Cassava poised to make a substantial economic contribution – Minister Ramsammy, by the Guyana Information Agency, 9 July, 2013

Guyanese produced farine is gaining in popularity with its own niche market, outside of its traditional users, those in the hinterland community; and to increase its usage, Government is set to build what has been described as a full phased factory operation for the processing of the item made from cassava, with the first facility to be installed in Region Nine later this year, Minister of Agriculture Dr. Leslie Ramsammy told the media.

For more information see page 10

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.

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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
Cereals and Grains

Maize trade disruption could have global ramifications by Science Daily, 17 July, 2013
http://www.sciencedaily.com/releases/2013/07/130717114342.htm

Full Article

New research on the global maize (corn) trade suggests that any disruptions to U.S. exports could pose food security risks for many U.S. trade partners due to the lack of trade among other producing and importing nations. The study, while not primarily focused on plant disease, population growth, climate change or the diversion of corn to non-food uses such as ethanol, suggests that significant stresses in these areas could jeopardize food security. This is particularly true of nations like Mexico, Japan and the Republic of Korea that have yet to diversify their sources.

Maize is at the center of global food security as increasing demands for meat, fuel uses, and cereal crop demands increase the grain's pivotal importance in diets worldwide. It is used as a basic raw material in producing starch, oil, protein, alcohol, food sweeteners and as a dietary staple. Disruptions in any one major exporter's supplies could lead to price shocks. The centrality of maize means that it would become a critical food security risk if major exporters experience disruptions due to non-food diversions, plant diseases and climate impacts, according to the article.

The researchers studied trade patterns from 2000-2009 and determined that the U.S. is by far the largest exporter, exporting four times as much maize as Argentina, the next largest exporter. Drs. Felicia Wu of Michigan State University and Hasan Guclu of the University of Pittsburgh use network models -- essentially, food trade maps -- to track the movement of maize in their article "Global Maize Trade and Food Security: Implications from a Social Network Model." The research was supported by the National Institutes of Health and the article was recently published electronically in the journal Risk Analysis, published by the Society for Risk Analysis.

The researchers based their work on United Nations Commodity Trade data and developed a social network model of maize exports and imports to study how "clustering" in trade patterns may affect food security. The clustering shows that nations generally do not trade broadly worldwide. Nations that import maize primarily from only one other nation may be vulnerable to any changes in their exporters' ability to produce and ship maize. "These statistics show that the vast majority of nations are exporting to or importing from only one or a small number of nations," they conclude. They also note that Japan is the largest importer by far, while other nations such as Taiwan and Egypt have more broadly diversified their sources of maize, thereby reducing their vulnerability to export disruptions. The researchers are careful to point out that their work is descriptive and cannot predict what risks will actually be or if they might lead to disruptions. The article suggests that the largest maize producers may be wise to consider potential solutions to combat impacts of climate change on maize production for the purpose of maintaining supplies. Finally, they add that if the maize supply were to change from a global perspective for whatever reason, other cereal grains or legumes could fill gaps, softening the impacts of disrupted maize production and trade.

Risk Analysis: An International Journal is published by the nonprofit Society for Risk Analysis (SRA).
Cassava

Cassava poised to make a substantial economic contribution – Minister Ramsammy, by the Guyana Information Agency, 9 July, 2013

Full Article

Guyanese produced farine is gaining in popularity with its own niche market, outside of its traditional users, those in the hinterland community; and to increase its usage. Government is set to a build what has been described as a full phased factory operation for the processing of the item made from cassava, with the first facility to be installed in Region Nine later this year, Minister of Agriculture Dr. Leslie Ramsammy told the media.

Minister Ramsammy noted that many of the hinterland residents depend on the cassava for not only food security, but for a livelihood. “I am happy to report that the Guyana farine which is almost exclusively produced in the hinterland is becoming popular outside of our borders. Whilst Brazil, for example produces its own farine, Guyana’s farine is becoming a niche market in Brazil”. He added that the locally produced product is now gaining attention in the Caribbean market. This provides an opportunity for the semi-industrialisation of the cassava industry, Minister Ramsammy said, and this can move the crop’s production from a subsistence level to an actual industry.

Farine production is traditionally done by indigenous women, who use their hands to harvest cassava, clean, peel and squeeze the tuber to produce the product. The Agriculture Ministry has assisted several communities by providing grinders to ease their task, said the minister, but this new move takes that assistance a step further.

The crop gives farmers an average of two tonnes per acre according to the minister, but it is normally grown nine to ten months annually. There are varieties of cassava that can result in yields of up to 30 tonnes annually, but if farmers can double their production they can also double their income without additional investment or work.

The Agriculture Ministry is partnering with IICA, the National Agriculture Research and Extension Institute, the National Drainage Authority and Guysuco’s Apprentice School situated in Port Mourant to ensure the pre-fabricated components of the processors are properly constructed with local materials.

Agriculture Ministry, IICA to assist Tapakuma to resuscitate cassava milling operations by Guyana Information Agency, 15 July, 2013

Full Article

Minister of Agriculture Dr. Leslie Ramsammy in pushing ahead with the ministry’s plan of expanding the local cassava industry, today meet with Toshao of Tapakuma, Region Two, Doreen Jacobis to discuss a partnership among the ministry, the Inter-American Institute for Cooperation on Agriculture (IICA) and the council and residents of the village, aimed at resuscitating the operations of the village’s cassava processing factory.
The factory that was established in 2007 has not been in operation for the past two years, due to its non-profitability.

Accompanying Minister Ramsammy were Permanent Secretary George Jarvis, Director, National Agriculture Research and Extension Institute (NAREI) Dr. Oudho Homenauth, General Manager of the new Guyana Marketing Corporation (GMC) Nizam Hassan and IICA Representative Wilmot Garnett.

The visit is in keeping with the Ministry’s recently announced agenda, with support from IICA, of moving cassava production from a subsistence level to an actual industry.

Minister Ramsammy explained that the goal is to support the production to meet increased demand outside of its traditional users, those in the hinterland community. The industry in Guyana has traditionally relied on subsistence livelihood.

“Increasingly cassava products – mainly farine, cassreep, cassava bread are becoming important parts of our market and supermarkets, but the greatest markets for those products exist on the coast,” Dr. Ramsammy said.

