



**REPORT OF THE FIRST
CARIBBEAN AGROMETEOROLOGICAL
INITIATIVE (CAMI)
STEERING COMMITTEE MEETING**

9 - 10 February, 2010

Prepared By: Mr. Adrian Trotman
Agrometeorologist, CIMH
Project Coordinator, CAMI

Caribbean Institute for Meteorology and Hydrology
Husbands
St. James

Meeting of Steering Committee

The First Steering Committee meeting of the Caribbean Agrometeorological Initiative was held on 9 and 10 August 2010. The first day was held at the campus of the Caribbean Institute for Meteorology and Hydrology (CIMH) in Barbados. On the second day the committee members met with officers of the Ministry of Agriculture at their Headquarters in Graeme Hall Christ Church, Barbados.

The committee was welcomed during a brief presentation by the Principal of CIMH, Dr. David Farrell. He remarked on the timeliness and importance of the CAMI project and wished the committee well in its decision making as it sought to move the CAMI project forward, particularly during its first year.

After members introduced themselves with their brief professional backgrounds, the tone for the meeting was set by a presentation on the project and the background to its development by Project Coordinator, Mr. Adrian Trotman. The presentation informed the committee of the strategic plan for agrometeorology, developed for CIMH as well as the WMO/FAO (World Meteorological Organization/Food and Agriculture Organization of the United Nations) Seminar on the Application of Climate Data for Desertification Control, Drought Preparedness and Management of Sustainable Agriculture in the Caribbean Region held in 2004 in Antigua. It was at this meeting that the concept for CAMI was discussed and subsequently developed. The Science and Technology Programme of the ACP was seen as a real opportunity to finally get the region's agrometeorology agenda started in a meaningful coordinated way. Mr. Trotman also reminded the committee of the specific activities of the CAMI project which include:

- Development of predictors of the rainy season potential characteristics through analysis of long-term climatic data and use of seasonal to inter-annual climate prediction models.
- Interpretation of the climate predictor and near-real time weather information to support management decisions, especially irrigation scheduling.
- Working with the agricultural research and extension agencies in developing an effective pest and disease forecasting system.
- Preparation and wide diffusion of a user-friendly weather and climate information newsletter for the farming community.
- Organization of regular forums with the farming community and agricultural extension agencies to promote a better understanding of the applications of weather and climate information.
- Building capacity of the Meteorological and Agricultural Services and research institutions.
- Data Rescue.

These were discussed during the meeting. A summary of the discussions is as follows:

- Data Rescue – committee members from meteorological services pledged its support in sourcing the paper data to be archived. Some perceived some challenges in obtaining all the data from sources that may not be as cooperative.

Belize suggested that most if not all of its data from its stations are already digitized.

- Rainfall Analysis and Seasonal Climate Forecasts – due to the proposed topics to be covered (e.g. analysis of dry days, dry spells, and rainfall extremes) under rainfall analysis, Dr. Roger Stern of the Statistical Services Centre (SSC) of the University of Reading, U.K., was recommended as one resourceful person capable of providing the desired results. His experience and the staff of SSC were internationally renowned for training in this area. There was however some concern as to whether one trainer that can be sourced that can provide such rainfall analysis and still be verse enough in seasonal climate forecasting and modelling. It was agreed that this be raised with Dr. Stern. It was also agreed that the subsequent attachment of CIMH staff to build upon the work started at the workshop should also be done at the University of Reading. It was however agreed that the WMO representative Mr. Stefanski will initiate contact with Dr. Stern.
- Pest and Disease – the project coordinator suggested that of all the outputs to be achieved this one could be the most challenging due to the data demands, the diversity in pests and diseases and the dearth of experience in the region on this topic. Mr. Stefanski (WMO) however suggested that there was a wealth of experience in the United States and we can seek assistance from the US Department of Agriculture (USDA). He also suggested there is some experience in Europe, e.g. in Italy. WMO will assist in sourcing potential scientist/research centres later in the year. CARDI is expected to be a pivotal organisation in this regard.
- Crop Weather Models – The project coordinator informed members that Decision Support System for Agrotechnology Transfer (DSSAT) and Agricultural Production Systems Simulator (APSIM) models were being targeted for training and use under the project. DSSAT developed in the USA by the International Benchmark Sites Network for Agrotechnology Transfer (IBSNAT) project with further development through collaboration among scientists from the University of Florida, the University of Georgia, University of Guelph, University of Hawaii, the International Center for Soil Fertility and Agricultural Development, Iowa State University and others. APSIM was developed by Agricultural Production Systems Research Unit (APSRU), Australia. The committee was informed that DSSAT was already introduced to the region through training sponsored by the Caribbean Community Climate Change Centre, but it was thought that the region needed more than this introduction to be meaningfully used in the region, and that it was best to be trained by those who developed and continue to develop these

