



Issues Affecting Caribbean Agriculture

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CARDI brings sheep, goats to Trinidad. Trinidad and Tobago Newsday. Business Day. 14 February 2013
<http://www.newsday.co.tt/businessday/0,173438.html>


On January 23, 146 head of selected pedigreed stock, including Katahdin and Dorper sheep and Anglo-Nubians, Alpine and Saanan goat breeds, arrived at the Piarco International Airport, Trinidad. This arrival, out of North America and valued at over US \$188,000, signals a potential for some 2,000 improved breeding animals over the next three years for local farmers. These breeds were selected based on, in part, adaptability, weight gain, meat to bone ratio, milk yield.

For more information see page 8

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.





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

Roots and Tubers

Red Stripe, Jamaica Producers partner on cassava project by Sabrina Gordon. Jamaica Gleaner, 13 February 2013

<http://jamaica-gleaner.com/gleaner/20130213/business/business3.html>

Full Article

Red Stripe Jamaica and Jamaica Producers Group (JPG) are partnering on a project to explore the financial feasibility of local cassava as input for brewing beer.

The partnership seeks to leverage JPG's agricultural expertise.

The company already farms cassava and other crops as raw material for its snack operation, but the feasibility study to be undertaken by the companies will determine whether cassava can be grown in the quantities and quality required for beer-making.

Red Stripe aims to replace 30 per cent of imported inputs with cheaper, locally grown cassava.

"We have a 50/50 joint arrangement to conduct the study. The dollar amount is confidential between the two parties, however, there will be a starter fund available for the joint venture to use," said Marguerite Cremin, head of corporate relations at Red Stripe.

Cassava is to replace barley and corn syrup imported from the United States.

"Both Red Stripe and JP see this as good for business and good for Jamaica to use cassava-based starch input for Red Stripe brewed products," said Jeffrey Hall, chief executive officer of JP. "It will be good for employment and foreign exchange," he said.

Red Stripe disclosed the agreement with Jamaica Producers alongside the release of its half-year results showing a 58 per cent rise in profit for the six-month period. The beer company made J\$808 million of profit from J\$6.5 billion of revenue at half-year ending December 2013.

Partnership could evolve

If cassava is found to be a viable alternative, Hall indicated that the partnership with Red Stripe could evolve into a more sustainable business partnership.

Hall said that JP would essentially be supplying the tuber to Red Stripe, but said the details of the arrangement would be subject to the findings of the study. Red Stripe similarly said more details of the partnership would come at the end of the testing phase.

"The MOU is for JP and Red Stripe to collaborate together on completing a feasibility study for the large-scale cultivation, harvesting and processing of cassava to produce cassava starch for brewing," explained Cremin.

"At the end of the feasibility study we will have more details on how much is to be supplied, location of farms, processing facility, among other details," she said.

Cremin adds that the early results of the pilot suggest the tuber is of good quality.

"Already we have worked on test plots of under four acres that produced good-quality cake," she told Wednesday Business.

Red Stripe plans to phase in the replacement local inputs into the production process over five years.

"We expect with the adoption of modern cultivation, harvesting and processing technologies and mechanisation, it will allow the venture to be in line with global prices for cassava," said Cremin.

"This scale of cultivation has never been attempted within the last 30 years but we believe we can make this venture locally sustainable, profitable and globally competitive within cassava trading market," she said.

Red Stripe expects that partner JPG will engage small and large farmers who are willing to adopt the farming model that the feasibility study advises to supply the crop, Cremin said.

Efforts intensify to decode cassava “alphabet soup” by Neil Palmer, CIAT, 12 February 2013
http://www.ciatnews.cgiar.org/2013/02/12/decoding-cassava-noodle-soup/?utm_source=rss&utm_medium=rss&utm_campaign=decoding-cassava-noodle-soup

Full Article

Imagine having to write a story, using a pile of several billion letters.

First the letters have to be arranged into words, the words into sentences and paragraphs to produce a coherent, accurate chapter. There are 18,000 chapters in each book, and 5,000 books make the full story.

The story is the complete genetic history of cassava.

Making biological sense of that pile of letters – otherwise known as sequencing the cassava genome – might seem like a daunting prospect, but the result should be a precise genetic fingerprint of the plant and all its known variations. It promises to accelerate the development of improved varieties by helping scientists home-in on the genes responsible for increasing yields, boosting starch or protein content, and improving resistance to notorious pests like whitefly, diseases like brown streak.

“Genome sequencing generates an enormous amount of data – at the moment we just have an ‘alphabet soup’ of information that we need to arrange into the right order,” explained CIAT cassava geneticist Luis Augusto Becerra. “But once all those letters are in order, it means we will really, truly understand cassava.”

The first draft of the cassava genome was completed in 2009, by the U.S. Department of Energy Joint Genome Institute (DOE JGI), and 454 Life Sciences. While it only sequenced one cassava variety – the equivalent of one single book in the set – it was enough to help scientists isolate the gene responsible for “waxy” roots, a major breakthrough for the development of high-value cassava for industrial use.

Crucially, the first draft also provides a firm foundation for speeding up subsequent sequencing, since many cassava varieties contain similar characteristics to the draft, with only small variations in the sequence responsible for particular characteristics. In just three years, the first draft has enabled a further 200 varieties to be quickly decoded.

Using cassava varieties conserved in gene banks around the world – including domesticated “landraces” and undomesticated wild relatives – a further 1,000 varieties will be sequenced in 2013, funded by CGIAR’s Roots, Tubers and Bananas research program. The aim is for all 5,000 cassava varieties – representing 95% of the crop’s global genetic diversity – to be sequenced by 2017.

Launched in mid-2012, The Global Cassava Genome Initiative, jointly coordinated by CIAT and the Beijing Genomics Institute (BGI), with support from the International Institute of Tropical Agriculture (IITA), RIKEN, DOE JGI and the Chinese Academy of Tropical Agricultural Sciences (CATAS), will pool the expertise of scientists and the technical capacity of participating institutions around the world to try and put speed up the process of putting the pieces of the puzzle together.