The market for those products in the hinterland community remains small, and as long as the population there is limited, that market will be small and therefore, the production of cassava cannot be sustained by the hinterland market. It has to be increased and sustained by improving the coastal market, he said.

According to the Minister, meeting an increasing demand for the product and for better quality, lies in factory operations for the processing of cassava-based items. He said that the intention is to move towards mechanisation with the resuscitation of the Tapakuma factory and with the installation in Wowetta, Region Nine later this year, of a processing factory.

“We are going to work these villages (Tapakuma and Wowetta). We are going to be initial partners in the transformation of the industry. We will do this across the country,” he said.

Minister Ramsammy also stated that cassava transformation is an example of how the ministry wants to proceed with agriculture across the board, particularly those industries outside of rice and sugar; transferring and developing them to expand beyond the traditional level.

The support to Tapakuma will mostly take the form of technical guidance for the sustainable operations of the factory.

Minister Ramsammy explained that if needed, the ministry will provide financial support, but this will be an initial investment that must be repaid by the community for the ministry to rotate it into other agricultural ventures in communities similar to Tapakuma.

The technical support is to begin in two weeks’ time, with various teams meeting with the village to map-out the return of the factory’s operation. A team comprising representatives from NAREI and the Food and Agriculture Organisation (FAO) with other partners will assist the village in terms of enhancing their farming techniques and teach them about new varieties of cassava that will bring better yields and allow for increased production.

Another team from the new GMC and IICA will work with the village with regards to the marketing of cassava products. The ministry and IICA will help the village with the technology for the
processing and GMC and IICA will work with them on devising a business plan (2013-2014) that will guide the project.

Minister Ramsammy advised that a business plan is essential to ensuring the venture’s success this time around.

It was IICA that came to the Ministry with the idea of revisiting the factory. Garnett explained that a team from IICA including himself visited the community a few months ago to conduct training in farmers’ organisation, and to learn about the factory.

He said that given history of the community in production, reactivating the programme, holds a lot of potential.

**Climate Change**

**Disaster risk management project to be completed in 2013** by Dominica News Online, 14 July, 2013

**Full Article**

Climate Change Adaptation officer at the Food and Agriculture Organization (FAO) headquarters in Rome, Anna Ricoy, wants an action plan for an ongoing three year project to be entrenched in the existing structures in Dominica.

Phase one of the FAO approved project began in 2010 and continued until 2011, had several components which included the development of an agricultural plan for disaster risk mitigation in the agricultural sector. Phase two is ongoing and is expected to be completed by December of 2013.

“So the project that we are implementing in Dominica follows the pattern of other disaster risk management projects that we have previously implemented in the region notably in St. Lucia, Belize, Grenada, and to a certain extent in Haiti, Jamaica and Cuba,” Ricoy explained.

She was speaking at a press conference at the Division of Agriculture on Friday.

“The approach in this type of project is to focus on two levels, one side on the institution levels on the strengthening of capacity of institutions, and also at community levels or district levels, strengthening the technical capacity on the ground,” she said.

Ricoy also mentioned that the approach that they are adopting is to shift the focus from reactive emergency response to disasters to proactive disaster risk reduction. That entails emphasizing the prevention, mitigation and preparedness to disasters.

Winston Magloire, Technical Officer project and services division of the Ministry of Agriculture said the idea of the project is to initiate awareness at all levels.

“The intent really is to pilot some of these activities to trigger the awareness and the interest so that both at the individual level, meaning the individual farmer level or fisher level or at the community
level, that there is greater awareness as to what methods can be used, that individuals can engage in to reduce the impact of disasters on agriculture generally.”

Magloire said the resources provide under the project are not adequate to meet all community activities which have been identified, “But we believe that through this work that we are doing now it allows us to create the awareness and also to start the process so that if additional funds are identified then we can continue the implementation practices in different communities and different agricultural regions,” he stated.

Phase one of the project cost US $325,000 and the cost of phase two is US $157,000. The work was done in collaboration with the National Emergency Planning Organization, Community Development Division, Forestry Division, Fisheries and Livestock Divisions, among others.

Global Climate Change Summit in San Ignacio, Belize by CCCCC, 18 July, 2013

Full Article

The Africa Caribbean Pacific (ACP) Secretariat, in collaboration with the Caribbean Community Climate Change Centre, hosted a global climate change summit in San Ignacio, Belize this week.

Today marks the end of the four day summit that included the inaugural Intra-African Caribbean and Pacific (ACP) Global Climate Change Alliance (GCCA) Programme Regional Technical Meeting (RTM, July 16-17) and the Second Programme Steering Committee Meeting (July 18 – 19).

The gathering sought to raise interest in this global programme; establish thematic working groups in order to enhance networking and communication and facilitate exchange of information and expertise within the GCCA Intra-ACP Programme.

The outcomes of the RTM drove discussions in the Second Programme Steering Committee meeting that examined programme implementation in the ACP regions among other issues.

“The adverse impacts of climate change are a major concern for the African, Caribbean and Pacific group of States. I believe the services provided by the GCCA Intra-ACP Programme will inspire those at the forefront of the fight against climate change for the benefit of the most vulnerable people across the regions and around the world,” said ACP Assistant Secretary-General, Dr. Achille Bassilekin III.

Technical Assistant to the ACP Secretariat, Dr. Pendro Maro said that ACP countries are facing serious impacts of climate change on lives and livelihoods.

“The two-day meeting will bring together experts and practitioners from across the ACP region and beyond, creating synergies and constructive interactions towards finding viable solutions to addressing climate change impacts in the regions,” she added.

The GCCA Intra-ACP Programme is a component of the Global Climate Change Alliance (GCCA), which specifically targets the ACP group of States, helping them to better tackle climate change as a challenge to their development.
Trade-offs between food security and climate change mitigation explored by Science Daily, 16 July, 2013
http://www.sciencedaily.com/releases/2013/07/130716120017.htm

Full Article

Improving crop yields using sustainable methods could cut greenhouse gas emissions by as much as 12% per calorie produced according to a new study published in the journal Environmental Research Letters. At the same time, these changes could provide more food to people in need.

Agriculture and land use change contributed about 1/3 of total human greenhouse gas emissions in the past decade, through crop cultivation, animal production, and deforestation. By producing more food on less land, it may be possible to reduce these emissions, but this so-called intensification often involves increasing fertilizer use, which can lead to large emissions of nitrogen-containing gases that also contribute to global warming.