models. This will be developed during the 2nd and 3rd years of the project. It was agreed that trainers for this course should come from University of Florida or Georgia (in the case of DSSAT) and the Commonwealth Scientific and Industrial Research Organisation of Australia (in the case of APSIM).

- General Agrometeorology and Crop Water use – there was brief discussion on this, but mention was made of Luis Pereira of Instituto Superior de Agronomia Lisbon, Portugal as a potential trainer. Dr. Pereira co-authored the popular FAO text on “Crop evapotranspiration - Guidelines for computing crop water requirements” and was one of the trainers at the regional drought and desertification meeting where the CAMI concept was born.
- Farmers Forums – even though expected to be a 2nd and 3rd year activity, there was some discussion on the much anticipated forums. These forums were expected to follow the climate field schools already carried out in parts of Africa. Members were informed that national meteorological and agricultural extension services as well as CARDI are expected to participate in the forums. Much further discussion will be made on this during the 2nd Steering Committee meeting where plans for the forums will begin.
- Newsletters and Bulletins – this is seen as a critical part of the project as it determines the success of the process of communicating the information to the users – farmers, Ministries of Agriculture and Agro research entities. It is hoped that CTA communications division can play a pivotal role in this, particularly the workshop. This topic will be revisited at the next steering committee meeting.
- Research and Publications Potential – it was agreed that the level of work expected to emanate from the CAMI project should reach a standard that is publishable in journals. These would particularly include the work surrounding the workshops and attachment at international institutions.
- Visibility of project –one member thought that bringing CAMI to the level of the schools through a schools competition on the topic of climate and agriculture. Members were reminded that this activity was not budgeted in the project. It is expected that as much as possible, there be media awareness of the activities of the project, particularly when there are meetings in the varying countries such as the Steering Committee meetings and farmers’ forums. The steering committee was informed of the intention to have a documentary video of the project to be distributed within the partner countries and institutions by the end of the project.
- The project coordinator was advised to limit, as much as possible, the hosting of workshops during the hurricane/rainfall season since staff are often on call and meteorological services prefer to have as close as possible to full staff

compliments during these periods. It was suggested that some shifting of the timeline would be necessary for this but, the project coordinator agreed to satisfying the request as much as is possible, concentrating most training workshops during the region's dry season.

- The Director of the Belize Hydrometeorological Service agreed to pursue the possibility of his country hosting the 2nd Steering Committee Meeting of CAMI at the end of year 1/beginning of year 2.

The Director of the Belize Hydrometeorological Service agreed to pursue the possibility of Belize hosting the 2nd Steering Committee Meeting of CAMI at the end of Year 1/beginning of Year 2.

Meeting with Officers of the Ministry of Agriculture, Barbados

On 10 February, 2010, the Steering Committee met with officers of the Ministry of Agriculture, Barbados led by the Deputy Chief Agriculture Officer (crops), Mr. Ralph Farnum. This was to make the Ministry more au fait with the project and the potential benefits it offers to agriculture and farming in Barbados, as well as to solicit from the officers what they perceived as the important issues in agriculture related to weather and climate.