“This initiative will really help to accelerate the work to decode cassava,” continued Becerra. “So it’s not a matter if we’re going to find, say, the gene responsible for resistance to whitefly, or increasing yields – it’s a matter of when. That makes the process tremendously exciting; it could be cassava’s Green Revolution, both as a cash crop and a food crop.”

Once the cassava genome is fully decoded, scientists will be able to breed cassava in silico (on the computer) to establish the most effective combinations of parent plants to produce offspring with the most valuable traits.

It could enable them to help cassava fulfill its enormous potential as both a food security crop and an industrial crop – in a fraction of the time required by conventional breeding methods.

A global network to support the nutritional quality enhancement of potato and sweetpotato by Rory Sheldon. International Potato Center (CIP), 11 February 2013

<http://cipotato.org/press-room/blogs/a-global-network-to-support-the-nutritional-quality-enhancement-of-potato-and-sweetpotato>

Full Article

From January 14 to 18, a meeting was held at CIP’s headquarters to create a Network to guarantee the improvement of the nutritional quality of roots and tubers. The Network will be a magnificent opportunity to promote research and strengthen collaboration among researchers from the North and the South to identify specific needs and opportunities for these crops.

In January 2013, the International Potato Center (CIP) hosted a formative meeting focused on establishing a global network to support the enhancement of the nutritional quality of potato and sweetpotato as well as other root and tuber crops (RTC) under the umbrella of A4NH – the CGIAR

Research Program on Agriculture for Nutrition and Health. Labeled as “Nutritional Quality Assurance and Enhancement Network (NQAEN)”, this initiative aims to build knowledge and capacity to enable researchers to assure accurate and cost-effective assessments of micronutrient concentrations of potato and sweetpotato; and to look for research opportunities to contribute in building evidence that micronutrients of potato and sweetpotato and their products are bioavailable for the human body.

Currently over three billion people worldwide suffer from malnutrition, particularly in developing countries where insufficient intake of iron (Fe), zinc (Zn), and Vitamin A constitute the most common micronutrient deficiencies. Several plant breeding initiatives have been set up to increase the Fe, Zn and Vitamin A concentration of RTC to improve human nutrition. RTC are largely locally traded, are accessible and affordable to producers and consumers and less subject to global price fluctuations than are, for example, grain crops. This makes RTC an important source for food security in the developing world, and establishing a global network to assure and enhance their nutritional quality is of utmost importance to CIP and its global partners.

During the meeting held in CIP’s Lima headquarters, Thomas zum Felde, CIP’s Plant Quality Specialist elaborated that, “Realizing the potential of RTCs to contribute improving nutrition and health status of low income populations requires not only concerted efforts and collaborations among scientists to biofortify these crops, but also the need to assure accuracy in the determination of micronutrients, and to show evidence that micronutrients of RTC are available to the human body.”

The general objectives of the meeting were firstly to develop a work plan for assuring quality of micronutrient analysis in potato and sweetpotato in Asian and later in African countries and secondly to elaborate a strategy for evaluation of micronutrient bioavailability in potato and sweetpotato cultivars and biofortified clones. During the meeting, participants were familiarized with new approaches in agricultural research for development. Especially the links with nutrition and health and advances on research related to micronutrient characterization and evaluation of bioavailability of micronutrients were discussed. Following the meeting, Thomas zum Felde said that the participants felt confident that needs and opportunities had been adequately addressed, and that “partnerships will be developed between the invited advanced research institutions and applied research organizations”.

The NQAEN formative meeting relied upon the participation of Gordon Prain (Leader of CIP’s Global Program ‘Social and Health Sciences’), Graham Thiele (Program Director of CGIAR Research Program - Roots, Tubers and Bananas), Erick Boy (HarvestPlus’ Nutrition Manager), Oladeji Alamu (Head of Quality Lab at IITA, Nigeria), Mohanta Haridas (Bangladesh Agricultural Research Institute), Munirul Islam (ICDDR, Bangladesh), Gabriela Burgos (CIP) amongst other specialists from CIP, Danièle Evers (Centre de Recherche Public - Gabriel Lippmann, Luxemburg), Stan Kubow (McGill University, Canada), and Thomas zum Felde (CIP) who is leading the NQAEN.

Maize

Carlos Slim, Bill Gates and Mexican dignitaries visit CIMMYT to inaugurate Bioscience facilities.

International Maize and Wheat Improvement Center (CIMMYT), 13 February 2013

http://www.cimmyt.org/index.php?option=com_content&view=article&id=1560:carlos-slim-bill-gates-and-mexican-dignitaries-visit-cimmyt-to-inaugurate-bioscience-facilities&catid=635:2013

Full Article

Today, CIMMYT inaugurated a new US\$ 25 million research complex at its headquarters in El Batán. The new advanced bioscience research facilities, 45 kilometers (20 miles) from Mexico City, marked its grand opening to a crowd of more than 100 invited guests.

The event was attended by Bill Gates, Carlos Slim, Lic. Enrique Martínez y Martínez, Mexican Secretary of Agriculture and leader of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), and **Dr. Eruviel Ávila Villegas**, Governor of the State of Mexico.

The new bioscience complex will allow researchers to speed the development of valuable seed, by way of more precise characterization of its genetic traits, such as heat and drought tolerance, disease and pest resistance, and seed health, as well as the nutritional and industrial quality of the grain. CIMMYT was the cradle of the Green Revolution 60 years ago. By providing cutting-edge facilities and an enhanced research capacity, this alliance will significantly improve farm productivity.

“We are enthusiastic about this alliance,” said Bill Gates, co-founder of the Bill & Melinda Gates Foundation. “Bringing together the collective experience of our respective organizations, we can promote innovation to transform the lives of farmers in Mexico and around the world. Investing in agricultural development is one of the most effective investments we can make. It allows farming communities to become self-sufficient and prosperous by growing and selling more of what they produce.”

Carlos Slim added: “This alliance to promote research and development by CIMMYT, with the collaboration of national and international scientists dedicated to improved seed and generating more efficient techniques, is a step toward making this knowledge available to farmers everywhere, particularly small- and intermediate-scale farmers, as well as promoting economic growth, employment, and food self-sufficiency and exports from this sector.”