"The most efficient way to ensure sustainable intensification on the crop side is to rely on practices and technologies that are not more fertilizer-demanding, such as new varieties, improved rotations, integrated crop-livestock practices, and precision farming," says IIASA researcher Hugo Valin, who led the study.

The study's findings particularly apply to developing countries. In many cases farming in these countries is not as efficient as it could be, and so investing in better farming practices could lead to big benefits both in terms of food security and greenhouse gas emissions.

The study found that increasing livestock yields was more effective at reducing greenhouse gas emissions than increasing yields from crops that people eat. Overall, closing yield gaps by 50% for crops and 25% for livestock would lead to a 12% savings in greenhouse gas emission per calorie produced.

However, says Valin, "Increasing livestock yield is not as beneficial to food security as can be increase crop yield, just because meat and dairy are a small share of diets, especially in developing countries."

To conduct the study, Valin and colleagues explored scenarios using IIASA’s GLOBIOM model. Scenarios are modeling tools for understanding the links between future policies, actions, costs, and outcomes -- in this case, scenarios allow researchers to look at future food production both from crops and livestock, greenhouse gas emissions, and the trade-offs and co-benefits of different pathways of crop yield improvement.

The new study also emphasizes the effects of increased food production on demand. All things being equal, more food availability leads to lower prices and therefore greater demand. That extra demand means that farmers will want to continue expanding, to produce even more food.
Dr. Ulric Trotz says the Caribbean lags in climate finance by CCCC, 19 July, 2013

**Full Article**

The Deputy Director and Science Advisor of the Caribbean Community Climate Change Centre (CCCCC), Dr. Ulric Trotz has defended regional countries from criticisms that they are more interested in seeking financial assistance from the developed world when dealing with the impact of climate change.

We can’t get away from the question of finance because we need to have finance,” he said, noting that “one of our problems is that we are poor, we know what to do. Trotz told the Caribbean Media Corporation (CMC) that the region needed the finances to deal with issues like strengthening coastal defences, making airport and seaports less vulnerable to climate risks.

But we don’t have the resources. Take a country like Holland, they are below sea level like Guyana, but they have invested in a one in a 1000 year flood event to protect Amsterdam and the coast of Holland from that type of event. We in the Caribbean don’t even have the resources to protect ourselves from a one in a 10 year event. So finances are important and this is one of the arguments that we have at the international level because we are saying “look, we are in a position now, you are facing a risk that is as a result of your lifestyle, your pattern of development, we are not responsible for this but being poor and living where we are, we are very vulnerable to the impacts basically that results from that type of development which you have been enjoying for years”.

Trotz said that the Caribbean has always felt “there is a moral argument for the developed countries to provide us with financing to help us to deal with the impacts of climate change, a phenomena that is on us as a result of your developmental patterns.

And so the question of finance is central to the entire argument and basically it is a key issue for us as we move forward to address climate change in the region.

Trotz also acknowledged that the developed world has maintained its position regarding the climate change arguments despite the moral and other arguments from the region, telling CMC, the “other challenge that we have and this is the one we are trying to make, is to make a business case for responding to climate change.

“A business case for adaptation and for mitigation,” he said noting “we still have to depend on aid etc, but there are a lot of opportunities, for instance in the energy sector right now for the new business opportunities, basically it would result in a more sustainable energy sector and it is good business.”

He said this is the road being taken by the United States with President Obama “trying to preach to the American private sector that there are new business opportunities unfolding by addressing some of the risk we face with climate change.

So we hope to be able to sell that as an opportunity now for our private sector to look at new investments and see how we can marry that opportunity with getting us on teh road to what we should be doing to increase resilience in the Caribbean.

Trotz said while he is aware that the new venture would be a challenge “but I don;t think we would have a choice”.


The CCCCC senior official said an examination of the disasters in the Caribbean would show the region suffers from weather related events that would get worse in the future.

So we should be dealing with our present day exposure to climate risk, and there is a lot of action that we should be taking. Yes we look at the destructive side of it but now under the discussions we are having internationally about dealing with climate change there are tremendous opportunities for the region to basically address several of our development issues.

“Like other countries in the developing world, Jamaica needs to increase capacity to produce adequate and wholesome food to ensure the health and well-being of our people,” he said.

Food Security

Agricultural sector must produce more - Minister Clarke. Jamaica Information Service, 14 July 2013

Full Article

MONTEGO BAY - Minister of Agriculture and Fisheries, Hon. Roger Clarke has said that with Jamaica's vulnerability to natural disasters and dependence on food imports, the agricultural sector must increase its capacity to produce more wholesome foods, while expanding local production.

"When there is insufficient local produce available, our dependence on imports increases, fueling the almost vicious cycle of utilizing scarce foreign exchange to purchase food from overseas. It is an unsustainable position," the Minister said.

He was addressing the closing day of the forum on 'Supporting Economic Empowerment and Development in the Caribbean and Pacific (SEED CAP) at the Half Moon Conference Centre in Montego Bay, on Friday, July 12.

The Minister informed that in order to mitigate the challenges of food security, the Government recently approved the Food and Nutrition Security Policy, which seeks to insure that a sufficient quantity of nutritious foods of appropriate quality is available to everyone, through increased domestic production and a sustainable level of imports.

Like other countries in the developing world, Jamaica needs to increase capacity to produce adequate and wholesome food to ensure the health and well-being of our people," Minister Clarke stated.

Meanwhile, he asserted that women have a crucial role to play in this effort. Noting that over 43,000 female farmers are registered with the Rural Agricultural Development Authority (RADA), Mr. Clarke said that despite challenges, they have proven to be very capable, as evidenced by the Food and Agriculture Organization (FAO) pilot project in western Jamaica.
"It is up to the policy and decision makers present at this conference to ensure that our institutions and businesses are prepared to address the unique needs of women and enable agricultural entrepreneurs to thrive," Minister Clarke pointed out.

**FAO Director General on island to advance Zero Hunger Pilot Project.** Press release by the Government of Antigua and Barbuda, 15 July, 2013

**Full Article**

Antigua and Barbuda, on Friday, welcomed Director General of the Food and Agriculture Organization (FAO) Dr. Jose Graziano da Silva. In addition to observing the Zero Hunger pilot project, Dr. da Silva will call on Hon.

