

## CariCOF Wet/HurricaneSeason 2014

### Concept Note

The combination of climate variability and change pose significant risks for the Caribbean region. Pressures on regional resources are anticipated to increase along with demands due to population growth and the expansion of tourism. Coupled with these risks are:

- The threats already posed to society from today's climate extremes and variations
- The potentially high-impact but uncertain additional risks presented by climate change

While the seasonality of climate in the Caribbean has been well documented, major gaps in knowledge exist in terms of the drivers in the shifts of amplitude and phase of seasons as evidenced from the recent (2009-2010) drought in the Caribbean. In addition as noted by the IPCC (2007): *“The region must prepare for the possibility that 1 and 2 degree C temperature increases superimposed on interannual and decadal scale variations will physically change the nature of extremes.”* There is thus a strong need to link present preparedness and adaptation strategies over time to mitigate the loss and damage in the particular context in which they arise. Early warning information systems across climate timescales become significant as input into preparedness, risk reduction and adaptation. The disaster research and emergency management communities have shown that effective early warnings of impending hazards need to be complemented by information on the risks actually posed by the hazards and pathways for action.

Regional Climate Outlook Forums (RCOF), sponsored by the World Meteorological Organization (WMO) are active in several parts of the world, These RCOFs are critical for the development and effectiveness of early warning systems in that they provide real-time seasonal climate forecasts and interpretation across relevant time and spatial scales. Appropriate climate services, tailored to the Caribbean islands, will rely on such early warning information systems if the goals of supporting adaptation and disaster risk reduction are to be realized in practice. In June 2010, a workshop was convened to re-establish the Caribbean Regional Climate Outlook Forum (CARICOF) in order to develop a sustained collaborative process that provides credible and authoritative real-time regional climate outlook products. This collaborative process was strengthened in two subsequent pre-CariCOF training and Forum events.

In February/March 2012 a CARICOF was held that consisted of three separate but complementary activities: (i) a Technical Training Workshop that developed a draft seasonal (three-month) rainfall outlook, (ii) a Partnership Workshop that brought together key partners and users of climate information and (iii) the Outlook Forum that discussed the rainfall outlook with users and determined the final product. It was agreed that such forums be held once or twice per year just prior to the beginning of the two major Caribbean seasons, particularly the wet/hurricane season. More recently, in May 2013, a technical workshop and an Outlook Forum, were again held in Port of Spain, Trinidad and Tobago. The training focused on verification of forecasts and effective communication of the forecast. The Forum was followed by the rolling out of WMO's Global Framework for Climate Services (GFCS) in the Caribbean, which has established a roadmap for Caribbean climate services to the focal sectors of Disaster Risk Management, Agriculture and Food Security, Health and water Resources, and since then drafted a roadmap for Climate Service in Belize.

May 26-28 of this year, the Caribbean Institute for Meteorology and Hydrology, along with its partners United States Agency for International Development (USAID), National Oceanographic and Atmospheric Administration (NOAA) of the USA, World Meteorological Organization (WMO), the International Research Institute for Climate and Society (IRI) and the U.S. Higher Education for Development agency (HED) will host another training session for meteorologists/climatologists to be followed by an Outlook Forum, as stakeholder agencies and social scientists from across the region join the meteorologists/climatologists to discuss the climate outlook and its implications for the 2014 wet/hurricane season for climate sensitive sectors in the region. The training builds on the two previous training sessions in 2012 and 2013, with specific focus on drought forecasting using the Standardised Precipitation Index, and temperature forecasting, both using a recently upgraded version of the Climate Predictability Tool (CPT), a climate prediction tool developed by the IRI.

For the following two days of the week (29-30 May), colleagues from the IRI and the University of Arizona (UA) will be joining us in Kingston, and have organized sessions focused on responses to impacts of climate variability and change. Funded by the USAID and NOAA as the *Integrating Climate Information and Decision Processes for Regional Climate Resilience* project, their efforts will focus on exploring research-based approaches to a) understanding the structure and functions of formal and informal networks for climate information production, communication and use, b) assessing vulnerabilities of affected communities to impacts of climate variability and change, c) assessing risks incurred by sectors impacted by climate variability and change, and d) evaluating effectiveness of products and processes of the existing system of production, provision and use of climate information. At this particular forum, discussions and

exercises will work through aspects of forecast interpretation, its implications, how the information can be utilized in sectoral planning activities, with the view to improving the COF products and process that would trigger appropriate decision making and responses from the many climate sensitive sectors and communities.