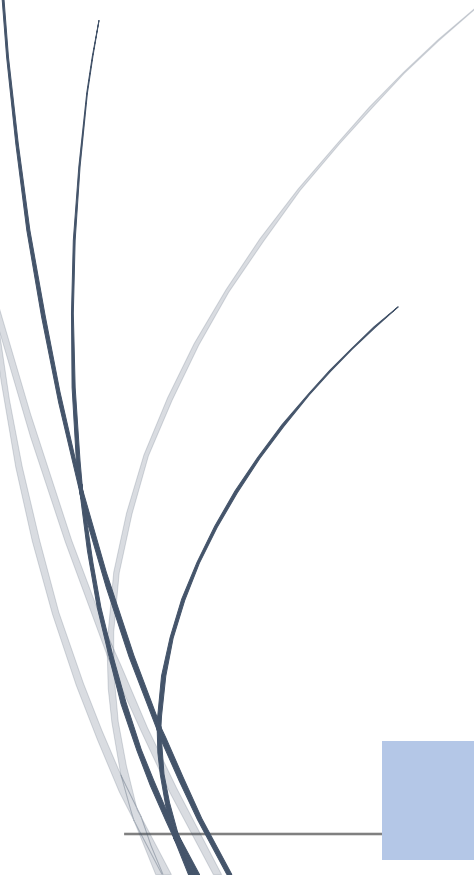





DRAFT



**Baseline Technical Capacities Assessment
Training Needs and Training Program for Better
Data and Information Use to Mainstream
UNCBD Convention**

Patrick E. Williams

May 29, 2018

Data Project

Project location: Guyana

Project start date: 01/06/2017

Project end date: 30/06/2019

Data Beneficiary

Name Beneficiary: Ministry of the Presidency, Department of Environment

Contact person: Ms Michelle Klass

Postal address: Lot 68 High Street, Kingston, Georgetown, Guyana

TABLE OF CONTENT

1.1 Background and Context.....	3
1.2 Overall Aim	3
2.0 TRAINING NEEDS ASSESSMENT.....	4
2.1 Objective.....	4
2.2 SWOT and GAP Analysis	5
2.3 Preparation of Action Plans	5
2.4 Baseline Data Collecting and Assessment.....	5
2.5 Setting of Biodiversity Targets	6
2.6 Development of Biodiversity Indicators.....	6
2.7 Environmental Accounting and Auditing	6
3.0 BIODIVERSITY MAINSTREAMING TRAINING PROGRAMME.....	6
3.1 Objective.....	6
3.2 Training Module 1: Preparation of SWOT and GAP Analysis.....	7
3.3 Training Module 2: Preparation of Action Plans	7
3.4 Training Module 3: Collection and Analysis of Baseline Data	7
3.5 Training Module 4: Setting of Biodiversity Targets.....	8
3.6 Training Module 5: Development of Biodiversity Indicators.....	8
3.7 Training Module 6: Environmental Accounting and Auditing.....	8
3.8 Training Module 7: Monitoring and Evaluation.....	8
4.0 SUGGESTIONS FOR FURTHER TRAINING	8

Baseline Technical Capacities Assessment Training Needs and Training Program for Better Data and Information Use to Mainstream UNCBD Convention

1.0 Background and Context

In 1992 Guyana became a signatory to the United Nations Convention on Biological Diversity (UNCBD) and ratified it one year later in 1993. In acceding to the Convention, the country has agreed to comply with and implement the regulations associated with it. One of the guidelines for compliance with the UNCBD is the Aichi Biodiversity Target. This document comprises seven (7) goals and twenty (20) targets that countries are expected to implement by the end of 2020. Additionally, countries are expected to report periodically on the progress made on their accomplishments with respect to the attainment of these goals and targets.

