



IMPROVING LIVES THROUGH
AGRICULTURAL RESEARCH

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Agriculture *in the* News



Issues Affecting Caribbean Agriculture

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Plant Clinics to aid in populating the Agriculture Ministry's database. Trinidad and Tobago Government Information Service Limited (GISL), March 31, 2017

<http://www.news.gov.tt/content/plant-clinics-aid-populating-agriculture-ministry%E2%80%99s-database#.WOB-KdLilvMw>

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Agriculture in the News is a weekly 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.

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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,
St Augustine
Trinidad and Tobago W.I

Tel: 1-868- 645-1205-7
Fax: 1-868-645-1208
Email: infocentre@cardi.org
Website: www.cardi.org

Like us on Facebook: <https://www.facebook.com/CARDIcaribbean/>
You Tube channel <http://www.youtube.com/user/CARDIcaribbean>

ROOTS AND TUBERS

The Rockefeller Foundation announces results of the Cassava Innovation Challenge. International Institute of Tropical Agriculture (IITA), 29 March 2017

<http://www.iita.org/news-item/the-rockefeller-foundation-announces-results-of-the-cassava-innovation-challenge/>

Full article

NRI selected for an award of up to \$500,000 to develop solution for increasing cassava shelf life, with the potential to enhance food security and increasing income for millions of farmers.

Nairobi, March 29, 2017 – The Rockefeller Foundation, Dalberg and IITA today announced the results of the Cassava Innovation Challenge, launched last year to uncover novel solutions for increasing cassava shelf life in Nigeria and the world. The organizers are awarding the Natural Resources Institute (NRI), based at the University of Greenwich, United Kingdom, in partnership with (Federal University of Agriculture, Abeokuta (FUNAAB), Nigeria, with a grant of up to \$500,000, along with technical assistance, to test and market a polythene bag with a built-in curing technology that will keep cassava fresh for at least eight days past harvest. The announcement was made today at the first All Africa Post-Harvest Congress in Nairobi.

Cassava is critical for food security in Africa. It is the main source of nutrition for an estimated half of the continent's population, or 500 million people. Yet this root crop has a very short shelf life, and if unprocessed it will spoil within 24-72 hours after harvesting – less if it is damaged during harvesting or transport. Nigeria is the world's largest cassava producer, accounting for more than 20% of global production – more than 50 million tons annually, grown by nearly 30 million farmers, most of them with less than an acre of land.

Approximately 40% of this cassava is lost due to spoilage, a tremendous problem that limits farmer incomes and rural economic development, and one that stretches far beyond Nigeria's borders as food spoilage and wastage affects the global economy and impacts greenhouse gas emissions.

“We were encouraged when we received more than 600 applications from 32 countries with ideas for how to solve this problem of a short shelf life for cassava. Clearly a lot of people care about food security and ensuring that a vital staple crop is not lost to rotting due to lack of preservation technology,” said Mamadou Biteye OBE, Managing Director for Africa at The Rockefeller Foundation. “Upon the recommendation of our expert judges, we are investing in NRI's bagging technology in part because we see farmers using bags with great success to store other perishable crops. Now is the time to try this for cassava. We know that when farmers win, we all win.”

The challenge is part of YieldWise, The Rockefeller Foundation's \$130 million initiative launched in January 2016, aimed at reducing food loss by at least 50% by 2030 in representative value chains. Research has found that post-harvest loss reduction solutions exist, but they are not reaching the farmers who need them. With the farmer in mind, the Foundation is promoting a variety of interventions in the areas of education, technologies, financing and market solutions to ensure production is linked to demand, and so improving livelihoods, creating less vulnerable ecosystems and natural resources, and increasing food availability.

“Over the past five years, we have led numerous projects on the cassava value chain and designed facilities to invest in cassava across Africa. We have kept running into the number one constraint in cassava – its short shelf life,” said Nneka Eze, Partner and co-Lead, Agriculture & Food Security Practice at Dalberg Global Development Advisors. “Over the past year, Dalberg designed the Challenge in partnership with IITA and The Rockefeller Foundation, reviewed over 600 applications, and coordinated inputs from our diverse group of expert judges. We are excited about the potential of NRI’s simple bagging solution to impact lives in Nigeria and in Africa, where more than half the world’s cassava is produced.”

“IITA is pleased to be part of this initiative to identify a workable and effective solution to this postharvest problem in cassava, especially in Nigeria, being the world’s biggest cassava producer, where about 14% of the produce is lost annually on average. Providing a solution to reducing postharvest loss in this crop would potentially provide annually more than \$200 million to the cassava value chain,” says Nteranya Sanginga, IITA’s Director General.

The Rockefeller Foundation Cassava innovation Challenge launch was based on input from those involved in the cassava value chain as to what could most help reduce post-harvest loss. The challenge posed an optimistic goal of finding a novel, transformative, scalable, and easy-to-use solution. More than 600 applications were received. A panel of 21 judges from around the world, including Nigerian cassava experts, recommended a short list based on the Rockefeller Foundation’s criteria for innovation.

The complexity of preventing cassava’s quickness to rot made it difficult for any one solution to excel at all of the criteria. But among the many very good ideas submitted, a straightforward solution – bags – rose to the top of the judge’s recommendations as the one that most warranted further support. The judges weighed likely efficacy along with ease of low cost of production in Nigeria and, most importantly, appeal to farmers. Greenwich University NRI and FUNAAB polythene bag would be available in a range of sizes, for different value chain actors and are intended to prevent post-harvest physiological deterioration until the fresh cassava can be processed or transported for sale at the fresh market.

CEREALS AND GRAIN LEGUMES

New selection method allows for rapid development of improved maize varieties by [Jennifer Johnson](#). International Maize and Wheat Improvement Center (CIMMYT), March 30, 2017
<http://www.cimmyt.org/new-selection-method-allows-for-rapid-development-of-improved-maize-varieties/>

Full article

MEXICO CITY (CIMMYT) – Marker-assisted recurrent selection (MARS) is helping maize breeders develop higher yielding and drought-tolerant improved varieties faster than ever before, according to a [recent study](#) from scientists at the [International Maize and Wheat Improvement Center](#) (CIMMYT).

“With conventional breeding, it often takes up to 7-8 years for varieties to reach farmers,” said Yoseph Beyene, a CIMMYT maize breeder working with the CGIAR Research Program on

Maize (MAIZE) and one of the authors of the study. “With MARS, those varieties take only 5 years to reach farmers, and display greater genetic gain, even under drought conditions”

The study “[Improving Maize Grain Yield under Drought Stress and Non-stress Environments in Sub-Saharan Africa using Marker-Assisted Recurrent Selection](#)” found that by using MARS, breeders can develop new maize varieties farmers need faster and cheaper than conventional breeding methods by reducing the breeding cycle, showing scientists which varieties have desired traits at a quicker rate. This study focused on developing improved, drought-tolerant and high-yielding tropical maize varieties for areas such as sub-Saharan Africa that suffer from frequent drought and an unpredictable climate.

“Climate change is changing environments faster than agriculture can naturally adapt,” said Beyene. “It is crucial that farmers are able to access drought-resistant maize varieties as quickly as possible so that they can adapt to these new conditions,” he said.

