

**REPORT OF NATIONAL STAKEHOLDERS CONSULTATION ON GLOBAL  
FRAMEWORK FOR CLIMATE SERVICES FOR DOMINICA**



**FORT YOUNG HOTEL, ROSEAU  
AUGUST 12<sup>TH</sup> TO 13<sup>TH</sup> 2014**

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### Acronyms

CariCOM	Caribbean Community and Common Market
CIMH	Caribbean Institute of Meteorology and Hydrology
GFCS	Global Framework For Climate Services
NSSC	National Steering Committee for Climate
PAHO	Pan American Health Organization
WHO	World Health Organization
WMO	World Meteorological Organization
DOWASCO	Dominica Water and Sewage Company (DOWASCO)

## ***Background***

The Ministry of Health with the assistance of the World Meteorological Organization (WMO) and the National Steering Committee for Climate Change conducted a National Consultation on August 12<sup>th</sup> and 13<sup>th</sup> 2014 at the Fort Young Hotel to discuss the Global Framework for Climate Services (GFCS) and to identify a mechanism for implementation of the various services provided by the GFCS. The consultation also aimed to identify ways in which development sectors can utilize climate information in decision making and to establish a national framework for climate services that can support the mainstreaming of climate variability and change adaptation in the health sector.

This national consultation brought together key stakeholders including the National Meteorological Services and key decision makers among the various sectors including Agriculture, Fisheries, Health, Water, Disaster management, and Tourism, to discuss the framework and how Dominica could implement the requirements and develop a plan for its implementation.

The Ministry of Health expected that the participation of key stakeholders and decision makers at that national consultation would have

1. Facilitated the identification of the appropriate mechanism and network to improve and sustain the flow of information for all users among all sectors
2. Obtain strategic guidance on institutional arrangements and processes required to facilitate the sectors response to climate variability and change.
3. Identify the required capacity development needs for the implementation of the requirements of the GFCS at the national level.
4. Develop a framework through which information on climate variability and change can be included into the health sector
5. Identify the capacity development needs of the health sector in order to utilize and enhance the available climate services for better decision making

Officials from the World Meteorological Organization, The Caribbean Institute of Meteorology and Hydrology and the Pan American Health Organization also participated in the consultation, with representatives making presentations and participating in discussions over the two days.

## ***Organization of the National Workshop***

The workshop was organized by the Ministry of Health and the National Steering Committee for Climate Change to discuss the Global Framework for Climate Services along with key stakeholders in Dominica including the various development sectors, academia and community organizations. The workshop was addressed and facilitated by officials from the WMO, CIMH, PAHO and local sectors including the Ministry of Agriculture, Forestry, Fisheries, Environment and Health, DOWASCO, HIU.

The consultation was over a period of two days with the first day being discussions on the GFCS and the climate needs of the various sectors. There were also discussions on the climate services provided for the region by the CIMH and the status and capacities of the local climate services.

Development sectors discussed the services they provided and the challenges which are faced in obtaining climate services tailored for each sector.

The Ministry of Health took center stage on the second day with the objective of discussing the present challenges facing the sector and how the GFCS could benefit and improve the services provided by the ministry.

The consultation ended with a group discussion on the need for an Environmental Health Surveillance System and the research needs for the various sectors.

### ***Opening ceremony***

The workshop began with representatives of the Government and GFCS addressing the participants and highlighting Dominica's need to address climate variability and change as this posed the greatest environmental challenge to small island developing states like Dominica for a long time.

Mrs. Helen Royer, Permanent Secretary in the Ministry of Health highlighted the need for climate information for the health sector to better address the growing impact of climate sensitive diseases in light of the country's vulnerability to climate variability and change.

Mr. Harold Guiste, Permanent Secretary, Ministry of Agriculture, Forestry, Environment, Natural Resources, Physical Planning and Fisheries spoke of the activities being undertaken by his ministry to improve resilience to climate variability and change in Dominica.

Mr. Filipe Lucio, Director of the GFCS, presented the keynote presentation providing participants with a background and global perspective of the GFCS. He explained the purpose of the framework, the concerns countries should have with reference to the changing global climate and why decisions about preparedness should be made across time scales. He discussed the GFCS implementation priorities and approaches and the pre-requisites for implementation of the framework at the national level.



