



# Agriculture in the News

January 2012

## Issues Affecting Caribbean Agriculture

PSC#: HQ/008/12

### INSIDE THIS ISSUE

1	Roots & Tubers - General
2	Cassava
3	Livestock; Small Ruminants
6	Agro-energy
7	Soil & Water
8	Climate Change
10	Pests
11	Food Security
12	Agricultural Development
15	National Budgets – Agriculture
17	CARDI Open Day
19	Upcoming Events

### *Global program on Roots, Tubers, and Bananas to exploit untapped potential and new synergies for increasing food security and incomes*

International Potato Center (CIP) Press Release, 4 January 2012

<http://cipotato.org/press-room/press-releases/global-program-on-roots-tubers-and-bananas-to-exploit-untapped-potential-and-new-synergies-for-increasing-food-security-and-incomes>

Two-hundred million poor farmers in developing countries use roots, tubers, and bananas (RTBs) for food security and income. But they don't fully benefit from the potential of these nutritious, resilient, and versatile crops. They are constrained by challenges such as poor quality seed, stresses from climate change, and poor management practices. Roots, Tubers, and Bananas for Food Security and Income is a joint initiative of the Consultative Group on International Agricultural Research (CGIAR) to address these challenges more globally and efficiently. As one of the newest CGIAR Research Programs (CRPs), it is led by the International Potato Center (CIP) in collaboration with Bioversity International, the International Center for Tropical Agriculture (CIAT), and the International Institute of Tropical Agriculture (IITA). To enhance the research, reach, and impacts of the program it also works directly with extensive networks of partners and stakeholders.

**See Roots & Tubers- General, page 1**

*Agriculture in the News* is a monthly newsletter which provides a compilation of selected news articles on issues affecting agriculture in the Caribbean region. Articles from Newspapers, Online News Service Agencies, Newsletters and Press Releases are featured.

For copies of documents cited, visit the web address or source of the information provided.



**CARDI** *Improving Lives Through Agricultural Research*

*Caribbean Agricultural Research and Development Institute (CARDI)*  
P.O. Bag 212, Frederick Hardy Building,  
University of the West Indies,  
St. Augustine Campus,  
Trinidad and Tobago W.I.

**Tel:** 1-868- 645-1205-7  
**Fax:** 1-868-645-1208  
**Email:** infocentre@cardi.org  
**Website:** [www.cardi.org](http://www.cardi.org)



## About CARDI

### *Our Vision*

To be the centre of excellence in the Caribbean for the provision and application of research and development in agriculture and rural enhancement.

### *Our Mission*

To contribute to the sustainable economic well being of Caribbean people by the generation and transfer of appropriate technology through research and development within the agricultural value chain.

[www.cardi.org](http://www.cardi.org)

***Global program on Roots, Tubers, and Bananas to exploit untapped potential and new synergies for increasing food security and incomes***

International Potato Center (CIP) Press Release, 4 January 2012

<http://cipotato.org/press-room/press-releases/global-program-on-roots-tubers-and-bananas-to-exploit-untapped-potential-and-new-synergies-for-increasing-food-security-and-incomes>

**Full article:**

Two-hundred million poor farmers in developing countries use roots, tubers, and bananas (RTBs) for food security and income. But they don't fully benefit from the potential of these nutritious, resilient, and versatile crops. They are constrained by challenges such as poor quality seed, stresses from climate change, and poor management practices.

Roots, Tubers, and Bananas for Food Security and Income is a joint initiative of the Consultative Group on International Agricultural Research (CGIAR) to address these challenges more globally and efficiently. As one of the newest CGIAR Research Programs (CRPs), it is led by the International Potato Center (CIP) in collaboration with Bioversity International, the International Center for Tropical Agriculture (CIAT), and the International Institute of Tropical Agriculture (IITA). To enhance the research, reach, and impacts of the program it also works directly with extensive networks of partners and stakeholders.

Roots, tubers, and bananas are among the 10 most consumed food crops in the world. They provide cheap sources of energy and key nutrients, and up to 60 percent of daily calories. RTBs offer great potential for higher yields and increased system productivity as these diverse crops can grow in marginal areas, in rotation, or inter-cropped with grains or other crops. This means more food, more efficient systems, and more diversity to reduce risks of food shortages and nutritional shortfalls.

RTBs are often grown by poor women and in remote regions. Enhanced productivity and access to value market chains can improve lives and opportunities for these small-scale producers and their communities, increasing gender equity and reaching some of the poorest of the poor in developing countries. As well, RTBs are relatively insulated from global price fluctuations. They can buffer against market shocks and serve as crisis mitigation crops.

Important scientific commonalities link these crops. They are genetically complex and clonally propagated (grown from plant cuttings), not grown from seed. They also share many similarities—and challenges—in crop management, seed systems, and breeding strategies. Roots, Tubers, and Bananas for Food Security and Income prioritizes a participative stakeholder strategy. During the design phase of the program, researchers from the four CGIAR centers engaged with 255 stakeholders, across three continents to ensure that that research and program components are based on real needs and opportunities to ultimately improve its outcomes and impacts.

“Roots, tubers, and bananas are not usually well positioned within policy and agricultural extension services, as decision makers do not have a full appreciation of their true importance,” commented one of the stakeholders from an African NGO.

With the launching of this new program, the position of Roots, Tubers and Bananas will undoubtedly gain more ground.

*Key program areas:*

- Conservation/access to genetic resources
- Breeding more robust, high-yielding varieties
- Managing pests and diseases
- Making available low-cost, high-quality planting material for farmers
- Developing tools for more productive, ecologically robust cropping systems
- Improving post-harvest technologies, value chains, and market opportunities
- Partnerships for better impacts

**CGIAR Research Program: Roots, Tubers, and Bananas (CRP RTB) site.**

<https://sites.google.com/a/cgexchange.org/roots-tubers-bananas/home>

### ***IITA-led team develops vitamin A cassava to tackle malnutrition in Africa***

International Institute of Tropical Agriculture (IITA), 19 December 2011

[http://www.iita.org/home-news-asset?p\\_p\\_id=101\\_INSTANCE\\_1nBS&p\\_p\\_lifecycle=0&p\\_p\\_state=normal&p\\_p\\_mode=view&p\\_p\\_col\\_id=column-2&p\\_p\\_col\\_pos=1&p\\_p\\_col\\_count=4&\\_101\\_INSTANCE\\_1nBS\\_struts\\_action=%2Fasset\\_publisher%2Fview\\_content&\\_101\\_INSTANCE\\_1nBS\\_urlTitle=iita-led-team-develops-vitamin-a-cassava-to-tackle-malnutrition-in-africa&\\_101\\_INSTANCE\\_1nBS\\_type=content&redirect=%2F](http://www.iita.org/home-news-asset?p_p_id=101_INSTANCE_1nBS&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_pos=1&p_p_col_count=4&_101_INSTANCE_1nBS_struts_action=%2Fasset_publisher%2Fview_content&_101_INSTANCE_1nBS_urlTitle=iita-led-team-develops-vitamin-a-cassava-to-tackle-malnutrition-in-africa&_101_INSTANCE_1nBS_type=content&redirect=%2F)

#### **Full article:**

A research team led by the International Institute of Tropical Agriculture (IITA) has developed three new varieties of vitamin A cassava that could improve the livelihoods of millions of farmers in Africa and help put an end to malnutrition due to vitamin A deficiency in the continent.

