

**THIRTY-FIFTH MEETING OF  
THE STANDING COMMITTEE OF  
CARIBBEAN STATISTICIANS**

**SCCS/2010/35/3**

**Roseau, Dominica  
8-9 November 2010**

**1 November 2010**

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**DEVELOPMENTAL WORK IN THE AREA OF ENVIRONMENTAL STATISTICS  
AND PROPOSED WORK PLAN FOR 2011/2012**

**1. DATA COLLECTION FOR CARICOM ENVIRONMENT IN FIGURES 2009**

The Caribbean Community (CARICOM) Secretariat has commenced a new round of data collection and compilation for the Third CARICOM Environment in Figures Report which will contain data for the period 2005 to 2009. Table formats for data collection were sent out via email on August 10 2010. Eight (8) Member States submitted data in the table format as at September 10 2010.

Relative to the compilation and production of these Core indicators and statistics on the environment, the CARICOM Secretariat convened an Environmental Statistics Workshop during the week of September 13-17, 2010 to discuss the data collected for the report. The second report contained data up to the period 2004 and was first published via the website of the Regional Statistics Sub-programme in September 2008.

**2. CONDUCT OF REGIONAL WORKSHOP**

In preparation for the **CARICOM Workshop to Review the Compilation of Social/Gender and Environmental Statistics and Indicators** on September 13<sup>th</sup> to 17<sup>th</sup>, 2010 participants were sent via email the status of the data for the Core Environmental Indicators (including Millennium Development Goals (MDGs) prior to the

2008 update) received by the CARICOM Secretariat for the period 1998-2004 which was the period of data collection, although some countries submitted data for 2005 on some indicators. Also, the status of the data for the Regional update of the Millennium Development Goals (MDGs) Indicators and the Caribbean Specific Millennium Development Goals (CSMDGs) Indicators that was approved by the Council for Human and Social Development (COHSOD) in 2008 for participants to indicate the availability of these statistics in their country. With respect to the metadata, a template was submitted for participants to document the metadata, with respect to concept and definition, source of the data and method of computation for each indicator.

Countries were also asked to submit any recent Environmental Statistics publications so that any new indicators in these reports could be considered for addition to the table formats. The following were the reports received from countries:

- Dominica's Environmental Statistics Report 2008,
- Jamaica's Environment in Your Pocket 2009, and
- Bermuda's Environment Statistics Compendium

Six member countries submitted status reports prior to the workshop. These were Antigua and Barbuda, The Bahamas, Haiti, Jamaica, Suriname and the Turks and Caicos Islands.

Participants were also assigned indicators to present to the workshop detailing the sources of data, methodologies and procedures for filling gaps in data, concepts/definitions, data quality challenges/ inconsistencies and data relevance and use.

### **3. CARICOM WORKSHOP ON SOCIAL AND ENVIRONMENTAL STATISTICS AND INDICATORS**

The CARICOM Workshop to Review the Compilation of Social/Gender and Environmental Statistics and Indicators was convened during the period September 13-17, 2010 in Suriname at The Courtyard by Marriott Hotel, Paramaribo and country representatives were invited from both areas of statistics. The workshop was funded by

the by the European Union under the Caribbean Integration Support Programme (CISP) 9th European Development Fund (9th EDF) and the United Nations Statistical Division (UNSD) assisted with facilitating the workshop particularly in the area of Environmental Statistics. Sixteen (16) participants from twelve Member States and two Associate Members, Anguilla and The Turks and Caicos Islands participated in this workshop. Ms Reena Shah and Ms. Yongi Min from the UNSD Environment Statistics Section and Ms. Anya Thomas from the CARICOM Secretariat Sustainable Development Sub-Programme co-facilitated this component of the Workshop.

The main aim of the meeting was to facilitate information interchange and discussions that would serve to clarify issues and problems on the data compiled and submitted, to identify gaps in the data compiled, to validate the information and to strengthen capacity in the bridging of the existing gaps. In addition, the issue of comparability of the data within and across Member States will also be the focus of the workshop deliberations in an effort to achieve harmonisation.

