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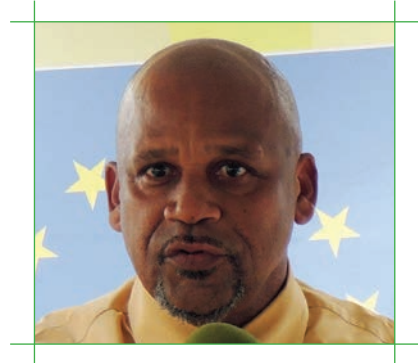
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BAM - Banana Accompanying Measures - funded by the EU through the Agricultural Transformation Programme (ATP).

MESSAGE

Minister for Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives Hon. Ezechiel Joseph



It is my distinct honor and pleasure as the Minister for Agriculture, Food Production, Fisheries, Physical Planning, Natural Resources and Co-operatives to be part of a collaborative initiative with the European Union through its Banana Accompanying Measures Programme (BAM), to develop a dynamic agricultural sector in Saint Lucia which extends beyond the traditional approach.

This initiative signals the continued commitment of the Government of Saint Lucia and that of the European Union to support modernization, transformation and diversification within the agricultural sector, stimulate broader economic diversification outside of agriculture and carry out social adjustments to cushion the effects of the contraction in the banana industry.

Bananas were crucial to the livelihoods of thousands of farmers as an important economic activity and to the country, as a major source of export revenue, which had multiplier effects in the rest of the economy. This was because trade between Europe and the Caribbean was based largely on 'preferences' and special tariff rates for selected goods. However, with their erosion over time, these reductions continue to have social and economic effects on the country.

For this reason, the European Commission has provided assistance to the main ACP banana-exporting countries including Saint Lucia to continue the export of bananas while reorganizing their productive systems and adjusting to the more competitive environment.

Previously, the EU had supported ACP countries with two successive programmes focused on bananas and diversification of the agricultural sector: the Special System of Assistance, (SSA 1994 to 1999) followed by the Special Framework of Assistance (SFA 1998 to 2008). Both programmes benefited several ACP traditional banana suppliers.

Now, we are thankful for the Agricultural Transformation Programme which is an instrument to continue the support for adaptation processes with a budget of EUR 190 million for ten beneficiary countries. The countries were selected based on the level of banana exports over the last ten years. These countries each supplied on average, well over 10,000 tonnes annually since 1999.

The new projects for agricultural development in Saint Lucia total over 10 million Euros. They include the construction of an Agricultural Diagnostic Facility, the on-going implementation of a management plan for the Black Sigatoka disease in bananas, the rehabilitation of Agro-processing facilities, capacity building for stakeholders in the agricultural sector, Youth in Agriculture and the rehabilitation of farm community infrastructure such as agricultural feeder roads.

Parallel to this, agricultural entrepreneurs are being encouraged to manage their operations as commercial businesses because agriculture is not a social sector. Agriculture is a business investment, and we must begin to treat agricultural investments as businesses.

This is the new direction that the Ministry of Agriculture is encouraging agricultural entrepreneurs to embrace to help us along this route. We welcome and thank the EU for its assistance and for playing a critical role in promoting sustainable agricultural development and combating poverty by trying to improve the living standards and conditions of farmers and agri entrepreneurs.

This effort will go a long way towards the growth and development of our Agricultural Sector and our country Saint Lucia. I look forward to the continuation of the strong relationship between the EU, the Ministry of Agriculture, and all the agencies and organizations which are collaborating in this very important initiative.



BAM - Banana Accompanying Measures - funded by the EU through the Agricultural Transformation Programme (ATP).

MESSAGE

Special Projects Coordinator - Eden Compton



St. Lucia has had a formal relationship with the European Union (the then European Economic Community) as a former British colony, since its Independence in 1979, and has benefited immensely from that partnership. Today, the EU still continues to be one of Saint Lucia's largest donors for agricultural and other developmental programmes.

The European Commission's Banana Accompanying Measures (BAM) Programme has donated over ten (10) million Euros to agricultural development assistance for Saint Lucia. This signifies its commitment to helping Saint Lucia, as it adjusts to present robust market conditions. The disadvantage of this is that one does not have preferential access to markets as was enjoyed before by the African Caribbean and Pacific (ACP) group of countries, of which Saint Lucia is a member.

The BAM projects seek to help address the underlying weakness in the agricultural sector relating to commercial competitiveness and low productivity, through the following: strengthening of entrepreneurial and technological development and innovation, implementation of quality standards, improvement of physical infrastructure, and enhancement of value/supply chain efficiencies.

The projects range from studies to capacity building efforts, the retrofitting, refurbishing and equipping of agro-processing facilities, the construction of a National Diagnostic Facility, procuring inputs for the management of Black sigatoka disease, the rehabilitation of roads, and the procurement of equipment for land preparation activities.

This effort is compatible with the Government of Saint Lucia's economic agenda which is strongly underpinned by the awareness of the need to adopt an approach geared towards developing capacities in the agricultural sector, particularly in rural communities to increase the employability of young persons and other vulnerable groups.

It is in light of this that Saint Lucia has positioned itself to make maximum use of this agricultural development assistance, through the establishment of an appropriate structure for project execution.

The National Authorizing Officer (NAO) in the Ministry of Economic Development acts as the Contracting Authority. The Implementing Partners are the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Cooperatives and the Banana Industry Trust. A multi-sectoral Project Steering Committee which includes State and Non State Actors, chaired by the Permanent Secretary of the Ministry of Agriculture, meets four times a year to review project progress, with the EU Delegation as observer. A Technical Advisory Committee made up of representatives of stakeholder groups, participates in the implementation of the programme components.

As Technical Coordinator of the BAM Programme, I am happy to be associated with this agricultural development intervention and I would like to encourage agricultural stakeholders and all other interested parties to take advantage of the opportunities this initiative provides, so that the strategic development goals of the agricultural sector can be realized.





BAM Diversification, Transformation & Modernization of Agriculture

THE SFA PROGRAMME

With the erosion of preferential trading arrangements sometime around 1999, the European Union (EU) conceptualized the Special Framework of Assistance or SFA Programme to help small economies in the African, Caribbean and Pacific (ACP) States cope with the fallout. The 10-year SFA Programme funded by the European Commission was to help diversify the agricultural sector in ACP countries.