MARS also dramatically cuts costs by using genotypic data to predict the best maize varieties before planting them. Previously, breeders would have to visually examine and select the best maize varieties every year.

The study found that MARS can be used to improve maize varieties in both drought and optimum environments throughout sub-Saharan Africa, where it is the most important staple food for over 300 million people. The study used MARS to estimate the genetic gain for 10 biparental tropical maize populations and found that overall, the grain yield for the 10 populations increased by 105 kilograms (kg) per hectare per year under well-watered and 51 kg per hectare per year under water-stressed conditions using MARS. The subsequent generations of test crosses were found to have significantly greater grain yields than their parents and commercial checks, suggesting that MARS has excellent potential for increasing genetic gain under both drought and optimum environments in sub-Saharan Africa.

Over 1,000 improved maize lines, including 352 doubled-haploid lines, have been developed from each cycle of the 10 biparental populations used in this study, and tested in multi-location trials. Several hybrids were derived using lines developed through MARS and pedigree methods. The best hybrids from each population are currently under national performance trials and are expected to be released soon for commercialization in sub-Saharan Africa. CIMMYT is one of the first research organizations to apply this technology to maize breeding specifically for the needs of smallholder farmers.

This study was implemented under the [Water Efficient Maize for Africa \(WEMA\)](#) project, supported by the [Bill and Melinda Gates Foundation](#), the [Howard G. Buffet Foundation](#) and the [U.S. Agency for International Development \(USAID\)](#).

*Read the study “[Performance and grain yield stability of maize populations developed using marker-assisted recurrent selection and pedigree selection procedures](#)” published in *Euphytica* (2016) 208:285–297 for more information.*

COCONUTS

Partnership Agreement signed by CARDI/Hope Coconut Estate -for the production of high-quality Coconut Seedlings. Guyana Ministry of Agriculture, March 17, 2017

<http://agriculture.gov.gy/2017/03/17/partnership-agreement-signed-by-cardi-hope-coconut-estate-for-the-production-of-high-quality-coconut-seedlings/>

Full article

The revitalization of the Coconut Industry is paramount and remains on the top of Government's developmental agenda for the industry. As such, efforts are being made to ensure the development of the industry by making available quality seedlings to farmers'.

Agriculture Minister, Hon. Noel Holder, facilitated a Partnership Agreement between the Hope Coconut Industries Limited (HCIL) and the Caribbean Agricultural Research and Extension Institute (CARDI) today for the expansion of the Coconut Nursery at Hope Estate.

The Agreement which was signed in the Boardroom of the Ministry of Agriculture by CARDI'S Representative (Guyana), Dr. Cyril Roberts and Hope Estate's General Manager, Mr. Rickey Roopchand, will cater for the production of 50,000 seedlings in the first year.

Dr. Roberts in delivering remarks stated that the initiatives forms part of CARDI's Coconut Development project which is being implemented across 9 different (CARICOM) countries.

"The Hope Estate will be responsible for the management of the Nurseries and from our visit there recently, we are pleased thus far, with the progress made and the work being done to ensure farmers have access to high-quality seedlings," Roberts said.

General Manager, Hope Estate, Mr. Ricky Roopchand, in welcoming the joint venture pointed to the fact that such an initiative is both timely and augers well for the advancement of the coconut industry in Guyana.

He added that when the project is fully implemented, Hope Estate will have the capacity to supply 1,000 coconut seedlings weekly to farmers.

"The implementation of this project will also result in farmers having easy access to adequate amounts of high-quality coconut seedlings at an affordable cost. In addition, the income generated from the sale of coconut seedlings will significantly boost the income stream of the Estate," he said.

Meanwhile, calls were made by the Agriculture Minister for the entities to continue collaboration so as to ensure the technical support is given for the advancement of the industry.

"We do look forward to a very productive working partnership with CARDI which we are confident will provide benefits to our agriculture sector and by extension our country," Minister Holder said.

CARDI, which is a Regional Institute established by the CARICOM Heads of Government, is in the process of resuscitating the CARICOM Regional Coconut industry and today's exercise is in

partnership with the International Trade Center with funding support through the 10th European Development Fund.

According to Minister Holder, efforts are being made to ensure that a long-term partnership is established with CARDI in the areas of research and commercial production of coconut seedlings.

In the Partnership Agreement, CARDI will be responsible for establishing research and demonstration plots of seedlings in conjunction with the Management of the Hope Estate and the establishment and management of coconut Nurseries.

The National Agricultural Research and Extension Institute (NAREI) has been playing a lead role in ensuring farmers have access to quality seedlings for production, as government positions the sector to tap into the regional and international markets. Thus far, NAREI has made available over 2000 quality seedlings to farmers in the different coconut-growing regions.

Also present at today's event were, Chief Executive Officer of the National Agricultural Research and Extension Institute, Dr. Oudho Homenauth, Secretary of the Board of Directors, Hope Estate, Mr. Omadatt Chandan, Scientist at CARDI's Trinidad and Tobago Office, Dr. Annika Minott and Caribbean Development Bank (CIB), Consultant, Dr. Wayne Myrie.

New action plan to stop the spread of Red Palm Weevil. FAO, 31 March 2017
<http://www.fao.org/news/story/en/item/878036/icode/>

Full article

Governments endorse a plan to protect palm trees from destructive beetle

31 March 2017, Rome - A new action plan to stop the spread of the Red Palm Weevil has been endorsed at a high-level meeting at the United Nations Food and Agriculture Organization (FAO) in Rome.

Agriculture ministers and other government representatives today agreed on a new strategy to fight the pest. It includes national interventions such as improved pest monitoring and greater involvement of farmers, as well as international efforts such as a proposed ban on the import of palms larger than 6cm wide from infested countries.

The endorsement came after scientists, pest control experts, farmer representatives and others took part in the [Scientific Consultation and High-Level Meeting on Red Palm Weevil](#), hosted by FAO with the [International Centre for Advanced Mediterranean Agronomic Studies](#) (CIHEAM), to share the latest research and agree the best way forward.

The red weevil destroys palm trees by eating them from the inside, and has rapidly expanded its global spread to more than 60 countries. It threatens date and coconut palms, as well as ornamentals.

Factors contributing to the spread have been late detection of infested palms because of insufficient inspections, a lack of engagement with date and coconut farmers, improper assessment of the risks, few natural enemies of the pest, difficulties managing mass trappings

across large oases networks, lax quarantine, improper disposal of infested trees, and difficulty controlling the pest in private homes or small family gardens.

"The Red Palm Weevil has become a global threat and demands a global strategy to eradicate it," said FAO Director-General José Graziano da Silva. "The message coming from the scientific consultative meeting is a positive one: The Red Palm Weevil can be controlled and defeated."

Proof is in the Canary Islands. It was declared free of the pest in May last year, after implementing a coordinated strategy that included tight monitoring controls and the removal of all infested trees. In Mauritania, detection of the pest in an oasis triggered quick action by the Government with the support of FAO to implement an integrated pest management strategy that had farmers and farmer cooperatives at the core. The pest has been successfully contained to the original infestation area, without any outbreaks in the past six months, and with continued control efforts it is likely the area will be declared pest-free.

Integrated pest management involves farmer training, regular inspections, trapping using pest-attracting pheromones, tracking infestations, removing heavily-infested trees, tight quarantine controls, and monitoring progress of the integrated approach.