Prime Minister Baldwin Spencer, Hon. Minister of Agriculture Hilson Baptiste, Hon. Minister of Health Wilmoth Daniel, Hon. Minister of Finance Harold Lovell, Parliamentary Secretary in the Ministry of Social Transformation Senator Malaka Parker, project coordinators and representatives of civil society. Priority areas that have been identified by the government under the Zero Hunger initiative include expanding the National School Meals Programme to all 33 state-run primary and pre-schools by the of 2014 and to identify and develop backyard gardens in six vulnerable communities.

The action plan also includes economic expansion and diversification of the agricultural sector; improvements in the nutrition and health status of the population; expansion of pro-poor employment and income generating opportunities; and to increase good governance and management of hunger and poverty.

Dr. da Silva is fresh from the recently-concluded Caribbean Community (Caricom) meeting in Trinidad and Tobago, where he told regional heads of government about the FAO’s new objectives towards dealing with hunger.

He said the objectives will focus on eradicating hunger, food insecurity and malnutrition in the region. The Zero Hunger Pilot Project, slated for 2013 to 2014, is a collaborative effort of the Government of Antigua and Barbuda, FAO, the Inter-American Institute for Cooperation on Agriculture (IICA), Pan American Health Organization (PAHO), and the Economic Commission for Latin America and the Caribbean (ECLAC).

The project is being conducted within the framework of the Hunger-free Latin America and Caribbean Initiative. This project aligns with the recently approved Food and Nutrition Security policy for Antigua and Barbuda and with the National Economic and Social Transformation Plan (NEST), proposing definitive action towards the eradication of hunger and extreme poverty in the twin-island state.

The FAO officials complimented the county’s progress so far and said the goal is attainable as long as people believe in the initiative, its aim and objectives.
Veterinary Diagnostic Lab expected to be completed in four months – important to Guyana consolidating food security. Georgetown, GINA, July 10, 2013

Full Article

The Guyana Veterinary Diagnostic Laboratory that will have the capability to test, detect and diagnose diseases that may affect animals and the public’s health is 45% complete, and is expected to be commissioned in approximately four months.

This US$2.5M investment, which is located at Mon Repos, East Coast Demerara will be equipped to test for brucellosis which is caused by bacteria and affects mainly animals, including goats, sheep, pigs, cattle, and dogs, bovine (cattle) diseases, leptospirosis and tuberculosis among others. It is also expected to strengthen the overall animal health system and advance the livestock sector, while increasing production for local consumption and export.

The laboratory is sitting on what was previously the Animal Health Lab which was barely ever used and was not functioning as a full-fledged lab. The old facility was demolished and redesigned. Construction which is expected to last for eight months is now close to the four-month mark.

Minister of Agriculture Dr Leslie Ramsammy, who visited the worksite today, expressed satisfaction with the progress thus far, as he explained that due to the rainy season some of the work was delayed.

Minister Ramsammy said that he is optimistic that the work will be completed on time, as he has been looking over the project and will continue to do so. “We are not only telling the people what is happening, but we have to deliver,” he said.

This lab is critical, he said, because Guyana wants to consolidate its food security, and therefore animal health is very important.

He also mentioned the animal welfare bill which is intended to address the wellbeing of animals, not only on how they are cared for, but reducing the amount of weight the animals carry and addressing their health.

“We can’t talk about looking at the health of animals and not have a credible animal health lab,” he said. Minister Ramsammy added that whilst Guyana will do some testing abroad, Government wants to ensure that basic laboratory testing for animals is available.

Animals in Guyana are part of the country’s food security, and Minister Ramsammy said “not only do we want to provide our people with the highest quality meat and the safest meal, but we want to make sure that we develop the cattle and the small ruminant industry to the extent that we have excess meat in Guyana that can be exported”.

He said that that objective cannot be fulfilled unless Government builds a reliable animal health lab.

Guyana has already achieved self sustainability in terms of local demand for meat, but “we want to consolidate that and become an exporter of meat”, he said.
Guyana Livestock Development Authority’s Chief Executive Officer, Dr. Dindyal Permaul who accompanied Minister Ramsammy to the worksite, said the lab will assist farmers to maintain the health of their animals.

The Agriculture Ministry sees the lab as very important in supporting farmers’ ventures and for being able to give effective diagnoses for things that would crop up from time to time in the farmers’ bid to control pest, parasites and organisms that would reduce the productivity of the country’s animals, Dr. Permaul said.

Food and Agriculture agency head shows support for Caribbean: FAO chief attends CARICOM conference ahead of tour of the region. FAO. Oficina Regional para América Latina y el Caribe. 8 July 2013 http://www.rlc.fao.org/es/paises/barbados/noticias/food-and-agriculture-agency-head-shows-support-for-caribbean/

Full Article

In its ongoing show of commitment to the Caribbean region, the most senior official of the Food and Agriculture Organization of the United Nations (FAO), attended the opening of the 34th CARICOM Heads of Government Meeting recently held in Trinidad and Tobago from 3-6 July.

Dr. Jose Graziano da Silva, FAO Director General, attended the Opening Ceremony of a packed conference held on the 40th anniversary of CARICOM's founding. He met with President of Guyana and Lead Head of Government for Agriculture, Mr. Donald Ramotar, Prime Ministers of the Bahamas, Grenada and St. Kitts, Mr. Perry Christie, Dr. Keith Mitchell and Dr. Denzil Douglas, respectively, as well as the Foreign Ministers of Dominica and Suriname.

Dr. Graziano, who has headed FAO since January 2012, took the opportunity to personally outline a series of changes and reforms which are making the Organization more efficient and responsive to Member Countries' needs. He also spoke about FAO's new strategic objectives and its focus, not just on the reduction, but the eradication of hunger, food insecurity and malnutrition. He reiterated that hunger levels are impacted by climate change, disaster resilience, governance, inclusion and access and offered the Organization's help in dealing with those challenges.