## **National and International Officials of the Meeting**

### **MEMBERS OF THE HEAD TABLE**

#### ***Workshop presentations and discussions***

On the first day of the consultation, discussions and presentations were centered around the capacities for climate services regionally and nationally. Mr. Adrian Trotman, Chief of Applied Meteorology and Climatology from CIMH made a presentation on the regional capacity to provide climate information to the various sectors. He made mention of his organization's capacities and some of the information which are provided to users of climate information. Special mention was made of the Caribbean Climate Outlook Forum (CariCOF) and the drought forecast which CIMH issues. Of importance was CIMH's partnership with member CARICOM countries with capacity building program and the focus on an early drought warning system for some countries. Mr. Trotman, using the Agriculture Sector as an example, made a number of recommendations that would support climate services to that sector including:

1. Adequate human resources and structural changes at National Meteorological Services that support weather and climate services for agriculture and financial support to develop competencies among staff
2. Specialized training for agricultural extension staff in agro meteorology

3. Financial resources made available for adequate, well maintained observation networks of higher spatial density that include Automatic Weather Stations. Particular emphasis should be placed on enhancing the quality and detail of biological information
4. National tri-partite committees, made up of meteorologists, extension officers and farmers as core groups ratified by government and report to the Ministry of Agriculture, particularly at times of threatening weather and climate conditions. These committees can be either expanded to, or play an advisory to role of Disaster Risk Reduction Committees in Agriculture

Mr. Collin Guiste, Meteorologist and Project Officer at the Environmental Coordinating Unit presented on climate projections for Dominica with emphasis on temperature increases and how Dominica is expected to be affected by climate change.

There were presentations on the climate needs of the Ministry of Agriculture, Forestry Division, Dominica Water and Sewage Company (DOWASCO) and Fisheries.

### ***Climate Variability and the Health Sector***

Day 2 of the National Consultation concentrated on climate variability and the vulnerability of the health sector. The objective of the session was to present the health sector's perspective and to identify strategies and capacity needs to better forecast and prevent negative health outcomes related to climate variability.

Ms Trudy Christian from the Dominica Health Information Unit made a presentation on the Epidemiology of climate sensitive diseases in Dominica highlighting the increasing incidence of Dengue Fever, Chikungunya, Gastroenteritis and Acute Respiratory diseases in the country. She also highlighted trends in some non-communicable diseases such as Asthma, Cancers and Heart diseases. Her presentation ended with recommendations on the development of the capacity of the Health Information Unit to better conduct surveillance of climate sensitive diseases.

The recommendations included

1. Human resources: appropriately trained professionals in adequate numbers
2. Data analysis and interpretation (techniques for longitudinal data are different than used presently for existing data- Disease modeling.)
3. Equipment and technology
4. Mobile computer devices, GIS
5. Access to data from non-health sector
6. Central servers, agreements
7. Routine inter-sectoral risk assessments
8. Information dissemination mechanisms
9. Active websites
10. International collaborations

Mr. Sylvester St Ville, Senior Environmental Health Officer presented on Primary Health Care and Environmental Health and the need for climate information. Mr. St Ville highlighted the activities of the Environmental Health Department in food safety, waste management, water quality and vector control. Regarding the engagement of health in climate issues discussions some of the main obstacles were stated: that there is a health demand for climate information, however, climate information is not tailored for use by health providers; that there is little demand for climate information by health practitioners in the field; that health only makes up a small fraction of decisions which impact human health, whereas other sectors have their own decision making mechanisms, Finally, an important issue is that climate information is not being presented in an attracting way for health practitioners.

The following recommendations were made

1. Integration of climate information into health decisions making mechanisms
2. Development of a climate information platform which should be demand driven and include air quality (ozone, UV radiation, particulates)
3. Involvement of health into decision making mechanisms where health is a downstream outcome

Another presentation was made by Ms.Sally Edwards, PAHO's Environmental Health and Sustainable Development Advisor for the Eastern Caribbean who discussed the strategies necessary for mainstreaming climate change into the health sector. She gave a comprehensive overview of the impact of climate on human health and the various pathways through which climate variability enables disease transmission.

Ms. Edwards discussed PAHO's strategies for climate and health including strengthening the dissemination of knowledge regarding the health risks associated with climate variability, building partnerships among all sectors and strengthening the capacity of the health system to respond. Four strategic areas were defined: evidence, awareness raising and education, partnerships, adaptation.