Farmers can be a very efficient, and cost-effective, frontline defence. They can regularly inspect trees to detect pests in the early stage of attack when a tree can still be saved, and carry out trapping and spraying. A study in Saudi Arabia found that a seven percent infestation rate dropped to just 0.15 percent in one year when weekly inspections were introduced. In some affected countries, farmers have set up smart phone messaging app groups to share information and alerts.

The [new framework](#) aims to provide technical assistance and guidance for improving national control programs as well as a platform for inter-regional cooperation and coordination. It was produced by an international team of Red Palm Weevil experts from various countries and organizations with the support of FAO, CIHEAM and the [Near East Plant Protection Organization](#) (NEPPO).

Just four palm species were affected by Red Palm Weevil when studies were done in 1956, but now the pest attacks 40 palm species worldwide. The three most-affected species today are coconut palm, date palm and the tall ornamental Canary Island date palm.

PLANT AND ANIMAL HEALTH

Plant Clinics to aid in populating the Agriculture Ministry's database. Trinidad and Tobago Government Information Service Limited (GISL), March 31, 2017

<http://www.news.gov.tt/content/plant-clinics-aid-populating-agriculture-ministry%E2%80%99s-database#.WOBKdLi1vMw>

Full article

March 31, 2017: Home gardening enthusiasts, plant lovers and an ornamental plant exhibitor from as far as Rio Claro, seized the opportunity to have their plant sicknesses diagnosed at a free Plant Clinic, hosted by the Ministry of Agriculture, Land and Fisheries on March 29, 2017 at its Farmers' Training Centre in Centeno.

Subsequent to an engaging one-on-one discussion with Ministry representatives from the Extension, Training and Information Services (ETIS) Division, participants were each given an individual copy of their 'Prescription and Report' sheet which captured a host of valuable information, inclusive of which, was a description of the plant problem; the current control measures used as well as expert recommendations. Entomologist (Ag.) in the Ministry and team lead on the clinic, Ms. Roshni Ramsingh, opined that the timing of the outreach activity was opportune as the Ministry was currently in the process of revamping strategies to be more proactive in its overall management of plant pests and diseases.

She said: "If through these clinics, we are able to forecast the problems that agricultural stakeholders are having, then overtime, we will be able to actively gauge, particular diagnostic trends which can thus guide our management options and inform any training course(s) to effectively address any issues identified, in a timely basis." To this end, Ms. Ramsingh identified with at least three (3) participants of the clinic whose pimento leaves bore the adverse effects of the Cushiony Cotton Scales pest which she said, was "not a usual citing" and may be indicative of a possible trend, having regard to the frequency of reports.

Apart from the pest aforementioned, diagnoses such as thrips on Cotton; caterpillar damage and nutrient deficiencies on the Amaryllis, were also identified. According to Ms. Ramsingh, the data captured in the clinic will be used to populate the Ministry's existing database which can prove useful in responding to the needs of the agricultural community.

She hinted: "The Ministry continues to see tremendous value in this exercise, which no doubt represents the first of many to be embarked upon this year." Ms. Ramsingh was assisted by Mrs. Gayatri Singh-Ramlogan, Ms. Merle Seedial and Mr. Rishi Mohansingh - all Agricultural Officers (I) in the Ministry.

Laboratories in the OECS receive new equipment: Testing for Plant and Animal Health and Analysis for Food Safety to be improved. Organisation of Eastern Caribbean States (OECS), March 24, 2017

<https://pressroom.oecs.org/laboratories-in-the-oecs-receive-new-equipment#>

Full article

Friday, March 24, 2017 — Laboratories in OECS Member States are now better equipped to diagnose issues related to human, animal and plant health, and food safety, thus increasing their levels of efficacy and efficiency. On Wednesday March 15th 2017, the OECS Commission, through its Agriculture Unit, handed a total of XCD \$309,416.94 worth of Laboratory Equipment to Agriculture Health and Food Safety (AHFS) testing Laboratories and Pest Risk Analysis Units of Anguilla, Antigua and Barbuda, Dominica, Grenada, St. Kitts/Nevis, Saint Lucia, and St. Vincent and the Grenadines.

The docket for the equipment was handed to Lab Managers and Supervisors, and Ministry of Agriculture Officials of the beneficiary countries at a Ceremony at the Golden Palm Conference Centre in Rodney Bay, Saint Lucia. The new Laboratory Equipment was purchased under the 10th EDF Regional Integration and Trade of the OECS Region Project.

In his brief remarks, Programme Officer in the Agriculture Unit of the OECS Commission, George Alcee, thanked the European Union for responding to the request for Laboratory Equipment, and for its continued support under the Harmonisation and Enhancement of OECS Agriculture Health & Food Safety Systems. Alcee said the Programme, which started in 2012, has strengthened the health and food safety systems in the OECS.

The Pest Risk Analysis Support component of the Programme involves the provision of Training for all OECS Countries to undertake Science-based risk assessments, and provide quarantine policy advice, to protect Plant Health status, whilst facilitating Trade. It also involves the procurement of equipment to establish Pilot Labs in St. Vincent and the Grenadines, Dominica, and Saint Lucia – to safeguard against the entry of exotic pests, consistent with the International Plant Protection Convention. The OECS Commission has trained over 30 quarantine inspectors, through the annual UWI Plant Quarantine Training Programme. The support to improving the quality infrastructure and testing capacity of Labs in the OECS was manifested in Training, with an eventual goal of certification or accreditation to ISO/IEC17025, and the provision of laboratory equipment, based on the testing needs of beneficiary countries. A technician in each Member State was trained in Lab Diagnosis for Avian Influenza (Bird Flu) and New Castle disease. The Training took place in Chile.

Alcee reiterated that the equipment is to assist the Labs in their mandate to protect human, animal and plant health in their respective countries, and the OECS Region as a whole. He appealed to the Lab Managers and Technicians to make the best use of the equipment, “as we continue to work towards safeguarding the OECS Economic Union from pests and disease.” According to Alcee, achieving this goal is key to realising the free circulation of goods within the Economic Union.

OECS Director General, Dr. Didacus Jules, described the occasion as “a milestone in agricultural health and food safety in the region” as it relates to strengthening of the processes of compliance to international health and food safety standards and the establishment of a framework for the development of ‘Centres of Excellence’ and access to their services, by Member States. Dr. Jules

stressed that “initiatives such as these in which we are building collaboration among Member States, strengthening capacity, and providing tools for more scientific ways of working – exemplify the work of the OECS Commission.”

He told all present: “If you don’t do your work effectively, if you’re not provided with the right tools and equipment, if we’re not able to hold the line against dangers and diseases, our entire Free Circulation of Goods Regime runs into peril.”

Dr. Jules notes that international trade in high-value food products continues to expand, fuelled by changing customer tastes and advances in production, transportation, and other supply chain technologies. He says this expansion of trade in food products has given rise to concerns about food safety, with major concerns about the presence of chemical residues and various contaminants in food, as well as the possibility of the spread of pests, and the threat of invasive species.

According to Dr. Jules, the expanding Trade and Tourism Industry in the OECS and the wider region, has long been recognized as an avenue for the entry of invasive pests and diseases. Citing actual examples, he said the destruction of the coconut industry in St. Kitts/Nevis and Antigua by Lethal Yellowing, was as a direct result of the importation of palms from Florida, for landscaping in the tourism industry in those countries.