He mentioned FAO's leading role in facilitating the UN's Zero Hunger Challenge which acts as a catalyst for hunger eradication by setting five measurable milestones to be achieved within two years. The goals are:

· 100% access to adequate food all year round

· Zero stunted children less than 2 years old

· All food systems are sustainable

· 100% increase in smallholder productivity and income

· Zero loss or waste of food
A Zero Hunger pilot project is currently underway in Antigua and Barbuda and will serve as a roadmap for how the programme will be implemented across the region.

Dr. Graziano also met with Dr. Warren Smith, President of the Caribbean Development Bank (CDB). In their talks he noted the two organizations' lengthy partnership dating back to 1986 and recommitted FAO to a new phase of cooperation based on a redefined set of priorities, reflecting current trends and opportunities for the regional agriculture sector. He spoke of FAO's fruitful relationships with similar institutions including the World Bank and the African Development Bank.

They discussed several wide-ranging issues of relevance to the region including innovation and investment in agriculture research and production; agricultural diversification to fill the void left by the decline of the sugar and banana industries and the potential of crops such as cassava, pineapple, mango and coconut; the need to reduce the food import bill; employment and labour supply for agriculture with a special focus on youth and women; addressing challenges to the agricultural value chain; preparing for the impact of climate change on agriculture; and an ecosystem approach to intensifying crop production.

Dr. Graziano, who is accompanied by Dr. J.R. Deep Ford, FAO's Subregional Coordinator for the Caribbean, continues his mission to the region with upcoming visits to several other Caribbean countries.

Dr. Ford indicated that, "The visit of the Director General to the region is very timely given that one of the main issues at the Heads of Government meeting was related to stimulating the economies of CARICOM countries. A revitalized, more productive agricultural and food sector capable of substituting domestic food for imported food and producing non-traditional products for export markets is critical to achieving the economic growth rates that are needed for the region's development."

**Soil and Water Management**

*Why crop rotation works. New research could help explain the dramatic effect on soil health and yield of crop rotation.* John Innes Centre News, 18 July, 2013
[http://news.jic.ac.uk/2013/07/crop-rotation/](http://news.jic.ac.uk/2013/07/crop-rotation/)

**Full Article**

Crop rotation has been used since Roman times to improve plant nutrition and to control the spread of disease. A new study to be published in Nature’s ‘The ISME Journal’ reveals the profound effect it has on enriching soil with bacteria, fungi and protozoa.

“Changing the crop species massively changes the content of microbes in the soil, which in turn helps the plant to acquire nutrients, regulate growth and protect itself against pests and diseases, boosting yield,” said Professor Philip Poole from the John Innes Centre.
Soil was collected from a field near Norwich and planted with wheat, oats and peas. After growing wheat, it remained largely unchanged and the microbes in it were mostly bacteria. However, growing oat and pea in the same sample caused a huge shift towards protozoa and nematode worms. Soil grown with peas was highly enriched for fungi.

“The soil around the roots was similar before and after growing wheat, but peas and oats re-set of the diversity of microbes,” said Professor Poole.

All organisms on our planet can be divided between prokaryotes (which include bacteria) and eukaryotes (which include humans, plants and animals as well as fungi). After only four weeks of growth, the soil surrounding wheat contained about 3% eukaryotes. This went up to 12-15% for oat and pea. The change of balance is likely to be even more marked in the field where crops are grown for months rather than weeks.

Analysis has previously relied on amplifying DNA samples. This limits scientists to analysing one taxonomic group at a time such as bacteria. It also means that everything present in that group is analysed rather than what is playing an active role. Every gram of soil contains over 50,000 species of bacteria so the task is enormous.

There are relatively fewer actively expressed genes, or RNA. It is now possible to sequence RNA across kingdoms so a full snapshot can be taken of the active bacteria, fungi, protozoa and other microbes in the soil. The research was carried out in collaboration with the University of East Anglia and The Genome Analysis Centre on Norwich Research Park.

By sequencing RNA, we can look at the big picture of active microbes in the soil,” said PhD student Tom Turner from the John Innes Centre.

“This also allows us to work out what they are doing there, including how they might be helping the plants out.”

“Our work helps explain the experience of farmers in the field,” said Professor Poole.

“The best seed needs to be combined with the best agronomic practices to get the full potential benefits.”

“While continued planting of one species in monoculture pulls the soil in one direction, rotating to a different one benefits soil health.”

Seeds can be inoculated with bacteria before planting out, just like humans taking a dose of friendly bacteria. But this does not achieve the diversity or quantity of microbes found in this study.

The scientists also grew an oat variety unable to produce normal levels of avenacin, a compound that protects roots from fungal pathogens. They expected the soil to contain higher levels of fungi as a result, but instead found it contained a greater diversity of other eukaryotes such as protozoa.

The findings of the study could be used to develop plant varieties that encourage beneficial microbes in the soil. John Innes Centre scientists are already investigating the possibility of engineering cereal crops able to associate with the nitrogen-fixing bacteria normally associated with peas.

“Small changes in plant genotype can have complex and unexpected effects on soil microbes surrounding the roots,” said Professor Poole.
“Scientists, breeders and farmers can make the most of these effects not only with what they grow but how they grow it.”

The research was made possible with funding from the Earth and Life Systems Alliance at the University of East Anglia and from the core strategic grant to the John Innes Centre from the Biotechnology and Biological Sciences Research Council (BBSRC).

**Full reference**
Comparative metatranscriptomics reveals Kingdom level changes in the rhizosphere microbiome of plants by Thomas Turner et al. *The ISME Journal* advance online publication 18 July 2013; doi: 10.1038/ismej.2013.119

**Agricultural Development**

**PM encourages women to become more involved in agriculture** by the Jamaica Information Service, 14 July, 2013

**Full Article**

MONTEGO BAY - Prime Minister, the Most Hon. Portia Simpson Miller is urging more women to increase their participation and assertiveness in the economic development of their countries.

She issued the call in an address read by Minister of State in the Ministry of Industry, Investment and Commerce, Hon. Sharon Ffolkes Abrahams, at the Supporting Economic Empowerment and Development in the Caribbean and Pacific (SEED CAP) Forum at the Half Moon Conference Centre in Montego Bay on July 12.

Also urging more women to become involved in agriculture in particular, Mrs. Simpson Miller observed the link between gender, nutrition and food security, and poverty.

"It is imperative that we design and implement strategies to increase the involvement of women in agriculture; to diversify their roles and to give greater recognition to their contribution to the sector," the Prime Minister said.

