should:</td>
<td>1. Understanding Meta Data</td>
<td>Practitioners &amp; Middle Managers (B)</td>
<td>This course should specifically target administrators, data management team members.</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>1. present the concept, principles, and value of metadata.</td>
<td>2. Analyze the Current State of the Meta Data Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. enable participants to create a managed meta data environment that is accessible and relevant to its users and essential to an organization’s successful use of their information assets.</td>
<td>3. Challenges in the meta data industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. provide attendees with an overview of full lifecycle strategy and methodology for defining meta data requirements, analysis of the meta data tools market, specific ROI definition, capturing/integrating meta data, and accessing the managed meta data environment (MME).</td>
<td>4. Know how to implement a Managed Meta Data Environment</td>
<td></td>
<td>In addition to the training program, participants should be provided with an organization/sector specific project. Special meetings (to be arranged) may be required for presentation and discussion of projects. These special sessions will be scheduled based on the timeline required for development of the project. Participants already engaged in data analysis should be specifically targeted as well as users of data.</td>
</tr>
<tr>
<td></td>
<td>4. provide an introduction to the world of statistics</td>
<td>5. Meta data environment architecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Gain a broad understanding of the conceptual underpinnings of statistics in ecology and conservation, the major issues and pitfalls associated with study design, and the key distinctions among statistical methods or classes of methods commonly used in ecology and conservation;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. develop problem solving skills in an interdisciplinary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Information Management Training – Phase 2

<table>
<thead>
<tr>
<th>Area of Training</th>
<th>Course Objectives</th>
<th>Expected Outcomes</th>
<th>Target Group/Level of Training for Target Group</th>
<th>Suggested Training Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology and conservation</td>
<td>5. an understanding of basic statistical concepts critical to the proper use and understanding of statistics in environmental conservation.</td>
<td>team environment; 8. Refine their written and oral communication skills. 9. A lab/practical hands-on session will provide participants with hands-on experience analyzing 10. real data sets using excel software or SPSS</td>
<td>Senior managers (B) Practitioners/Middle managers (I) Operational Staff (A)</td>
<td>The course should include both class sessions as well as hands on projects for the middle managers/practitioners.</td>
</tr>
<tr>
<td>Research methods &amp; techniques</td>
<td>This course should: 1. introduce participants to qualitative and quantitative research methods and techniques used to study environmental sustainability and management 2. increase participants' knowledge of how research is designed and implemented and enable them to assess the quality and nature of research required as an input into policy making 3. enable participants to understand the importance of research,</td>
<td>At the end of this course participants will be able to: 1. Assess the literature and identify relevant resources for the research 2. Read and analyze the sources to identify relevant materials 3. Extract/take notes (summarize/paraphrase) useful data from the sources; 4. Synthesis relevant data from different sources 5. Critique consulted literature; 6. Acknowledge used sources accurately; 7. Construct an appropriate research design;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area of Training</td>
<td>Course Objectives</td>
<td>Expected Outcomes</td>
<td>Target Group/Level of Training for Target Group</td>
<td>Suggested Training Strategy</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
</tbody>
</table>
| Geographic Information Systems (GIS) | the process of information seeking, defining a need, creating a research strategy, selecting and evaluating information sources, and using information ethically.  
4. enable the participants to understand the importance of research, the process of information seeking, defining a need, creating a research strategy, selecting and evaluating information sources, and using information ethically.  
8. Implement the design to collect primary data;  
9. Write and present a research report  
10. Work collaboratively within a group to do assigned tasks; deal with disagreement & conflict to reach consensus | This course should provide the participants with a full understanding of GIS concepts and principles and how it can be used for environmental management data collection and analysis | Senior managers (B) Practitioners/Middle managers (B) Administrators/Operational staff (workers); (B)                                                                                               |                                                                         |
<table>
<thead>
<tr>
<th>Area of Training</th>
<th>Course Objectives</th>
<th>Expected Outcomes</th>
<th>Target Group/Level of Training for Target Group</th>
<th>Suggested Training Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting - Vulnerability and adaptation Assessments</td>
<td>coordinate systems, map projections, database management, spatial data models and operations</td>
<td>This course will give participants an overview of an approach and tool to help natural resource managers and conservationists assess the vulnerability of resources and infrastructure from a variety of stressors including climate change and develop adaptation alternatives for soil conservation and environmental management generally. Particular attention will be given to theoretical and practical aspects of assessment process in relation to the compilation of inventories required to comply with MEAs, as well as soil conservation and environmental management</td>
<td>Senior managers (I) Practitioners/Middle managers (I) Administrators/ Operational staff (workers); (B)</td>
<td></td>
</tr>
<tr>
<td>Environmental Indicators</td>
<td>1. increase participants’ understanding of</td>
<td>1. Understanding of the role and importance of</td>
<td>Senior managers (A) Practitioners/Middle</td>
<td></td>
</tr>
<tr>
<td>Area of Training</td>
<td>Course Objectives</td>
<td>Expected Outcomes</td>
<td>Target Group/Level of Training for Target Group</td>
<td>Suggested Training Strategy</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
</tbody>
</table>
| Development      | sustainability issues at the national and grassroots level and provide tools for initiating or developing environmental indicator projects.  
2. Increase knowledge on how others are defining and working on sustainability, participants should gain experience in developing and evaluating potential indicators of sustainability.  
3. Should highlight useful resources and sources of data for indicators. | indicators  
2. Understanding of the requirements and characteristics of “good” indicators  
3. Understanding of the various types and classifications of indicators  
4. Ability to identify problems with the current indicators used in their environment monitoring  
5. Ability to improve or develop more appropriate indicators for various levels of the programme, project or policy system  
6. Ability to develop indicators for assessing and measuring sustainable development | managers (A) Administrators/Operational staff (workers) (B) | |
5 Deliverables