Recommendations out of the discussions:

### **1. Strengthen Primary Health Care:**

- Identify priorities in terms of new climate challenges for health, climate-related diseases,
- Develop consciousness and self-awareness that cooperation between the climate and health sectors is crucial for the future.
- Create means of communication and prevention of critical situations derived from climate conditions in health.

### **2. Surveillance:**

- Surveillance systems need to be strengthened and integrated with other data; climate, environmental

### 3. Disasters:

- Disaster Management plans rarely takes Climate Change projections into account, mitigation & adaptation

### 4. Research:

- Local level evidence generation
- Application of regional relationships
- Win-win situations – making health an opportunity

### 5. National Strategy and Framework

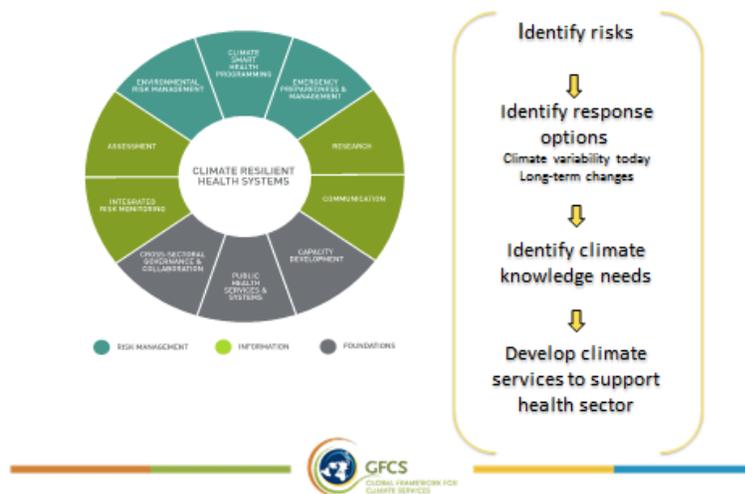
- National multi-sectoral strategy
- National framework for action

Dr. Joy Shumake-Guillemot, WHO/WMO Climate and Health Office, made a presentation on *Becoming Climate Smart*, a presentation which presented global climate impacts on health, WHO's action plan and technical resources to help countries advocate and take action to adapt to climate change, including the use of climate services. As Health is still a neglected sector in the climate talks and policy making processes, two fundamental concepts need to be emphasized:

1. Adaptation – manage unavoidable impacts, strategies, policies, measures taken
2. Mitigation – avoid climate change impacts that can be unmanageable.

She presented an overview of the Global Framework for Climate Services with respect to health, and the process of adaptation which starts with identifying local health risks exacerbated by climate change.

### Starting points for building climate resilience



The consultation ended with a group activity to discuss the following questions with regard to the development of an integrated environmental surveillance system and research:

- 1) Which global and/or regional climate services do you access and use?
- 2) Which climate information and services do you receive from national institution (NMHS) and use? How was the service developed or identified?
- 3) What additional products and services are needed?
- 4) What are the challenges in accessing climate information and services in your sector?
- 5) What are the challenges in using climate information and services? What are the critical elements that need to be taken into account or addressed?
- 6) Identify gaps/needed capacities to better use climate services (observation stations, research, enhanced interaction between users and providers, institutional arrangements and mandates, etc.).
- 7) What are the challenges in setting up a framework for climate services at the national level? Where do you see opportunities?
- 8) What shall be done in your sector do ensure availability of tailored climate services that address your decision making requirements.

### *National Consultation Recommendations and next steps*

#### **National Framework Coordination**

1. The National Steering Committee for Climate (NSCC) has been proposed as the coordinating body for the implementation of the Global Framework for Climate Services. Next steps include a presentation of GFCS to NSCC, and discuss modification of the existing ToR for the National Steering Committee for Climate Change, to include the coordination and implementation of the GFCS. Request agreement by the Minister of Health and the committee in order to implement the requirements of the framework.
2. Request for the formation of a Cabinet subcommittee on climate change to be made to the Government of Dominica
3. **Capacity Building of the Meteorological Services** CIMH to support the National Meteorological Services in the identification of gaps and priorities in order to improve the capacity and engagement in the implementation of GFCS.
4. Discuss the meteorological capacity of the various organizations in Dominica collecting weather data, assess the quality of the data collected, and identify opportunities for improved data management and coordination.

5. Expand the collection of weather information from the present points to ones more representative of the populated areas of the country, and develop capacity to monitor air quality on the island.