Noting that women in the Caribbean and sister states of the Pacific islands, play important roles in household food security as income earners, nurturers and managers of natural resources, she said this is why women must play a pivotal role in the eradication of poverty, the elimination of food insecurity, and the promotion of proper nutrition.

"As Government and policy-makers it is critical that we provide the kind of legislative and policy framework and the kind of environment that facilitates the achievement of these goals," Mrs. Simpson Miller stated.
She observed that women are excelling in important agricultural roles as veterinarians, farm managers and educators.

Meanwhile, Mrs Simpson Miller pointed out that in tandem with the country's national development plan and vision to become the place of choice to live, work and raise families, one of the chief objectives is having a healthy and stable population.

"We aim to achieve this by advancing the development of an agricultural sector that promotes food security and safety in order to contribute to the well-being of our people," she informed.

In seeking to achieve these objectives, she said there is a clear role for the increased participation of women in agriculture. "Currently our farmer registration programme shows that only about 33 per cent of Jamaican farmers are women... I would like to encourage more women to give due consideration to becoming more involved in this very vital sector of the economy," she stated.

The Forum is being held over the three days in an effort to expand economic opportunities for women in the agriculture sector in the Caribbean and Pacific Islands. The United States Department of State and Jamaica in collaboration with the other U.S. agencies and the New Zealand Government are hosting the Forum, which brings together businesses, producers, experts and public and private sector representatives.

**Ground Broken for $69M RADA Office in Trelawny** by the Jamaica Information Service, 19 July, 2013

**Full Article**

Minister of Agriculture and Fisheries, Hon. Roger Clarke, on Thursday, July 18, signed a contract and broke ground for the construction of a new parish office for the Rural Agricultural Development Authority (RADA) in Hague, Trelawny.

The $69 million project entails the construction of a two-storey reinforced concrete building at the Hague Showground, which will house some 22 RADA staff and other government agencies. The contract period is nine months.

Addressing a ceremony held at the construction site, Minister Clarke stated that over 10,000 farmers in the region will benefit from the facility.

“This will have a significant impact on the region and is part of our Ministry’s plans to improve customer service at RADA,” he stated.

He noted that the project is in keeping with the commitment of his Ministry and RADA, to advance the development of a modern and efficient agricultural sector.
“We recognise that a modern agricultural sector speaks not just to the provision of new agricultural facilities, but also to the application of new and appropriate technologies, strategies, and know-how, which must be suitably translated into everyday farming and management practices,” he stated.

Minister Clarke said that with the agricultural sector now poised for growth, the Ministry needs to attract more qualified officers in technical areas, and there is the need to provide the kind of working environment that will enable such personnel to perform optimally.

He commended the RADA officers for their contribution to the farming sector over the years.

Meanwhile, Chief Executive Officer (CEO) of RADA, Lenworth Fulton, in bringing greetings at the ceremony, said he was elated at the implementation of the project.

He said the new facility will not only serve the farmers of Trelawny but others across the country.

Also present at the signing and ground breaking were Permanent Secretary in the Ministry of Agriculture and Fisheries, Donavan Stanberry; National Board Chairman of RADA, Dr. Denzil Williams; Custos of Trelawny, Hon. Paul Muschette; and Mayor of Falmouth, Garth Wilkinson.

**Department of Agriculture introduces pre-Culturama Fruit Festival sale** by ZIZonline, 19 July, 2013
http://www.zizonline.com/news/?AF735957-F8E8-D3D7-CB92C770A01B7330

**Full Article**

NIA-CHARLESTOWN, NEVIS (JULY 19TH 2013) -- Marketing Officer attached to the Department of Agriculture’s Marketing Division, Steve Reid Jr., has extended an invitation to the general public to attend his department’s pre-Culturama Fruit Festival sale.

Slated for today, Friday July 19, 2013, the sale will run until 3 p.m.

According to Reid, the pre-fruit sale will feature a variety of fruits “such as honeydew melons, watermelons and cantaloupes” adding that there would also be “a sale on some vegetables such as sweet potato, sweet corn, seasoned peppers and a few other vegetables.”

With much enthusiasm, he added that prices for fruits such as honeydew melons and cantaloupes begin as low as $5 each. Also, sweet corn would be sold at $3 per pound, which, according to Reid, equates to an average of three to four corns.

“The watermelons range from small to large and we are selling them for just $1 per pound,” the marketing officer stated.

He encouraged persons to attend the activity which is aimed at “stimulating the taste buds of the general public.”

Today’s event will serve as a pre-cursor to the annual Culturama Fruit Festival which would be held on the Villa Grounds in Charlestown on August 02, 2013.
Want a job? Agriculture industry teeming with them by the USA Today, 14 July, 2013
http://www.usatoday.com/story/money/business/2013/07/14/farm-industry-struggles-to-attract-workers/2512685/

Full Article

Holding career fairs and recruiting on college campuses are just two of the ways the agriculture industry is working to update its stodgy image and address an alarming shortage of workers.

WASHINGTON — U.S. agriculture and food companies are struggling to attract enough workers, a problem the industry concedes is getting worse as innovation and growing demand for their products leads to the creation of thousands of new jobs.

Agribusinesses have been working for years to shed their stodgy and outdated image to help draw employees and stop the loss of highly qualified workers to other fields such as engineering and financial services.

In recent years, agribusinesses, colleges and others within the agricultural industry have promoted opportunities beyond the farmer in the field that were overlooked in the past — resulting in a dearth of employees today.

"We certainly have a shortfall, no doubt about it," said Sonny Ramaswamy, director of the Agriculture Department's National Institute of Food and Agriculture. Ramaswamy added that while there has been an increase in the number of students enrolled in agriculture at U.S. universities, "that's not been enough to keep up with the demand that we've got in the workforce."

The National Institute of Food and Agriculture funded a study released by Purdue University in 2010 that showed just how big of a problem the employment situation might be for the industry.

The research found that, between 2010 and 2015, an estimated 54,400 jobs would be created annually in agricultural, food and renewable natural resources. To help fill the void, approximately 29,300 students are expected to earn degrees in traditional agriculture and life science-related fields each year. An additional 24,200 students are seen coming from disciplines such as biological sciences or businesses where graduates could choose to go into agriculture or another field.