ATP/BAM

Special Projects Coordinator in the Ministry of Agriculture, Eden Compton, disclosed that the Agricultural Transformation Programme (ATP) of which the Banana Accompanying Measures (BAM) is a major component – is intended to build on the gains made by the SFAs. He explained: "This instrument (ATP/BAM) is intended to continue agricultural modernization, transformation and diversification, but this time in countries which have exported more than 10,000 tons of bananas to the United Kingdom or to the European Union over the last 10 to 12 years."

BENEFICIARY COUNTRIES

The beneficiary countries of the EU-funded ATP/BAM are Suriname, St. Vincent and the Grenadines, St. Lucia, Dominica, Jamaica, Belize and the Dominican Republic in our Hemisphere. On the African continent, the countries receiving assistance are Cameroon, Ghana and the Ivory Coast. The EU-funded Agricultural Transformation Programme is also designed to help integrate the economies of beneficiary countries into the global economy.

NATIONAL ADAPTATION STRATEGY

Each beneficiary country developed a National Adaptation Strategy based on a diagnosis of the needs of its agricultural sector. The next stage was the development of a Multi-annual Support Strategy to address priority areas in the National Adaptation Strategy. St. Lucia's National Adaptation Strategy has four (4) main components.

The first component is Agri-Enterprise Facilitation through Market Development and Agro Processing in order to leverage expansion of the value chain. A key objective is to enhance the value of selected agricultural commodities to meet the demands of the market. Agricultural commodities identified under the BAM include Food and Root Crops, Vegetables and Herbs, Fruit and Tree Crops, and Livestock. Livestock covers egg production, broiler production, pig farming, and ruminants (goats and sheep). The ATP/BAM supports open field as well as greenhouse production, irrigation, land/soil preparation, and the adaptation of new technologies in agriculture.





Special Projects Coordinator in the Ministry of Agriculture, Eden Compton

Training of Agro Processors and Extension Officers (Crops and Livestock) is a critical element of this component of the ATP/BAM. The Training for Agro Processors focuses primarily on Business and Entrepreneurial Development whilst the Training for Extension Officers Focuses on Value Chain Analysis of the targeted commodities. The retrofitting of agro processing facilities also forms part of this component. Four agro processing facilities on the island are earmarked for upgrades. They are the Fond Assau Agro Processing Plant, a Facility for Rural Women Agro Processors in Anse Ger, the Cocoa Micro-Fermentary in Anse Ger (built under SFA 2005) and a Processing and Bottling Facility for Mille Fleurs Honey Producers at the La Caye IRDC in collaboration with the Global Environment Fund (GEF) and the Trade Export Promotion Agency (TEPA)

The second component of the National Adaptation Strategy involves facilitation of Research and Technology in Agriculture through the construction of a National Diagnostic Facility at Union, which will monitor Plant and Animal Health, Soil Testing, Tissue Culture Analysis, as well as Food Safety Monitoring, and Enforcement of Safety Standards and Protocols with oversight by the Saint Lucia Bureau of Standards.

The third component is Disaster Risk Reduction in Agriculture through the continued implementation of a management plan for the Black Sigatoka disease which has adversely affected the island's banana crop. This involves the establishment of the Black Sigatoka Management Unit and implementation of the Black Sigatoka Management Project. Compton underscored the high cost of managing Black Sigatoka and the consequences of not managing the disease for the banana industry and St. Lucia's economy as a whole.

The Rehabilitation of Farm Community Infrastructure is yet another element of the Disaster Risk Reduction component. Initially, the Ministry focused on Drainage and Riverbank Stabilization. In light of extensive damage to

the road network in farming communities, the next phase will focus heavily on Rehabilitation of Farm Roads, commonly referred to as Feeder Roads.

NURTURING A NEW CROP OF FARMERS

The fourth component of the National Adaptation Strategy for St. Lucia's Agriculture Sector is Youth

Agri-Enterprise Facilitation also known as the Youth Agricultural Entrepreneurial Project (YAEP). The YAEP seeks to create an enabling environment that will allow the entry of approximately 150 young persons in Agriculture as young entrepreneurs. The objective is to create a new crop of farmers. The YAEP is also an incubator programme designed to accelerate the pace at which St. Lucia's agricultural sector is modernized, transformed and diversified.

The YAEP targets unemployed, employed and under-employed persons within rural communities. Under the YAEP, 205 acres of land have been earmarked for the cultivation of specific crops and the rearing of livestock. The Ministry of Agriculture is collaborating with Invest Saint Lucia and the Department of Crown Lands in this initiative. Land has been identified in the Roseau Valley, River Doree in Choiseul, Beausejour in Vieux Fort and the Mabouya Valley in Dennery. These lands will be subdivided and leased to young persons, mainly between the ages of 18 – 35 but not limited to that age group.

A Committee has been established to manage the distribution of the lands. One local and one overseas supplier have been selected to supply equipment and implements for the YAEP. Most of the equipment and implements are already on island. There will be a Storage and Distribution Facility at Beausejour in Vieux Fort and one in the Mabouya Valley. Production Schedules have been drafted for all the crops to be produced as well as for broiler production. The Production Schedule for Swine (pig farming) is being prepared by the Veterinary & Livestock Division of the Ministry of Agriculture. The Special Projects Unit is working very closely with the National Skills Development Centre (NSDC) to undertake Refresher Training for young farmers registered under the YAEP.

Compton disclosed that production and output under the YAEP will be prescribed and monitored and the selected young farmers will not be left on their own to produce "what they want, when they want."



He explained: "The focus here is on import substitution... looking at the agricultural commodities that we import that we can produce locally. At present, our local farmers produce too much of the same crops at the same time; so the price goes down and they find themselves at a loss. Under the YAEP, there will be Production Scheduling for both Crops and Livestock, so that production will coincide with demand. This will assist in cutting our Annual Food Import Bill, which stands at somewhere in the vicinity of \$360 million."

Compton hastened to add that St. Lucia cannot produce all commodities "so we have to be selective and focus on the commodities we can do best – both in terms of primary production and value-added activities."



