



## **St. Vincent and the Grenadines**

### **Farmer's Forum**

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## Contents

I. INTRODUCTION .....	3
II. REPRESENTATION.....	3
III. WELCOME .....	3
IV. PRESENTATIONS .....	3
<i>Weather and Climate of St. Vincent and the Grenadines - Joan McDonald – National Met Service.</i>	4
<i>An explanation of Public forecast terms – David Burgin ..... National Met Service .....</i>	4
<i>Seasonal forecasts – By Adrian Trotman, CAMI Project Coordinator .....</i>	4
<i>Extreme Rainfall – Droughts and Floods – By Adrian Trotman, CAMI Project Coordinator .....</i>	5
<i>Climate Trends and Climate Change –Lisa Kirton-Reed Technical officer (CIMH).....</i>	5
<i>Weather, Climate and Pests and Diseases - By Adrian Trotman, CAMI Project Coordinator .....</i>	5
V. OPEN DISCUSSION – CIMH .....	6
<i>Farmers Working Groups .....</i>	6
<i>Plenary Discussion .....</i>	8
<i>Summary .....</i>	9
VI. ANNEXES .....	9

## I. INTRODUCTION

The St. Vincent and the Grenadines Farmers' Forum took place at the Eversham Learning Resource Centre on June 14<sup>th</sup> 2011.

The purpose of the forum was to help farmers become more self-reliant in dealing with weather and climate issues that affect agricultural production on their farms. The overall goal of the farmers' forums is to secure farmer self reliance, through helping them to be better informed about effective weather and climate risk management by sustainable use of natural resources for agricultural production.

(Link to generic agenda)

## II. REPRESENTATION

Attendees included farmers, two staff members of the Caribbean Institute for Meteorology and Hydrology (CIMH) as well as representatives from the Meteorological Services of St. Vincent and the Grenadines and the Ministry of Agriculture.

(See full list of attendees at **Annex 1**).

## III. WELCOME

The day's events started off with an address by ET Joshua's Airport Director, Corsel Robinson. At this point, the participants of the workshop were welcomed.

Another introductory greeting was given by Mr. Edwards from the Ministry of agriculture; he too briefly outlined the significance of the meeting before the forum began.

## IV. PRESENTATIONS

### ***The Cami project - Lisa Kirton-Reed - Technical officer (CIMH)***

The Caribbean Agrometeorological Initiative project (CAMI) is funded by the European Union's ACP Science and Technology programme, in partnership with CIMH, WMO, CARDI and the ten meteorological services of the participating countries.

The main objective of the project is to increase and sustain agricultural productivity at the farm level in the Caribbean region, through improved applications of weather and climate information, using an integrated and coordinated approach.

Some of the activities of the three year project apart from the stakeholder meetings and training in rainfall analysis workshops include some data rescuing, which started in the first year, along with rainy season prediction, with the use of long term climatic data. In the second year, training which was geared towards the production of user-friendly weather and climate information newsletters for the farming community, has been completed, as well as the development of a Pests and Diseases forecasting system.

For the final year of the project, some crop simulation models for yield generation will be used and some emphasis on irrigation requirements and scheduling will be looked into, in time for the second round of farmer's forum meetings and the final stakeholder conference.

### ***Weather and Climate of St. Vincent and the Grenadines - Joan McDonald – National Met Service***

The first question which was raised by Mrs. McDonald was “what is weather?” Here she went on to answer the question, making reference with brief explanations to the various weather elements: pressure, temperature, etc. She further went on to discuss what affects our weather, with respect to the wet and dry seasons, effects such as dry spells and drought in the dry season and The Inter-Tropical Convergence Zone, Tropical Cyclones and the effects of flooding in the wet season. The effects of El Nino/ La Nina on the climate of St. Vincent and the Grenadines was also a highlight of the presentation, as mention was made of the fact that the lowest monthly total was obtained for the island in the month of February 2010, despite the fact that the year still turned out to be the wettest recorded.