**Action to be taken by the Ministry of Health**

6. The Ministry of Health to advocate for enhanced inclusion of the health agenda, and the need for climate services with the NSCC
7. The Ministry of Health to adopt and modify the WHO/PAHO strategy for climate and health in the health sector
8. Conduct a vulnerability and adaptation assessment to identify health vulnerabilities to climate variability and change, including assessment of capacity to access and use climate information, Formal request to be made to the WMO for financial support, and WHO/PAHO for technical support.

***Closing***

The consultation was officially closed by Chief Medical Officer Dr. David Johnson who thanked the participants and the WMO and PAHO for supporting the consultation. He reiterated Dominica's commitment for implementation of the recommendations and the health sector's determination to mainstream climate change adaptation into its programs for disease prevention.

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## ANNEX 2: AGENDA

<i>Agenda</i>	
<b>Day 1</b>	
8: 00 a.m.	<b>Registration</b>
8:30 a.m.-9:35 a.m.	
<b>Opening Ceremony</b>	
<i>Chairperson: Dr. David Johnson, Chief Medical Officer</i>	
Welcome:	<i>Mrs. Helen Royer</i> <i>Permanent Secretary, Ministry of Health</i>
Remarks:	<i>Mr. Adrian Trotman</i> <i>Chief of Applied Meteorology and Climatology; Caribbean Institute of Meteorology and Hydrology</i>
Remarks:	<i>Dr. Kenneth Darroux</i> <i>Minister of Environment, Natural Resources, Physical Planning ,Fisheries</i>
Remarks:	<i>Mr. Julius Timothy</i> <i>Minister of Health</i>
Key Note Address:	<i>Dr. Filipe Lucio</i> <i>GFCS Representative</i>
Vote of Thanks:	<i>Mr. Lloyd Pascal</i> <i>Director of Environmental Coordinating Unit</i>

9:50 a.m.– 12:30 p.m.	
<b>Session 2: Capabilities for provision of climate services</b>	
<i>Chairperson: Mr. Ricky Brumant, Director of Agriculture</i>	
<b>Presentations</b>	
Status of capacities for provision of climate services in the region: <i>Presenter: Mr. Adrian Trotman,</i> <i>Chief of Caribbean Institute of Meteorology and Hydrology</i>	
Current capabilities for the provision of climate services in Dominica: <i>Presenter: Mr. Colin Guiste</i> <i>Meteorologist</i>	
Regional Strategic Framework and Implementation Plan for addressing climate variability: <i>Presenter: CCCC</i>	
<b>Discussion</b>	
12:30 p.m.-1:30 p.m. <b>Lunch</b>	
1;30 p.m.-3:30 p.m.	
<b>Session 3: Case studies on the application and needs of climate services in Dominica</b>	
<i>Chairperson: Mr. Andrew Magloire, Chief Fisheries Officer</i>	
<b>Presentations</b>	
Case 1: Agriculture and the need for climate services <i>Presenter: Mr. Ricky Brumant, Director of Agriculture</i>	
Case 2: Forestry and the use of climate services <i>Presenter:</i>	

Case 3: Disaster and the need for climate services <i>Presenter</i>	
Case 4: Water and the need for climate services <i>Presenter:</i>	
Case 5: Fisheries and the need for climate services <i>Presenter:</i>	
Case 6: Tourism and the need for climate services	
<b>Discussion</b>	
3:30 p.m.-4:30 p.m.	
<b>Session 4: Coordination mechanism for implementing climate services in Dominica</b>	
<i>Chairperson: Mr. Anthony Scotland, Chief Environmental Health Officer</i>	
<b>Presentations</b>	
Dominica Low Carbon Resilient Development Strategy <i>Presenter: Mr. Lloyd Pascal, Director of Environmental Coordinating Unit</i>	
Establishing a framework for climate services :	
- General ToR for a framework for climate services: <i>Presenter: Dr. Filipe Lucio (GFCS)</i>	
- Discussion on existing national mechanism that could perform the functions of the framework for climate services	
4:30 p.m.	<b>End of session</b>

**Day 2**

8: 30 a.m.– 9:40 a.m.

**Session 5: Focus on Climate Services for Health**

*Chairperson: Ms Sally Edwards, PAHO Advisor*

*Sustainable Development and Environmental Health*

Welcome:

*Dr. David Johnson*

*Chief Medical Officer*

**Presentations**

Epidemiology of diseases with a climate trigger in Dominica:

*Dr. Shalaudin Ahmed*

*Communicable Diseases Surveillance Officer*

Climate Services– opportunities for improved Climate Risk

Management and Health Adaptation:

*Ms. Joy Guillemot ,World Health Organization/World*

*Meteorology Organization*

9:40 a.m.– 10:00 a.m.