The vitamin A cassava varieties named by the National Variety release Committee of Nigeria as UMUCASS 36, UMUCASS 37, and UMUCASS 38 are recognized as IITA genotypes TMS 01/1368, TMS 01/1412, and TMS 01/1371. They have high beta carotene (pro-vitamin A) and are suitable for food uses as *gari*, *fufu*, and high quality cassava flour. The yellow root color of the vitamin A-rich varieties are products of over 20 years of breeding efforts for improved nutritional quality using traditional breeding methods involving hybridization and selection of cassava seedlings followed by clonal propagation of the selected desirable plants.

Drs. Peter Kulakow and Norbert Maroya, IITA Cassava Breeders, said, “The development of these varieties is a major breakthrough that will change the nutritional status of people living on cassava-based food.”

Known for its high carbohydrate content, cassava is the fourth largest staple after wheat, maize, and rice consumed in the developing countries, with over 200 million people in sub-Saharan Africa relying on the crop for over half of their daily food energy.

The biofortification of cassava with pro-vitamin A provides a cost-effective way of combating vitamin A deficiency in the region where millions are malnourished and many people live on less than \$1 per day.

In Nigeria where the average consumption of cassava is 600 grams per capita per day, about 20% of pregnant women and about 30% of children under five suffer from vitamin A deficiency. Resultant health implications include low immunity and impaired vision, which often lead to blindness and even death.

Maroya says the release of this first set of vitamin A cassava varieties in Nigeria is “a victory for women and children.” The project, funded by Harvestplus, was carried out by IITA with the Nigeria-based National Root Crops Research Institute (NRCRI), Umudike and with other local partners.

Dr. Chiedozie Egesi, NRCRI Cassava Breeder, says the development of the varieties marks a new dawn in Nigeria's cassava industry as it is the first set of ‘nutritious cassava developed and released in Nigeria.’ Farmers who participated in the project loved the varieties for their high-yielding ability and resistance to major diseases and pests. “Demand for these varieties has already started, but it will take some time before we have enough quantities to give out,” says Paul Ilona, the HarvestPlus Manager for Nigeria.

The yellow cassava is already being multiplied through stem cuttings. In 2013, when sufficient certified stems will be available, HarvestPlus and its partners will then distribute these to about 25,000 farming households initially. Farmers will be able to grow these new vitamin A varieties and feed them to their families. They can also multiply and share cuttings with others in their community, amplifying the nutritional benefits. After the mid-2014 harvest, more than 150,000 household members are expected to be eating vitamin A-rich cassava. Other partners in this work include the International Center for Tropical Agriculture (CIAT) and the Brazilian Agricultural Research Corporation (Embrapa).

END

For more information, please contact:

Peter Kulakow, IITACassava Crop Leader, [p.kulakow@cgiar.org](mailto:p.kulakow@cgiar.org),  
Norbert G. MAROYA, HarvestPlus Cassava Breeder/Geneticist, [n.maroya@cgiar.org](mailto:n.maroya@cgiar.org)  
Paul Ilona, Country Manager, HarvestPlus, [p.ilona@cgiar.org](mailto:p.ilona@cgiar.org),  
Chiedozie Egesi, Asst. Director & Head, Cassava Breeding, NRCRI, [chiedozie.Egesi@nrcrri.gov.ng](mailto:chiedozie.Egesi@nrcrri.gov.ng)  
Godwin Atser, [g.atser@cgiar.org](mailto:g.atser@cgiar.org), Corporate Communications Officer (West & Central Africa) +2348034430027  
Jeffrey T. Oliver, [o.jeffrey@cgiar.org](mailto:o.jeffrey@cgiar.org)  
Corporate Communications Officer (International)

## Livestock:

### ***Major gains in efficiency of livestock systems needed***

FAO, 14 December 2011

<http://www.fao.org/news/story/en/item/116937/icode/>

#### **Full article:**

Intensive production holds key to feeding growing cities, but improvements in natural resource use and environmental performance are crucial

**FAO 14 December 2011, Rome –**

By 2050 an expanded world population will be consuming two thirds more animal protein than it does today, bringing new strains to bear on the planet's natural resources, according to a new FAO report published today.

Populations and income growth are fueling an ongoing trend towards greater per capita consumption of animal protein in developing countries, says the report, *World Livestock 2011*. Meat consumption is projected to rise nearly 73 percent by 2050; dairy consumption will grow 58 percent over current levels.

Much of the future demand for livestock production — in particular in the world's burgeoning cities, where most population growth is occurring — will be met by large-scale, intensive animal-rearing operations.

"As it stands, there are no technically or economically viable alternatives to intensive production for providing the bulk of the livestock food supply for growing cities," FAO's report says.

But such systems are a source of concern due to environmental impacts such as groundwater pollution and greenhouse gas emissions, as well as their potential to act as incubators of diseases, warns the report, cautioning: "an urgent challenge is to make intensive production more environmentally benign."

Based on existing knowledge and technology, there are three ways to do this, according to FAO: reduce the level of pollution generated from waste and greenhouse gases; reduce the input of water and grain needed for each output of livestock protein; and recycle agro-industrial by-products through livestock populations.

#### *Efficiency gains only way to meet demand*

The surge in livestock production that took place over the last 40 years resulted largely from an increase in the overall number of animals being raised. But "it is hard to envisage meeting projected demand by keeping twice as many poultry, 80 percent more small ruminants, 50 percent more cattle and 40 percent more pigs, using the same level of natural resources as currently," says *World Livestock 2011*.

Rather, increases in production will need to come from improvements in the efficiency of livestock systems in converting natural resources into food and reducing waste.

This will require capital investment and a supporting policy and regulatory environment.

### *Animal health is key*

A number of additional challenges must be confronted as well, including drought, water shortages and other climate-related impacts — not to mention the threat of animal diseases, some which may directly threaten human health, which will have to be carefully managed as livestock production is ramped up.

Intensive systems, and those that encroach upon forest environments or peri-urban areas without proper hygiene, are a fertile ground for new diseases — and many of them are managed in ways that are detrimental to animal health and welfare, according to the report.

"It is not enough to pour funding into coping with the urgent disease threats of today — disease intelligence and epidemiological research must be financed to anticipate future diseases in the countries that produce the bulk of livestock source food," it says.

### *Livestock and food security*

Since 1967, global production of poultry meat increased by around 700 percent. Other products saw surges in production as well, including eggs, which registered a 350 percent increase, pig meat (290%), sheep and goat meat (200%), beef and buffalo meat (180%) and milk (180%).

Livestock products today supply 12.9 percent of calories consumed worldwide — 20.3 percent in developed countries. Their contribution to protein consumption is estimated at 27.9 percent worldwide and 47.8 percent in developed countries.

However global trends have not played out evenly on the ground. In many places, production increases haven't occurred and poor and vulnerable communities have not seen their consumption of animal protein rise, FAO warns. Production has expanded rapidly in East and Southeast Asia and in Latin America and the Caribbean but growth in sub-Saharan Africa has been slow

"Average consumption of livestock protein in Africa is less than a quarter of that in the Americas, Europe and Oceania, and represents just 17 percent of the recommended consumption level for all proteins," says FAO's report. "By contrast, the consumption of livestock protein in the Americas, Europe and Oceania in 2005 was between 78 and 98 percent of the total protein requirement, suggesting that livestock products are being over-consumed."