Putting the issue into context, the OECS Director General said: “We have recognized the need for the region to have the capacity and capability to rapidly detect and accurately diagnose agriculture, health and food safety issues, to ensure safe and sustainable trade and consumption of agricultural commodities.”

“The capacity to meet sanitary and phytosanitary standards to address the many issues of agriculture, health and food safety as a region, lies in strengthening the institutional and managerial capabilities of our agencies, and in deepening functional cooperation between them.”

Dr. Jules says regrettably, agricultural health and safety issues have been primarily promoted as a Trade-related obligation imposed by the World Trade Organisation (WTO) in a very stringent manner. In light of this, he believes that as a region, “we must give equal prominence to product quality improvements and health benefits to our consuming public.”

The Handing-Over of Equipment coincided with a three day Meeting of Agriculture Health & Food Safety Laboratory, Sanitary and Phytosanitary Quarantine Managers of the OECS. Representatives of Development Partners in attendance included Mrs. Shivanna Mahabir of LEESquared Consultants and Mr. Stephen Farquharson of CROSQ.

CLIMATE CHANGE

Caribbean communities take on climate change. Caribbean Climate, 31 March 2017

<https://caribbeanclimateblog.com/2017/03/31/caribbean-communities-take-on-climate-change/>

Full article

When powerful storms tear through the islands of the Caribbean, it's often fishing families and farmers in coastal villages who bear the brunt of flooding and damage – and it's those same people who can help lead climate change adaptation, say experts.

Across the region, decision makers are realising a top-down approach isn't always the way forward, and often those who live and work in high-risk areas – whether they grow coffee, run small businesses or work as tour guides – best understand the particular issues they face, and have ideas about how to tackle them.

Those local insights can positively shape policy at a national level in the climate-vulnerable tropical island nations, a discussion hosted by the Climate and Development Knowledge Network (CDKN) heard this week.

“It's saying ‘this is a two-way street, a two-way conversation’,” said Will Bugler, a senior consultant at Acclimatise, who gave a rundown of Caribbean climate change adaptation tools and research.

But local efforts alone are not enough, and communities need strong links with regional and national governments so they can draw on their expertise, influence and spending power.

The problem is that linking up groups with different levels of understanding – and sometimes competing interests – can make hammering out climate resilience strategies a long and frustrating process, according to a report published by CDKN.

Today, a raft of sophisticated new technologies harnessing high-quality data on climate and weather patterns are being used to develop community vulnerability assessments and help companies, governments and development banks inject climate change resilience into their plans.

Sharon Lindo, policy advisor at the Caribbean Community Climate Change Centre (CCCCC), said Grenada was one country now consulting CCORAL, an online tool highlighting climate change vulnerabilities, before making policy decisions. Some regional banks are using it as part of their risk assessment processes, she added.

“What that showed us was that just a small incremental cost makes the investment climate-resilient,” Lindo told the webinar.

DATA GAPS

While these tools can be used to track multiple scenarios – such as the chance of storm damage, drought or even dengue outbreaks – there are still gaps in the data, as some of the tiny islands scattered across the Caribbean lack comprehensive monitoring.

A planned project to install additional monitoring stations could start to fill in the picture, said Dr. Ulric Trotz, CCCCC's Deputy Director and Science Advisor, who highlighted the need for well-documented environmental data to go with meteorological information.

"If we want to really target agriculture... and watershed management appropriately, we need to also have stations within areas on these smaller islands to really capture that data that can feed into the model and give a more robust analysis," said Trotz.

And in climate-vulnerable countries, it seems you're never too young to learn about the impact climate change may have on your future. A pilot project in Belize is trying to integrate climate change into the curriculum for schoolchildren, said Trotz.

"Individual countries could start initiatives in schools. We're particularly keen on ... introducing a system of school gardening right across the region," he said.

With this, students could find out about new techniques like drip irrigation, greenhouse cultivation and aquaponics, he added.

SOIL AND WATER MANAGEMENT

Wastewater an opportunity being flushed away. FAO, 22 March 2017

<http://www.fao.org/news/story/en/item/853565/icode/>

Full article

FAO today marked World Water Day by highlighting the opportunity that treated wastewater represents for agriculture, and improved food security and nutrition.

Globally, most wastewater is released into the environment without being treated. As a result, in many regions of the world, contaminated water is discharged into rivers and lakes and ends up in oceans. But treated and reused wastewater can be a cost-effective and sustainable solution to water scarcity.

"We need to use water in agriculture in a more efficient, productive, equitable and environmentally friendly way where quality is not compromised," FAO's Deputy-Director General, Maria Helena Semedo, said at a World Water Day ceremony at the UN agency's Rome headquarters. "We should maximize the potential of wastewater as a valuable and sustainable resource."

In his remarks, President of Fiji Jioji Konousi Konrote, said: "There is an urgent need for greater investment and research into the management of wastewater to reduce the life-threatening impacts that wastewater pollution has on our environment. With enough effort there is potential to turn wastewater into a valuable resource."

"The challenges in getting this done vary by country, but many challenges are shared and we need close cooperation between nations to push action on this issue."

The government of Fiji is poised to assume the [presidency](#) of the next Conference of the Parties to the UN Framework Convention on Climate Change.

More with less

While agriculture accounts for around 70 percent of freshwater withdrawals, only a small percentage of treated wastewater is being reused by agriculture. FAO is working with its Member States to increase the reuse of treated wastewater in a safe and secure way.

In Jordan, for example, 90 percent of treated wastewater is used for irrigation, and in Israel treated wastewater accounts for nearly half of all water used for irrigation. At least 50 countries worldwide are known to use wastewater for irrigation, accounting for an estimated 10 percent of all irrigated land. However, data remains incomplete for many regions including Africa.

The [Global Framework on Water Scarcity](#), launched by FAO, promotes alternative sources of water, such as rainwater harvesting and the reuse of treated wastewater. It also encourages sharing knowledge and developing innovative approaches to deal with water issues in agriculture.

A resource, not a problem

This year's [United Nations World Water Development Report](#), released today by UN-Water, calls for a quantum shift to see wastewater as a resource rather than a problem in a world where water is increasingly scarce but demand for it is growing.

FAO contributed a chapter that highlights that agriculture is both a producer and user of wastewater, and that the sector can both cause and suffer the consequences from pollution.

Treated wastewater can also be a potential source of raw materials such as phosphorus and nitrates that can be turned into fertilizer. An estimated 22% of global demand for phosphorus, a finite and depleting mineral resource, could be met by reusing treated wastewater.

Improved wastewater management generates social, environmental and economic benefits, and contributes to the achievement of the [Sustainable Development Goals](#). Key to improving wastewater management is to highlight its benefits and raise social acceptance of the use of treated wastewater.

SARGASSUM SEAWEED - Organic Compost

Sargassum project presents at the Smithsonian by Geraldine Bicette-Joseph, Saint Lucia GIS, March 29, 2017

<http://www.govt.lc/news/sargassum-project-presents-at-the-smithsonian>

Full article

A Saint Lucian project on the transformation of sargassum seaweed into organic compost will be showcased during the Earth Optimism Summit at the Smithsonian Institute in Washington, DC.

