

TAKING A PROACTIVE APPROACH TO PROTECTING CARIBBEAN AGRICULTURE AGAINST CLIMATE CHANGE AND NATURAL DISASTERS

Trinidad & Tobago, Port of Spain, November 7, 2016 – One of the Caribbean’s most vulnerable states was once again hit again by the double-barrelled impact of a natural disaster and its intensified effects due to climate change. Hurricane Matthew swept through Haiti on October 4th, leaving over 500 dead and causing vast crop damage, further depleting the food sources of an already impoverished population. The destruction left behind is another reminder in the Caribbean that something needs to be done to protect the Region’s tenuous farming base and food supply systems from climate change and extreme weather events.

“Caribbean countries and their populations are in a position of increased vulnerability to the effects of natural disasters and climate change related events”, states an August 2016 report on Disaster Risk Management and Climate Change Considerations in Agriculture put out by the Intra-ACP Agricultural Policy Programme (APP).



Flooding in Haiti as a result of Hurricane Matthew. (Photo: IICA, Haiti)

The third strongest storm on record to make landfall in Haiti tore out grapefruit, banana and avocado trees, damaged important root crops and killed livestock. According to the World Food Program, in the Grand-Anse region nearly 100 percent of crops and 50 percent of livestock were destroyed. Not to mention the fishing industry, which was paralyzed due to material and equipment being washed away. Haitian and international agriculture experts agree that it could be ten years or more before the hardest hit regions of the country can recover from the effects of Hurricane Matthew in the agriculture sector.

Though Hurricane Matthew cannot be directly attributed to climate change, it is very likely to have increased the impact of the hurricane. According to the Union of Concerned Scientists (UCSUSA), hurricanes now cause more damage because of climate change. Sea levels have risen by an average of about eight inches around the globe making storm surges and flooding from hurricanes worse. The UCSUSA also says that climate change creates more rainfall in these catastrophic weather events. Warm air holds moisture, so as the atmosphere warms up, rainfalls have become heavier.

These factors make the area experiencing the rain and storm surge more vulnerable. Combine that with the fact that Haiti is one of the regions most exposed to negative impacts from climate change and extreme weather events, and you have a recipe for immense devastation. With only two percent of its original forests left due to decades of exploitation, the country’s ability to absorb the effects of natural disasters are greatly lessened. And, with limited vegetation, rising sea levels and extreme weather events greatly intensify soil and coastal erosion, resulting in overall ecosystem degradation.

In a recent article on “Support for Climate Change Integration in Haiti’s National Development” the Global Climate Change Alliance noted that these conditions would require building climate change adaptation into Haiti’s development policies, strategies, programmes and projects. The Agricultural Policy Programme (APP) is an agriculture development

project funded by the European Union (EU) under the 10th European Development Fund (EDF). They have also identified the need to address climate change and disaster risk management in agricultural planning, not just in Haiti however, but across the entire Caribbean Region.

According to a 2014 study published by the Caribbean Institute for Meteorology & Hydrology (CIMH) “climate change in the Caribbean region is observed in rising temperatures along with trends toward more warm extremes and less cold extremes, as well as strong indications for enhanced heavy precipitation.” These factors and their side-effects are doing significant damage to the Caribbean agriculture industry which is already struggling due to high import competition and limited access to financing and new technology.

As noted in a CIMH presentation on Food Security and Environmental Change, Jamaica lost approximately US \$6 million in crops between 1999 and 2000 due to drought. In Guyana, floods were responsible for damages totalling approximately US \$78 million in 2005 and 2006. Hurricane Ivan caused Grenada US \$40 million in damages where 91% of forests and watersheds were stripped of vegetation and the nutmeg sector was setback by ten years.

Going forward, in addressing the impacts, a 2015 paper published by the International Center for Tropical Agriculture on “Assessing the Impact of Climate Change on Cocoa and Tomato”, states that “by 2050, the area of land suitable for growing tomato and other annual crops (in Trinidad) is expected to be reduced by higher temperatures.”

Since it is clear that the climate is changing, the APP has recognized the need to be proactive rather than reactive in their approach to challenges resulting from climate change and natural disasters. As part of their programme they have undertaken initiatives to strengthen the integration of disaster risk management (DRM) and climate change considerations (CCA) into agricultural plans, policies and strategies across CARICOM.

After months of collaboration to create an Audit Instrument, work is now under way, and in some countries complete, to assess the extent to which planning within an agricultural sector integrates disaster risk management, including factors that result from climate change.

The project began with the identification of critical climate change and disaster risk management issues which must be addressed in order for the agriculture sector to become more disaster resilient. From that, ten key pillars for strengthening responses were determined and a tool to assess a country’s readiness to respond was created. After assessments were completed, countries were able to identify gaps in their planning and work to fortify their plans to prepare for and protect and recover from climate change and disaster events.

The analysis, results and gaps identified from these activities “suggest a need for the CARICOM Region to develop and implement agreed priority actions both at the national and regional levels in order to manage the issues of DRM and CCA in Agriculture”, says the APP report, prepared by Dr. Jeremy Collymore. Dr. Collymore also states that there is a “need for more commitment to policy formulation and a commitment to change. The programmatic elements alone will not generate the systematic change necessary to alter a sector trajectory of repeated loss and disruption to farming systems, livelihoods, communities and national economies.”

The people of Haiti were still struggling to recover from the devastating effects of the earthquake in 2010 and a recent drought when Hurricane Matthew hit. Today, there are reports of rising food prices at road-side stands and markets across the country. A disaster risk-management plan for agriculture, which takes into account the inevitable and obvious effects of climate change, wouldn’t stop hurricanes like Matthew but the hope is that they will make Caribbean countries more prepared, and enable a quicker recovery in the wake of such events.