### ***An explanation of Public forecast terms – David Burgin ..... National Met Service***

In this presentation some of the meteorological terms such as precipitation, scattered, isolated, localized and widespread showers were defined. Identification of the various cloud types and how all of this information goes into making forecasts, with the use of weather maps from radar and satellite imagery were also mentioned.

One farmer expressed concerns about the reliability of forecasts and wanted to know what could be done to improve the accuracy of weather predictions.

### ***Seasonal forecasts – By Adrian Trotman, CAMI Project Coordinator***

Mr. Trotman gave an overview of the seasonal outlooks of rainfall produced by CIMH. He advised that these outlooks are produced every two months for a three month period, thereby having one overlapping month with each succeeding product. This outlook suggests whether or not a particular region is expected to be wetter than normal, drier than normal or normal for those months forecasted.

After this some concerns were raised by the farming audience, with respect to the difficulties of getting access to this information, and the crop farmers especially wanted to know whether to shift their crops from one location to another depending on the conditions.

Concerns also arose about the fact that general forecasts are made for all areas in St. Vincent and the Grenadines, from very limited data and the fact that they are so few stations.

### ***Extreme Rainfall – Droughts and Floods – By Adrian Trotman, CAMI Project Coordinator***

The effects of extreme weather conditions were presented here. For drought, it was noted that the rainy season of 2009 marked the beginning of a period of drought which ended around April/May 2010. By October 2009 most countries in the Caribbean were in drought, with most countries recording their lowest ever value in February 2010. Mr. Trotman, in presenting the January to March 2010 outlook that was prepared at the beginning of January, suggested that the projected conditions were cause for concern as the forecasted below normal conditions for that period, were following a below normal last three months of the rainy season. This triggered the issuing of a number of warnings across the Caribbean of severe to extreme drought impacts.

The presenter also showed that temperatures are higher than average during periods of drought, thereby exacerbating the conditions and impacts. On the other hand, with respect to the potential for flooding, above normal rainfall was predicted for the latter half of 2010 and into 2011, which has been turning out to be the case – suggesting immense value of the rainfall outlook.

### ***Climate Trends and Climate Change –Lisa Kirton-Reed Technical officer (CIMH)***

This presentation focused on trends in rainfall and temperature patterns, and whether or not there were any expected increases or decreases for the future due to anthropogenic climate change.

It was found from the analysis that temperatures were predicted to increase over the years, so much so, that for the Caribbean region, temperatures exceeding 35 °C are expected, an event which hardly ever occurs. The increase has been estimated to be from about 0.5 to 4.2°C by 2099. From the analysis, rainfall on the other hand has been predicted to decrease, yet with an increase in its intensity.

Current trends in temperature do statistically show increases, however changes in rainfall were not statistically significant.

Some of the likely impacts and vulnerabilities of Caribbean agriculture to the predicted changes were highlighted by the presenter. These included shifts in the growing season, more frequent drought, greater possibility for erosion, market changes, and increasing number of events of heat stress in livestock and poultry.

### ***Weather, Climate and Pests and Diseases - By Adrian Trotman, CAMI Project Coordinator***

Mr. Trotman in his presentation looked at the effects of weather and climate on insect pests and disease pathogens, and how different crops are affected by various pests and diseases which exist in this type of environment. In particular, a summary for CAMI countries suggested that black sigatoka and whitefly were of grave concern to many of the farmers across the region, including St. Vincent and the Grenadines.

Efforts to model their outbreaks with the assistance of weather and climate information are about to begin with the aid of a consultant from the University of Florence, who will be working along with regional scientists.

One comment made by a participant was the fact that there is a lack of information for the farmers, and this makes decision making in terms of when and where to plant and so on, really difficult.

## V. OPEN DISCUSSION – CIMH

Three Short videos were shown to participants from WMO explaining:

- How agricultural information was disseminated via text messaging,
- Crop insurance
- The direct relationship between meteorological personnel and farmers

After this, a comment was made from one of the participants stating that “we are crisis driven people; we wait for something to happen before making any preparations.”