The project, the brainchild of Johannan Dujon, owner/manager of Algas Organics, will be highlighted at a gathering of 1000 conservation practitioners, pioneering scientists from varied fields, leaders in industry, philanthropists and artists. Presentations at the event will be streamed live to a global audience.

At a press conference held on Monday, Giles Romulus, National Coordinator of the Global Environment Facility's Small Grants Program (GEF-SGP) in Saint Lucia, detailed the project's history.

“This success is based on the hard work of Mr Johannan Dujon of Algas Organics who is participating in a project partnership that includes the Saint Lucia Fisher Folk Initiative, the GEF SGP UNDP, and the Inter-American Institution for Cooperation on Agriculture. The project is titled ‘The Removal and Utilization of Sargassum from the East Coast of Saint Lucia to Create Organic Compost for the Farming Industry.’ This project is still being implemented and will soon give to Saint Lucia its first Bio Fertilizer Manufacturing Plant.”

Mr. Romulus went on to state that officials at the Smithsonian were very impressed with the project.

“In early February we partnered with the Saint Lucia Fisher Folk Cooperative and submitted the project to the Smithsonian Institute for consideration. The Smithsonian Institute was in search of projects that could be promoted globally, as successes in a period when environmental indicators have taken a downward trend. The Earth Optimism Program which is initiated by the Smithsonian Institute has selected a Saint Lucian project for showcase in April. The project that is being implemented by Algas Organics met the criteria among many projects that were submitted. Mr. Dujon will be traveling to Washington, DC next month, where he will present the project, and in effect represent Saint Lucia as an unofficial ambassador.”

Also in attendance at the press conference was the Minister for Education, Innovation, Gender Relations and Sustainable Development, Hon. Dr. Gale Rigobert, who congratulated Mr. Dujon on his achievements and thanked him on behalf of the people of the east coast for finding a means to remove and utilize the invasive seaweed.

FOOD SECURITY

2017 Global Food Policy Report outlines challenges, opportunities in feeding growing urban populations by [Katarlah Taylor](#). International Food Policy Research Institute March 29, 2017 <http://www.ifpri.org/blog/2017-global-food-policy-report-outlines-challenges-opportunities-feeding-growing-urban>

Full article

With [concerns about famine in Africa mounting](#), IFPRI launched its [2017 Global Food Policy Report \(GFPR\)](#) on March 23. “Twenty million people may suffer from famine if we don’t act together,” IFPRI Director General [Shenggen Fan](#) said at the [event unveiling the report](#). While the GFPR—which assesses trends in hunger and nutrition issues worldwide—shows overall progress, great uncertainties lie ahead for global food security, Fan said, including stagnant economic growth and ongoing conflicts, which contribute to the [recurring risk of famine](#).

The GFPR focuses on a distinct theme each year. For 2017, it takes an in-depth look at how rapid urbanization is reshaping food systems, and its impact on food security and nutrition for rural and urban populations.

Feeding urban populations poses unique challenges, and malnutrition is shifting to urban areas, Fan said. But there are obstacles to addressing this trend. Changing political circumstances could fundamentally impact global food and nutrition security through reduced or uncertain investments in aid, research, and global partnerships. And while current agricultural and food policies focus heavily on production, in the future they must shift to address the “missing middle” between producers and consumers, including processing and retailing, where better policies can boost employment opportunities and reduce food waste.

“If we are to eradicate hunger and poverty, we must have a paradigm shift,” said [Vimlendra Sharan](#), director of the Liaison Office for North America of the United Nations Food and Agriculture Organization (FAO). Asking the audience to picture what comes to mind when they hear the word “city,” Sharan warned that images of hunger, malnutrition, and ill health will come to dominate public perceptions—unless food is integrated into discussions about cities and vice versa.

“Three point four billion people have a problem with food,” said [Louise Fresco](#), president of Wageningen University & Research Center in the Netherlands, noting that 2 billion of them suffer from malnutrition due to micronutrient deficiencies and over 1 billion are overweight or obese, which is also a form of malnutrition. Nevertheless, she said, there is reason for long-term optimism because agricultural production is increasing, while the number of people who suffer from hunger and malnutrition declines.

To maximize sustainability, the food supply chain must be considered in its entirety, Fresco said. For instance, the rising concentration of urban populations presents an opportunity to move toward “circular food chain cities”—places that retrieve every single element from sewage systems and food waste, down to the molecular level of proteins and enzymes, and brings them back into the food chain.

Ninety percent of the increase in urbanization worldwide is expected to occur in Africa and Asia. Africa is the fastest-urbanizing global region and by 2030, the majority of its population will reside in urban areas. Urban food systems depending on informal food vendors will be crucial to feeding those populations affordably, said [Danielle Resnick](#), a senior research fellow in IFPRI’s Development Strategies and Governance Division.

Despite their importance, Resnick explained, food vendors have often been treated with ambivalence by many African governments: They are targeted in crackdown campaigns, have their goods confiscated, and are particularly vulnerable to violence. Efforts must be made to support and to harness this informal economy through programs such as food safety certification and redrafting vending bylaws, in addition to the usual focus on urban agriculture, she said.

“If we are serious about meeting the SDGs, we must be serious about urban food insecurity and malnutrition,” said [Elizabeth Buckingham](#) of the U.S. State Department Office of Global Food Security. One problem, she said, is a lack of fine-grained data on poverty and food security. Addressing food security across the rural and urban spectrum must include better, more localized data; building expertise along the value chain; and improving the business environment.

AGRICULTURAL DEVELOPMENT

Grenada Government announces Measures to Revive Agriculture. Government of Grenada website, March 27, 2017

http://www.gov.gd/egov/news/2017/mar17/27_03_17/item_1/government-announces-measures-revive-agriculture.html

Full article

ST. GEORGE'S, GRENADA, March 27, 2017 – GIS: The Grenada government has announced measures to turn around the agriculture sector which contracted in 2016.

Prime Minister Dr.Keith Mitchell says the plan includes the commercialization of government estates before year end and the liberalization of the commodity boards.

Government also plans to use of the small business initiative to target government lands for young farmers and restore direct flights from Grenada to New York to revive the country's fish export to the overseas market.

Among OECS countries, Grenada is one of the biggest exporters of fish to the United States market but Caribbean Airlines' decision to withdraw its director flight from St.George's to New York, a year ago, has hampered the fishing sector.

Prime Minister Mitchell told a news conference in St.George's the measures are expected to improve the country's agricultural stock.

"The process has been slow, much slower than we want it to be. I wish I could have done it overnight. But you have to bring stakeholders and their partners on board and in the process we have missed some timelines as far as that initiative is concerned," Prime Minister Mitchell told journalists.

"But we are on the road to this, so a number of our estates before the end of this year will be commercialized with certain guidelines for development and for production and for employment in the agricultural sector as a whole".

Last week the IMF reported that while the main drivers of growth in the local economy were construction and tourism, agriculture experienced weather-related contraction.

Prime Minister Mitchell disclosed that the international community is in support of Grenada's effort to merge its commodity board.

"The liberalization of the commodity board. Absolutely crucial. I would say better late than never to get our friends on the commodity boards to understand that present system of monopoly that we operate in a liberalized world community does not work, and that, in fact, after all the consultation there has been agreement to move forward," Prime Minister Mitchell said.