But in the developing world, livestock and livestock products can make a crucial contribution to household economic and food security — as well as nutrition.

Even small amounts of animal source foods can improve the nutritional status of low-income households. Meat, milk and eggs provide proteins with a wide range of amino acids as well as micro-nutrients such as iron, zinc, vitamin A, vitamin B12 and calcium, in which many malnourished people are deficient.

For livestock-dependent pastoral societies like those in Eastern Africa, the report says, priorities should be boosting the sector's contribution to food security by restoring degraded pastures and managing them better, strengthening animal health services, and doing more to help livestock keepers get their animals and goods to market.

**Editor's Note:** e-copy of *FAO. 2011. World Livestock 2011: livestock in food security. Rome: FAO* is available online at <http://www.fao.org/docrep/014/i2373e/i2373e00.htm>

## Small Ruminants:

### *Diversification of the Caribbean Livestock Sector through the Production of Small Ruminants*

Caribbean Agricultural Research and Development Institute (CARDI), 22 December 2011

<http://www.cardi.org/diversification-of-the-caribbean-livestock-sector-through-the-production-of-small-ruminants/>

#### **Full article:**

The Common Fund for Commodities (CFC), the Government of Jamaica, the Government of Trinidad and Tobago, the Caribbean Development Bank (CDB) and the Caribbean Agricultural Research and Development Institute (CARDI) are joint funding sources for the four-year project, Diversification of the Caribbean Livestock Sector through the Production of Small Ruminants which was launched in Kingston, Jamaica on the 7-9 December 2011.

The overall **Goal** of the project is to contribute to regional self sufficiency in meat consumption through the enhancement of the small ruminant industry in Jamaica and Trinidad & Tobago.

The main **Objectives** of the project are to improve the productivity and quality of meat (raw and processed) and the volume and value of the marketable off-take of small ruminants in the targeted countries Jamaica and Trinidad & Tobago. A related **Objective** is to enhance the income of small scale mutton and chevron farmers in the two countries.

This pilot commercial project aims to validate the basically untested recognition that for the small ruminant industry to be viable, both production and productivity must be enhanced given the significance of this industry within the CARICOM region.

The **principal Collaborators** of the project are:

- The Government of Jamaica, through Ministry of Agriculture and Fisheries (MAF)
- The Government of Trinidad and Tobago, through the Ministry of Food Production, Land and Marine Resources (MFPLMR)
- The Caribbean Development Bank (CDB)
- The Caribbean Agricultural Research and Development Institute (CARDI) as the Project Executing Agency (PEA)

The **four components** of the project are:

Component A: Breed Improvement & Dissemination of Stock (importation of 502 pedigree animals as foundation stock, followed by breeding, multiplication and dissemination to farmers).

Component B: Technology Transfer & Capacity Building (training of livestock producers, processors and, groups).

Component C: Small Ruminant Production (dissemination of improved stock with improved production practices)

Component D: Marketing and Processing (refurbishment of abattoir facilities, demonstration/training in meat processing and by-product refinement).

## ***Innovation in the cultivation of jatropha promoted to spur production of biofuels***

Inter-American Institute for Cooperation on Agriculture (IICA), 17 January 2012

<http://www.iica.int/eng/prensa/pages/comunicadoprensav1.aspx?cp=593>

### **Full article:**

Six working groups will address topics such as genetic breeding and the identification of the areas best suited to the cultivation of this plant in Latin America and the Caribbean, as a source of biodiesel and biokerosene.

**San Jose, Costa Rica, January 17, 2012 (IICA).** Through genetic breeding, the identification of suitable agroclimatic conditions and the application of sustainable cultivation and harvesting technologies, *jatropha curcas* could become a profitable and efficient source of biofuels in Latin America and the Caribbean, without its production competing with food security.

With this in mind, specialists supported by the Inter-American Institute for Cooperation on Agriculture (IICA) and the Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics (PROCITROPICOS) will analyze the future of *jatropha* production in the region.

Orlando Vega, an IICA Agroenergy and Biofuels Specialist, explained that in 2011 a regional agenda was drawn up to focus research and development (R+D) efforts on *jatropha curcas*, a non-edible plant from the Americas which yields raw material for biofuel and biokerosene.

He stated that the areas in which R+D would be promoted at the regional level were genetic breeding, agricultural practices, floral synchronization, post-harvest and byproducts, agroclimatic zoning and sustainability.

Each subject will be addressed by a working group, as agreed at two meetings held in Brazil in November and December 2011, attended by growers, researchers and delegates from the member countries of the Latin American and Caribbean *Jatropha Curcas* Network, as well as representatives of cooperation agencies.

The principal objective of R+D on the production of this oilseed is to make it socially and environmentally sustainable as well as economically viable throughout the value chain, he said.

### *Lines of work*

The widespread existence of *jatropha* in Mesoamerica will facilitate the creation and operation of germ plasm banks of the plant, which will be used to obtain varieties suitable for the different agroclimatic areas of the region.

A model of this map of climatic suitability is being developed in Brazil by the Brazilian Agricultural Research Corporation (EMBRAPA), one of the leading proponents of the use of biofuels in the world.

The zoning of production would facilitate the preparation of cultivation manuals based on technical criteria related to climatic conditions and the availability of water and soil. In this way, *jatropha* plantations would not compete with those that produce food.

For Orlando Vega, the existing network, sponsored by PROCITROPICOS and IICA, could become a channel for communication between researchers and growers, to ensure that the results of R+D reach the countryside.

Extension services have become important because, at present, growers use wild species known for their low productivity and yields, added to the fact that they are not profitable for the first two years. This also creates the need to establish a mechanism for defining the prices to be paid to growers, he added.

The transfer of R+D would make the management of the waste generated in the processing of *jatropha* more sustainable. "At present, only the oil derived from the seeds is being used, which limits the possibility of adding value to its byproducts."

He added that the creation of associations of small-scale growers, even those at the family agriculture level, could facilitate access to financial resources and make it possible to obtain sustainability certificates.

**For more information, contact:**

[orlando.vega@iica.int](mailto:orlando.vega@iica.int)

## Soil & Water Management

### *Training Workshop in St. Kitts on Water Use Efficiency in the Agriculture Sector*

Global Water Partnership-Caribbean, 17 January 2012

<http://www.gwp.org/en/GWP-Caribbean/GWP-C-IN-ACTION/News-and-Activities/Training-Workshop-in-St-Kitts-on-Water-Use-Efficiency-in-the-Agriculture-Sector/>

#### **Full article:**

In its efforts to continue building capacity for improved water management in the region, Global Water Partnership-Caribbean (GWP-C) together with its partner, the Caribbean Agricultural Research and Development Institute (CARDI) hosted a workshop entitled 'Water Use Efficiency in the Agriculture Sector' on November 1<sup>st</sup> - 3<sup>rd</sup>, 2011 at the University of the West Indies (UWI) Centre in St. Kitts.