Agriculture is hoping to lure prospective workers by touting a more modern image where employees are immersed in everything from robotics and GPS systems to plant and animal genetics. Companies have focused more attention on promoting the job opportunities for scientists, accountants, attorneys and others. To help attract employees, businesses have boosted salaries, increased internships and worked more closely with universities to better prepare students for what they can expect when they graduate.

At Poet, the country's largest ethanol producer, the Sioux Falls, S.D., company regularly goes to local universities and technical schools to meet students. It also holds career fairs near its ethanol plants to showcase the facilities and highlight available opportunities.

Colleen Stratton, senior vice president of human resources for Poet, said the firm has recently reached out to local schools to help it find about 50 new employees for its operations in Emmetsburg, Iowa. Poet is scheduled to open a cellulosic facility with Dutch-based DSM early next year adjacent to its existing corn-fed ethanol plant.
"By going out to the colleges and talking to them about what opportunities are available within the (agricultural) industry this has helped to open their eyes to see that we're probably more of a growing industry then we are a dying industry," said Stratton. "We just wait until we get that 'A' player that we really want to come and work for us and we normally find it."

Still, a January survey of members of the Coalition for a Sustainable Agricultural Workforce — whose companies include General Mills, DuPont Pioneer, Monsanto and Cargill — found the pipeline of graduates isn't as full as it should be and there will be challenges finding people with the right education and experience. Some new hires will need to be retrained, they said.

Paul Schickler, president of DuPont Pioneer in Johnston, Iowa, said in the past six years, the seed company has hired about 6,000 people worldwide, swelling its ranks to 13,000 employees. DuPont Pioneer expects to add 3,000 to 4,000 more workers in the next five years.

"The demand is there for the opportunity and talent," said Schickler, vice chairman of the STEM Food & Ag Council, a public-private partnership designed to promote education and career opportunities in the food and agricultural sectors. "It's tough finding talent."

The worker shortage has been a problem food and agriculture companies have been aware of for years. Beginning around 2005, Iowa State University started hearing from people representing agribusiness, commodity organizations, the biorenewable industry, and other groups that the school needed to produce more graduates.

"There was a human capital shortage at the time and as they saw the economy increasing and jobs growing and they wanted Iowa State to increase the number of graduates to help along that line," said Tom Polito, director of student services at the university's college of agriculture and life sciences in Ames, Iowa. "Because of that input, we started responding to that need and started looking at things a little differently."

The school boosted its efforts to attract students by promoting the diverse range of jobs available after they graduate. The initiative helped increase the number of students enrolled at Iowa State's college of agriculture and life sciences from 2,448 in 2005 to a record 3,900 during the 2012-2013 school year — a number it expects to exceed this fall.

USDA's Ramaswamy said agriculture enrollment is increasing at most universities, with some schools experiencing a double-digit increase.

Some of the stigma of a major in agriculture has worn off as the farm economy has prospered, and agribusiness companies are able to pay more to attract employees. For some, it's not enough to just have a prestigious job with good pay. Schickler and Ramaswamy are among those who said young adults want to play a part in solving problems in the world such as poverty, food insecurity and climate change.

Amanda Lorack, a senior at Iowa State, grew up on a farm 20 miles south of Iowa City where her father raised corn, soybeans and hogs. Lorack, 21, participated in 4-H and the National FFA Organization, formerly the Future Farmers of America, growing up and helped her father on the farm whenever she could. "It's always been a part of my life and I knew I wanted to have a career in ag someday, it's something that I have a passion for," she said.

Now she's looking at a career in agricultural sales. She hopes to peddle chemicals to farmers to help them increase yields for crops used to produce renewable fuels and feed animals and a growing human
population. "It's important to the economy and everyday life and I'd love to be a part of it," said Lorack.

Thad Simons, chief executive of Novus in St. Louis, did not have an agricultural background before he began working for the company, which produces nutritional supplements for animal feed, in 1991 after a career as a lawyer in Monsanto. He said the industry is to blame for not doing a better job promoting itself, especially the altruistic parts of the field and the role agriculture plays in feeding the world. "People think that if they didn't grow up on the farm they have no role in farming or in agriculture and that's not really true," said Simons, who became CEO in March 2001. "I think a lot of people get confused about what our industry is about. There is a huge need in terms of bringing more attention" to it, he said.


**Full Article**

The Government of Dominica continues to invest heavily in the agriculture industry.

Prime Minister Hon. Roosevelt Skerrit has revealed that in this year’s budget four million dollars will be allocated to purchase a boat to facilitate the transportation of produce to neighboring islands.

“In our discussions with people who have had over fifty years of experience in shipping, they have said to us they think that we can get a decent boat that would address not in total but in part the challenges confronting the transportation of produce for about seven hundred thousand US dollars so that four million is certainly adequate to cover the purchase of at least one boat.”

At present the existing boats currently trade with islands to the north. The purchase of the vessel however, will result in an expansion in trade.

“So you have a huge gap in terms of consistency to the south of Dominica, Martinique, Barbados and Trinidad so Dapex and Dexia who normally would get markets in Trinidad, Barbados and Martinique etc are unable to supply on a weekly consistent basis because of the unreliability of transportation to those islands.

I even understand that Dapex has had to charter boats out of St. Lucia and Barbados to transport the produce to those markets and I believe that if we can continue enhancing quality production to get us to the level where we can supply those markets on a consistent basis and we can continuing addressing the issue of proper marketing and providing farmers with the marketing support and also addressing the issue of inconsistency in transportation I believe that we can certainly take advantage of the markets in the region where Dominica can supply fresh agricultural produce.”

Funding will also be made available to assist existing boat owners to improve their vessels to facilitate trade. That includes the installation of on-board refrigeration equipment.
Agricultural Production

Agriculture stakeholders urged to do more to move sector forward by the Jamaica Information Service, 19 July, 2013

Full Article

Agriculture and Fisheries Minister, Hon. Roger Clarke, has called on stakeholders in the agricultural industry to do more to move the sector forward.

He said the sector seems to be caught in a “comfort zone” where it is contributing six per cent to gross domestic product (GDP) and last year, exported some US$274 million in comparison to an import bill of nearly US$1 billion.

“This is no comfort zone for our country,” he said, stating that the sector must move into new “realms of growth and achievement”.