"We have the support of the regional and international community and financial institution to see that we meet that objective. So I think we will see some improvement before the end of this year by being able to get the commodity boards liberalized. Cocoa and nutmeg in particular".

Agriculture department targets policy objectives by Geraldine Bicette-Joseph, Saint Lucia GIS
March 21, 2017

<http://www.govt.lc/news/agriculture-department-targets-policy-objectives>

Full article

The department will improve diversification, conservation and food security in the coming year.

The Department of Agriculture has stated that in moving forward during the current triennium, there are a range of issues that have to be addressed by the department in an effort to fulfil their mandate.

Dr Felix Jaria, Director of Agricultural Services within the Department of Agriculture, has stated that although the public may not be fully aware of it, there are many matters currently being tackled by the unit in a bid to help grow the sector. “Last year we conducted a series of sessions, consultations with various groups around the island to ascertain what they would like to see as the agricultural program and a number of mixed based ideas came through. We were able to group them together into 11 policy objectives. The first one being diversification, there is a need to diversify around bananas, the second policy objective the development of bananas, enhancing the national food import bill, agro processing and agri-business, making development. We also have strengthening of agricultural institutions across the board, increased youth and women in agriculture, effective management and utilization of fishery resources, disaster risk management, and the other one is protection, conservation and the sustainable use of natural resources.”

The magnitude of the work to be done is not lost on those within the division and as such they have resigned to addressing a number of key factors within an allotted amount of time.

“As you would well realize it would be difficult in any one year to capture in any way all of these 11 policy objectives, so as a result our new PS has asked us to just target three or four of them for every one year so that we get something tangible out of them.”

The four policy objectives being tackled by the unit this year are agricultural diversification, the resurrection of the banana industry, enhancing national food and nutrition security, and the reduction of the food import bill and the protection, conservation, and sustainable utility of natural resources.

Minister of Finance, Hon. Winston Jordan signs agreement with IFAD. Guyana Ministry of Finance, Press Release 2017-03-21

<http://finance.gov.gy/media/minister-of-finance-hon.-winston-jordan-signs-agreement-with-ifad>

Full article

Guyana and IFAD signs agreement to invest in Agriculture, strengthen small scale farming in the hinterland and diversify economy

Government’s mission to reduce poverty in the most vulnerable communities received a sizeable boost today when Minister of Finance, Hon. Winston Jordan and the International Fund for

Agricultural Development (IFAD) signed a financial agreement to transform the lives of 30,000 people in Guyana's hinterland.

The Hinterland Environmentally Sustainable Agricultural Development Project referred to as the 'Hinterland Project' will operate in Region 9 as well as Mabaruma and Moruca in Region 1. It will initially only focus on the North Rupununi in order to capitalize on current government efforts to exploit the agricultural potential of the area but will also be conducted in Central and South Rupununi, areas most affected by climate change.

At the signing, Minister Jordan said, "The Guyanese economy has remained un-diversified. Guyana's "bread and butter sector", the agricultural sector, also remained unchanged with heavy reliance on sugar and rice (so) this operation is expected to boost the Government's efforts in diversifying the economy as well as open up new markets and new trade agreements for Guyana."

The agreement was signed today at IFAD headquarters in Rome by Winston Jordan, Minister for Finance of Guyana and Kanayo F. Nwanze, President of IFAD.

The total cost of the project is US\$11.1 million of which IFAD is providing a \$7.9 million loan and a \$500,000 grant. Other co-financiers are: the Government of Guyana (\$2.4 million) and the beneficiaries themselves (\$300,000).

IFAD's Country Programme Manager for Guyana, Ladislao Rubio said, "Guyana has set an ambitious goal of exploiting the country's potential in the agricultural sector and devoting special attention to hinterland areas through the efficient and sustainable use of the country's natural resources." He added, "By building social, human and natural capital and addressing climate change and malnutrition issues, the project will help improve resilience to climate change."

The Hinterland Project will: 1. Support communities and producer groups within communities to identify investment opportunities and managed economic and climate risks, some 4500 households will benefit. 2. Develop business plans and investment and income generating opportunities and increase market access: Some 2000 households will be targeted. 3. Facilitate increased access to assets that build community resilience and create enabling productive environment such as water, energy and ICT and ensure that poor indigenous and non-indigenous rural households living in the Project area, whose livelihoods are threatened by economic and environmental risks, are direct beneficiaries. At least 15 per cent of these households will be female-headed households – a reflection of the reality in the Project area.

The Lead agency for the implementation of the Hinterland Project will be the Ministry of Agriculture through its Agriculture's Sector Development Unit (ASDU) and will be assisted by the Ministries of Indigenous Affairs, Natural Resources & Energy, Communities and Business and other government agencies, Non-Governmental Organizations, Community-Based Organizations (CBOs) and local educational institutes.

IFAD is an international financial institution and a specialized United Nations agency based in Rome – the UN's food and agriculture hub. It invests in rural people, empowering them to reduce poverty, increase food security, improve nutrition and strengthen resilience. Since 1987, IFAD has provided over US\$22.9 million in financing for three rural development initiatives, reaching over 12,000 households.

ASTT prepared to work with Agriculture Ministry to take the agriculture sector forward. Trinidad and Tobago Government Information Service Limited (GISL), March 15, 2017

<http://www.news.gov.tt/content/astt-prepared-work-agriculture-ministry-take-agriculture-sector-forward#.WOBMIbi1vMw>

Full article

March 15, 2017: Speaking at the Hand-over Ceremony of Multi-crates and other Assets to beneficiaries of the 10th EDF Agriculture Policy Programme (APP) in Trinidad and Tobago on Tuesday 14th March, 2017, Senator the Honourable Clarence Rambharat, Minister of Agriculture, Land and Fisheries said to the farmers present *'we will continue to meet with the farmers, discuss the issues and try to resolve the problems'*. Noting that he was particularly pleased to be present at the event, Minister Rambharat said that on the issue of youth in agriculture, this particular Project *'demonstrated to the young people who are interested in agriculture that there are opportunities. Though not an easy way of earning a living, it requires a lot of dedication, effort; [and] for the young people in places like Wallerfield and Maloney, you see young people really working hard and making the effort and sacrifice; the group gathered here today demonstrates that there is interest and there are opportunities'*.

Assuring the Minister of the support of the Agricultural Society, Mrs. Dhano Sookoo, President said *'we give you our full commitment, we are here to support the programmes of the Ministry, we are here to support you as Minister of Agriculture in taking the agriculture sector forward. We are prepared to do it together with you - as partners in this development programme'*.

Stating that *'today is a very memorable and proud moment for the ASTT'*, Mrs. Sookoo outlined that this was the first time that farmers have received direct benefits from an international funding agency. Hot peppers was chosen as the agricultural commodity under the APP, because of its potential. Members of the Agricultural Society of Trinidad and Tobago (ASTT) and representatives of NAMDEVCO received 1,500 multi-crates to be used primarily by farmers and exporters to enhance the harvest, field packing, storage and transportation of fresh produce such as hot peppers thereby reducing post-harvest losses and improving product quality and marketability.