He explained: "We're coming from an era where banana production was the predominant agricultural activity in St. Lucia. Banana farmers capitalized on a guaranteed preferential market for our bananas in the United Kingdom. St. Lucia was the largest producer of bananas in the Windward Islands. All other agricultural commodities were sidelined in the heyday of bananas. The transition has been difficult because there is still this 'romance' with bananas, but I think our farmers are beginning to realize that we have to move away from bananas. That is why the Ministry is hoping that the ATP/BAM will accelerate the pace of diversification, transformation and modernization of agriculture in St. Lucia."

To underscore the potential of non-traditional sectors of the agriculture industry, Compton disclosed that in 2013 purchases of local chicken amounted to \$19 million in revenue. St. Lucia's current banana exports average \$20 million per annum. Compton believes such statistics make a compelling case for Government to develop emerging sectors within the agriculture industry and that's exactly what the BAM is intended to achieve.

“The transition has been difficult because there is still this 'romance' with bananas, but I think our farmers are beginning to realize that we have to move away from bananas”

MAKING THE TRANSITION



The overall value of the ATP/BAM for St. Lucia is 10.3 million euros or approximately EC\$35 million. Compton explained that the transition from a mono crop culture to a diversified agricultural sector has not been easy.



St. Lucia Achieves 100% Allocation of ATP-BAM Funds



Tracy Polius

St. Lucia has achieved full commitment of resources allocated to it by the European Union (EU) under its Agricultural Transformation Programme of the Banana Accompanying Measures – ATP-BAM, in the assigned time of three years. A further two years was allocated to complete implementation of all projects.

The disclosure was made by National Authorizing Officer, Tracy Polius, as she addressed the Sod Turning Ceremony for the National Diagnostic Facility at Union. Speaking on behalf of the Delegation of the European Union to the Eastern Caribbean, Polius said the Delegation is particularly impressed with the excellent effort made by St. Lucia, in this significant achievement.

Polius described the achievement as "the triumphant culmination of years of engagement with the European Union by the Office of the National Authorizing Officer and the Government of St. Lucia."

She said it is an example of stellar cooperation between the Office of the NAO and the implementing partners, namely, the Ministry of Agriculture and the Banana Industry Trust (BIT). Polius says the successful implementation of key components of the ATP-BAM Programme is

evidence of the strong commitment of public sector employees, demonstrated through "the exercise of strategy, patience, and long arduous labour."

According to Polius, a strong cooperative relationship developed, between the Green Economy Team at the EU Delegation in Barbados and the Office of the NAO in St. Lucia. She said there was constant engagement at the Technical Level as well as at the level of the NAO, to ensure that problems were resolved quickly. Polius says it is this partnership that has yielded the 100 % commitment of resources allocated for St. Lucia's ATP-BAM Programme. She is confident that this spirit of cooperation will ensure successful implementation of the BAM Programme in St. Lucia.

The Delegation of the European Union to the Eastern Caribbean Countries, OECS, CARICOM/CARIFORUM – thanks St. Lucia for the efforts towards what has been achieved so far, and looks forward to working with stakeholders on the island, to complete projects under the ATP-BAM.

Polius says the Delegation is committed to working with St. Lucia and other donors, in implementing reforms and policy guidelines that will further transform the island's agriculture sector.

The BAM programme supports 10 banana-exporting ACP countries in order to facilitate their adjustment to this



Hon. Guy Joseph

new trading environment, taking each country's specific situation into account. They focus on three goals:

- Boosting the banana sector's competitiveness
- Promoting economic diversification
- Addressing broader social, economic and environmental impacts

The beneficiary countries of ATP-BAM are Belize, Cameroon, Côte d'Ivoire (Ivory Coast), Dominica, Dominican Republic, Ghana, Jamaica, Saint Lucia, St. Vincent and the Grenadines, and Suriname. The measures were identified and prepared by each ACP country in coordination with the EU, within wider agriculture and development strategies. St. Lucia's Ministry of Agriculture, along with the Ministry of Economic Development and other stakeholders – were the architects of the island's BAM Programme,

with several projects designed to achieve transformation of the agriculture sector.

Minister for Economic Development, Hon. Guy Joseph, complemented the Staff of the Ministry of Agriculture and the NAO for achieving 100 % commitment of resources under the ATP-BAM Programme. St. Lucia is the only one of the four Eastern Caribbean Islands which are beneficiaries of ATP-BAM to achieve this milestone. Dominica and St. Vincent are the other islands with ATP-BAM Programmes. Minister Guy Joseph says he is encouraged by the increased efficiencies and institutional capacity developed within the Ministry of Agriculture and the National Authorizing Office. He says this augurs well for project implementation in the future. The Office of the National Authorizing Officer is within the Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation.



Rehabilitation of Agricultural Feeder Roads under **BAM**



Dr. Gale Rigobert

Agricultural Feeder Roads (Farm Roads) in major farming communities on the island are being rehabilitated under the BAM Programme. Roads in Mighney and Derache in Soufriere, Compere in Dennery, Bois Cannon in Micoud and Morne Cayenne in Vieux Fort are being rehabilitated under the BAM Programme to the tune of 1.57 million Euros. The Contractors for these projects are Construction and Industrial Equipment Limited (CIE) and Gregory Mongroo.

National Authorizing Officer, Tracy Polius, revealed that initially, 15 agricultural feeder roads were earmarked for rehabilitation but government had to reconcile with falling exchange rates and the available budget was not adequate, for rehabilitation of all fifteen roads. She said the Mighney/Derache Road made it to the high priority list as it is criteria critical to agricultural production in St. Lucia. Some of the considerations which resulted in the choice of the Mighney/Derache Road were – the quality, quantity and value of agricultural produce in the area; the percentage of household income derived from agricultural activity; and the potential for agro-tourism linkages. On completion, the Mighney/Derache Road will see improvements to 430 metres of road. It is the shortest of the four agricultural feeder

roads being rehabilitated under BAM in terms of scope of works and cost. Be that as it may, Polius believes the Mighney/Derache Road will rank amongst the highest, in terms of value, to those who use the road to earn their livelihoods as farmers, farm labourers and owners of farm lands.

Rehabilitation of the Bois Cannon Road in Micoud is also deemed critical to the sustenance of agriculture in that farming community. Parliamentary Representative for Micoud North, Dr. Gale Rigobert said farmers have been lamenting the state of the roads leading to their farms. She



thanked the farmers for their patience and understanding and for partnering with the Ministry of Agriculture and the Office of the NAO to ensure that this project comes to fruition for the benefit of the farming community and the nation as a whole.