Both the Bill & Melinda Gates Foundation and the Carlos Slim Foundation have been generous supporters of CIMMYT's mission. The buildings inaugurated today are the result of the Carlos Slim Foundation's investment in CIMMYT. The Bill & Melinda Gates Foundation partners with CIMMYT in projects to fight hunger around the world. The impact of the commitment made today by both foundations will be felt beyond Mexico's borders.

“We will see the introduction of modern and more sustainable farming practices,” said CIMMYT Director General Thomas A. Lumpkin. “These include precision and conservation agriculture, backed by intelligent mobile phone services in farmers' fields and digital tools in labs that will open our access to the full genetic diversity of maize and wheat to benefit the world's poorest farming communities.”

Speaking at the ribbon-cutting ceremony, Mr. Gates spoke of the importance of CIMMYT's role in

agricultural research and development: “When you ask where the best work is done for poor farmers, the answer is here, at CIMMYT.”

New project launched: heat stress tolerant maize for Asia. Posted by [Barbora Nemcova](#). CIMMYT blog, February 11, 2013.
<http://blog.cimmyt.org/?p=9993>

Full Article

South Asian farm lands have been increasingly experiencing climate change related weather extremes. A [report from the Asian Development Bank in 2009](#) warns that if the current trends persist until 2050, major crop yields and food production capacity of South Asia will significantly decrease — by 17% for maize, 12% for wheat, and 10% for rice — due to climate change induced heat and water stress. In response to this situation, [USAID](#)’s Feed the Future (FTF) initiative has decided to support the “Heat stress resilient maize for South Asia through a public-private partnership” (Heat Tolerant Maize for Asia, HTMA) project to develop heat resilient maize for South Asia.

HTMA is a public-private CIMMYT-led alliance consisting of [Purdue University](#), [Pioneer Hi-Bred](#), seed companies, and South Asian public sector maize programs. It targets resource-poor people of South Asia who rely on growing maize for subsistence or income in rainfed conditions, and whose welfare is directly dependent on maize yields and negatively affected by crop failures. To develop and deploy heat stress resilient, high-yielding maize hybrids for vulnerable regions in South Asia, the HTMA project will build upon CIMMYT’s elite abiotic stress tolerant maize germplasm base; the technical expertise of the key resource partners (Purdue University, Pioneer Hi-Bred, and CIMMYT); the maize breeding and phenotyping locations and strengths of the national agricultural research systems of India, Nepal, Bangladesh, and Pakistan; and the seed production capacity, strong links with the farming communities, and the market reach of private sector partners (Pioneer Hi-Bred, [Vibha AgriTech](#), [Ajeet Seeds](#), and [Kaveri Seeds](#)).

During 23-25 January 2013, project launch meeting took place in Hyderabad, India, where 44 scientists gathered to discuss various aspects of the project, including the [genomic selection](#) (GS) approach which is proposed to be one of its major approaches. CIMMYT’s Jose Crossa, Paulino Perez, and Raman Babu discussed the GS concept, its application in breeding programs, and data analysis and management for fast-track breeding progress and product development. The meeting included a presentation on the FTF initiative by Larry Beach (USAID) who explained the role of HTMA in achieving FTF goals in South Asia. B.M. Prasanna (Global Maize Program director) discussed the climate change scenario in South Asia, its potential impact on the farming community, and the importance of HTMA in addressing these challenges. P.H. Zaidi (CIMMYT maize physiologist and HTMA coordinator) then provided an overview of HTMA’s scope, objectives, outputs, and outcomes, which was followed by presentations from participating countries on the current progress status of heat tolerant maize and on suitability of HTMA for country and institutional priorities.

These deliberations set up an excellent platform for further discussions on work plans, activities, and intended outputs and outcomes, including breeding strategies, trial sites, resources, bottlenecks, and potential solutions. The group then agreed on an implementation strategy for each of the planned activity and decided that a project management committee would hold bi-monthly web-based meetings to review implementation of planned activities, perform monitoring visits, and receive updates on

activities during crop season at each site. A project steering committee, an overseeing body chaired by B.M. Prasanna, also met to discuss the project structure and execution plan.

The meeting was considered successful by its attendants. USAID's Beach concluded the meeting with encouraging remarks showing confidence in the alliance and its capability to execute the planned activities and thus achieve the outputs that will eventually help FTF to reach its goals. The HTMA team is looking forward to working on helping resource-poor farmers of South Asia.

Hot Pepper

Grace pushes for growth in pepper market. Jamaica Gleaner, 7 February 2013

<http://jamaica-gleaner.com/gleaner/20130207/business/business3.html>

Full Article

High production costs continue to undermine the price competitiveness of local agricultural produce on the international market, a point Orville Palmer, general manager of Grace Agro Processors Division, shared with contract farmers recently.

He told them: "The international demand for pepper is very high. The challenge that we have is the cost of production (because) what we pay for pepper is what pepper mash is being sold for on the international market. As a matter of fact, less than that; so the challenge that we have is to increase our productivity."

Palmer was addressing the signing ceremony at GraceKennedy's Harbour Street, Kingston, office, where 10 farmers from St Elizabeth, St Ann and St Mary had come to sign two contracts to provide pepper for the company's pepper mash facility in Hounslow, St Elizabeth. The pepper mash is the main ingredient in the Grace line of hot pepper sauces, sold across the world.

"We have to increase our yields so we can get the cost of the pepper down, so we can trade internationally," Palmer appealed to the farmers.

Partnership the key

Meanwhile, Michael Ranglin, chief executive officer of Grace GK Foods, reiterated the importance of partnership in achieving this objective.

He explained: "We don't know how to grow peppers. We know how to market the product from peppers. We know how to process it and market it all over the island and in various countries in the world but we need your expertise to grow good quality peppers.

"We are getting good-quality peppers, but what we have to work on now with you is the price. It is very important that we work together to produce a product that is competitively priced," added Ranglin.

While the company has in the past contracted farmers to produce raw material for its extensive line of food produce, this project differs somewhat. The farmers are obligated to get their operations up and running, and after the first month through to the fourth month, the company will provide inputs, such as fertiliser and chemicals, distributed by AgroGrace, at discount prices.

At the end of harvesting, this cost will be deducted from the total paid to farmers for pepper during the cultivation period.

Grace will also provide technical assistance to the farmers, with the Ministry of Agriculture and Fisheries also partnering in training of the farmers in best practices.