On the issue of collaboration, the Minister referenced his meeting with the Principal of the University of the West Indies, which he coined a *'Summit for Survival'*, with eighteen senior officials from the Ministry present along with twelve senior representatives of the University. Though *'there are bright, committed and hard working people within the Ministry'*, the Minister stated that there is a need to put *'skin in the game'*, which underlies the need for more commitment to providing the support to the stakeholders – the persons who have made an investment of their time, sweat and money in agriculture.

The Agriculture Minister also shared plans for reviewing the legislative framework within which the Agricultural Society operates, stating that *'this year, we will have some meaningful discussions on modernizing the legislation governing the ASTT and secondly modernizing the way in which farmers groups are formed and represented and the way that we as a Government interact with farmers groups'*. This, in the context of providing a less fragmented sector that allows for better public policy decision making.

Under Component 3 of the APP, which addressed improved entrepreneurial, marketing and organisational capacities of small holders and valued added enterprises, members of producer

groups such as the Agricultural Society of Trinidad and Tobago (ASTT), the Network of Rural Women Producers (NRWP) and the Trinidad and Tobago Goat and Sheep Society (TTGSS) were provided with semi-industrial processing and packaging equipment to enhance operational efficiency and product competitiveness. The 10th EDF Agricultural Policy Programme (APP) was implemented by the Inter-American Institute for Cooperation on Agriculture (IICA) and its partners - the Caribbean Agricultural Research & Development Institute (CARDI) and the CARICOM Secretariat and for which the operational phase came to an end on December 31, 2016.

Other speakers included His Excellency Aad Biesebroek, Head of Delegation and Ambassador of the European Union to Trinidad and Tobago and Mr. Gregg C. E. Rawlins, IICA Representative in Trinidad and Tobago and Coordinator, Regional Integration, Caribbean Region.

OECS puts the spotlight on Agriculture: A call for a serious injection of capital into the sector.
Organisation of Eastern Caribbean States (OECS), March 15, 2017

<https://pressroom.oecs.org/oecs-puts-the-spotlight-on-agriculture#>

Full article

Wednesday, March 15, 2017 — There is an urgent need for sound investment in Agriculture, if the industry is to remain viable to the economies of the OECS. That's the view of Agricultural Economist with the OECS Commission, George Alcee. He was speaking at the OECS Forum on Agriculture held in Saint Lucia on Friday March 10, 2017. According to Alcee, without a major injection of capital, Agriculture will continue to flounder, with sub-optimal production, unsustainable farming practices, and dwindling revenues.

Sub-Regional Coordinator for the UN's Food and Agriculture Organisation (FAO) in the Caribbean, Dr. Lystra Fletcher-Paul noted that the region's Food Import Bill is US\$4 billion per year and 85 % of the food consumed in the Caribbean is imported from outside the region, including lots of processed foods and meats. Dr. Fletcher-Paul surmised that since the loss of major revenue earners such as sugar and bananas, Caribbean Agriculture has struggled to regain its place as the major source of food for our populations, a source of rural employment, and a driver of economic growth.

Panellists and stakeholders in attendance made a very strong case for the introduction of Land Use Policy across the OECS, to stop the practice of agricultural lands being used for commercial and industrial development. There was consensus on the view that Government needs to do more to create the enabling environment for Agriculture to thrive through direct capital investment in the sector, the introduction of new technologies in agriculture, and the provision of fiscal incentives to spur growth. On the other hand, it was felt that farmers and agri-business entrepreneurs need to adopt more of a business approach to Agriculture, if the sector is to remain viable and competitive. The FAO and IICA Reps touted the merits of networking and collaboration among farmer groups and farmer support organisations across the region. Panellists and stakeholders agreed that the future of Agriculture is in the hands our youth, and so, more young persons need to be encouraged to go into agriculture as a viable career choice, and one that is becoming increasingly driven by technology and innovation.

The theme for the Forum was: **Agriculture: Investing in the Caribbean's Food Bowl**. Among the other issues discussed at the Forum were diversification into non-traditional crops, agro processing, agri-business development, domestic production, food security, and an FAO funded Agro Shipping Initiative being implemented by the OECS Commission, to increase intra-region shipping of agricultural commodities.

The Panel at the Agriculture Forum comprised representatives of the Food and Agriculture Organisation (FAO), the Inter-American Institute for Cooperation in Agriculture (IICA), St. Lucia's Ministry of Agriculture, the Caribbean Network of Rural Women Producers (CANROP), the Belle Vue Farmers' Co-operative (St. Lucia), the River Antoine Rum Distillery (Grenada), and the OECS Commission. The audience comprised individual farmers including St. Lucia's former Minister of Agriculture, Calixte George, and former Geest General Manager, Anthony Leonce. Among the farmer groups represented were the Cocoa Producers Association, the Broilers Association, the Honey Producers Co-operative, the Flower Producers Co-operative, and the Agriculture Division of the Sir Arthur Lewis Community College. Also represented was the Massy Group of Companies, which provides interest-free loans to a select group of local farmers, and buys a significant amount of local produce for retail in its chain of supermarkets across Saint Lucia.

The Public Education Forum Series, dubbed Vini Koze – Kweyol for 'Come Chat' is aimed at educating and informing the people of the OECS on the social, economic and political benefits of Integration. It seeks to ensure citizen engagement and active participation in the regional integration process.

The Forum Series is part of the public education component of the Economic Integration and Trade Programme of the OECS Region, funded by the 10th European Development Fund. It is being produced by ElShaFord Productions on behalf of the OECS Commission. The series will be edited and broadcast across the OECS, and the Caribbean Diaspora in the UK, USA and Canada.

NATIONAL BUDGET – Agriculture: Grenada

Government of Grenada 2017 Budget Statement presented by Dr. The RT. Hon. Keith C. Mitchell, Prime Minister and Minister of Finance and Energy To The House of Representatives December 9, 2016

http://www.gov.gd/egov/docs/budget_speech/Budget-2017.pdf

Excerpt

pp. 22 - 26 8.4. Agriculture and food security

.. *Main achievements in the sector during this year.*

- The training of staff in a range of agricultural disciplines such as rainwater harvesting techniques, composting and soil management and root crop production.
- The provision of tools, vehicles and equipment to strengthen the Praedial Larceny Programme to support the hard working farmers of this Country.
- The continued implementation of the Zero Hunger Programme which seeks to increase small scale producers income and productivity, reduce the loss or wastage of foods as well as ensure access to adequate and healthy foods for all, all year round. This Project provides direct benefit to hundreds of farmers across Grenada.

- Mr. Speaker, in 2016 the Marketing and National Importing Board (MNIB) continued to play an important role in the growth and development of the agricultural and export sector.
- Purchases from farmers remained significant in 2016.
- Additionally, the MNIB, in support of farmers, joined up with Grenada Development Bank and the Public Service Credit Union to create a pathway for financial support.
- Finally, Mr. Speaker, consistent with our commitment to improve the nutrition of our children, the MNIB also launched a major schools initiative project which provided over 50,000 fruit bowls to our Nation's children.
- The MNIB is also working on launching a "Smoothie Project" in schools before the end of this year utilizing our fresh fruits and vegetables which will provide additional opportunities for farmers.