The workshop's opening ceremony included remarks from Ms. Avril Alexander, Regional Coordinator of GWP-C; Mr. Cromwell Williams, Manager/ Water Engineer of the St. Kitts Water Services Department; and Mr. Ashton Stanley, Permanent Secretary of the Ministry of Agriculture.

Mr. Cromwell in his remarks, stressed that there should be cohesion in the management of water and agriculture. He highlighted the need for great investments to meet the increase demand for water identified by the agriculture sector in St. Kitts and sited Integrated Water Resources Management (IWRM) as the approach for addressing the various demands by sectors. He also stressed the critical importance of farmers and all other users to work to conserve water. He explained that from an environmental standpoint there is great water stress during the dry season and from an economical viewpoint, demand management reduced the need for increasing investment.

Mr. Ashton Stanley, Permanent Secretary of the Ministry of Agriculture, expressed that the WUE workshop was timely, citing the experiences of the Ministry in recommending water management methods to farmers, explaining that they are not always followed. He further pointed out that there has been an increase in the demand for water from other sectors (E.g. Tourism).

Mr. Stanley explained to participants that there is no policy on water for agriculture in St. Kitts and the fact that there is need for a national consultation on this to develop a plan/policy. He also acknowledged the need for IWRM, stating that the responsibility of securing water for agriculture does not rest solely on the agriculture sector.

The three-day workshop targeted technicians and practitioners within the Agriculture sector and sought to train them and provide them with relevant material that could be used in working towards improved water use efficiency in the sector. St. Kitts was seen as an ideal territory to host the workshop as it is currently in the process of developing plans for the rationalisation of its water resources mainly with respect to water to be provided for agricultural development.

Workshop participants were trained on Water Use Efficiency (WUE) in Agriculture using the WUE Manual developed by GWP-C. The workshop facilitators Dr. Leslie Simpson, Natural Resources Management Specialist at CARDI and Mr. Stanley Rampair, a Senior Irrigation Consultant, clearly identified the objectives of the training to participants from the onset of the workshop.

The workshop objectives were clearly defined as follows:

- Demonstrate the benefits of improved WUE.
- Provide examples of demand calculation models for WUE in the agriculture sector.
- Demonstrate the methodologies for assessing the economic benefits of improved WUE.
- Explain the potential impacts of climate change on water resources use in the sector.
- Initiate discussions which would make provisions for the adaptation of WUE measures.
- Foster discussions on retrofitting the industry with WUE devices.

Apart from lectures with allotted discussion sessions, the workshop was designed in an interactive way with various exercises to reinforce key points and concepts. The broad topics covered included:

1. Soil / Water Relationships
2. Irrigation
3. Water Efficiency
4. Water Management and Non-Performance of Irrigation Systems

Participants were very receptive to the exercises which stimulated much discussion and debate and by extension allowed practitioners to share knowledge with each other on their experiences with WUE techniques for Agriculture.

Workshop participants included extension officers from the Ministry of Agriculture, officers of the Water Services Agencies as well as farmers from both St. Kitts and Nevis. Participants were all awarded certificates of participation after completing the three-day workshop.

## Climate Change

### *FAO-EC project to promote climate-smart farming: Malawi, Vietnam and Zambia will benefit from collaborative effort*

FAO, 16 January 2012

<http://www.fao.org/news/story/en/item/119835/icode/>

#### **Full article:**

**16 January 2012, Rome** - FAO and the European Commission announced today a new €5.3 million project aimed at helping Malawi, Vietnam and Zambia transition to a "climate-smart" approach to agriculture.

Agriculture — and the communities who depend on it for their livelihoods and food security — are highly vulnerable to climate change impacts. At the same time agriculture, as a significant producer of greenhouse gases, contributes to global warming.

"Climate-smart agriculture" is an approach that seeks to position the agricultural sector as a solution to these major challenges.

It involves making changes in farming systems that achieve multiple goals: improving their contribution to the fight

against hunger and poverty; rendering them more resilient to climate change; reducing emissions; and increasing agriculture's potential to capture and sequester atmospheric carbon.

"We need to start putting climate-smart agriculture into practice, working closely with farmers and their communities," said FAO Assistant Director-General for the Economic and Social Development Department, Hafez Ghanem. "But there are no one-size-fits-all solutions — better climate-smart farming practices need to respond to different local conditions, to geography, weather and the natural resource base," he added.

"This project will look closely at three countries and identify challenges and opportunities for climate-smart agriculture and produce strategic plans tailored to each country's own reality," Ghanem said. "While not all solutions identified will be universally applicable, we can learn a lot about how countries could take similar steps and begin shifting to this approach to agriculture."

#### *Tailor-made solutions*

The EU is providing €3.3 million to support the effort; FAO's contribution is €2 million.

Working closely with agriculture and other ministries in each of the partner countries, and collaborating with local and international organizations, the three-year project will:

- Identify country-specific opportunities for expansion of existing climate-smart practices or implementation of new ones
- Study the constraints that need to be overcome to promote wider adoption of climate-smart agriculture, including investment costs
- Promote integration of national climate change and agricultural strategies to support the implementation of climate-smart agriculture
- Identify innovative mechanisms for linking climate finance with climate-smart agriculture investments
- Build capacity for planning and implementing climate-smart projects capable of attracting international investments

FAO will take the overall lead on the project, working in partnership with national policy and research institutions, as well as global organizations such as the Global Crop Diversity Trust.

By tackling the urgent need to incorporate climate change concerns into agricultural development planning, this new project represents a concrete step forward, said Ghanem. "The problems of climate change are increasingly being felt on the ground, and thus early actions to address the problem are needed, even as international negotiations continue in the search for a global climate agreement," he said.

## ***Another New Insect Pest Discovered In Barbados***

Barbados. Ministry of Agriculture, 29 December 2011

[http://www.agriculture.gov.bb/agri/index.php?option=com\\_content&view=article&id=629:another-new-insect-pest-discovered-in-barbados&catid=80:information-services&Itemid=97](http://www.agriculture.gov.bb/agri/index.php?option=com_content&view=article&id=629:another-new-insect-pest-discovered-in-barbados&catid=80:information-services&Itemid=97)

### **Full article:**

Barbadian householders and the local agricultural sector have been put on alert that they have another insect pest with which to contend. This time it is the Croton Scale, scientifically known as *Phalacroccoccus howertoni*, which has been detected on crotons and acalypha in the parish of St James.

This was revealed by Government Entomologist, Ian Gibbs, who said that the insect was positively identified by Dr Greg Hodges of the Florida Department of Agriculture and Consumer Services.

Mr. Gibbs explained that “the croton scale is a member of the soft scales (Coccidae) family of insects which attack a wide range of plants. It has been found on 72 plant species in Florida. Included in these are the soursop, carambola, fat pork, sea grape, mango, avocado, guava and plums, all commonly found in Barbados. It also attacks ornamental plants such as heliconias, crotons and acalypha.”

“Adult females and late growth stages (instars) have a greenish yellow appearance with dark marks, and are approximately 3.5 mm to 7.0 mm long and 2.0 mm wide.”

The Ministry of Agriculture Entomologist further pointed out that “the eggs hatch into mobile crawlers which search for suitable sites on the host plant on which to settle and feed. They suck sap from the plant and remain at these selected sites for the rest of their life cycle. Scale insects suck copious amounts of sap from the host plants and also excrete viscous liquid called ‘honeydew’ that contains a lot of sugars. When this honeydew spreads out on the leaf surface it provides an ideal layer in which fungi can grow.”