Livestock

CARDI brings sheep, goats to Trinidad. Trinidad and Tobago Newsday. Business Day. 14 February 2013

<http://www.newsday.co.tt/businessday/0,173438.html>

Full Article

On January 23, 146 head of selected pedigreed stock, including Katahdin and Dorper sheep and Anglo-Nubians, Alpine and Saanan goat breeds, arrived at the Piarco International Airport, Trinidad. This arrival, out of North America and valued at over US \$188,000, signals a potential for some 2,000 improved breeding animals over the next three years for local farmers. These breeds were selected based on, in part, adaptability, weight gain, meat to bone ratio, milk yield.

The Caribbean Agricultural Research and Development Institute (CARDI) and the Ministry of Food Production (MFP) working together to strengthen and diversify the local small ruminant industry in Trinidad and Tobago, under the Jamaica Government/Trinidad and Tobago Government/Common Fund for Commodities/Caribbean Development Bank-funded Project “Diversification of the Caribbean Livestock Sector through the Production of Small Ruminants”.

It is expected that through this Project, farmers will benefit from improvement in farm income from increased availability of quality breeding stock; improved technical capability and practices of small ruminants’ producers through training; improved quality of output from the farm level (marketing of higher quality small ruminant meats) and stronger farmer groups linked to processors, marketers and consumers.

One of the binding constraints to the expansion and development of the industry is the limited availability of breeding stock. Importation of “new higher-performing breeds” is therefore critical. Under the project, over 250 animals will be imported into Trinidad and Tobago.

Following quarantine at the Ministry of Food Production’s Centeno Livestock Station, under the care of the Animal Production and Health Division, the animals will be bred and their offspring disseminated to farmers.

The Caribbean Agricultural Research and Development Institute (CARDI) has lead responsibility to develop the regional small ruminant industry. The Institute’s contribution towards this effort is through research and development in nutrition, health, breeding and production systems development.

The main objective of the programme is to increase production and productivity at the farm level in order to increase the local supply of quality meat and meat-products and thus enhance the viability of the industry. The major centres for CARDI's small ruminant research and development activities are Jamaica and Trinidad and Tobago.

In Jamaica, emphasis is on quality breeds and housing. This complements the work in Trinidad and Tobago which seeks to develop forage-based feeding systems using improved, high-yielding grasses and forage legumes. In addition, capacity building of key stakeholders along the value chain and infrastructure strengthening are areas of focus.

CARDI is a Regional organization that seeks to contribute to the economic well-being of Caribbean people by the generation and transfer of appropriate technology through agricultural research for development.

Blackbelly sheep labeled as a national treasure by Sharifa Medford. Barbados Government Information Service, 14 February 2013

http://www.gisbarbados.gov.bb/index.php?categoryid=13&p2_articleid=10078

Full Article

This view was endorsed by Minister of Industry, Small Business and Rural Development, Denis Kellman, who asserted that "the value of this breed of sheep goes beyond its provision of meat... There is value in its skin".

The Minister made these points today, during the launch of a project entitled Blackbelly Sheep - A National Treasure: Building Bigger Value at Pelican Village Terrace, where the logo of the Barbados Blackbelly sheep was also unveiled. The project is a collaborative effort of the Barbados Investment and Development Corporation, the Inter-American Institute for Cooperation on Agriculture and the Canadian High Commission.

He lauded the organisations for establishing the initiative which is designed to heighten the awareness of the value of the Barbados Blackbelly sheep and its role in the growth and development of Barbados' economy.

"...The Ministry of Industry, Small Business and Rural Development has been drawn [to Blackbelly sheep] since its [the Ministry's] establishment in 2011... The Ministry has been quietly gathering the relevant information, and in so doing, has been able to meet with some of the other players who were interested in exploiting the Blackbelly sheep and the added value that could be brought to the table by this exploitation," the Minister disclosed.

Minister Kellman pointed out that the animal's skin, when transformed to leather, could be applied to the production of bags, coats, gloves, jewelry, spa products and shoes.

With respect to the manufacture of shoes, the Minister stated that research in this area was high on his Ministry's agenda due to the health benefits to which it was attached. He noted that initial investigations have shown that the leather produced from the skin of Barbados' Blackbelly sheep was "softer and more elastic than that produced by other animals".

"Such an initiative has a health benefit to Barbadians who are having to grapple with the complications of diabetes, particularly those resulting in diabetic foot. The manufacturing of custom made shoes for those persons who have foot problems, could potentially reduce the number of amputations that are performed each year, seeing that poor blood circulation was a significant contributing factor. Leather produced from the skin of the Blackbelly sheep is highly recommended as the leather of choice for the manufacture of these shoes," Mr. Kellman explained.

The Minister also alluded to the export potential which lies in the production of items through utilising various parts of the Barbados Blackbelly sheep. He noted that these products were likely to generate foreign exchange and would be one solution in the search to find export niches.

Praedial larceny forces farm to stop operations. Jamaica Gleaner, 7 February 2013

<http://jamaica-gleaner.com/gleaner/20130207/business/business6.html>

Full Article

Operations at the farm in Goodwill, Trelawny, where 32 one- and two-year-old heifers were stolen on the night before Christmas Eve, have been significantly scaled back, with only a skeleton staff in place. This is in keeping with the hard-line stance taken by management in a bid to hit back at the cattle thieves and their cronies.

Of the original 22 workers, only about six who are employed in key positions have retained their jobs, with the others laid off pending resolution of the \$4-million rustling operation, which the management is committed to resolve.

"Everybody on the farm is under investigation. No work has started back, they lay off everybody while they are being investigated," a source revealed.

Farm manager Hyacinth Dawson-Whitter confirmed, telling The Gleaner: "They are not putting anybody back to work until they find out what happened because they are satisfied that it's partially internal."

The farm manager and the management team responded to a report from a worker on Monday, December 24, indicating that a number of heifers were missing, and an audit that day by the farm's management confirmed that 32 heifers bearing the brand mark AK followed by two digit combination were missing. The herd was comprised mainly of Jamaica Red Poll, with a few Jamaica Black Polls and Jamaica Brahman.