Mr. Bertram Clarke
Executive Director - BIT

Permanent Secretary in the Ministry of Agriculture, Dr. Darius Gabriel, says the issue of agricultural feeder roads is an important one for his Ministry. He asserts that good feeder roads are an important component of the agricultural network and the infrastructure for agriculture; to ensure that the standards that are required in transporting agricultural produce from farms can be met. He noted that good feeder roads also help reduce the cost of operating and maintaining farm vehicles, thus reducing the overall cost of production.

Dr. Gabriel told the gathering: "The whole issue of rehabilitation of agricultural feeder roads will help refocus attention and energy on the need for us to ensure that the kind of infrastructure that is required to engender the development of the agricultural sector to the level that we perceive that it can be, is put in place. So our hope is that this initiative will stimulate and catalyze the rehabilitation of other agricultural feeder roads on the island."

National Authorizing Officer, Tracy Polius, says the agricultural sector remains a priority for the government of St. Lucia. More specifically, she said government is interested in strengthening the relationship between the agricultural sector and the tourism sector. Consequently, she said, rehabilitation of feeder roads is key to improving the tourism-agriculture value chain. In addition, she said the strategy of consolidating the gains from the tourism industry, through enhanced value-added in the agricultural sector, will assist in reducing poverty in many rural communities. This is consistent with the objectives of the BAM Programme.

Polius, who is also the Permanent Secretary in the Ministry of Economic Development, revealed that BAM Funds are

fully committed and the level of engagement between the Delegation of the European Union and the Government of St. Lucia is at its peak. Polius was happy to report that the EU Delegation has reaffirmed its commitment to working with St. Lucia and other donors, in implementing reforms and policy actions that will further transform the agricultural sector in St. Lucia.



Vehicles on a section of the Derache Road



Managing Black Sigatoka, Plant Health and Soil Testing



Mr. Martin Satney - Coordinator,
Black Sigatoka Management Project

TACKLING BLACK SIGATOKA – SAVING BANANAS

In early 2010, the dreaded Black Sigatoka disease almost wiped out St. Lucia's banana industry. The industry was further ravaged by Hurricane Tomas in October 2010. By then, the banana industry was almost completely destroyed and needed immediate resuscitation. The Black Sigatoka Emergency and Stabilization Project was launched in April 2012.

Mr. Martin Satney is the Coordinator of the Black Sigatoka Management Project. He explained: "In the Emergency and Stabilization phase, the Republic of China on Taiwan provided EC \$1.8 million towards the procurement of Spray Oil and Fungicides to treat, control and manage the disease. Those funds were also utilized in the eradication of abandoned banana farms which were heavily infested with Black Sigatoka. So that phase dealt primarily with abandoned farms and the chemical control of the disease. It helped stabilize production and control the spread and severity of Black Sigatoka in banana fields across the island."

In Phase 1, the Government of St. Lucia contributed EC \$1.5 million towards the procurement of supplies, provision of fertilizers and so on. Overall, the Government of St. Lucia projected a capital outlay of EC \$12 million to deal with the

Black Sigatoka disease over a period of 3 years. The Black Sigatoka Management Project begun in April of 2013. It was due to end in August 2015, but has been extended to March 2017. In the first year (2012-2013) the overall Programme Budget was approximately EC\$5.4 million, which included administrative costs and technical expertise. In the second year (2013 – 2014) the Government of St. Lucia contributed just under \$1 million, and in year three (2014 – 2015/2017) the Government of St. Lucia along with the Republic of China on Taiwan are collectively contributing about \$3.5 million towards the Black Sigatoka Management Project.

Asked about a continuity plan, Satney said the Government of St. Lucia is considering a follow-up phase which will focus on Production and Productivity Recovery. He said a key component of this phase should be targeted crop diversification, with bananas, as part of the broader strategy of managing Black Sigatoka disease. Satney says the approach could be alternative commercial production or cropping systems, including mixed cropping. Essentially, it involves engaging in non-banana production systems using other crops and/or livestock, as well as aquaculture. This approach would help increase productivity, maximize yield per acre, manage livelihood risks, and generate more revenue for farmers.

MONITORING AND CONTROL OF BLACK SIGATOKA

With the help of the Republic of China on Taiwan, a significant amount of resources have been allocated to manage and control the Black Sigatoka disease, to ensure that it does not decimate the island's vital banana crop. Quite apart from the procurement of agro-chemicals to treat affected farms, the Black Sigatoka Management Project involves Training of Farmers and technical personnel, Managing Abandoned Fields, and Monitoring of the disease on a daily and weekly basis, since Black Sigatoka is an airborne disease that can be easily spread by wind, rain splash, or through the transportation of spores in infected plant/planting material from one part of the island to the next. Drainage, Irrigation and the introduction of new



“Overall, in terms of its impact, the Black Sigatoka Management Programme has helped to stabilize banana production as well as exports”

Resistant (tolerant) Varieties of Bananas are some other key components of the Black Sigatoka Management Project.

The Black Sigatoka Management Unit is collaborating with the International French Research Institute (CIRAD) in establishing demonstration plots of banana varieties which are resistant/ tolerant to Black Sigatoka disease. Similarly, demonstration plots of tolerant plantain varieties have been established in collaboration with the Taiwanese Banana Research Institute (TBRI), since Black Sigatoka also affects the plantain crop, which belongs to the same *Musa* species as bananas.

IMPROVED YIELD – INCREASED EXPORTS

Commenting on the overall success of the Project, Satney said: “In terms of impact and the level of success, we’ve seen production being sustained in all the banana growing regions, primarily the north eastern corridor which includes Babonneau and environs, in the Region 3 (the Mabouya Valley), Region 4 (the Micoud area) and particularly Regions 5 and 6 (Vieux Fort North). We’ve also seen production stabilize in Region 7 which is the Roseau belt and environs, as well as Region 8 which includes Cul de Sac to Marc. Satney added: “Overall, in terms of its impact, the Black Sigatoka Management Programme has helped to stabilize banana production as well as exports. In fact, our banana exports have been gradually increasing, not just to the UK, but also to countries like Barbados and Trinidad in the region. There has also been a noticeable increase in domestic consumption through the supermarkets in particular, and through the hotels.”