After a brief introduction of the members of the Steering Committee, the CAMI Project Coordinator outlined the aims, objectives and specific activity of the project to the officers. This led into a discussion on the important issues in Barbados. Some of the main talking points are summarised below.

- It was agreed that information provided by such projects as CAMI was long overdue.
- The need for accurate weather (rainfall) forecast with higher-resolution country details was identified. The desired detail was thought to be difficult but such information will improve with the construction of the EU funded radars in the region, one of which is stationed in Barbados and was completing its testing phases.
- It was thought that there was a need for weather and climate information tailored to farmers. Mention was made of the farmers' forecasts in the media in Barbados in the distant past. It was suggested that this can be re-introduced probably in a modified way. There was some concern that the Barbados Meteorological Services was not catering enough to agriculture. It was explained that the meteorological services in the region were established for aviation purposes, and therefore primarily exist at airports. It was agreed that the meteorological service diverts its activities to provide more meaningful information to sectors such as agriculture. CAMI is expected to be the driving force for this in the agriculture sector.
- There was much enthusiasm over the planned farmer's forums. The format of the forums was outlined for the Ministry officials.
- One of the major points of discussion was the existing drought, which began during the 2009 dry season. The drought was getting progressively worse and causing major concern to the country's farmers. There was a query as to whether or not the drought conditions could have been forecasted earlier. The officers were informed that the products and information related to drought is provided under the Caribbean Drought and Precipitation Monitoring Network (CDPMN - another regional initiative launched by the project the Caribbean Water Initiative) based at CIMH. Ministry officials were also informed that the CDPMN was also the responsibility of the CAMI project coordinator. The project coordinator informed officers that when launched in January 2009, the monitoring network was expected to be developed such that it would be operational by the end of

2010, but the region found itself in a drought before the end of 2009 (a year earlier), but in spite of not being totally ready the information had was enough for CIMH to warn Barbados and the rest of the region of the existing drought and the expectation that the situation would continue to deteriorate. There were also plans afoot to introduce indices and indicators of agricultural drought. The officers were informed that drought information and the CDPMN will be on the agenda at the farmers' forums.

- There was also some interest in irrigation information being provided. Information on timing is expected to be important. What was also important was that there not be over-watering by farmers.
- Projection/outlook of rainfall 6 to 12 months in advance to facilitate more long term strategic planning. Mention was made of the current 3 month tercile probabilistic forecast produced by CIMH. This was thought to be useful but the longer lead forecast was also important. It was pointed out to the officers that the accuracy of such projections decreases with the increase in lead time, but research continues to improve the accuracy of such products. The officers suggested that information of even the climate signals presented would be useful. It was agreed that this is something CIMH can consider.

COMMITTEE PARTICIPANTS

NO	LAST NAME	FIRST NAME	ORGANISATION	CONTACT EMAIL
1	Aaron	Arlene	Trinidad & Tobago Meteorological Service	arleneaaron@gmail.com
2	Gonguez	Dennis	Meteorological Service, Belize	dennis_gonguez@yahoo.com
3	Leblanc	Sheryl E-	Meteorological Service, Dominica	Sheryl/8568@hotmail.com
4	McGill	Sylvia	Meteorological Service, Jamaica	Wxservice.dir@cwjamaica.com
5	Nurse	Sonia	Barbados Meteorological Service	sas_nurse@hotmail.com
6	Simpson	Leslie	Caribbean Agricultural Research & Development Institute (CARDI)	leslieasimpson2000@yahoo.co.uk
7	Stefanski	Robert	World Meteorological Organisation (WMO)	RStefanski@wmo.int
8	Trotman	Adrian	Caribbean Institute for Meteorology and Hydrology CIMH	atrotman@cimh.edu.bb