He said “a complex of fungi usually grows in this layer and produces the characteristic black sooty mould, which Barbadians often call ‘blight’. This sooty mould will also reduce the photosynthetic capability of the plant.”

The effects of the sap removal by the scale insect and the formation of the sooty mould layer on the leaves often combine to weaken the plant, make it less productive, and, in the case of ornamentals, make them less attractive or not saleable.

Mr. Gibbs said the croton scale insect could be controlled by the application of conventional systemic insecticides such as Aval® (acetamiprid), Actara® (thiamethoxam), Merit® (imidacloprid) or Orthene® (acephate); or by using organic alternatives like Safer Soap® (potassium salts of fatty acids), Organocide® (fish oil) or Ultrafine Oil® (paraffin oil).

He said the Ministry of Agriculture was monitoring the situation in the St. James area, as well as neighbouring parishes in an effort to not only minimize its presence but also to quickly control it.

Persons who detect this insect should contact the Entomology Section of the Ministry of Agriculture at 434-5103 (Ian Gibbs) or 310-2821 (Bret Taylor). (BGIS)

## ***IFPRI to Lead Two New CGIAR Research Programs***

International Food Policy Research Institute (IFPRI), 9 January 2012

<http://www.ifpri.org/blog/ifpri-lead-two-new-cgiar-research-programs>

### **Full article:**

In January 2012 IFPRI is launching two major research programs. These CGIAR Research Programs (CRPs), led by IFPRI, will bring together researchers from across the CGIAR centers to address some of the most pressing problems facing the global food system.

The first of these two programs—**Policies, Institutions, and Markets to Strengthen Food Security and Incomes for the Rural Poor**, also known as CRP2—will identify the policies and institutions that will enable rural smallholder producers, particularly women, to increase their incomes through better links with markets and equitable access to services and assets. Failures related to policies, institutions, and markets are a major impediment to increasing agricultural growth in the developing world, where a majority of people depend on agriculture for their livelihoods. This CRP seeks to produce a body of knowledge that decisionmakers can use to shape policies and institutions that will reduce poverty and promote sustainable rural development. [Mark Rosegrant](#), Director of IFPRI's Environment and Production Technology Division (EPTD), serves as Acting Director of CRP2.

The second program—[Agriculture for Improved Nutrition and Health, also known as CRP4](#)—aims to improve the nutrition and health of poor people by exploiting the many synergies between agriculture, nutrition, and health. This program will focus on research in four key areas: value chains, biofortification, control of agriculture-associated diseases, and integrated agriculture, nutrition, and health development programs and policies. [John McDermott](#) has been named [Director of CRP 4](#).

In addition to playing a leadership role in these two CRPs, IFPRI researchers will also contribute to two other research programs: [Climate Change, Agriculture, and Food Security](#) (CRP7, led by CIAT), and Water, Land, and Ecosystems (CRP5, led by IWMI).

\*Consultative Group on International Agricultural Research ([CGIAR](#))

## ANTIGUA AND BARBUDA

### *Policy on agriculture complete*

Gordon, T

Antigua Observer.com, 12 January, 2012.

<http://www.antiguaobserver.com/?p=69749>

Antigua and Barbuda. Ministry of Agriculture, Lands, Housing & The Environment, 13 January 2012

<http://agricultureantiguabarbuda.com/news/policy-on-agriculture-complete/>

#### **Full article:**

St. John's Antigua- Help is on the way for farmers, as the Ministry of Agriculture moves to finalise a document to assist them in securing financial backing from local institutions.

Director of Agriculture Jedidiah Maxime said farmers in the country have had their fair share of financial challenges, due to the instability of the market place and the lack of insurance.

The director said despite a few setbacks, the ministry was able to draft a long promised national policy for agriculture and he anticipates that the establishment of such a policy will make the industry less of a risk.

“We have been promoting agriculture as a business and I think it needs to be treated as any other business, where an investor can go into a financial institution and get money to support their products,” he said. “But for some reason, agriculture has not really been given that kind of respect by the financial institutions as some of the other investments.”

He indicated that despite the challenges, a number of farmers had sought alternatives by having a supplementary job.

Maxime said in order to view farming as a lucrative business, farmers need a strong strategic framework.

“I think as farmers take on a more business like approach, the financial institutions become more amenable to assisting them,” he said on state media. “With a strong national policy, I think that would go a long way to give some confidence to the financial institution in terms of farm financing.”

The policy, which has been in the works since 2008, will soon be circulated to the various stakeholders for public consultation and then to Cabinet for final approval.

The proposed document will cover critical areas affecting the agriculture sector.

“When we look at a policy for agriculture, we are looking at the major issues that are confronting agriculture; not only nationally, we have to take into context some of the regional and international agreements that we have and how it will impact agriculture,” Maxime said.

He further stated that the policy has six major pillars which deal with food security, invasive species, food safety, climate change and disaster mitigation.

With a severe cut to the 2012 budgetary allocation for the Ministry of Agriculture, the director said that public private partnership would be necessary this year to promote growth within the sector.

The government has also secured funding from international donor agencies such as the Food and Agriculture Organisation (FAO), Inter-American Institute for Cooperation on Agriculture (IICA), Caribbean Agricultural Research and Development Institute (CARDI), to support its agriculture work programme for 2012.

## ***Director outlines agriculture's successes, challenges***

Antigua and Barbuda. Ministry of Agriculture, Lands, Housing & The Environment, 9 January 2012

<http://agricultureantiguabarbuda.com/headline/director-outlines-agriculture%e2%80%99s-successes-challenges/>

### **Full article:**

St. John: Antigua – Against the backdrop of scarce resources, unseasonal rainfall and the instability of input /implements prices on the world market in 2011, the Ministry Of Agriculture, Lands, Housing & the Environment (MALHE) has made significant inroads maneuvering these challenges hampering its performance, thanks to the Government assistance offered to bone-fide producers.

Much emphasis was placed throughout 2011 on programs directed towards the Agriculture's contribution to the Gross Domestic Product and the thrust of achieving Food and Livelihood Security.

Director of Agriculture Mr. Jedidiah Maxime said, a three –pronged approach was taken with overarching objectives, “to assist in modernization of the sector through strategic alliance with stakeholders and regional and international organizations, provision of incentives for entrepreneurs especially for youths to establish agriculture businesses and the protection and development of the sector by utilizing the environment in a sustainable manner.”

Significant efforts were made in the areas of research and development towards the development of Food and Livelihood Security. “The Agricultural Extension Division and the Research Station will be collaborating in trials to demonstrate the performance of new varieties of tomatoes, sweet peppers and other vegetables. Additionally; research is continuing on Irish Potato to determine the commercial feasibility of the appropriate varieties for production.

To this end, Mr. Maxime explained trials were undertaken successfully in 2010-2011 to produce on a semi-commercial basis the Irish Potato.

Meanwhile, the Christian Valley and Green Castle Stations are continuing their programme of fruit trees and seedlings production. It is anticipated that the combine effort will produce some 10,000 seedlings of fruit trees varieties in 2012.