SOIL AND PLANT TESTING

Technical Coordinator of the Black Sigatoka Management Unit, Lucius Alexander, says the re-commissioning of the Research Lab at Union with Technical Assistance from Taiwan, is a key component of the Work Programme of the Black Sigatoka Management Unit, from the perspective of crop protection, and timely diagnosis of pests and diseases.

Alexander, who previously served as a Senior Crop Protection Officer with the Ministry of Agriculture, says the Lab at Union used to be the premier facility in the provision of diagnostic services on the island, even to the police. He said the BAM Project has inspired the refurbishment of the Research Lab with new equipment, supplies and Technical Training of Laboratory personnel at the TBRI in Taiwan.

“We have been working with the TBRI of the Republic of China on Taiwan through the Black Sigatoka Management Project. One of the components is the strengthening of the diagnostic capacity, because if you cannot diagnose correctly you cannot make proper recommendations to farmers or whoever needs it.”

A major Diagnostic Training Exercise brought together technical officers and Lab Technicians from the Ministry of Agriculture, the Black Sigatoka Management Unit, WIN-FRESH, and the National Fair Trade Organization (NFTO). The local Lab Technicians benefitted from the expertise of two Taiwanese scientists who specialize in Plant Pathology. Alexander notes: “We went through the process of visiting various farms, observing the symptoms in the field, collecting samples, coming back into the laboratory



and doing the diagnostics for fungi, bacteria, viruses, and so on. That has put us in a position where we can provide a better service to the farming community.”

The Lab has also been engaged in Plant and Soil Testing. Alexander explained: “We have gone to farms, collected soil samples, lifted tissue samples. We have taken these samples back to the Lab for testing, to see whether there are enough nutrients in the soil, and whether the leaves have sufficient nutrients ... for them to produce. We were assisted by Dr. Chang and Ms. Lee from the Taiwan Banana Research Institute.”

He added: “We have just furnished and commissioned this Plant and Soil Lab and the Technicians are learning how to use the (new) equipment, and how to analyze the samples and data they are working with, to ensure our findings are more scientific and accurate. So we are now in a much better position to provide that service to our farmers.”

The Plant and Soil Lab will be a Unit of the National Diagnostic Facility when that facility is completed.





Animal Health – important to Food Safety and Food Security in the Livestock Sector

THE POULTRY AND PORK SUB-SECTORS

Under the BAM Project, Poultry and Pork production are two key Livestock sub-sectors earmarked for assistance.

Dr. Aurea King-Cenac – Veterinary Officer in charge of the Veterinary Livestock Services Division of the Ministry of Agriculture, describes poultry as "one of our leading commodities in the Livestock sector." She disclosed that at present, there are close to 50 active farmers in the Poultry sector. She says the increasing cost of production has forced some farmers out of production while others have reduced on the number of birds that they rear per cycle. Dr. King disclosed that in spite of those challenges, there is growing interest in the poultry sector and new persons/farmers wishing to enter the sector. She said candidly: "St. Lucians eat a lot of chicken, so there is great potential for getting more persons on board, in the poultry industry."

In the Pork (pig farming) industry, there are an estimated 300 active farmers, most of whom are located in the South of the island. Noting that consumption of pork is also very high among the local populace, Dr. King believes there is a lot of potential for these two sectors to continue to grow and lead the livestock sector in St. Lucia.

She hopes that the establishment of a Feed Mill in the South of the island (Caribbean Grains) will help reduce the cost of production in the livestock sector. According to her, Caribbean Grains produces feed for both chickens and swine (pigs) at a competitive price. She says, coupled with that, the improvement of animal breeds should help local farmers improve their efficiency and productivity.

In terms of new technologies being adopted in the Poultry and Pork sectors, Dr. King explained: "In poultry farming, before we were only looking at open house systems where everything was done manually. Now a lot of our farmers are going into the semi-automated systems for feeding and watering their birds. We still promote the



Dr. Aurea King-Cenac
– Chief Veterinary Officer, Veterinary
Livestock Services

open house because of our climatic conditions. We don't think it's necessary for us to go windowless as it would be too costly for our farmers. However, we encourage our farmers to go semi-automated to help reduce the burden or the costs to them in the long run."

In pig farming, the Veterinary Division is encouraging the use of Biogas Digesters as a waste management system as well as an energy generating mechanism. The Digesters produce methane gas which can be used for cooking. A few farmers have installed Biogas systems on their farms. Composting is yet another recycling practice which the Veterinary Division encourages among pig farmers.

Dr. King sees the BAM Project as positive and timely in helping farmers enhance their productivity. She said: "I see it as helping in the development of the livestock sector. Most of our farmers are aging, so with the BAM project and the fact that they are encouraging young persons to go into agriculture, it will help with the sustainability of the agricultural sector."



“Having a Diagnostic Facility on island will help us build our capacity to be able to identify and diagnose diseases at an early stage. We will be able to respond quicker to prevent outbreaks or detrimental situations in the livestock industry”

THE NATIONAL DIAGNOSTIC FACILITY

A new Diagnostic Facility which will bring all the branches of agricultural research under one roof is currently under construction at Union. The Chief Veterinary Officer disclosed: “We do have an existing Lab at the Division but the capacity there is very limited. We are not able to do as many things as we would like. Right now, if we were to have any (animal) diseases or signs of diseases, we would have to collect samples and ship them to laboratories overseas for testing.”

Dr. King explained that this procedure has its advantages as well as disadvantages. She explained: “In the event of having to ship samples overseas, your results will be delayed and your response time will also be delayed. With the Diagnostic Facility on island, we will be able to make rapid diagnosis and be able to react quickly.”

When completed, the Diagnostic Facility will have the capacity to diagnose Animal Health, Plant Health, and Soil Fertility. The Facility will also house a Food and Feed Lab, as well as the Metrology Unit of the St. Lucia Bureau of Standards. The Food and Feed Lab will tests for nutritional deficiencies in food and possible contamination of animal feed.

