

# Water Management, Health and Climate Adaptation in Barbados





May 9, 2013 Bridgetown, Barbados

Following a first successful seminar in Colombia on February 2013, interest from the USAID Mission in Bridgetown, Barbados arose to host a session on water management, health and climate adaptation. Working in close partnership with the University of the West Indies – Cave Hill (UWI) and especially the Center for Resource Management and Environment Studies (CERMES), the session was able to identify key stakeholders within Barbados's ministries, agencies and educators. The collaboration with the university was of significant importance to them, as they were celebrating their 50 year anniversary and wanted to take his opportunity to look towards the future, specifically within the realm of climate change and its implications for the Caribbean region.

The primary objectives for the seminar were to identify successful adaptation methods taking place on the island, and by bringing in successful case studies from the region to discuss case studies. A secondary objective was involving the greater Caribbean community of nations. Barbados, a small island state heavily dependent on revenue from tourism and staple crops, shares the similar fate of its surrounding island states as the risk of climate change increases, specifically with sea water rise, drought and health hazards associated with a changing climate. In order to tap into this network of islands, we engaged representatives from the Organization of Eastern Caribbean States (OECS) which is comprised of seven island nations in the Caribbean working together to streamline economic integration and to provide mutual assistance in case of natural disasters. The OECS engagement was particularly important for the success of the seminar and allowed for a larger audience to take part in the conversation and to create a larger network that would help streamline much of the work taking place among them.

The seminar was divided into two sections, the first a technical session focused on impacts, challenges and strategies to approach, respond to and successfully adapt to climate change. This was followed by a keynote and final wrap up by leaders from UWI, the Ministry of Agriculture, Food, Fisheries and Water Management and the United States government.

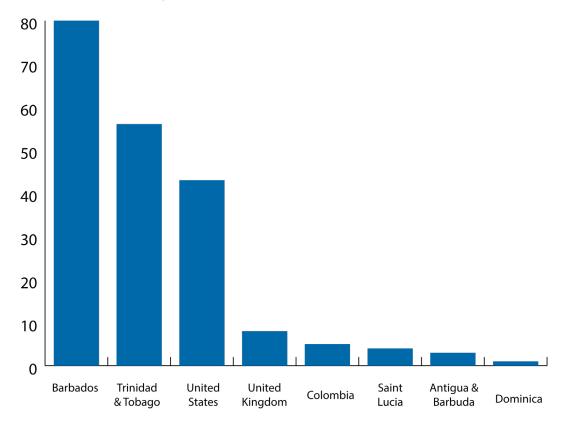
Experts from Barbados and the region were brought in to give 20 minute presentations on specific issues. The session was opened by Senior Lecturer at UWI Dr. Adrian Cashman, who provided background and context for Barbados and the OECS region as a whole, stressing the importance of water management and the need to provide long term strategies to ensure water security. Mr. Basil Fernandez, Managing Director of the Water Resource Authority in Jamaica focused his presentation on water scarcity and the issue of water management needed more attention. He discussed the issue of "water peak", the point in which water is exploited to a point where it cannot be replaced, which is a persistent problem facing fresh water strapped island states throughout the Caribbean. His solution is better management, increased coordination among agencies and regulating the supply of water.

The afternoon sessions were dedicated to health and climate change, issues extremely relevant to the future of the small island development states (SIDS). The goal of these sessions was to make connections between climate change and water scarcity and how they affect the health of the population.

Barbados has the <u>highest rate of dengue</u> in the Americas, and this, while affecting the overall health and productivity of the island; is also a result of water mismanagement. While rainwater storage has been promoted as an adaptation strategy, the risk of vector-borne diseases increases dramatically and resulted in higher instances of dengue across the island. Two officials from the Pan-American Health Organization - Barbados (PAHO) brought up this issue and suggested that better water recycling strategies coupled with education programs would help to target two persistent issues; water scarcity and vector-borne illnesses. Bringing in a non-Caribbean case study, Dr. Ines Navarro, from the Universidad Autonoma de Mexico, focused her presentation on similar grounds from the PAHO-Barbados representatives, linking water scarcity to public health issues throughout Mexico. There was consensus between the presenters that better education outreach amongst the population and better implementation strategies of water resources is needed to combat both scarcity and the burden of water borne illnesses.

The final presentation was a case study from northeast Brazil, Adapta Sertão, led by Dr. Daniele Cesano, which highlighted adaptation programs in the semi-arid region of Brazil known for water scarcity and how a specific community-led cooperative has helped to transform the area into a vibrant community. By implementing adaptation strategies of reforestation and use of technologies to gather water, the case study demonstrated its successes in developing new techniques to redevelop land. The grassroots program emphasized the role of women's empowerment in developing community identity while increasing resilience to climate change.

The seminar achieved its goal in bringing together local stakeholders and foreign experts to discuss issues that the SIDS nations are facing. While members from the OECS were not able to physically join the seminar, a live stream of the entire event, coupled with a strong live tweeting presence, allowed the seminar to transcend the traditional boundaries of a conference room and elevated the conversation to an international scale. Metrics provided by UWI demonstrated that the target OECS audience was reached. Throughout the course of the seminar, 200 unique visitors streamed the event.



Speaking on behalf of the Minister in the closing remarks of the seminar, Deputy Permanent Secretary in the Ministry of Agriculture, Food, Fisheries and Water Management, Dr. Lennox Chandler noted that Barbados must "start thinking and planning for the impacts of climate change with immediacy", but as was demonstrated by the case studies presented earlier in the day, action is already being taken by various agencies to implement adaptation policies, but more resources and streamlining of communication is needed to advance already existing and future projects.

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