At Cades Bay Pineapple and Propagation Station approximately (8) eight acres of pineapples planted at the Cades Bay Propagation Station should generate an estimated revenue of five hundred thousand dollars (\$500,000) for the 2012 harvesting cycle, the director outlined.

With the increased services to the private sector in the areas of affordable tractor services to farmers in the various agricultural districts, productivity of vegetables and root crops and management and control of swarms on the agenda, the ministry has widened the benefits with earmarking of approximately, three hundred (300) acres of land for crop production in 2012.

Several trainings were also conducted with farmers and producers in the areas of crop production technology, integrated pest management and good agricultural practices.

As it relates to cotton, the director of agriculture noted “the purity and quality” of the Sea Island Cotton Germplasm is priority as required by the Market.

“The ministry is continuing its technical management of the Sea Island cotton in a manner that allows for the development of a robust local Cotton Industry in areas of research and technology,” said Mr. Maxime.

In January 2011, an agreement was reached between Ministry of Agriculture, Lands, Housing & the Environment, and the Cooperative West Indian Sea Island Cotton Japan Project (CWISICJP), for the export of the Indigenous Antigua Sea Island Cotton.

“This agreement allows the Ministry of Agriculture to supply a minimum of 20,000 lbs of Sea Island cotton lint annually at U.S. \$10.00 per lbs, which equates to US \$ 200,000 in revenue annually.”

For, the 2011 -2012 season approximately 50 acres is under production.

With regards the private agriculture projects facilitated by the ministry a \$1 –million dollar Agricultural Investment project geared towards the sustainable development of the eight species of Avocado varieties in Antigua & Barbuda is currently underway at Gaynor's. This project is being developed by Avikado Antigua Ltd. The project has an underlined

objective to develop a handling and processing facility in an effort to strengthen the agro-processing industry.

Several hundreds of avocado trees are being planted with advantages ranging from increased local employment in the agricultural industry, impact on food security, reduction of imported avocado and its by products, Training and capacity building for technical staff at the ministry of Agriculture, savings of foreign exchange and Diversification of the economy.

## JAMAICA

### *Agriculture Minister to Focus on Food Safety Act*

Linton, L

Jamaica Information Service, Friday, 13 January 2012

<http://www.jis.gov.jm/news/leads/29570>

#### **Full article:**

Minister of Agriculture and Fisheries, Hon. Roger Clarke, says ensuring that exporters meet the requirements of the Food Safety Modernization Act will be one of his immediate priorities.

Speaking with JIS News, Mr. Clarke said with United States (US) authorities expected to carry out inspections next month; focus will be placed on all areas dealing with the export of agricultural produce.

"There is a short window of opportunity left for us, so at this point in time we have to be looking at our packing houses and our labs. Traceability is also another aspect and therefore we are going to have our farmers do proper book-keeping, the chemicals they use and all that. It's a very complex situation, but we have to adhere to those conditions as laid down," the Minister said.

The Food Safety Modernisation Act is intended to institute critical steps toward strengthening the US food safety system, and places greater emphasis on preventing food-borne illnesses. The law was promulgated to protect the US consumers from potential hazards from the farm to the fork that could pose a health and safety risk.

Another area of focus for the new Minister will be to stimulate production within the coffee industry as well as taking a serious look at the banana and cocoa producing sectors.

"It cannot be that we are importing bananas into the country at this point in time, so we have to find a way to deal with that. Cocoa production, the possibilities are endless in terms of demand and price, so we will be concentrating our efforts on resuscitating our cocoa production in the country," Mr. Clarke said.

Efforts will also be made to improve the marketing of domestic produce through revision of the Agricultural Business Information System (ABIS), which is operated by the Rural Agricultural Development Authority (RADA).

"The Agricultural Business Information System has to be updated to enable us to plan ahead for production and also to inform people as to what is needed at particular times, so that we don't have these gluts and shortages over time," the Minister pointed out.

Mr. Clarke said that increasing the number of RADA extension officers and the quality of service they provide to farmers would be on the front burner, and a review of RADA would be done.

"RADA is going to be looked at because the service delivery to the farmers is also of the utmost. What we want to make sure is that quality service is rendered to the farmers," the Minister said.

In addition, Mr. Clarke stated that the government will be moving to provide a greater level of security to the fisheries sector. This, he said, will be done by expediting the passage of the fisheries legislation.

"We have to fast track this to enable us to deal with our fisheries situation in a more precise way and to protect our aquatic resources," Mr. Clarke emphasised.

The Ministry will also be working closely with other stakeholders to guarantee the sustenance of the school feeding programme.

"We're looking at nutrition in our schools. The former administration had begun to look in that direction. We also have to fast track that, so that our young people can be properly fed to enable them to learn and be good citizens in the future. The dairy industry, that's one of the areas we're targeting to help in the school feeding programme," Mr. Clarke said.

In the meantime, the Minister stressed that despite the potential challenges facing the sector, failure was not an option.

"Our purpose is to really advance the agricultural sector to enable our rural folks to really rise to a higher standard. Rural development is at the heart of what we are about and we must make sure we succeed," Mr. Clarke told JIS News.

by Latonya Linton, JIS Reporter

## *National Budgets - Agriculture*

### ANTIGUA AND BARBUDA

#### ***Antigua and Barbuda Budget Statement 2012 presented by Hon. Harold Lovell, Minister of Finance, Economy, and Public Administration, 5 December 2011. 2012 Budget Statement: Resolved to Transform, Determined to Deliver***

Official website of the Government of Antigua and Barbuda, 5 December 2011

[http://www.ab.gov.ag/pdf/finance/budget\\_statement\\_2012.pdf](http://www.ab.gov.ag/pdf/finance/budget_statement_2012.pdf)

#### **EXCERPTS**

##### ***pp. 74-77 Economic Action Plan - Agriculture***

Madam Speaker

With Antigua and Barbuda's focus on services as the means to achieve our growth and development aspirations, the contribution of agriculture to annual economic output has declined steadily to less than 2 percent. However, the objectives of food security and generating or persevering foreign exchange have brought renewed focus on agriculture. In order to achieve these objectives, we have pursued a number of policies and programmes to boost crop and livestock production.

The objective of food security can be tied to that of preserving foreign exchange and increasing income for local farmers. Instead of spending between forty and fifty million on imports of fresh produce and crops, we can preserve foreign exchange by producing more of these crops locally. The Government has focused on developing new varieties of crops that can thrive in Antigua and Barbuda and increase the harvest of our farmers. Emphasis has been placed on tomatoes, sweet peppers and other vegetables, including Irish potatoes. In fact, with the successful trial of a specific variety of Irish potato we are preparing to undertake production on a semi-commercial basis. Further, we will continue to capitalise on onion and carrot production for both local consumption and export to a number of our CARICOM neighbours.

Madam Speaker

We recognise that in order to significantly augment crop production and reduce the amount of foreign exchange spent on food imports, existing and potential farmers must possess the necessary inputs and receive appropriate support from the Government. The Government has therefore earmarked 300 acres of land for crop production in 2012. A related intervention is the Government's plans to harness the skills of the youth to develop the sector through entrepreneurship. The National Youth Farm and the 20/40 project in Pares Village are intended to attract youth to the sector by emphasizing investment in and the direct returns from agriculture. These programmes are also intended to offer economically viable income generating options for youth.