Dr. Aurea King says the Diagnostic Facility is key to animal health and food safety in the livestock sector. She said: “The Diagnostic Facility is something we’ve been anticipating for a while now. It is something of utmost importance; especially now, in the world today, there are a lot of diseases that are emerging; and a lot of them are Zoonotic

“Having a Diagnostic Facility on island will help us build our capacity to be able to identify and diagnose diseases at an early stage, so that we will be able to respond quicker to prevent outbreaks or detrimental situations in the livestock industry.”

IMPROVING BLOODLINES IN THE LOCAL LIVESTOCK SECTOR

Dr. King notes that one of the strategies for growing and sustaining the livestock sector in St. Lucia is to improve our bloodlines and introduce new animals to the existing stock. Recently, a herd of goats were brought into St. Lucia from Australia, to boost the local ruminant population. This project was undertaken by the Government of Australia under its Development Assistance Programme (DAP). Dr. King explained that all the protocols were followed to ensure it was safe to accept the herd into St. Lucia.



Any animal or animal products entering St. Lucia has to get clearance from the Veterinary Livestock Services Division of the Ministry of Agriculture; and in order to qualify for a Permit, certain conditions and requirements have to be met. In this case, the exporting country (Australia) would have a copy of our conditions and they would do the necessary testing. The necessary information that we would need for those animals or animal products has to be submitted to us, along with an Export Health Certificate to ensure that the animal meets our conditions. The Veterinary Division would then review the information and if it is satisfied that all the requirements have been met, it would then issue a Permit. When the animals or animal products land here, they would be inspected at the port of entry by an official of the Veterinary Division who will then decide whether there is need for quarantine or whether the animals or products can be cleared for release.



in nature – meaning that they can be transmitted from animals to humans and from humans to animals, under natural conditions.”

Caribbean Grains

Producing Wholesome Feed for St. Lucia's Livestock Sector



Managing Director,
Max Edouard

St. Lucia now has its own Feed Mill supplying the island's livestock sector. Caribbean Grains began operations in St. Lucia in July of 2013, producing Feed for Poultry and Pig farmers on the island. The Feed Mill operates in the Free Zone near the Hewanorra International Airport in Vieux Fort.

Caribbean Grains is a subsidiary of CEM, a Martinique-based group of companies which is into shipping, trading and cereal processing. On the shipping side, CEM owns and operates Caribbean Lines. CEM owns and operates Flour Mills in Haiti, Martinique and Guadeloupe, as well as Feed Mills in Martinique, Guadeloupe and French Guyana (Cayenne). CEM also supplies raw materials to some of the other Mills in the region (Barbados, Trinidad, Guyana and Suriname) through its trading company – Soreidom.

EUROPEAN STANDARD FEED

Managing Director, Max Edouard says Caribbean Grains produces European standard feed at its Mill in Vieux Fort, St. Lucia. He explained: "European standard means no an-

imal protein in the Feed, no antibiotics or chemical of any kind, no hormones or enhanced products. We comply with all the regulations which are enforced in Europe."

"These regulations were introduced after health issues like the Mad Cow Disease and some problems with migrant workers who had health problems after having soup made with chicken neck, laden with hormones. The use of hormones in animal feed has been banned in Europe since the 1970s. Animal protein was banned after the outbreak of Mad Cow Disease."

Edouard notes that the lobby is still on in Europe to ban the use of antibiotics in animal feed since it can lead to animals being antibiotic-resistant, which is bad, not just for the animals but also for consumers because the antibiotics remain as residual substance in the meats when they are consumed.

Caribbean Grains produces wholesome animal feed using Corn, Soya Bean Meal (high in protein), Wheat Bran and Rice Bran (both of which are high in fat) and Minerals – all of which help the animals develop properly. Calcium carbonates are used to harden the pellets.

PRICE AND QUALITY

In terms of quality, Edouard says there is "no match" between the Feed produced by Caribbean Grains and imported feed, primarily because the imported feed contains antibiotics and hormones which can have harmful effects on the animals and humans as well. In terms of price, he says Caribbean Grains Feed cost an average of \$2.00 less per bag than imported feed. He said the price gap can widen to \$7.00 per bag on the retail price of imported feed. Local farmers buy directly from Caribbean Grains at a wholesale price.

At present, Caribbean Grains produces feed for Broilers, Layers and Pigs. Edouard explained that the Mill can also produce feed for local ruminants (goats and sheep)





as well as horses, subject to demand and availability of raw materials, because the fibre content for ruminants is much higher than for other animals. Production capacity at Caribbean Grains Feed Mill in the Free Zone in Vieux Fort ranges from 15 – 25 tonnes per day. Caribbean Grains exports Animal Feed to Dominica from its St. Lucia Plant.

ADAPTING TO THE NEEDS OF FARMERS

Commenting on the feedback from local farmers, Edouard said: "In the beginning we had some issues with the performance of the product because we were using the same formula for the feed we produce in Martinique, Guadeloupe and French Guyana. We soon realized that farm management in the French territories is at a higher level than what obtains in St. Lucia. So we have reformulated the feed to adapt to the local farming conditions. Since then, the farmers have been very satisfied with the product and the broilers being fed with our product are the same weight and in some instances better than the imported chicken. We hope that most of the farmers will go for the local feed because it's better and healthier for their animals."

"We keep in touch with the local farmers who use our feed. It's important that they (the farmers) give us feedback, because we can help them improve their animal health and their yield, and they can also help us improve our product. The advantage of having a Feed Mill on island is that we can, at any time, adapt the product to the needs of the local farmers."



As an example, Edouard explained: "We have a farmer who needed harder pellets because his feeding system is automated. So we produced harder pellets for that particular farmer. We also proposed some products for the layers, to clean the liver of the hen and improve egg production by 5 – 10 percent every 2 months. This is the kind of service we can bring to the farmers. We can also formulate special products on request."

Edouard stressed that Farm Management is critical to healthy livestock as well as food safety. He said Caribbean Grains is committed to working with local farmers to help them improve the management of their farms, rear healthier animals and produce better and tastier meats for the consuming public.

EXPANSION PLANS

Caribbean Grains investment in St. Lucia is currently worth approximately \$5 million. That includes the Feed Mill and two Warehouses. In 2015, the company opened a Flour Mill in Vieux Fort.