For Guyana, as in the case of other countries, a National Biodiversity Strategy and Action Plan (NBSAP) was prepared for the period 2012 – 2020 and is under implementation. The Environmental Protection Agency (EPA) is the focal point with responsibility for the implementation of the UNCBD, working in collaboration with key agencies such as the Guyana Forestry Commission (GFC), the Protected Areas Commission (PAC), the Guyana Geology and Mines Commission (GGMC) and the National Agricultural and Research Institute (NAREI) of the Ministry of Agriculture. The NBSAP, while reflecting much of what has been presented in the Aichi Biodiversity document, was tailored to take cognizance of the local conditions in Guyana, including legal and institutional arrangements, as well as policies, plans and programmes.

A review of Guyana’s most recent progress report on the implementation of the UNCBD and the assessments conducted under the current Department of Environment Consultancy which focusses on biodiversity mainstreaming into national policies, plans and programmes, suggest that while considerable progress has been made with respect to the mainstreaming process, there are still numerous gaps and deficiencies in the system that need to be addressed for more to be accomplished. These constraints are not uniform across all sectors and agencies as some have shown more technical capabilities and adaptability than others. It is therefore within this context that the discussion on the baseline technical capacities assessment training needs and training programme for better data and information use for UNCBD mainstream will be undertaken.

1.1 Overall Aim

To conduct baseline assessments of the technical capacities and training needs of key agencies to better utilize data and information to streamline and mainstream biodiversity into Guyana’s sector development plans consistent with the Aichi Biodiversity Goals and Targets and reflected in the National Biodiversity Strategy and Action Plan, 2012 – 2020.

2.0 TRAINING NEEDS ASSESSMENT

2.1 Objective

To undertake baseline technical capacities assessment of key agencies tasked with mainstreaming UNCBD activities in national sector plans and programmes and also includes other agencies such as the Department of Environment (DoE) and the Wildlife Conservation and Management Commission (WCMC) whose work is pivotal to the Guyana's compliance with the UNCBD.

TABLE 1: SUMMARY OF TECHNICAL CAPACITIES REQUIREMENTS OF KEY AGENCIES

KEY AGENCIES	TECHNICAL CAPACITY LIMITATIONS FOR UNCBD IMPLEMENTATION	TRAINING NEEDS
Department of Environment (DoE)	<ul style="list-style-type: none"> • Insufficient trained and technical staff to undertake tasks related to GSDS • Insufficient collaboration to facilitate coordination of MEAs • Absence of a data-sharing platform to monitor and evaluate the key agencies (PAC, EPA and WCMC) responsible for UNCBD implementation 	<ul style="list-style-type: none"> • Training of full-time Coordinator to facilitate the infusion of biodiversity into GSDS • Specialists with responsibility for monitoring and evaluating the work of key agencies tasked with biodiversity implementation
Protected Areas Commission (PAC)	<ul style="list-style-type: none"> • Insufficient staff to manage PAs • Lack of skilled and experienced staff to undertake scientific research, • Limited knowledge in biodiversity mainstreaming process (integrating plans with Aichi Targets) 	<ul style="list-style-type: none"> • Training in use of Remote Sensing and GIS software; • Training in the use of Marxan software; • Training in baseline data collection and analysis; • Training in the process of mainstreaming biodiversity
Guyana Forestry Commission (GFC)	<ul style="list-style-type: none"> • Insufficient collaboration to facilitate data gathering, data-sharing and technology transfer 	<ul style="list-style-type: none"> • Training in development of inter-agency networking platform
Ministry of Natural Resources (MNR)	<ul style="list-style-type: none"> • Lack of knowledge and experience in addressing biodiversity issues • No dedicated staff to address biodiversity issues • Lack of equipment to utilize in biodiversity monitoring process 	<ul style="list-style-type: none"> • Training in biodiversity conservation and management; • Training in the development of targets and indicators • Training in Remote Sensing and GIS to facilitate biodiversity monitoring and evaluation