#### **4. MAIN ACTIVITIES AND RESULTS ACHIEVED**

The following are activities from the Environmental Statistics Component of the workshop:

- Presentations by participants on the metadata for the list of core Statistics and Indicators, Caribbean Specific Indicators for the Millennium Development Goals (CSMDGs) and Millennium Development Goals (MDGs) Indicators on the Environment;
- Documentation of the sources of the environment data, data quality challenges/ inconsistencies, data relevance and use, gaps and deficiencies in environmental statistics and procedures for filling gaps in data.
- Development of an individual Action Plan for the submission of data and metadata to CARICOM.
- Discussion on recommendations on metadata to achieve harmonisation of Environmental Statistics looking at the best practices emanating from the workshop.

## **5. CHALLENGES AND OPPORTUNITIES**

Environmental Statistics is a relatively new and emerging field of statistics in the Region, with a large number of data sources and institutions involved, and with a lack of benchmarks and standards. Member States currently do not have the resources and manpower to have an Environment Unit, Jamaica and Suriname being the only countries with dedicated staff in this area, and therefore opportunities exist for capacity building and training. The need for increased inter-agency collaboration and the use of software such as the United Nations-based DevInfo to facilitate the compilation and dissemination of statistics that are available within agencies at the national level must be emphasised as mechanisms of improving data availability at the regional and international levels.

## **6. WORK PLAN IN ENVIRONMENTAL STATISTICS FOR 2011-2012**

The 2011-2012 work plan would focus on data collection and compilation for the Third CARICOM Environment in Figures Report, development and the refinement of concepts, definition and methodologies for gathering Environmental statistics and Indicators.

Elements of the approach to be followed will include:

- (i) Update the existing table formats for each indicator;
- (ii) Data and Metadata collection and compilation
- (iii) Data validation
- (iv) Prepare outline of publication
- (v) Provide support for the filling of the data gaps and the compilation of metadata in the selected areas including:

- (a) activate the Help Desk focusing on specific areas relative to resources to assist countries in compiling of these statistics;
- (b) collaborate with international and regional organisations to strengthen these areas of Environment Statistics
- (c) Collaborate with regional organisations such as CTO, CDERMA, OECS and UWI to collect data and metadata

Most Member States will be conducting population and housing censuses so it is expected that data compilation would be constrained by these activities.

### **ACTION TO BE TAKEN**

The **Meeting** is **invited** to:

- (i) **note** the work put in place by the CARICOM Secretariat in the development of Environmental statistics in the Region;
- (ii) **encourage** Member states to support efforts to collect and compile Environmental statistics.

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**List of Environmental Statistics and Indicators**

**ENVIRONMENTAL STATISTICS AND INDICATORS - MDGs & CSMDGs**

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**INDICATOR - MDG AND CSMDGs**

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**I. POPULATION AND HOUSEHOLDS**

- 66. Proportion of households with own dwelling; (CSMDG)
- 7.10 Proportion of urban population living in slums (MDG)
- 32. Proportion of households with access to secure tenure (CSMDG)

**III. ENVIRONMENTAL HEALTH**

- 7.8 Proportion of population using an improved drinking water source (MDG)
- 64. Proportion of population with sustainable access to an improved water source; (CSMDG)
- 7.9 Proportion of population using an improved sanitation facility (MDG) (CSMDG)
- 65. Proportion of population with access to improved sanitation facility, urban/rural; (CSMDG)

**IV. NATURAL DISASTER**

- 67. Percentage of coral reefs destroyed by human activity and by natural disasters; (CSMDG)
- 68. Incidence of natural disasters; (CSMDG)
- 69. Economic losses resulting from natural disasters; (CSMDG)
- 70. Social dislocation resulting from natural disasters; (CSMDG)

**V. ENERGY AND MINERALS**

- 1. Consumption of energy and renewable energy (import/export)
- 61. Energy use (kg oil equivalent) per \$1 GDP (PPP); (MDG 2003, CSMDG)
- 29. Proportion of population using solid fuels (MDG 2003)
- 63. Proportion of population using solid fuels by type of tenure.(CSMDG)