“Our collective duty is to do all we possibly can, to bolster local production, and to reduce our dependence on foreign exchange expenditure on the importation of food. We can achieve this through increasing production, through sound management and the application of modern technologies,” Minister Clarke said.

He was addressing a contract signing and ground breaking ceremony held on Thursday, July 18, in Hague, Trelawny, for a new parish office for the Rural Agricultural Development Authority (RADA).

The Agriculture Minister said that there are already moves in the right direction, citing the agro-parks project, which is targeted specifically at import substitution, by planting crops that are imported in high volume.

He also mentioned efforts by RADA to modernise its operations by way of computer-aided technologies; and the recent signing of a Memorandum of Understanding (MoU) with the Mona School of Business to pursue computer-aided solutions to solve problems within the sector.

Clarke: Jamaica Needs to Increase Food Production Capacity, by the Caribbean Journal, 15 July, 2013
http://www.caribjournal.com/2013/07/15/clarke-jamaica-needs-to-increase-food-production-capacity/

Full Article

Food insecurity is not just a threat to the Caribbean — it’s an active problem.

And Jamaican Agriculture Minister Roger Clarke says that the country’s current position is an “unsustainable” one.

“When there is insufficient local produce available, our dependence on imports increases, fueling the almost vicious cycle of utilizing scarce foreign exchange to purchase food from overseas,” he said last week at a conference on economic development in Montego Bay. “It is an unsustainable position.”
Jamaica’s government recently approved a new food and nutrition security policy, one Clarke said would ensure that a “sufficient quantity of nutritious foods of appropriate quality” is available to all Jamaicans.

If realized, it will be crucial for a region that is imports a disproportionately high amount of its food and faces the growing threat of climate change.

Jamaica, like a number of Caribbean countries, has been looking to push more citizens to return to agriculture, with a particular focus on the sugar sector.

Information & Communication

CARDI –CTA Launches the 3rd Regional Excellence in Agricultural Journalism Awards
Recognition for Regional Journalists Reporting on Agriculture. CARDI Press Release, 19 July 2013

Excerpt

Port of Spain, July 19th 2013 - The Caribbean Research Development Institute (CARDI) and the Technical Centre for Agriculture and Rural Co-operation (CTA) have launched their third Regional Excellence in Agricultural Journalism Awards this time under the theme “Achieving Food Security through Regional Cooperation”. Journalists from across the Caribbean are invited to participate, by submitting their best entries.

The inaugural competition in 2011 focused on reporting on ”Food and Agriculture Issues” while the 2012 Media Awards were on “Climate Change Mitigation, Adaptation and Sustainability”. Both Media Awards attracted a high calibre of entries from journalists in the print, electronic and on-line media.

According to CARDI, journalism in agriculture has a crucial role in information exchange, awareness building and improving understanding of food and agriculture issues.

The Media Awards competition encourages journalists and producers to probe the challenges and opportunities for improving food and nutrition security in the Caribbean thus raising the level of awareness on the important role of agricultural research, training and rural development.

The Awards are intended to help journalists and producers to deepen their understanding of agriculture issues, to probe opportunities and innovation in the Caribbean, and to continuously improve interaction between the agricultural industry and the media.

It is anticipated that the Awards will be an additional incentive “to enhance awareness of food and nutrition security issues among Caribbean citizens,” said Dr. Arlington Chesney, CARDI’s Executive Director. “Through these Media Awards and several other media targeted activities by agricultural institutions we have witnessed an increase in the reporting of agriculture related stories in the media, greater participation of journalists in agriculture activities and an increased awareness and willingness
by agricultural scientists on the need for timely submission of news to media,” the CARDI official added.

Since 2006, CARDI has been working with the Association of Caribbean Media Workers (ACM) and the Inter-American Institute for Cooperation on Agriculture (IICA) on several initiatives aimed at strengthening information dissemination within the agriculture community and linkages with the media.

This Awards target full time and freelance journalists working with print, new media, radio and television and cover work published or broadcast during the period September 2012– June 2013. Submissions for entries close on Friday, September 06, 2013, winners will be announced on Friday 20, September, 2013.

Categories for submission are:
- Excellence in Print Journalism
- Excellence in Radio Journalism
- Excellence in Television Journalism
- Excellence in online and digital media
- Youth/Citizen entry

There will be one overall winner in each category. The winners will each receive a cash prize of US$1,000, a commemorative plaque and a round trip to Guyana to attend the Awards Ceremony on 9 October, 2013.

Click here to download


**For more information please contact:** Denise Besai, CARDI Headquarters, UWI Campus, St Augustine/ 1-868-645-1205-7/ agrimediaawards@gmail.com

**Upcoming Events**

July 2013
**International Association of Agricultural Information Specialists (IAALD) World Congress 2013**
**Date:** 21- 24 July 2013
**Location:** Cornell University, New York, USA
**Website:** [http://iaald.library.cornell.edu/](http://iaald.library.cornell.edu/)

September 2013
**Science Forum 2013**
**Date:** 23-25 September 2013
**Location:** Bonn, Germany.
**Description:** Will focus on “Nutrition and health outcomes: targets for agricultural research”
Website: http://www.scienceforum13.org/
First International Conference on Global Food Security
Date: 29 September - 2 October 2013
Location: Noordwijkerhout, The Netherlands
Website: http://globalfoodsecurityconference.com/index.html

October 2013
First Global Yam Conference “Yams 2013”
Date: 3-6 October, 2013
Location: Accra, Ghana
Description: First Global Yam Conference “Yams 2013” will be held in conjunction with the 12th Symposium of the International Society for Tropical Root Crops (ISTRC)-African Branch, from 3 to 6 October 2013 in Accra, Ghana
Website: http://www.iita.org/web/yams2013

12th Caribbean Week of Agriculture (CWA)
Date: 4-12 October, 2013
Location: Guyana International Conference Centre, Guyana
Theme: Linking the Caribbean for Regional Food and Nutrition Security and Rural Development
Email: cwaguyana2013@gmail.com

November 2013
Entomology 2013: Entomological Society of America (ESA) 61st Annual Meeting
Date: 10-13 November 2013
Location: Austin, Texas, USA
Theme: Science Impacting a Connected World
Website: http://www.entsoc.org/entomology2013