

Integrated Water Resources Management (IWRM) Projects and Initiatives in the Caribbean

Title: Caribbean Agro-Meteorological Initiative (CAMI)

Organisation: Caribbean Institute for Meteorology and Hydrology (CIMH)

Aims and Objectives:

The objective of the programme is to increase and sustain agricultural productivity at the farm level in the Caribbean region through improved dissemination and application of weather and climate information using an integrated and coordinated approach. The results are expected to benefit the farming community in the Caribbean Region.

The project is expected to assist the farming community in the Caribbean region through provision of information through the regional network of Meteorological and Agricultural Services and research institutes on predictors of the rainy season potential and development of effective pest and disease forecasting systems for improved on-farm management decisions; preparation and wide diffusion of a user-friendly weather and climate information newsletter and organization of forums with the farming community and agricultural extension agencies to promote a better understanding of the applications of weather and climate information and to obtain feedback to provide better products from the meteorological services for use by the farming community.

Duration: Start Year: 2010 Completion Year: 2013

Additional Comments:

Estimated Cost (USD): \$1,410,000

Funding Source: European Union under the African, Caribbean and Pacific Group of States (ACP) Science and Technology Programme



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Key Words: Caribbean; Agro-Meteorological; Climate; Predictors; Farming

Geographic Coverage: Ten Caribbean countries including Antigua and Barbuda; Barbados; Belize; Dominica; Grenada; Guyana; Jamaica; St Lucia; St Vincent and the Grenadines; and Trinidad and Tobago

Sectoral Focus: Water; Agriculture

Target Beneficiaries: Farming Community; Agricultural Extension Officers

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Outputs:

Data rescue

- CAMI countries each collected 30 years of precipitation data to improve the robustness of its meteorological forecasting (CAMI, 2012). In some cases the available data were not in a digital format or were held in multiple locations within a single CAMI country, complicating any attempted use.
- Rainy season modelling
- A workshop to assist the meteorological agencies to model rainfall and temperature (Stoute, 2010).

Communication workshop

- A workshop to identify the information needs of extension agents, farmers, ranchers, foresters, fishers, media, and the general public. It also explored the best modes of communication (Stoute, 2011).

Pest and Disease Modelling

- A training session covering monitoring, modelling, modelling approaches, crop protection, and climate variability and agricultural impacts (CAMI, 2011b).
- Farmers forums
- A series of stakeholder workshops for awareness and capacity-building exercises among farmers and extension officers. Each CAMI country conducted up to two workshops with farmers to discuss climate, climate change, and their impacts on farmers. One lesson from these discussion sessions was the need for better communication of forecasts to farmers. Information may be overly complex or may not convey what to do with the information. Farmers want assistance in determining what to do in response to the forecast. These sessions also covered preferred communication modes (CAMI, 2010).
- Crop simulation
- A training session covering the crop simulation model DSSAT (Stoute, 2012).

CAMI. 2010. Caribbean Agrometeorological Initiative. Available <http://63.175.159.26/~cimh/cami/>. Accessed August 6, 2013.

CAMI. 2011b. Pest & Disease Modelling. Caribbean Agrometeorological Initiative. Available: <http://63.175.159.26/~cimh/cami/pesdismod.html>. Accessed September 5, 2013.

CAMI. 2012. Interim Narrative Report. Caribbean Agrometeorological Initiative. Available <http://63.175.159.26/~cimh/cami/files/Reportasat310112.pdf>. Accessed August 6, 2013

Stoute, S. 2010. Rainy Season Predictors and Interpretation and Management: Workshop Report. Caribbean Institute for Meteorology and Hydrology, Barbados. June 15–19. Available:

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<http://63.175.159.26/~cimh/cami/files/rainreport.pdf>. Accessed August 5, 2013.

Stoute, S. 2011. Publications and Communications Strategy for Farmers: Workshop Report. Caribbean Institute for Meteorology and Hydrology, Barbados. April 6–7. Available:
<http://63.175.159.26/~cimh/cami/files/PUBCOMM/PresK11/PDF/workshop.pdf>. Accessed August 5, 2013.

Project Links and References: www.cimh.edu.bb/cami/
<http://www.acp-st.eu/content/caribbean-agrometeorological-initiative>

Impacts:

Expected impacts

- Improved ability of policy makers and extension agencies in exploiting the rainy season potential fully through strategic decisions and better preparedness strategies in case of a high probability of occurrence of extreme events.decision-support tools.
- Better informed farming community regarding the climate situation before and during the crop growing season.
- Improved capabilities for the farming community to make strategic and tactical decisions for soil and crop management and enhanced incomes.
- More efficient irrigation scheduling and quantifying, especially for domestic food crops and important export crops.
- Conservation-effective soil and crop management practices to reduce land degradation and improve long-term crop productivity.
- Greater farm incomes, improved crop quality and enhanced environmental benefits for small farmers through more effective pest and disease management.
- Increased interactions between the meteorological services, agricultural research and extension agencies and the farming community resulting in the provision of better services to farmers.
- Availability of regular feedback to the meteorological services on the nature of services and products needed by the farmers resulting in the preparation of user-friendly products from the meteorological services.
- Enhanced capacity of Meteorological and Agricultural Services, CARDI and CIMH to perform the tasks relevant to the goals of this action.

Sustainability:



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Information not available

Lessons for the Future:

Information not available

Opportunities Arising from the Project:

Information not available

Further Comments:

See the comprehensive terminal evaluation report

<http://www.climate-services.org/sites/default/files/EvaluationReport.2014.01.30.pdf>