Ministers’ Brief

Issue 3, March 2021

CDB/CARDI launch regional sweet potato project
Small farmers benefit from crowdfunded project
Developing Bahamas’ Cascarilla industry
New pest threatens Belize’s agriculture
The Caribbean Agricultural Research and Development Institute (CARDI), through the financial support of the Caribbean Development Bank (CDB), is implementing a three-year project to improve the production, processing and marketing of sweet potato in the Region.

The CDB will provide USD 600,000.00, with CARDI providing counterpart funding of USD 210,000. The project will be implemented in Antigua and Barbuda, Barbados, Guyana and St. Vincent and the Grenadines and the results will be shared across the Region. In addition, morphological and molecular characterisation work in Belize and Cayman Islands will also support this project.

Sweet potato is an important local food source for Caribbean people and a priority research commodity for CARDI. However, in spite of the agronomic and value chain improvements, the regional industry is still beset with challenges. Regional production is lagging behind when compared to other regions of the world. Additionally, farmers and processors are not adequately equipped to meet the demands of the modern consumer and address product safety standards and sanitary and phytosanitary (SPS) requirements, for intra-regional trade. This situation prohibits them from accessing high-value food markets for fresh and processed products.

Using a market-led approach, a value chain analysis will be conducted to analyse the gaps and identify opportunities for market linkages and investments. A complementary research component will identify and make available climate-resilient varieties for production and processing.

The aforementioned interventions will inform the development of a series of agriculture multimedia extension aids. Targeting farmers and other stakeholders along the sweet potato value chain, these aids will demonstrate best practices in sweet potato cultivation, processing and value-added product development. The goal is to increase the production and consumption of sweet potato.

The COVID-19 pandemic has brought the region’s food insecurity into the spotlight. According to Executive Director, Barton Clarke, ‘the region’s dependence on imported food to meet our daily subsistence is both worrying and unacceptable. Projects like this are an opportunity for Caribbean countries to make significant strides towards increasing their production of traditional commodities, placing them on the path to achieving food and nutrition security.’

CARDI remains committed to working with all stakeholders to improve the Region’s self-sufficiency whilst, exploiting our full production potential in a sustainable manner.

Crowdfunded project brings relief to small farmers in Antigua and Barbuda

The Inter-American Institute for Cooperation on Agriculture (IICA) is collaborating with CARDI and the Ministry of Agriculture, to mitigate the impacts of COVID-19 on small farmers in Antigua and Barbuda. Resources garnered under this initiative are supporting 55 small farmers in rural communities boost local production, through improved irrigation technologies and planting materials.

The ministry has also been supplied with instruments to strengthen their soil and water testing capabilities.

Across in Barbuda, a site in the community of Codrington has been identified for the construction of a multiplication bin and seedling nursery. These would increase the availability of quality planting material to farmers on the island.
The Government of Bahamas is on the move to sustainably expand the production of Cascarilla (Croton eluteria) and grow new businesses around this valuable shrub. The oil and other aromatic compounds produced by the plant are highly valuable in the nutraceutical, pharmaceutical, food and perfume industries. The essential oil extracted from the Cascarilla bark is a key ingredient in the production of the popular aperitif Campari. The Bahamas exports the Cascarilla bark to Europe.

Developing a sustainable Cascarilla industry in the Bahamas

The industry has been recognised as an important contributor to rural development and livelihoods in the Bahamas. In 2019, two steam distillation units were established at the Acklin Islanders Cooperative and five persons trained in oil extraction by chemists identified by CARDI. An important result of this initiative was the realisation that oil can be extracted from non-traditional plant parts – fresh and dried leaves, stems and barks. Originally oil was only extracted from the bark.

Together with The Bahamas Agriculture and Marine Science Institute (BAMSI), CARDI has assisted in the establishment of a nursery at Acklins, Crooked Island, Pinnan and Samana Cays. Understanding the natural habitat and growth habit of the plant is critical to sustainably boosting its production.

CARDI is one of the agencies providing technical support to the Global Environment Facility (GEF) funded Pine Islands Pilot Project, “Multi-purpose conservation by enabling coastal communities: Native Palm and Cascarilla cultivation.”

One of the first activities the Institute facilitated was the identification of an internationally acclaimed botanist to work with the Forestry Division, to conduct a Cascarilla resource assessment on Acklins, Crooked Island, Pinnan and Samana Cays. The results of the delimiting surveys conducted by the Ministry of Agriculture, BAHA and CARDI found that the pest was distributed throughout the country. However, the infestation was most severe in the northern part of the country.

CARDI is part of a technical team developing national strategies for managing the pest. These include the development of monitoring and integrated pest management (IPM) strategies, capacity building activities and an education and awareness campaign.

Jose Novelo, Director, Grain Program Coordinator, Ministry of Agriculture noted that between 40-50% of six thousand acres of Black eye peas in production was severely damaged by Asian Bean Thrip. The estimated value for that crop was about 8.4 million Belizean Dollars (BZD). Black eye peas is largely an export crop and farmers in the Corozal, Orange Walk and Cayo districts were seriously impacted.

New pest poses threat to Belize’s grain industry

The Belize Agricultural Health Authority (BAHA) has reported the presence of the pest, Asian Bean Thrip (Megalurothrips usitatus) in the country. Previously, the only place in the Americas to report this pest was Florida, USA.

This tiny elongated, dark yellow insect, as explained by the BAHA, measures two millimetres and can be found in flowers, tender buds and young leaves. Its main hosts are red kidney beans and black eye peas. In Belize, the pest has also been found on soybean, peanut and wild legumes species. The insect causes stunted growth and deformation of the flowers and growing tips. According to BAHA, if the pest is not controlled, it can destroy the entire crop. As a major producer and exporter, grains are an important foreign exchange earner and provides food and nutrition security for the country.

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CARDI plays a pivotal role in food security in the Caribbean and will continue to provide technical assistance to manage this economically important pest.
From the field

**Antigua and Barbuda**

"Prior to the installation of the irrigation system on farm water and fertilizer application were done manually. This technology is helping me to maintain my livelihood during the dry season and the ongoing COVID-19 pandemic."

Avery Smith
Farmer, Antigua

Testimony of beneficiary farmer Avery Smith, recipient of a fully automated drip irrigation system.

**Belize**

CARDI and the University of Belize have renewed their MoU for another 3 years. Both institutions have committed to working together to strengthen the country’s agricultural sector.

**Guyana**

Farmer Ganesh Harricharan, will soon begin harvesting broccoli from a shade house constructed on his farm, under CARIFORUM/EU “Alliances for Coconut Industry Development, Expansion and Enhanced Support for the Caribbean”

**Trinidad and Tobago**

CARDI joined the world in celebrating International Women’s Day 2021 - #ChooseToChallenge.