She said it is unlikely that strangers could have walked on to the farm at night and herded the cattle into a pen and then get them into trucks, with the apparent ease the thieves did. It is theorised that the animals were penned in advanced.

No repeat

This is the first time the farm has suffered a loss of this magnitude and the owners are determined to ensure that there is no repeat. Given the serious financial fallout, they are determined that even if the cattle are never recovered, the culprits are arrested, that will send the important message - such action will not be tolerated.

Dawson-Whitter explained that experience has shown that if the thieves are not stopped in their tracks they will keep preying on the victims. For this reason, the management has urged the police to be thorough in their investigation, with the aim of ensuring they have an airtight case.

"We have asked them not to do anything prematurely, to make sure that they complete their investigation thoroughly because we don't want them to make a wrong move and lose the whole momentum and then you might lose the entire case," Dawson shared with The Gleaner.

With all 32 animals bearing prominent identification brands on the left rear hip, the managers are puzzled as to how the thieves could offload them legally, without raising the suspicion of a butcher or other buyer. In addition, the age and breed of the cattle should raise eyebrows, since it is unlikely that anyone who has invested in any of the three breeds would butcher them at such a tender age. It could not make economic or other sense, since this would in all likelihood have to be a long-term investment.

The public is being asked to be on the lookout for these brand-marked animals.

Protected Agriculture

Grow crops using your smartphone by Corey Robinson .Posted on Scientific Research Council, Jamaica website, February 11th, 2013

<http://src.gov.jm/grow-crops-using-your-smartphone/>

Excerpt

"IMAGINE being able to grow healthy crops with the touch of a button on your smartphone. This is what Ewan Pitter, a third-year engineering student at the University of the West Indies (UWI) envisions, and he has been working at it for almost a year.

Pitter, 25, on Thursday, unveiled the prototype of a Renewable Energy-Driven Microcontroller-Based Fully Automated and Controlled Hydroponics Greenhouse System — the flagship item of UWI's 14th staging of the annual Research Days.

The system — a miniature hydroponics greenhouse, powered by solar energy, and linked to the Internet — allows its user to maintain the quality of crops from anywhere in the world using a laptop or smartphone.

Anything, from injecting the appropriate amount of nutrients to regulating the acidity of the hydroponics solution, can be done with the touch of a button, Pitter bragged, adding that his invention has the potential to revolutionise farming.

"After I finish this, I plan to put in more work, more improvement; I want to take it from the school level to different parts in the Caribbean," said Pitter, whose project was selected as the best among his 18 classmates'.

Hydroponics, the growing of plants without soil, is not new in Jamaica, neither are Internetbased remote control systems, but the combination of the two, Pitter said, can offer many opportunities for regional development.

It is for this reason that the project is most fitting for this year's Research Days theme: 'Pathways and Opportunities for Regional Development', he noted.

"I hope that it (invention) will actually change farming, and I hope that people will accept the technology and try to utilise this type of farming," said Pitter.

"Because to be out there in the sun bending down can destroy your health and it is time-consuming to prepare landscape.

So this is an easier way." Pitter, who hails from "both Manchester and Clarendon", earns his university tuition fee by working as a maintenance technician at Kingston Container Terminal Engineering Department.

It is a job he enjoys, as electronics has always been his passion, he said.

On Friday, Pitter demonstrated how the machine, a combination of tubes, electronic devices, wires, and pipes, caters to crops of broccoli and parsley.

According to the Pitter, investors have already expressed an interest in his invention.

On Friday, Dr Paul Aiken, deputy dean of engineering, dispelled criticisms that the project paled in comparison to last year's revolutionary UWI Cardiac Surgery Simulator — a machine that recreates 'reallife' surgery scenarios using a pig's heart and artificial blood.

"Every year there is a research theme. Last year the research theme explored health and wellness. This year we have an overarching theme, but for this faculty it is energy, security and sustainability," he explained. "Sustainability involves our agricultural sectors. So what we have here is a renewable energy-driven sustainable form of agriculture.

"So compared to last year, the sensation for this is not the breath-taking because people have seen hydroponics systems before, but believe me, people are interested," he said, adding that, with the implementation of closed-circuit cameras, the system could be a solution to praedial larceny, which has been a major concern to Jamaican farmers."

Source: Jamaica Observer https://www.jamaicaobserver.com/news/Grow-crops-using-your-smartphone_13598165

Climate Change

5Cs to share OECS produced climate change series by Caribbean Climate, 15 February 2013

<http://caribbeanclimateblog.com/2013/02/14/5cs-to-share-oecs-produced-climate-change-series/>

Full Article

Starting March 2013 the Caribbean Community Climate Change Centre will share episodes from the 12 part climate change-focused TV series “Understanding Climate Change” on all our web platforms (our website, blog, and YouTube channel). The series, which is produced by the Organization of Eastern Caribbean States (OECS) Secretariat, a sub-region within the Caribbean Community (CARICOM), features climate change impacts and solutions – with an emphasis on issues related the water, tourism and agricultural sectors, as well as highlights on vulnerabilities to coastal areas, and increased exposure to natural disasters, such as hurricanes.

“Understanding Climate Change” was launched yesterday at “Our Planet”, a state of the art cinema theatre in downtown Castries. OECS Communications Specialist Tecla Fontenard notes that “an estimated 80 guests [were] in attendance, and over 15 media reps (including 7 cameras) from across the independent states of the OECS [were on hand to cover the event]“. The guests included representatives from local, national, regional and international agencies involved in environmental conservation and climate change related work in the OECS sub-region. Ms. Fontenard describes the launch as an “exciting night... the biggest we have seen so far for our climate change project”.

The TV series, which was recently completed with the assistance of a Saint Lucia-based consulting firm, is the first of its kind for the OECS Secretariat and is expected to contribute to awareness building efforts of an OECS-USAID Climate Change Project aimed at “Reducing the Risks to Human and Natural Assets Resulting from Climate Change (RRACC).

The series is part of the awareness component of the USAID-funded climate change project (RRACC), and is expected to generate increased curiosity on climate change and provide tips on how the public can make individual choices that will help them better cope with climate change related issues. The RRACC Project is a five-year development project which was launched in 2011 to assist OECS governments with building resilience through the implementation of climate change adaptation measures. RRACC will build an enabling environment in support of policies and laws to reduce vulnerability, address information gaps that constrain issues related to climate vulnerabilities, make interventions in freshwater and coastal management to build resilience, increase awareness on issues related to climate change and improve capacities for climate change adaptation.

