Rebuilding Bahamas’ agriculture sector

Dorian made land fall as a Category 5 hurricane on the island of Abaco in the Bahamas on 1st September 2019. Packing winds of 185 mph and gusts up to 220 mph the hurricane also had a devastating impact on the neighbouring island of Grand Bahama and the surrounding Cayes.

For nearly 68 hours Hurricane Dorian an unusually slow moving system pummeled the islands with 12-15 inches of rain and a storm surge of 18-23 feet. The impact was devastating. Thousands of residents were displaced, homes and buildings destroyed and lives and livelihoods lost.

CARDI has been working with the Ministry of Agriculture and Marine Resources and the Rapid Needs Assessment Team (RNAT) coordinated by the Caribbean Disaster Emergency Management Authority (CDEMA) to assess damage to the agriculture sector. Preliminary assessments have indicated almost total damage to the poultry industry, hydroponic and aquaculture farms. Livestock and vegetable farms were also hard hit by the monstrous storm.

CARDI is working on short term and long term responses to rebuild the ravaged agriculture sector.

Planting material, irrigation supplies and technical assistance are some of the short term measures CARDI will be providing to help kickstart production for commercially important commodities. Long term responses will be focused on building a resilient sector through the promotion and adoption of climate smart practices and technologies.

In the immediate aftermath of the hurricane CARDI staff contributed to the mediathon hosted by the Government of Barbados on September 8, 2019. CARDI contributed over 9,000 EC dollars to assist in relief and rebuilding efforts.
Phase II of regional coconut project launched

Phase II of the Coconut Industry Development for the Caribbean project, was launched in Barbados on 20 September 2019. Building on the foundation set under Phase I, the European Union (EU) and CARIFORUM funded project will invest a further 6 million euros to develop the region’s coconut industry.

Phase II of the project focuses on improving the competitiveness of farmers and strengthening the coconut value chain. Climate change, health and nutrition, increasing investments and value added product development will be emphasised. “CARIFORUM believes that the activities to be implemented through the project will position the region to take advantage, in a sustainable manner, of the opportunities created by rising global demand for coconuts and coconut products,” said Percival Marie Director CARIFORUM.

Under phase I of the project approximately 5,000 farmers were able to source planting materials from more than 20 seedling nurseries established/refurbished across the Caribbean. More than 2,000 farmers and 474 extension officers were trained in nursery management, pest management, crop production, processing, trade, finance and group dynamics. Additionally 11 private – public platforms were established and a new Caribbean wide standard for packaged coconut water developed.

In bringing greetings International Trade Center (ITC) Executive Director, Arancha González said that under Phase II “we aim to do more and do better”. She reiterated the importance of information, scaling up and stimulating investments to position the regional industry to capitalise on rising global demands.

Director-General of International Cooperation and Development at the European Commission Stefano Manservisi said that the business sector must be attracted to invest in the coconut industry. It will help in generating sustainable growth, and to assist the EU has established a fund to help with de risking investments.

Executive Director, Barton Clarke said CARDI is happy to be co-implementing the project with ITC and looks forward to greater collaboration from all stakeholders, especially the private sector. This he says will lead to a more competitive, integrated and sustainable industry.

Prime Minister of Barbados, Honourable Mia Amor Mottley, Q.C. delivered the feature address. She said it was time the private sector led the charge in agriculture by investing in the production, adding there could be a public/private sector partnership to improve regional maritime transport. Poor transportation is a chronic problem which continues to plague trade.

The 12 CARIFORUM states benefiting from the project are Barbados, Antigua and Barbuda, Belize, Dominica, Dominican Republic, Grenada, Guyana, Jamaica, St Lucia, St Vincent and the Grenadines, Suriname and Trinidad and Tobago.
TR4 disease in bananas was confirmed in Colombia in August 2018. Photo courtesy: http://bananalink.org.uk

Caribbean on alert for TR4 disease

Fusarium wilt disease caused by the soil borne fungus, Fusarium oxysporum f. sp. cubense is considered one of the most destructive diseases of banana in the world. The Tropical Race 4 (TR4 race) has been causing extensive losses in banana production in Southeast Asia since the 1960’s. On August 8, the Colombian Institute of Agriculture (ICA) officially announced that TR4 was found on six farms in the North East of the country.

Its arrival in this hemisphere is of major concern to the Latin America and Caribbean (LAC) region given the importance of bananas and plantains to many countries. Ecuador a neighbouring country to Colombia is the biggest exporter of bananas in the world. The potential impact of the threat is particularly severe because of the prevalence of the Cavendish bananas which are highly susceptible to the TR4 disease. The Cavendish banana variety makes up around 47% of global production. The disease also affects other non-commercial, local cultivars, plantains and other Musa species such as Heliconias.

No effective control measure has been identified that can eradicate the pathogen once it is established in the soil. The pathogen can remain in the soil for decades even in the absence of a host plant. Once established in a banana field, total loss of yield can result.

TR4 is spread by movement of infected plant material and infected soil. Farm tools, clothing, shoes, vehicles and animals can help spread the disease through infected soil that become attached to them. Other modes of spread include drainage and irrigation water.

Caribbean countries must be very vigilant and step up their on farm biosecurity measures to prevent the introduction and establishment of this dreaded disease.

CARDI has pledged it commitment to collaborate on the development of awareness campaigns and surveillance and management measures to prevent the introduction and spread of the disease.

Assessing wild varieties of cane for the cogeneration of electricity

The Caribbean Agricultural Research and Development Institute (CARDI) is assessing varieties of wild cane for the cogeneration of electrical energy in Belize. Belize presently generates approximately 10% of its electrical power from burning bagasse—a byproduct of the sugar industry. It is the third largest source of energy behind hydropower (46%) and energy imported from Mexico (27%).

Sugarcane and its relatives are recognized as high energy potential feedstock for the cogeneration of electricity.

CARDI Belize is leading the agronomic evaluations of these varieties. This includes the collection of samples, taxonomic classifications, molecular profiling, germination tests, experimental design and establishment of treatment plots. CARDI will also be involved the monitoring of the experiment and data collection.

Biometrician Videsh Jagroo conducted a 2 day training on biometrics techniques on 27 and 28 August for researchers in the CARDI Belize Unit and partner agencies: SIRDI, University of Belize, and Ministry of Agriculture. Modules included design and layout of experiments, sampling and data collection.

The trials will be established on 400 acres of land in the Orange Walk district.

The two primary sources of electricity in Belize are both expensive and unreliable. The use of biofuel derived from wild cane will support the country’s energy independence and lower the environmental impact of burning fossil fuels to generate electricity. This work complements CARDI’s Renewal Energy programme.

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