	<ul style="list-style-type: none"> Limited knowledge and skills in developing biodiversity targets and indicators 	
Guyana Geology and Mines Commission (GGMC)	<ul style="list-style-type: none"> Insufficient collaboration to facilitate data-gathering, data-sharing and technology transfer Lack of skills within the agency to address biodiversity issues Lack of dedicated staff to focus on UNCBD biodiversity implementation 	<ul style="list-style-type: none"> Training in the development of data platform and data bases to facilitate data exchange Training in data collection and analysis to facilitate the demarcation and protection of biodiversity sensitive zones within mining areas
Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> Lack of trained and dedicated staff to address biodiversity mainstreaming issues High staff turn-over among technical staff Limited expertise in conducting field research Lack of institutional capability to store, retrieve and disseminate scientific field data and information Limited skills and knowledge in developing biodiversity targets and indicators 	<ul style="list-style-type: none"> Training in indicator development and target setting Training in monitoring and evaluation Training in scientific data collection and analysis Training in knowledge management
National Agricultural Research and Extension Institute (NAREI)	<ul style="list-style-type: none"> Lack of knowledge on coastal dynamics Lack of knowledge in remote sensing and GIS to facilitate monitoring coastal mangrove rehabilitation Limited experience in community engagement and participation 	<ul style="list-style-type: none"> Training in coastal geomorphology Training GIS and Remote Sensing Training in community engagement and participation
Wildlife Conservation and Management Commission (WCMC)	<ul style="list-style-type: none"> Limited skills in conducting wildlife research Lack of equipment to support wildlife research 	<ul style="list-style-type: none"> Training in the use of equipment to conduct wildlife research (eg. Camera traps) Training in wildlife data collection to establish baselines

Table 1 above provides information obtained from discussions with key agencies responsible for UNCBD activities implementation as well as the DoE and WCMC both of which were not listed as key agencies in the NBSAP as they were not operational at the time. At the WCMC meeting it was observed that the agency was not given a specific role to play in the UNCBD

implementation despite the fact that its activities are pivotal to Guyana meeting its obligations. As such, it is included as part of the training needs assessment plan. The information has been identified in the previous project outputs (SWOT and Gap analysis) and is summarized in the Table as the starting point for the identification and development of the training modules in this section of the report.

2.2 SWOT and GAP Analysis

The SWOT analysis focuses on the capacities of the agencies to undertake their assigned tasks, in this instance, biodiversity mainstreaming, considering their strengths, weaknesses, opportunities and threats. The Gap analysis addresses the elements that are missing with respect to the attainment of the set goals and targets under the UNCBD list of activities.

2.3 Preparation of Action Plans

The action plan is derived from the SWOT and Gap Analysis and outlines the strategies/actions that are required to address the constraints (institutional, legal, technical, financial etc.) that negatively impact on the attainment of the requisite biodiversity goals and targets. The action plan seeks to provide answers to such questions as: What needs to be done (Activities)? Who will be responsible for doing it (Staffing)? When will it be done (Timeline)? How do you know that it is done (Indicators)? What will it cost to do it (Funding)?

2.4 Baseline Data Collecting and Assessment

One of the major constraints for the mainstreaming of biodiversity into sector plans in Guyana is the absence of adequate baseline data for scientific and sound decision-making as well as conducting proper monitoring and evaluation of project activities. In monitoring and evaluating change in biodiversity status, baseline data is used to measure the degree or proportion of change required for the attainment of desired results/targets. Baseline data may be both qualitative and quantitative. For example, qualitative baseline data could include high, medium or low levels of turbidity in a stream or extremely good, very good, good or marginal soils. Quantitative data could include number or percentage of types of trees in an area, degree of slope of land or percentage of land area degraded from gold mining activities.

2.5 Setting of Biodiversity Targets

For most of the agencies investigated, there has been an absence of biodiversity targets in their action plan to implement the UNCBD. This limitation points to two main weaknesses in the institutions. These are limited technical capacity and the absence of requisite baseline data. As a result, the agencies have been unable to measure the impact of their activities and to accurately measure the changes that have resulted from their interventions. The acquisition of baseline data and the establishment of targets are two critical aspects of monitoring and evaluation.

2.6 Development of Biodiversity Indicators

Indicators are parameters used to determine if a particular activity is undertaken or implemented. Indicators are usually defined as “*smart*”. The acronym refers to simple, measurable, achievable,

reliable and testable. Indicators like baseline data can also be qualitative and quantitative. For example, noise levels could be very high, medium and low. Quantitative indicator of noise level could be number of decibels.