Government official calls for more climate change funding by Julie Carrington. Barbados Government Information Service, 14 February 2013

http://www.gisbarbados.gov.bb/index.php?categoryid=13&p2_articleid=10083

Full Article

A senior government official is making a case for more climate change funding from international agencies at a time when growth and development in the region is threatened by sea level rises, storm surges and flooding.

Parliamentary Secretary in the Ministry of Finance and Economic Affairs, Jepter Ince, made this observation yesterday while addressing a one-day workshop entitled Development and Implementation of a Risk Management Approach to Decision Making in the Caribbean. It was held at the Accra Beach Hotel, Rockley, Christ Church.

The former senator expressed concern about the existing inertia and warned that commitment to funding was needed to "slow the pace at which the planet was warming".

Given this situation, Mr. Ince said Caribbean governments had been proactive in managing the risks associated with climate change despite scarce resources.

He added: "By engaging in such actions, the Ministries of Finance and Planning and other supporting ministries would be in a position to better allocate their scarce resources and ensure that the national objectives are met, particularly those relating to climate change."

Mr. Ince also outlined government's greening initiatives as articulated in the draft Green Economy Scoping Study, whose initial focus is to strengthen sectors such as transportation, tourism, building, agriculture and fisheries.

"Therefore, the workshop adds to the on-going climate effort by introducing another support tool for officials in the relevant ministries to use to make informed decisions," he suggested.

The workshop, which was organised by the Caribbean Community Climate Change Centre and the United Kingdom-based consultant agency - Acclimatise - is part of phase one of a programme that seeks to build resilience to climate change by developing support tools to guide government's strategic planners and budgetary decision-makers.

Full Article

A new focus issue of the journal [Environmental Research Letters](#) explores the current state and near-term potential for improved quantification of agricultural greenhouse gases. Together the articles in this issue provide a vision for an improved system for quantifying greenhouse gas (GHG) emissions in agriculture, with special attention to the needs of smallholder agriculture in developing countries.

The world's population is growing rapidly: an estimated eight billion people by 2030, nine billion by 2050. Feeding the world sustainably requires balancing a growing population's food and nutritional needs while limiting the greenhouse gases released by agriculture—a growing contributor to climate change. We cannot make informed decisions to achieve this balance without accurate data on agricultural greenhouse gas emissions at the local, national and international level.

Because developing countries must increasingly identify and report emissions to access climate financing incentives or carbon markets, an inability to produce accurate and consistent data eliminates potential revenue for countries that need it most. At the national level, countries with policies to reduce emissions and expand sustainable agriculture practices will only benefit if they can monitor these emissions.

The first set of articles in the special issue by [N.J. Berry](#) and C.M. Ryan, [C. Lloyd](#) et al., [D. Lobell](#) et al., [L. Olander](#) et al., [D. Signor](#) et al., [A. M. Silva-Olaya](#) et al., [F. Tubiello](#) et al., and [T-G Vågen](#) et al. synthesize the current state of GHG quantification methods and propose innovations for policy makers in developing countries who seek accurate and cost-effective methods to report on GHG stocks and emissions. These innovations include:

- **Improving field measurements for soil carbon.** The amount of carbon in soil is a key indicator of agricultural emissions. [Vågen et al.](#) found that remote sensing data when calibrated to field data (measurements of soil mass) can be used to estimate soil carbon on a landscape scale measured as soil organic carbon or SOC. This provides a significant improvement over current approaches when quantifying soil carbon on larger scales, which could improve estimates of carbon storage and lead to mitigation that is better targeted geographically.
- **Investing in agricultural adaptation.** Making sure agricultural production is resilient and well adapted to climate change is a key aspect of maintaining or enhancing food production. [Lobell et al.](#) found that broad-based efforts to adapt agriculture to climate change have mitigation co-benefits that are inexpensive relative to activities focused solely on mitigation. The results challenge most existing climate financing portfolios, which support adaptation funds separately from mitigation.
- **Improved agricultural GHG data systems.** [Tubiello et al.](#) present trends in GHG emissions from the agricultural sector and net deforestation using a new emissions factor database developed at FAO. They show how agricultural emissions increased from 2000 to 2010, and that emissions from agriculture have been consistently larger than those from net deforestation.
- **Low-cost GHG quantification.** [Lloyd et al.](#) review current methodologies for measuring GHG emissions from agricultural wetlands. The authors provide guidance on the development of robust estimates of carbon sequestration and GHG emissions in agricultural wetlands through the use of low cost reliable and sustainable measurement, modeling and remote sensing applications.

Together these articles demonstrate how targeted investments in improved soil carbon measurements, adaptation to climate change, improved GHG data systems, and low-cost GHG quantification methods could result in dramatic and quick improvements in GHG reductions, while also meeting global food needs.

The focus issue is sponsored by the [CGIAR Research Program on Climate Change, Agriculture and Food Security \(CCAFS\)](#) and [Duke University's Nicholas Institute for Environmental Policy Solutions](#), with support from the [David and Lucile Packard Foundation](#) and the [Food and Agriculture Organization \(FAO\) of the United Nations](#).

Read More: [Click here for a link to all the articles](#)

Taking the measure of agricultural greenhouse emissions by Liz Kalaugher, 12 February, 2013
<http://environmentalresearchweb.org/cws/article/news/52375>

Full Article

In 2011, greenhouse emissions from fossil fuels reached a record 31.6 Gtonnes per year. And how many emissions came from agriculture, forestry and other land use? That is anybody's guess.

Although agricultural greenhouse gases could make up as much as 30% of the world's manmade greenhouse emissions each year, there's been no global assessment since 2005. Now a team from the Food and Agriculture Organization of the United Nations (FAO) and the University of Aberdeen, UK, has created a database for 1961–2010 that considers emissions country by country and from all agriculture's emitting sectors, including key emissions from land use and land-use change.