Edouard believes the Flour Mill will save Government millions of dollars in subsidies and save consumers as well, since the locally produced flour cost less than imported flour. He also explained that having a Flour Mill on island minimizes the possibility of a shortage of flour, which is an essential commodity for St. Lucia.

The operations of the Feed Mill and Flour Mill have been integrated. The by-products of the Flour Mill are being used in the Feed Mill. Caribbean Grains already operates a similar model in Martinique and Guadeloupe.



“ It's important that the farmers give us feedback, because we can help them improve their animal health and their yield, and they can also help us improve our product **”**

Fond Assau Agro Processing Plant

– adding value to local crops, generating employment



The Fond Assau Agro-Processing Plant has been remodelled. The Retrofitting Project funded under the BAM Programme is aimed at improving efficiency and increasing production capacity. The refurbishment involved a redesign of the layout of the ground floor to facilitate a Flow Production System from Processing to Packaging. The retrofitting works were undertaken by Construction Industrial and Equipment Ltd (CIE) to the tune of almost \$200,000.

The second phase of the upgrade involves the acquisition and installation of a Multiple-Chamber Vacuum Pack Machine, a Pulper with a Filling Machine, a large Freezer for storage, and a Blast Freezer to store goods immediately after processing. All of this equipment is expected to be installed in the last quarter of 2016, in time for a re-opening of the Plant by yearend. Two Display Freezers have also been ordered. They will be placed at the St. Lucia Marketing Board and the St. Lucia Fish Marketing Corporation. A new Standby Generator to ensure an uninterrupted supply of electricity to the Plant, will also be installed.

Before the redesign and retrofitting, the Fond Assau Agro-Processing Plant vacuum packed 300 – 350 kilograms of produce per day, namely, green bananas, green plantain, breadfruit, dasheen and yams. The Plant also processed about 200 litres of pulp per day from local mangoes, golden apple, guava, passion fruit, tamarind, cherries and lime. They hope to begin pulping and juicing pineapples, sorrel and ginger, when production resumes.

With the new layout and new equipment, production as well as storage capacity is expected to increase significantly. The new Flow Production System will be more efficient and will ensure greater compliance to quality standards such as HACCP.

The Fond Assau Agro-Processing Plant commenced operations in September of 2011. The plant sits on over 10,000 square feet of land at Fond Assau in Babonneau. With the new layout, all production will now take place on the



Assistant Manager -
Fond Assau Agro Processing Plant
Cynthia Lionel

ground floor. Admin and operations will take place on the top floor.

According to Assistant Manager, Cynthia Lionel, the main objective of the Plant is to add value to the range of crops, fruits and vegetables grown by local farmers. She explained: "We've realized over the years that we have lots of seasonal crops, seasonal produce. Out of the season, these crops are no longer available. So the Plant was established to cut down on the wastage that we experience on a yearly basis."

"What we're trying to do here is to add value...to extend the shelf life of our mangoes, papayas, sour sop, cherries and other seasonal fruits. The Fond Assau Agro-Processing Plant has a significant role to play in the context of the BAM Programme and the overall thrust towards diversification of our agriculture sector as well as our food security."

Lionel explained that the new layout of the plant makes provision for small agro processors in the north who will be allowed to come-in and do their agro-processing in a controlled environment that ensures adherence to safety, quality and standards.



“The Fond Assau Agro-Processing Plant has a significant role to play in the context of the BAM Programme and the overall thrust towards diversification of our agriculture sector as well as our food security”

The plant buys fresh produce and fruits from farmers island wide, with Babonneau, Soufriere, Mon Repos, Micoud and Dennery being the regions with the largest and most consistent supply. The Plant's staff also go out to the farms to see what crops are being cultivated. This is also part of relationship-building with farmers.

Lionel explained: “While we purchase crops from farmers for processing at the Facility, we also purchase on behalf of the St. Lucia Marketing Board. So we buy a wide range of produce, fruits and vegetables. Our purchases from local farmers average around \$2000 weekly. Any purchase above \$100 has to go through a 15-day payment cycle whilst purchases of \$100 or less are paid to farmers immediately.”

The Fond Assau Agro-Processing Plant currently has a staff compliment of 12. When the Plant begins operating at full capacity, Lionel says there may be the opportunity to create more jobs in the community.

PAPER MAKING

The biggest novelty at the Fond Assau Processing Plant is its paper making operation. The paper is made from the fiber of the banana tree, which is widely available on the island. That too is another way of adding value to bananas. After the fiber is processed and dried, color is added to it, if needed.

The paper produced at the Fond Assau Agro-Processing Plant was a big hit at a TEPA sponsored Trade Show in England. Coming out of this Showcase, a UK firm has expressed interest in this authentic product. Paper from the Plant is being used by local artist for drawing and painting, as packaging for local handmade soap, by Bank of Saint Lucia for Awards Certificates and a few other local interests.

In-house, the Plant's staff create gift cards, gift bags, gift boxes and certificates from the paper that they produce. The niche market potential of this locally made paper looks promising. It may well become the 'Star' in the range of products produced at the Plant.



Empowering Rural Women through Farming, Agro-Processing and Enterprise



The Micoud cluster of the St. Lucia Network of Rural Women Producers is one of the beneficiaries of the BAM. The group comprises 25 rural women farmers and agro processors. Group members reside between Praslin and Desruisseux on the East Coast. They range in age from early twenties to late sixties. Most are single mothers. Members of the group produce a variety of jams and jellies, candied fruits and vegetables, tamarind balls, fudge, plantain chips, guava and mango cheese. They also produce fruit and vegetable juices and punches.

Carmen Nurse is President of the Caribbean Network of Rural Women Producers (CANROP), the St. Lucia chapter (SLNRWP) as well as the Micoud Cluster. She says the Micoud Cluster has been very active over the last 4 years.

"We have made great strides in that we were able to secure assistance from SEQUA from whom we got \$50,000 for the purchase of industrial equipment. Beyond that, we received funding from IICA for the purchase of additional equipment to begin agro-processing on a

large scale. We also have a Revolving Fund from which members can borrow money for the purchase of inputs for agro processing and farming materials. There is a 5% interest rate on repayment."