This is paramount to the continued existence and sustainability of agriculture in Antigua and Barbuda. We have approached the governments of Spain and Venezuela to assist with the 20/40 project, and we are working with the CDB to identify a funding arrangement for the National Youth Farm.

The National Youth Farm comprises 100 acres of land which will be used to train and employ Antigua and Barbuda's future farmers. This project will occupy 250 young people over a three year period. In 2012 the Government will focus on implementing the first phase of this project

This first phase will offer 80 youth an opportunity to begin training in modern crop production on 40 acres of land.

Another positive development in the sector is a one million dollar agricultural investment project geared towards sustainable development of the eight species of avocado varieties in Antigua and Barbuda. This project is being implemented at Gaynors by Avikado Antigua Ltd. Its overall objective is to develop a handling and processing facility in Antigua and Barbuda in an effort to strengthen the agro-processing industry.

Several hundred avocado trees are being planted with advantages ranging from increased local employment in the agricultural industry, impact on food security, reduction of imported avocado and its by-products, savings of foreign exchange and further diversification of the output from the agriculture sector. We are encouraged by the opportunities associated with this project and the Government will provide the requisite support to secure the success of this venture.

Madam Speaker

In terms of securing foreign exchange through this sector, we will continue to enhance production of the Antigua Black Pineapple and Sea Island Cotton for export. With respect to our Sea Island Cotton we intend to fully exploit the trade agreement with the Cooperative West Indian Sea Island Cotton Japan Project that was established earlier this year. This product demands strict adherence to high standards and the Cotton Station is working to ensure the integrity and quality of our unique Sea Island Cotton are maintained. The agreement affords Antigua and Barbuda the opportunity to supply a minimum of 20,000 pounds of Sea Island cotton lint annually at US\$10.00 per pound. There are currently 50 acres under production which will yield nearly 200,000 pounds of cotton with a market value of about US\$2 million.

The fisheries sector has incredible potential to generate foreign exchange in Antigua and Barbuda. With the opening of the Artisanal Fisheries Complex on Barbuda, which was generously provided by the Government and People of Japan, we anticipate increased capability for employment, handling, processing, and export of seafood. Antigua and Barbuda continues to enjoy the coveted status of being one of the few Caribbean countries that is able to export fresh seafood products to the European Union. The intent is to take greater advantage of this position in 2012 by enhancing our capacity to deliver seafood products that meet the high standards and quality requirements of the export market. We will achieve this with the coming on stream of the Complex in Barbuda and the improvements that have been made at the Point Wharf.

Lobster is the only product exported to the EU at this time. However, with the improvements made at the Point Wharf Processing Complex we will start exporting fish and conch to the EU in 2012. Additionally, all the infrastructure and equipment for processing seafood products are now in place. The Point Wharf facility has the capacity to gut and scale, fillet, steak, dry salt, and pickle fish in a sterile environment. In 2012 other products such as fish burgers, fingers, and patties will be added while adhering to quality assurance standards. These developments, along with the Government's direct support to fisher folk, promise to increase productivity and income in the fisheries sector. Government's support includes concessions on tools and equipment, and on fuel costs.

Madam Speaker

The prospect of further erosion of the agriculture base does not augur well for food security and generating or preserving foreign exchange. We are therefore mindful that the Government must continue to provide farmers with access to improved and affordable tractor services, along with ongoing training in crop production technology and good agricultural practices. Further, the Government continues to assist in keeping the cost of production low by affording bona fide farmers duty and tax, including ABST, concessions on inputs such as seeds, fertilizers, and various tools and equipment. A Buy Local Campaign will be launched to encourage our people to support local farmers. As part of this initiative, the Government will continue to pursue avenues to strengthen links between the agriculture and tourism sectors. If households and businesses all make a conscious effort to consume the foods produced in Antigua and Barbuda, the higher incomes of farmers would help to increase demand for other goods and services in the economy. Essentially, Madam Speaker, when we buy local, we are stimulating our own economy. While we are not likely to become fully self-sufficient, it is good economic sense to make the best use of our resources by empowering the agriculture sector to make a meaningful contribution to economic growth.

*pp. 104-105 Budgetary Allocation Ministry of Agriculture, Lands, Housing and the Environment .*

Madam Speaker

Food and shelter are two of the most basic needs of humankind. The Ministry of Agriculture, Lands, Housing and the Environment oversees the Government's programmes and policies with regard to these needs.

**This Ministry's budget for 2012 is \$16,379,516.**

In 2011 the International Institute for Cooperation in Agriculture (IICA) conducted an institutional review of the Agriculture portfolio. Based on IICA's recommendations, the Ministry's strategic priorities for 2012 are to develop its human resources and improve its financial management capabilities. The ultimate aim, Madam Speaker, is to increase agriculture's contribution to gross domestic product, and to food security in Antigua and Barbuda.

Among the specific activities to be undertaken in 2012, the Department of Agriculture (DOA) will assist farmers to prepare three hundred acres of land for crop production. The Green Castle and Dunbars stations will continue to produce seedlings for backyard gardeners and farmers. It is anticipated in 2012 that over 100,000 seedlings will be produced. Madam Speaker the Giant African Snail has emerged as the most significant invasion with the potential for crop damage in recent times. Efforts to control and eradicate the spreading pest remain high on the agenda of the Department of Agriculture.

In 2012 the Fisheries Division will focus on increasing the level of sea food processing, while adding new value added products for the local and export markets.

## *CARDI Open Day*

---

### ANTIGUA AND BARBUDA

#### ***Food security: top priority for CARDI Antigua***

Campbell, O

Antigua and Barbuda. Ministry of Agriculture, Lands, Housing & The Environment

Posted on FAO-Carib-Agri, 17 January 2012 [FAO-Carib-Agri@fao.org](mailto:FAO-Carib-Agri@fao.org).

**Full article:**

**St. Johns –Antigua:** Food Security, value added, funding and post disaster restoration of farmers' seed supply were among the areas of advancement touted during an accountability seminar, Tuesday 6<sup>th</sup> December 2011, when the Caribbean Agricultural Research and Development Institute (CARDI), held its annual Open Day at the Fisheries Complex.

Dr. Gregory Robins, OECS Technical Coordinator at Caribbean Agriculture Research Institute (CARDI), explained that the regional body has intensified its program in critical areas to ensure the sustainability of food security. This process, according to Dr. Robins is being facilitated through a planned production system utilizing the approach of technology based Research and Development co-ordination.

Sweet potatoes, cassavas, corns, pumpkins, squash, and hot peppers are among the varieties identified to boost the prospects of food security and ten varieties of sweet potatoes are currently being experimented. They were planted quarterly, in three zones at Betty's Hope, Green Castle and Cades Bay, respectively.

They are Blackrock (A1), Hurricane (A2), Catch Me (A3), Fine Num (A4), Tremont (A5), Mandela (A6), White Drill (A7), King Crown (A8), 1987 (A9) and CRO2 (A10), the marketable yields in Green Castle and Cades Bay were constant despite the planting period.

*Response to Disasters - Food Security*

Data suggests that CARDI contributed to the production of 60 acre of Corn with an expected yield of 720,000 lbs of Green Corn, generated at farm gate price of EC\$1,440,000.00 over the five year period.