"It's the first time that an international organization has created a coherent global database for greenhouse gases for agriculture, forestry and other land-use sectors, one that can be updated at yearly intervals," Francesco Tubiello of FAO told environmentalresearchweb. "This adds to the existing database on fossil-fuel emissions managed by the International Energy Agency. The FAO database can be used to support countries with low capacity identify their key emission sources and serve as a benchmark for international greenhouse-gas reporting."

The International Energy Agency updates fossil-fuel emissions each year, analysing the data by country. In 2007 the IPCC's fourth assessment report provided measures of agricultural greenhouse-gas emissions for 2004–2005. The new work extends this analysis further back in time and forward to 2010.

To calculate emissions, Tubiello and colleagues used data from FAOSTAT such as livestock numbers, amount of fertilizer applied and harvested area extent, along with default emission factors from the international reporting guidelines of the Intergovernmental Panel on Climate Change (IPCC).

"This approach allows for the creation of a global database with country detail," said Tubiello. "The platform facilitates data access and streamlining, identification of emission sources and data benchmarking, in line with new UNFCCC reporting requirements."

In the future, climate funding could be linked to more precise estimates of greenhouse emissions and mitigation potential, the team reckons. That would mean many developing countries would need a better assessment of their agricultural, forestry and land-use emissions.

"Our first results help quantify trends in the relative contribution of agriculture and deforestation to total anthropogenic forcing, showing that the ratio of agriculture emissions to total fossil-fuel emissions is declining," said Tubiello. "Results also indicate that emissions from agriculture are now comparable to those related to deforestation, and highlight the important role that degraded organic soils play in global emissions."

Growth in fossil-fuel emissions has outpaced the increase in emissions from agriculture, forestry and other land uses every decade from 1961 to 2010, the team found. Agricultural emissions increased by 1.1% a year from 2000 to 2010, to reach 4.6 Gt of carbon dioxide per year in 2010, or 5.8 Gt including emissions from biomass burning and organic soils. Over the same period, the ratio of agriculture to fossil-fuel emissions decreased from 17.2% to 13.7%, while the ratio of net deforestation to fossil-fuel emissions dropped from 19.1% to 10.1%. Indeed in 2010, emissions from agriculture were about 1.2 Gt of carbon dioxide per year larger than those from net deforestation.

"We are now expanding the database to include other relevant land-use emission components," said Tubiello. "We are providing this data to the current IPCC AR5 WGIII AFOLU (agriculture, forestry and other land uses) chapter. We will also make projections to 2030 and 2050, based on FAO projections of the underlying activity data such as projected livestock numbers and fertilizer use. Finally, we will begin to look at possible mitigation actions."

When it comes to capacity development, the team will use the new database in a series of regional workshops aimed at improving the ability of countries to identify their emissions from agriculture and report them to the international community. "We ran the first such workshop for the Asia-Pacific in October 2012 in Vietnam," said Tubiello. "Two additional workshops are planned this year in Latin America and Africa."

Tubiello and colleagues reported their work in Environmental Research Letters (ERL) as part of the Focus on Improving Quantification of Agricultural Greenhouse Gases.

Climate change risk management workshop begins in Suriname by Jamaica Observer, 12 February 2013

http://www.jamaicaobserver.com/environment/Climate-change-risk-management-workshop-begins-in-Suriname_13620956#ixzz2KiuCk6hP

Full Article

BELMOPAN, Belize (CMC) — The Belize-based Caribbean Community Climate Change Centre (CCCCC) yesterday began the first of a series of workshops in Suriname as it seeks to develop a regional approach to climate change risk management.

The CCCCC said that representatives from the United Kingdom-based consulting group, Acclimatise, will assist in conducting the high-level workshops in Suriname, Barbados, Jamaica, and Belize.

The CCCCC team includes Keith Nichols, programme development specialist, and Joe McGann, programme manager, and they will be joined by Olivia Palin and John Firth of the consulting group Acclimatise.

The initiative is being funded by the United Kingdom's Department for International Development (DFID), through the Climate Development Network.

The team is conducting the second set of focal-point country consultations to help inform the development of a regional approach to climate change risk management.

The consultation process, which ends on February 20, involves three countries with comprehensive development plans — Jamaica's Vision 2030, Barbados' Green Economy Strategy and Suriname's Green Vision.

Belize, which is also committed to climate resilience, has been added for the second round of discussions.

"The consultation process is expected to result in a regional Risk Management Framework and the creation of a risk ethic in decision making through the creation of a Web-based risk management tool, which is slated to be launched in April 2013.

"This will boost climate resilience in the region, amidst increasing threats from climate change. Those threats include rising sea levels and the associated predicted loss of coastal livelihoods; warmer temperatures and the likelihood of increased incidents of diseases such as dengue and increased frequency and/or intensity of hurricanes and droughts," the CCCCC said.

Agricultural Development

Minister Clarke announces \$45 Million drought Mitigation Programme by Judith Hunter. Jamaica Information Service, 14 February 2013
<http://www.jis.gov.jm/news/leads/32982>

Full Article

Minister of Agriculture and Fisheries, Hon. Roger Clarke, has announced a \$45 million crop production programme as part of the Government's drought mitigation initiative for the sector.

The programme, he said, will provide for the establishment of 645 hectares of select crops in 13 parishes to counter any shortfall in cash crops resulting from the severe dry conditions affecting the island.

Minister Clarke, who was addressing a press briefing at his Hope Gardens office on Tuesday, February 12, said that the programme will have three components: production incentives for farmers in irrigated areas to encourage them to plant additional acreages; production incentives for farmers in non-irrigated areas not presently affected by the dry conditions; and the trucking of water to the dry farming areas in St. Elizabeth.

“Through this initiative, the Rural Agricultural Development Authority (RADA) will disburse, in the coming weeks, some \$15 million in planting materials to approximately 2,000 farmers covering the full requirement for planting material,” Minister Clarke said.

“Also, a critical focus of this intervention will be the urgent disbursement of \$5 million for the trucking of water to the most severely impacted communities to sustain crops already in the ground. Emphasis will be placed on assisting dry farming areas in Southern St. Elizabeth; the trucking of water is scheduled to begin in the coming week,” he stated.

The Ministry will also offset 50 per cent of fertilizer cost with an injection of \$12.5 million for the purchase and distribution of the commodity, while another \$12.5million will be made available for assistance in land preparation activities.