### *Farmers Working Groups*

Participants were divided into two groups and several questions were asked to obtain information from the farming community, as well as the preferred means of communication and any other requirements needed.

1. What information does the Meteorological Service in your country currently/normally provide?

- |                             |                                    |
|-----------------------------|------------------------------------|
| a. Daily forecasts          | d. Climate reports                 |
| b. Aviation                 | e. Seasonal reports                |
| c. For farmers upon request | f. Seasonal outlooks to industries |

2. What are the key crops in your country?

- |                  |                 |                   |
|------------------|-----------------|-------------------|
| a. Hot peppers   | j. Plantain     | s. Fisheries      |
| b. Sweet peppers | k. Pimento      | t. Livestock      |
| c. Melon         | l. Watermelon   | u. Aquiculture    |
| d. Tomatoes      | m. Cucumber     | v. Apiculture     |
| e. Pumpkin       | n. Cabbage      | w. Citrus         |
| f. Cocoa         | o. Bodi         | x. Dasheen leaves |
| g. Cassava       | p. Sweet potato | y. Pineapple      |
| h. Coconut       | q. Orcho        |                   |
| i. Banana        | r. Pawpaw       |                   |

3. What do you see as frequent /costly impacts related to weather and climate that we have within our farming system?
  - a. Floods – erosion
  - b. High winds
  - c. Dry weather/drought
  - d. Bush fires
  - e. High humidity – costly due to specific disease and insect
  - f. Heavy showers – large droplets damages flowers and fruits. Also affects apiculture.
  - g. Excessive rainfall – fungicides
  - h. High temperatures – flowers and fruit drop, cracks, increase in insect population, leaf spots
  
4. Should the project focus on large or small scale farmers?
  - a. All farmers
  
5. What additional products would you like to see from your meteorological service?
  - a. Segment targeting agriculture – drought conditions, abnormal rainfall etc.
  - b. Specific season forecast for agriculture
  - c. Quarterly outlook geared to the farming community for planning purposes
  - d. Bill boards with information on weather
  - e. Liaise with water resources to know how much water is available.
  
6. Which of 5 above do you think can be provided by your meteorological service?
  - a. All of above
  - b. Segment targeting agriculture
  - c. Specific season forecast for agriculture
  
7. Preferred means of communication

- a. Ministry website
- b. SMS
- c. Farmer groups
- d. Media
- e. Access to meteorological website
- f. Electronic billboards
- g. Extension advisory service to distribute information
- h. Morning and evening news
- i. Newspapers
- j. Radio

### ***Plenary Discussion***

#### **Group 1**

- Weather forecasts are currently provided three times a day with full weather bulletins for severe systems, also three day forecasts are made. It was suggested for the production of week long forecasts, so as to help in the planning of farming activities, therefore helping to reduce loss of yield and livestock.
- Temperature forecasting over a longer period was also requested
- A need for information to be sent via text messaging, internet, newsletters

#### **Group 2**

- An increase in the number of weather stations, as different parts of the island receive different amounts of rainfall.
- All available media including SMS and BBM to be used for making sure that the weather information is received at an appropriate time.
- Advice from relevant persons for the farmers, as to how much mm of rainfall is adequate for certain crops
- A request for weather forecasts and reports four times a day, especially in cases where fertilization of the soil with different chemicals is to be undertaken, as the need for a reduction of the chemicals seeping into the soil is important.
- Greater communication links between the Meteorological staff and the farmers, so as to increase the understanding of the terms used in the forecasts.



## ***Summary***

In general, the discussions between the farmers, Meteorological and Agricultural staff in the group session proved to be quite useful, as all of the concerns raised were addressed by the relative personnel.

Agreements were made to continue the collaboration begun at the meeting and for the Met Service to seek to provide the information requested by the agricultural/farming community.

## **VI. ANNEXES**