*Table Squash*

As it relates to the local table squash seed production CARDI continues to select, maintain and re-produce seed material of the local table squash for the farming community.

The quantity of table squash seed supplied on the local market implied that the CARDI Antigua unit contributed to the production of 14 acres of table squash with an expected yield of 168,000 lbs of table squash , generated at farm gate price of EC \$420,000 over the five-year period.

*CARICOM/Japan Project*

Meanwhile, more than US\$ 100,000 will be expended in three phases under the CARICOM/Japan projects to undertake post-disaster restoration of farmer's seed supply in small island member countries of the Caribbean communities. Antigua & Barbuda, St. Lucia and Barbados are among the countries named as beneficiaries.

For phase 1 and 11, approximately USD \$ 40,000 and USD \$ 51,250 will be spent respectively for post-disaster restoration of farmers seed supply in small island member countries of the Caribbean community, while another USD \$ 20,000 is earmarked for the increasing of sweet potato production for value added processing.

The Inter-American Institute for Corporation on Agriculture (IICA) and CARDI have also forged co-operative agreements to undertake other food security initiative.

In the area of sweet potato, USD\$ 10,000 was allocated for variety, time of planting zonal experiment; USD \$10,000 for cost effectiveness of irrigation, and another USD \$ 10,000 for characterization of accessions.

Also, an additional USD \$30,000 was spent to boost the production of commercial Hot Pepper.

Twenty-five thousand United States Dollars (USD\$ 25,000) is also on the cards for the introduction of improved high yielding cassava varieties and the adoption of validated production, value added and marketing systems.

**-ENDS -**

Regards,  
Ms. Onika Campbell  
Communications Co-ordinator/Publicist  
Ministry of Agriculture, Lands, Housing & The Environment  
Telephone: 268 -770-2792/ 732-4094  
[Email: onika.campbell@gmail.com](mailto:onika.campbell@gmail.com)

## TRINIDAD AND TOBAGO

### ***CARDI Trinidad and Tobago Open Day 2011***

Caribbean Agricultural Research and Development Institute (CARDI), 22 December 2011

<http://www.cardi.org/cardi-trinidad-and-tobago-open-day-2011/>

#### **Full article:**

The Trinidad and Tobago Unit of the Caribbean Agricultural Research and Development Institute (CARDI) hosted the 3<sup>rd</sup> Annual Open Day "*Improving lives through agricultural research*" on December 02<sup>nd</sup>, 2011.

The day's activities included an opening ceremony, exhibition and a mini-tour which showcased the work being conducted by CARDI at a Protected Agriculture Operation and Sweet Potato Demonstration Plot.

The feature address was delivered by Dr The Honourable Timothy Harris, Senior Minister, Ministry of International Trade, Industry, Commerce, Agriculture, Marine Resources, Consumer Affairs and Constituency Empowerment (St Kitts and Nevis), and Chairman, Board of Governors, CARDI.

## *Upcoming Events*

### **FEBRUARY 2012**

#### ***Cassava Starch World 2012, 22-24 Feb, 2012 - Phnom Penh, Cambodia***

##### **InterContinental Phnom Penh - Ballroom 3**

<http://www.cmtevents.com/aboutevent.aspx?ev=120212&>

Schedule / Program <http://www.cmtevents.com/eventschedule.aspx?ev=120212>

- Improving the Potential of Cassava as a Feed Ingredient by Way of Biotechnology - Cassava and cassava by-products for poultry feeding and its potential for Australia. *Dr. Paul A Iji, Associate Professor (HDR Coordinator) University of New England*
- Improving Cassava Varieties & Enhancing Its Competitiveness
- Establishment of Sustainable & Profitable Cassava Plantation - an Asian Experience
- Cassava Waste Water Treatment & Biogas Capture

### **MAY 2012**

#### ***The Caribbean Food Crops Society 48th Annual Meeting***

The 48th Annual Meeting will be celebrated May 20 - 26, 2012 in Quintana Roo, Mexico. The central theme for this meeting is: "Education, Productivity, Rural Development and Commercialization in the XXI Century "

- **Call For Abstracts:** Due Date February 17, 2012 <http://cfcs.eea.uprm.edu/article/call-abstract-2012>

Send to Dr. Wilfredo Colón Guasp, Secretary CFCS, Email: [ue\\_wcolon@suagm.edu](mailto:ue_wcolon@suagm.edu), P.O. Box 40108, San Juan, Puerto Rico, 00940

## SEPTEMBER 2012

### *The 16th International Symposium of the International Society for Tropical Root Crops (ISTRC)*

23 – 28 September 2012, University of Agriculture, Abeokuta (UNAAB), Ogun State, Nigeria <http://www.istrc.org/>

**Theme: *The Roots and Tubers of Development and Climate Change*** - Tropical roots and tuber crops are essential to meeting global food security needs, improving staple foods of world's poor and creating new opportunities in global food supply.

#### **Subthemes:**

***Policies favourable to enhancing the contribution of RTCs to development-*** (1) poverty reduction and food security (2) enterprise development and income generation and export development, (3) impacts of climate change and variability, (4) impacts of the global food crisis, global economic downturn and urbanization, (5) opportunities provided by biofuels. (6) Intellectual Property Rights

***Global Scenario on Production, Utilization and Marketing of Root and Tuber Crops*** - Trade and Technology Commercialization;

***Progress in the science and technology for enhancing the contribution of Tropical Root Crops to development*** - Crop Improvement and Genomics; Biodiversity, Conservation and Evaluation; Biotechnology and Biofortification; Characterization of resistance to biotic and abiotic stressors; Plant, Water and Nutrient Management

***Applying new scientific and technical knowledge on RTCs to contribute to development.-*** Technology Development and Transfer processes and systems; Value Addition for Food, Nutrition and Health; Regional Exchanges and Technology Transfer; Roots and Tubers for Feed and Industry

#### **Important Dates:**

5<sup>th</sup> August, 2011 – First announcement

26<sup>th</sup> December, 2011 – Second Announcement

20<sup>th</sup> February, 2012 – Final Announcement

19<sup>th</sup> March, 2012 – Submission of abstract

25<sup>th</sup> June, 2012 – Accommodation Request

15<sup>th</sup> July, 2012 – Registration of delegates

1<sup>st</sup> August, 2012 – Submission of full Papers /Participation in Exhibition

17<sup>th</sup> September, 2012 – Submission of Power point

23<sup>rd</sup> September, 2012 – Arrival of Participants

#### **Contact persons:**

**Prof. Lateef Oladimeji Sanni** ([l.sanni@cgiar.org](mailto:l.sanni@cgiar.org); [lateef\\_2@yahoo.com](mailto:lateef_2@yahoo.com)), Chairman, LOC/Vice President 1, ISTRC

**Dr. Kolawole Adebayo** ([Kolawole\\_adebayo@hotmail.com](mailto:Kolawole_adebayo@hotmail.com)), Organizing Secretary, ISTRC, Abeokuta-2012

**Prof. Oluwafemi Olaiya Balogun** ([femibalogun54@yahoo.com](mailto:femibalogun54@yahoo.com)), Vice Chancellor, University of Agriculture, Abeokuta (UNAAB)