Selection of farmers to benefit under the initiative will be determined by their track record in producing the selected crops; readiness to immediately initiate production; and ability to engage in a partnership to provide the additional resources required to sustain the crops to harvesting.

All supplies will be made available through RADA parish offices for registered farmers.

St Ann small farmers want stake in agro parks. Jamaica Gleaner, 7 February 2013

<http://jamaica-gleaner.com/gleaner/20130207/business/business5.html>

Full Article

Small farmers in St Ann are urging the Government to make special provisions in order to enable them to contribute to the development of the much touted agro parks.

Hugh Johnson, president of the St Ann Association of Branch Societies and chairman of the South West St Ann Farmers Association, has taken issue with the approach being presented by the administration.

"My issue is that bauxite is on its way out and the Government is pushing agro parks for farmers, but the small farmers that we represent are not in the position to partner with the government," Johnson told The Gleaner after earlier presenting his case at a public forum in St Ann.

"So what I'm asking the government is to say, how they are going to partner with us so that we can move the small farmers from their level to another level of production," Johnson added.

He went on: "What the government must remember, on a whole, is that small farmers are a vital link in food production, but they are not going to be in the position to invest in the farm in the way Government would want them to do."

An agro park is an area equipped with the requisite infrastructure and facilities to facilitate integrated agricultural production. Under the agro-park programme, 8,000 acres of underutilised government lands will be leased to private individuals for agricultural purposes.

Private-sector input

Agriculture minister Roger Clarke said the Government has already identified private-sector input to the tune of \$1.5 billion.

He said the agro parks could reduce the country's food import bill by US\$47 million by 2015.

Johnson is adamant that small farmers in St Ann are included in the plan, and is already putting a proposal together.

"What we have requested of them is to ask, through the Land Agency, for us to get about 200 acres which would be put back into livestock production and build this agri-business from there. It is going to mean that we use some of the mined-out land for small crop production and dairy production," Johnson said.

Already, he said, a manufacturer in St Ann has agreed to accept fresh milk from the small farmers if they can develop that industry. Another area to be targeted is poultry production.

"What I'm asking the MPs to do is, instead of giving out chicken to people, let us have a coordinated approach so that we can start a satellite industry that will eventually grow to employ people in St Ann," Johnson suggested.

FAO Food Price Index remains unchanged in January by FAO, 07 February 2013

<http://www.fao.org/news/story/en/item/169407/icode/>

Full Article

World cereal production falls in 2012 but prospects are favourable for 2013

February 2013, Rome - The FAO Food Price Index held steady at 210 points in January 2013 after three straight months of decline. Increases in oil and fats prices offset lower cereals and sugar quotations while dairy and meat values remained substantially unchanged.

The pause in the Index's decline tallies with a significant upward revision in FAO's latest forecast for 2012 world cereal production. This is now estimated at 2 302 million tonnes - 20 million tonnes up on December's forecast.

FAO's monthly Cereals Supply and Demand Brief noted that the revision mostly reflects adjustments to maize production estimates in China, North America and the European CIS countries. But even at the new level, global cereal output would still be 2 percent down on the 2011 record crop.

Early prospects for 2013 cereal production point to increased world wheat output. Contributing largely to this prospect is an estimated 4 to 5 percent increase in the area under wheat in the European Union, where weather conditions have also been generally favourable so far.

But in the United States, the outlook is less favourable. Despite an estimated 1 percent increase in winter wheat plantings and prospects for spring wheat areas to expand, severe drought conditions continue to plague the southern Plains, where the condition of crops is reported to be very poor.

"Given the tight supply situation, weather remains an important determinant of prices. For several cereals, production needs to increase significantly this year in order to avoid unexpected price surges," said FAO Senior Grains Economist Abdolreza Abbassian.

World cereal stocks decline

World cereal stocks at the close of the crop seasons ending in 2013 are put at around 495 million tonnes, giving a global cereal stock-to-use ratio of 20.6 percent, down from 22 percent in 2011/12 but above the low of 18.7 percent in 2007/2008.

World trade in cereals in 2012/13 is forecast to fall to 297.5 million tonnes, down 6 percent from the previous season but nearly 2 million tonnes higher than the December forecast. Among the emerging features of the world grain market in 2013 is the resumption of large wheat exports from India of 6.5 million tonnes and record maize shipments from Brazil of 22 million tonnes easing the global grain supply/demand situation.

International prices

Regarding current international prices, the FAO Cereal Price Index dropped 1.1 percent, or nearly three points, to 247 points in January. The Cereal Index has been falling since October, mostly reflecting improved crop conditions.

The FAO Oils/Fats Price Index averaged 205 in January, up 4.4 percent, or 9 points, from December, reversing declines in the last four months. The rebound was mainly driven by palm oil on account of fresh import demand.

The FAO Dairy Price Index averaged 198 in January, slightly higher than in December.

The FAO Meat Price Index averaged 176 in January, down marginally from December. Quotations of all meat categories were generally stable, although a slight weakening in poultry and pig meat prices was evident.

The FAO Sugar Price Index averaged 268 in January, down 2.2 percent, or 6 points, from December. Prices declined for the third consecutive month on expectations of a large global production surplus and hefty export availabilities in 2012/13, notably in Brazil and Thailand.

The FAO Food Price Index is a measure of the monthly change in the international prices of a basket of food commodities.

Upcoming Events

February 2013

AGROFEST 2013

Date: 22 to 24 February, 2013

Location: Queen's Park, Bridgetown, Barbados

Contact: Barbados Agricultural Society <http://www.basonevoice.org/>

June 2013

49th Annual Meeting Caribbean Food Crops Society (CFCS)

Date: 30 June to 6 July 2013

Location: Port of Spain, Trinidad and Tobago

Description: The 49th Annual Meeting will be celebrated 30 June to 6 July in the Hyatt Regency Hotel in Trinidad. Joint meeting of the CFCS, Caribbean AgroEconomic Society (CAES) and the International Society for Horticultural Science (ISHS). Theme: Agribusiness Essential for Food Security: Empowering Youth and Enhancing Quality Products.

Contact: CFCS website <http://cfcs.eea.uprm.edu/>