**Coffee Break**

10:00 a.m.– 12:30 p.m.

Presentations:

Environmental Health Services and the need for climate services:

*Mr. Sylvester St. Ville*

*Senior Environmental Health Officer*

Primary Health care and the need for climate services:

Disasters and health: safe hospitals and climate services:

*Ms. Sandra Rolle*

Development of a strategy to mainstream climate change in the health sector:

*Ms Sally Edwards, PAHO Advisor*

*Sustainable Development and Environmental Health*

**Discussion**

12:30 p.m.– 1:30 p.m.

**Lunch**

1:30 p.m.-4:30 p.m.

**Session 6: Paving the way forward**

*Chairperson: Mr. Adrian Trotman*

*Chief of Caribbean Institute of Meteorology and Hydrology*

Introduction to group exercise

Break out group exercise:

Map out opportunities for improves coordination, multi sectoral cooperation, enhanced capacity and priorities for the development of climate services to strengthen the implementation of the health sector plan for climate risk management and adaptation

Reporting, Discussion, Conclusions and Way forward

4:30 p.m.

**End of session**

### ANNEX 3: Group 1 Report

#### Integrated Environmental Health Surveillance System Needs

Question	Response
Which global and/or regional climate services do you access and use?	National weather reports; CIMH Drought Forecast
Which climate information and services do you receive from national institution (NMHS) and use? How was the service developed or identified?	
What additional products and services are needed?	Weather patterns, flood prone areas, landslide prone areas, vulnerability surveys
What are the challenges in accessing climate information and services in your sector	
What are the challenges in using climate information and services? What are the critical elements that need to be taken into account or addressed	Knowledge of availability of met data Strategic planning to del with received information Software for integrated systems Information systems
Identify gaps/needed capacities to better use climate services (observation stations, research, enhanced interaction between users and providers, institutional arrangements and mandates, etc.).	Education capacity Equipment and material Training Equipment for specialised areas
What are the challenges in setting up a framework for climate services at the national level? Where do you see opportunities?	Coordination between sectors Controlled data base Open access data base
What shall be done in your sector do ensure availability of tailored climate services that address your decision making requirements	

## Group 2 Report : Climate and Health Research Needs

Question	Response
Which global and/or regional climate services do you access and use?	None
Which climate information and services do you receive from national institution (NMHS) and use	Public weather bulletins are available but not user friendly
What additional products and services are needed?	<ul style="list-style-type: none"> <li>• Vegetative pattern</li> <li>• Predictive models of the vector borne diseases</li> <li>• Historical data</li> <li>• Analysis of abnormal climate variables</li> </ul>
What are the challenges in using climate information and services?	<ul style="list-style-type: none"> <li>• Capacity for analysis</li> <li>• Resources</li> <li>• Involvement of tertiary research</li> <li>• New people for research</li> <li>• Data quality and uncertainty</li> <li>• Data verification</li> <li>• Availability and accessibility of data</li> </ul>
What are the critical elements that need to be taken into account or addressed?	
Identify gaps/needed capacities to better used climate services (observation stations, research, enhanced interaction between users and providers institutional arrangements and mandates, etc.)	
What are the challenges in setting up a framework for climate services at the national level?	<p>Competition for time of the committee members to take on new responsibilities</p> <p>Culture of tuff protection (for role &amp; functions</p>
Where do you see opportunities?	<ul style="list-style-type: none"> <li>• Existing structure to build on</li> <li>• Inclusion of climate change discussion in nursing curriculum</li> </ul>
What shall be done in your sector to ensure availability of tailored climate services that address your decision making requirements	<ul style="list-style-type: none"> <li>• Clear terms of reference</li> <li>• Formally binding agreement for climate service provision</li> <li>• A dedicated trained staff to the provision of analytical services for providers and users</li> </ul>
Recommendations	<ul style="list-style-type: none"> <li>• National steering committee for climate change to include in their TOR for the Global Framework for Climate Services</li> <li>• for the Min of Health to push the agenda of inclusion in the NSCC</li> <li>• Nationalization of PAHO strategy for climate and health</li> <li>• Cabinet subcommittee on climate change</li> <li>• Request to WMO/PAHO for support</li> </ul>