I now turn to our plans for the sector in 2017

- Mr. Speaker, we will continue the implementation of the National Agriculture Plan 2030 building on the achievements of 2016.
- Government will continue to work toward stamping out the scourge of Praedial Larceny through the upgrading of its laws and the introduction of motion sensors and other technologies.
- With assistance from the Chinese Government, work is underway for a multipurpose center and greenhouse at La Sagesse; and completion is scheduled for October 2017. Some 50 construction jobs are being created.
- We will work toward the accreditation of the Produce Chemist Laboratory to support research and development in areas of pest and diseases.
- In December and January, the United States Department of Agriculture is facilitating a food safety training course for 20 of our citizens, from various sectors in the industry. This training is designed to boost Grenada's exports to the US market, and ensure compliance with FDA regulations. This course, is being offered to our locals, free of cost.
- The continuation of the Youth in Agriculture Project with assistance from FAO will remain a priority.
- Government will continue to strengthen the MNIB to provide expanded support to our farmers. The addition of the packhouse facility will go a long way in supporting the fulfillment of its key role of finding markets for our products.
- Mr. Speaker, we will continue with our efforts to provide adequate agricultural feeder roads to support agricultural development.
- Mr. Speaker, we have heard the cries of the farmers, in 2017, we will revamp the agricultural idle lands Programme with a view to proper re-launch in 2018. Accordingly, there will be no tax on agriculture idle lands in 2017.
- The commercialization process of government's agricultural estates will be sustained. Early in the new year, operational details on Limlair Farm in Carriacou, which will focus on soursop and other fruit production, will be announced. This is in addition to the previously commercialized Belle Vue and Grand Bras estates. Belle Vue continues to expand, with an innovative commercial collaboration with Winfresh and the soon to be commissioned state of the art agro-processing plant at La Sagesse. When brought into full production, the La Sagesse plant will create significant opportunities for our local farmers and boost Grenada's agribusiness exports.

The total allocation for Agriculture, Forestry and Fisheries is \$27.4 million.

NATIONAL BUDGET – Agriculture: Saint Vincent and the Grenadines

Government of Saint Vincent and the Grenadines. Budget Address 2017 Fiscal Consolidation and Economic Growth, Job Creation and Sustainable Development in a Vulnerable Small Island Developing State in the Context of aChallenging Global Environment by Dr. The Hon. Ralph E. Gonsalves, Prime Minister of St. Vincent and the Grenadines. Delivered on February 06, 2017 at the House of Assembly, Kingstown, St. Vincent and the Grenadines
http://www.gov.vc/images/pdf_documents/budget_address_and_econ_review_combine_2017.pdf

Excerpt

pp. 16- 17 The major economic public sector investment projects in the 2017 Budget include: Agriculture Infrastructure (\$14 million);

pp. 71 + *St. Vincent and the Grenadines Economic and Social Review January to September 2016*

pp. 84 Despite growth in the banana agriculture sub-sector, activity in the agricultural sector contracted (with the exception of Saint Vincent and the Grenadines), fuelled by a reduction in non-banana output and adverse weather conditions.

pp. 94 -96 THE REAL ECONOMY 3.1 Agriculture

pp. 94 Accordingly, in 2016, the government continued to provide farmers with: (1) soft-loans through the Farmers' Support Company and (2) plantlets at a subsidized cost.

Additionally, work commenced on improving the feeder road system through the Agriculture Modernisation and Development Project (AMDP) and the Kuwait funded feeder-road rehabilitation project through the Ministry of Transport, Works etc. Other agricultural sector enhancing programmes include the implementation of the Banana Accompany Measures (BAM). This \$34.5m project is financed by the EU, with focus placed on:

1. Increasing the provision of agriculture infrastructure.
2. Promotion of sustainable land use practices and environment management.
3. Provision of incentives and technical assistance to encourage youth participation in agriculture.
4. Strengthening the institutional capacity for production, pest and disease management and marketing to ensure sustainable agriculture.

Access to finance, though limited, improved for farmers. Outstanding loans to the agriculture industry moved to \$2.8m at the end of September 2016, from \$1.9m for the same period in 2015 or an increase of 47.4 per cent.

pp. 94 Crops

Preliminary data show crop production grew by 8.5 per cent moving from 70.4m lbs in 2015 to 76.4m lbs in the corresponding period in 2016. Growth was recorded in the output of both banana (13.3%) and other crops (7.9%).

pp. 95 Banana ... Preliminary data show that banana farms realized a yield of 9.4m lbs for the first three quarters of 2016. This output was 13.3 per cent more than the 8.3m lbs for the corresponding 2015 period. Further to ensuring that farms are brought up to global GAP compliant level, the government continued its efforts to eradicate the Black Sigatoka disease, a major challenge to the banana industry since 2011....

pp. 95 Other Crops

Diversification of the agriculture sector continues to be a policy objective of the government. Preliminary data for the first nine months of 2016 show a yield of 67.0m lbs or 7.9 per cent increase over the 62.1m lbs recorded for the corresponding period in 2015. Temporary crops accounted for 63.4 (9.2%), eddoes (9.1%), and sweet potatoes (6.2%) were the main crops produced (see figure 3.1).

PUBLIC SECTOR INVESTMENT PROGRAMME

pp. 121 Agriculture Capital spending in the Agriculture subsector

pp. 126-131 for Agriculture data in following:

Annex 1: Gross Domestic Product by Economic Activity in Current Prices 2011- 2015 (EC\$m)

Annex 2: Gross Domestic Product by Economic Activity in Constant (2006) Prices 2011-2016 (EC\$m)

Annex 3: Percentage Contribution of Gross Value Added by Economic Activity in Current Prices 2011-2015

Annex 4: Percentage Contribution of Gross Value Added by Economic Activity in Constant (2006) Prices: 2011-2015

UPCOMING EVENTS

April

CARDI-ITC Regional Coconut Workshop on Group Dynamics, Business Investment Value Chain Link

Date: April 6th-7th, 2017

Location: Saint Lucia

Partners Meeting: Global Framework on Water Scarcity in Agriculture

Date: 19 - 20 Apr 2017

Location: FAO HQ, Rome, Italy

Website: <http://www.fao.org/land-water/events/events-detail/en/c/470887/>

Caribbean Public Health Agency (CARPHA) Annual Health Research Conference 2017

Date: April 27th- April 29th.

Location: Guyana

Description: Theme - Climate Change, The Environment and Human Health: Healthy planet, Healthy people

Website: <http://conference.carpha.org/>

National Agriculture & Trade Show 2017

Date: 28, 29 and 30th April, 2017

Location: Belmopan, Belize

Description: Theme “Let’s Get Growing”. Hosted by Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development

July

Caribbean Food Crops Society (CFCS) Annual Meeting

Date: July 16-22, 2017

Location: Puerto Rico

Description: The theme for the meeting is: The Role of the Caribbean as a Research Hub to Advance Global Agriculture and Food Security.

Website: <http://cfcs.eea.uprm.edu/article/annual-meeting-cfcs-puerto-rico-july-16-22-2017-call-submission-presentations-deadline-extend>

August

32nd West Indies Agricultural Economics Conference 2017

Date: 6-11 August 2017

Location: Georgetown, Guyana

Description: Theme: Food & Nutrition Security: the pathway to sustainable agricultural development in the Caribbean. Organised by Caribbean Agro-Economic Society

Website: <http://www.caestt.com/home/32nd%20W.I.A.EConference.php>