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**ENVIRONMENTAL STATISTICS AND INDICATORS - MDGs & CSMDGs**

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**INDICATOR - MDG AND CSMDGs**

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**VII. COASTAL MARINE AND RESOURCES**

7.4 Proportion of fish stocks within safe biological limits  
(MDG)

7.6 Proportion of terrestrial and marine areas protected  
(MDG)

**VIII. BIODIVERSITY**

7.6 Proportion of terrestrial and marine areas; (CSMDG)

7.7 Proportion of species threatened with extinction (MDG)

60. Ratio of area protected to maintain biological diversity  
to surface area; (CSMDG)

**IX FORESTS**

59. Proportion of land area covered by forest;  
(MDG,CSMDG)

**X. AIR**

62. Carbon dioxide emissions (per capita); (CSMDG)

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## ENVIRONMENTAL STATISTICS AND INDICATORS - CORE INDICATORS

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### INDICATOR - OTHER CORE

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#### I. POPULATION AND HOUSEHOLDS

1. Number of Households by type of dwelling
2. Number of Households by type of Tenure
3. Number of households by type of materials of outer walls
4. Number of households by type of roof
5. Number of persons per bed room of the household
6. Number of households by size of households

#### II. TOURISM

1. Tourist intensity /growth
2. Number of tourists
  - 3A. Number of cruise passengers arrivals
  - 3B. Number of cruise ships arrivals
  - 3C. Number of tourists nights spent
4. Tourist penetration ratio
  - 5a. Total number of rooms occupied
  - 5a. Number of hotel beds
  - 5b. Number of employees
6. Room occupancy rate
7. Estimates of visitor expenditure
8. Number of hotels by size
9. Number of hotels by land area occupied
10. Tourists visits by country of origin
11. Tourists arrivals by type of accommodation

#### III. ENVIRONMENTAL HEALTH

1. Number of reported cases and incidence of environmentally related diseases

#### IV. NATURAL DISASTER

1. Frequency and type
2. Economic loss
3. Human loss

#### V. ENERGY AND MINERALS

3. Number of households by type of lighting
  4. Production of gold, Aluminum or bauxite, Sand & Gravel, Limestone, Crude Oil, natural gas
  5. Mineral Reserves by Type
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**ENVIRONMENTAL STATISTICS AND INDICATORS - CORE  
INDICATORS (contd)**

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**INDICATOR -OTHER CORE**

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**VI. LAND USE AND AGRICULTURE**

1. Land use
2. Use of fertilizer by type (N,P,K) weight
3. Use of pesticides by type (weight)

**VII. COASTAL MARINE AND RESOURCES**

1. Total marine area (territorial sea area)
2. Protected marine area
2. Fish landings by type
  - 2A. *Protected marine area as % of total territorial sea area*
  3. *Fish landings by type*
- 4a. Fish catches
- 4b. Number of boats days
5. Population growth in coastal areas

**IX. FORESTS**

1. Total forest area
2. Protected forest area
3. Protected forest area as % of total forest area

**X. AIR**

1. Emissions of Sulfur Dioxide (SO<sub>2</sub>)
2. Emissions of Nitrogen Oxides (Nox)
3. Emissions of Non-Methane Volatile Organic Compounds (NM-VOCs)
4. Emissions of Carbon Dioxide (CO<sub>2</sub>)
5. Emissions of Methane (CH<sub>4</sub>)
6. Emissions of Nitrous Oxide (N<sub>2</sub>O)
7. Emissions of Lead (Pb)

**XI. WASTE**

1. Generation of Waste by Type and Sector
2. Treatment and Disposal of Municipal and Hazardous Waste by Type of Method
3. Hazardous Waste (Imported/Exported)

**ENVIRONMENTAL STATISTICS AND INDICATORS - CORE  
INDICATORS (contd)**

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**INDICATOR -OTHER CORE**

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**XII. WATER**

1. Renewable Fresh Water Resources
  2. Water Abstraction by Source
  3. Water Use by Supply Category and Activities
  4. Waste Water Generation
  5. Waste Water Treatment Facilities
  6. Water Quality of Selected Rivers
  7. Water Quality of Selected Coastal Areas
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