2.7 Environmental Accounting and Auditing

Budgetary allocations for biodiversity conservation and management often requires justification on the part of sector agencies, especially when decisions have to be made about priorities. Environmental accounting and auditing is a relatively new field in environmental management and is a tool that assists in identifying the costs and benefits (both quantifiable taking particular actions with respect to biodiversity conservation. The tool also allows for better monitoring and evaluation of project activities

3.0 BIODIVERSITY MAINSTREAMING TRAINING PROGRAMME

3.1 Objective:

To train participants from sector agencies to better understand and utilize data and information for mainstreaming biodiversity into national sector plans

3.2 Training Module 1: Preparation of SWOT and GAP Analysis

Learning Outcome:

By the end of this training module participants should be able to develop a framework for a SWOT and GAP analysis of his/her agency as well as identify the main aspects they relate to biodiversity conservation and the UNCBD

Activity 1.1 Prepare a list of all the perceived strengths and weaknesses of his/her agency

Activity 1.2 Prepare a table the perceived strengths and weaknesses of participant's agency

Activity 1.3 Prepare a table of the perceived opportunities and threats of participant's agency

Activity 1.4 Prepare a framework for a Gap Analysis and identify the data needs

Activity 1.5 Identify the data requirements needed to complete the gap analysis

3.3 Training Module 2: Preparation of Action Plans

Learning Outcome:

By the end of this training module participants should be able to develop an action plan to address the weaknesses, threats and gaps that have been identified in the SWOT and Gap Analysis conducted.

Activity 2.1: Develop an action sheet in relation to the UNCBD activities linked to your agency

Activity 2.2 Prepare an outline framework of the Action Plan

Activity 2.3 Describe the main features of the Action Plan

3.4 Training Module 3: Collection and Analysis of Baseline Data

Learning Outcome:

By the end of this training module participants should be able to identify and analyze baseline data that define the status of biodiversity

Activity 3.1: Conduct research on baseline data using both primary and secondary sources

Activity 3.2: Analyze and interpret baseline data

Activity 3.3: Prepare one paragraph describing the baseline data collected and the manner in which it will be used

3.5 Training Module 4: Setting of Biodiversity Targets

Learning Outcome:

By the end of the training module participants should be able to set targets to identify changes required in the status of biodiversity for the achievements of the Aichi Goals and Targets

Activity 4.1: Outline criteria for establishing targets

Activity 4.2: Compile list of targets for your agency

Activity 4.3: State the rationale for compiling the targets

3.6 Training Module 5: Development of Biodiversity Indicators

Learning Outcome:

By the end of the training module the participants should be able to develop a set of indicators to facilitate monitoring and evaluation of biodiversity project activities.

Activity 5.1: Explain the purpose of indicators

Activity 5.2: List the main elements of indicators

Activity 5.3: List examples of indicators

3.7 Training Module 6: Environmental Accounting and Auditing

Learning Outcome:

By the end of this training module participants should be able to have an understanding of the purpose and usefulness of environmental accounting and auditing with respect to mainstreaming biodiversity

Activity 6.1: Discussions on the concept of environmental accounting and auditing

Activity 6.2: Discussions on usefulness of environmental accounting and auditing

Activity 6.3: Listing of quantifiable and non-quantifiable costs and benefits

3.8 Training Module 7: Monitoring and Evaluation

Learning Outcome:

By the end of the training module participants should be conversant with the monitoring and evaluation process as well as the development of a framework for effective reporting on the UNCBD activities

Activity 7.1: Development of a framework for M&E

Activity 7.2: Identification of data requirements for M&E

Activity 7.3: Participants development of a hypothetical M&E framework

4.0 Suggestions for Further Training

1. Agencies should collaborate in developing a plan for skills-sharing and training to minimize costs and improve efficiency;
2. In areas where there is a need for specialized skills training e.g. Use of GIS, remote sensing, Marxan software and coastal geomorphology agencies could pool resources (both technical and financial) to avoid duplication