The Consultant is required to undertake the following deliverables:

i. Training Action Plan two (3) weeks after Inception Meeting

ii. Training Module for training areas identified in Table 2, five (5) weeks after approval of Training Action Plan by Contracting Authority (refer to course objective and outcomes detailed in Table 2)

iii. Consecutive training programs on target areas identified in Table 2 over a five-week period

iv. Training Evaluation Report two (3) weeks after administration of the training

6 Duration and Cost

The Consultant will be contracted for a period of fifteen (15) weeks. The Contract will be a lump sum Contract payable based on the schedule proposed in the agreed Contract between the Government of Saint Lucia (GOSL) and the Consultant. The payment level is in-keeping with the GOSL procurement guidelines for administration of a Departmental Tenders Board. The Contract will be taxed according to the Income Tax regulations related to Contract taxation.

7 Qualifications and Experience

Qualifications
The Consultant Firm/Team must possess at least Masters Level Degrees in atleast two of the following (Geographic Informational Systems, Statistics, Research Methods, Management Information Systems, Environmental Management, Conservation) or related fields.

Experience
The Consultant Firm/team must possess:
Environmental Information Management Training – Phase 2

I. At least five (5) years working experience in Geographic Information Systems, Statistical Analysis, Research methods and Environmental Management assessments in Latin American and the Caribbean Region.

II. At least five (5) years experience delivering training and capacity building programs.

Competencies
The Consultant Firm or Team should:

I. Demonstrate expert knowledge of, and experience in Geographic Information Systems (GIS), Statistical analysis, Meta Data Analysis, Research Methods, Environmental Management (particularly conservation, vulnerability and adaptation assessments and environmental indicators)

II. Possess an understanding of the principles of environmental management training in the mentioned fields and resources required to facilitate the training

III. Demonstrate thorough submitted proposal competence in training workshops, report writing, presenting information and consulting with stakeholders

8 Reporting and Logistics

The Consultant will report directly to the Permanent Secretary, Department of Sustainable Development or designate. The Consultant Firm is expected to be responsible for their own hotel, transportation and office arrangements.

9 Submissions

All Proposals submitted must be sealed and clearly marked “Consultancy to Conduct Environmental Information Management Training Workshops – Phase II” Increase Saint Lucia’s Capacity to Monitor Multilateral Environmental Agreements (MEAs) Implementation and Sustainable Development Project and must reach no later than 4:00 p.m. on 14th August 2018 and addressed to:
The Secretary
Department Tenders Board
Department of Sustainable Development
Norman Francis Building
Balata
CASTRIES