Quite apart from the processing end of things, Ms. Nurse notes that some of her farmer members have received much needed assistance from the Ministry of Agriculture. She explained: "There are farmers with basic needs. They cannot finance something as simple as irrigation. Presently, some of our members are being assisted by the Ministry of Agriculture with the setting-up of irrigation systems as well as help from farm assistants through the NICE Programme."

In 2009, members of the Micoud Cluster of SLNRWP benefitted from training in Agro-processing and in the use of preservatives – both natural and chemical. This training was also organized by IICA during which the rural women learnt how to process local fruits and vegetables in such a manner so as to increase its shelf-life and by





“ The objective of the St. Lucia Network of Rural Women Producers is to empower rural women. From the BAM Project, we are hoping that the facility for processing will be completed, and that we can use it, so that we can economically empower our women ”

extension, reduce the level of wastage of local fruits and vegetables in season.

In 2011, the group received some agro-processing equipment from IICA and SEQUA and was allocated space at the Anse Ger Depot of the Ministry of Agriculture to set-up its processing facility. However, there have been several challenges which have hampered the commencement of agro processing by members of the group at the facility. Ms. Nurse hopes that under the BAM Project these delays can be addressed. She says it is important to have a central processing facility to ensure quality control, proper packaging, storage and distribution of finished products.



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She said: “First of all, we need the processing space re-designed. We also need additional equipment so that we can start processing. We have fryers but we need direct shoots for our chips so that when we slice our plantain, cassava and eddoes, the chips go straight into the fryers through the shoots. We also need assistance with packaging and labeling.”

Ms. Nurse says the core objectives of the BAM Project are in sync with that of her group. She explained: “The objective of the St. Lucia Network of Rural Women Producers is to empower rural women. From the BAM Project, we are hoping that the facility for processing will be completed, and that we can use it, so that we can economically em-

power women to process here and reach the market, first at the local level and then at the regional level.”

Ms. Nurse hopes that the assistance from BAM will cause members of her group to take a more business-like approach to their cottage industries. She says when the processing plant is up and running, members will be encouraged to pool their resources to produce larger quantities to respond to special orders in the marketplace, thus giving them better economies of scale in raw materials, production capacity, as well as supply chain management. She hopes that once the group begins to establish itself as a viable entity, it will attract more women, which will in turn create more employment in the rural communities.

Ms. Nurse says the regional umbrella body for rural women producers CANROP is a good catalyst for enterprise development among rural women across the Caribbean, and as President, she will do all within her power to ensure that objective is fulfilled.





Cocoa

- a resurgent crop and a niche market for St. Lucia

Premium Cocoa Producers Association (St. Lucia) Limited, is a grouping of cocoa farmers in Region 4, which includes Micoud, Ti Rocher, Mahaut and Mon Repos on the East Coast of the island. Established in 2010, the Association comprises at least 18 cocoa farmers. Separate groupings of cocoa farmers exist in the Babonneau and Soufriere regions.

Mr. Jeremiah Louis-Fernand is Vice President of Premium Cocoa Producers. He says whilst it's not the ideal situation to have three separate groupings of cocoa farmers on a small island like St. Lucia, there are issues such as geographic location and proximity to farms, which justify the existence of more than one association.

CHALLENGES, PESTS AND DISEASE

Rain, drought, landslides, the erosion of river banks and flooding were identified as some of the natural elements affecting cocoa farmers on the island. According to Louis-Fernand, some farmers have lost quite a few cocoa trees to flooding or drought. He cited desilting of rivers and proper drainage on farms, as critical to the sustenance of the industry. There is also the need for new cocoa plants to replace what has been lost as well as inputs such as fertilizer and chemicals to treat pests and diseases affecting the cocoa plant. Black Pod was cited as one of the diseases affecting the cocoa crop here. Weeds and fungus are said to be on the increase on cocoa farms. Therefore, weed control and fungicide control are two other critical areas of need for the local cocoa industry. Rat infestation is said to be the latest threat to the cocoa crop. Thus, cocoa farmers are critically in need of rat bait to save their crop. Louis-Fernand says it is important that cocoa farmers receive assistance when it's most needed.

When it comes to agricultural diversification in St. Lucia, Cocoa is a resurgent crop with tremendous niche market potential. The establishment of the chocolate factory Hotel Chocolat in Soufriere has breathed new life into the local cocoa industry and provided a steady market for local cocoa farmers. Like other cocoa farmers on the island,



Mr. Jeremiah Louis-Fernand - Vice President - Premium Cocoa Producers

members of Premium Cocoa Producers sell 'wet' beans to Hotel Chocolat at \$2.00 - \$2.50 per pound. Hotel Chocolat has its own drying process which follows strict guidelines and specifications.

COMPETITIVE ADVANTAGE

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COCOA MICRO-FERMENTARY

Louis-Fernand says St. Lucia has competitive advantage, based on the quality and flavour of cocoa grown on the island. He said: "There's always a ready market because we have premium cocoa. Our cocoa is actually considered to be one of the finest in the world. In fact, our cocoa makes up 25% of all cocoa used in the production of chocolates and other cocoa by-products in the world."

"Because of the geographic location of St. Lucia, our cocoa is richer in flavour, fetches a better price on the world market, and it tastes better than cocoa from anywhere else in the world. That's why our cocoa is premium cocoa."



Louis-Fernand believes cocoa is the next big crop for St. Lucia. He says quite apart from the chocolate industry, there is now a great demand for cocoa in pharmaceutical products. He said Africa is one of the world's largest suppliers of cocoa but civil and political unrest have dealt a serious blow to the cocoa industry in that part of the world. This has created new niche opportunities on the world market for small grower countries like St. Lucia.

COCOA MICRO-FERMENTARY

Under a previous EU Funded project (SFA 2005), a Cocoa Fermentary was constructed on the site of the Ministry of Agriculture Depot in Anse Ger. However, there are issues of design, layout and equipment which need to be rectified before the facility can be used. Louis-Fernand hopes that these issues can be sorted out under the BAM Project to clear the way for utilization of the facility.

He explained: "With the Fermentary, the whole idea is to go through the proper process of fermenting the cocoa.

After fermenting, the cocoa should be dried. That's why we need a Dryer to dry the cocoa adequately and properly. After the cocoa is dried, we can either distribute locally or export. The third option would be processing of the cocoa into by-products such as cocoa sticks or chocolate. We're hoping that through the BAM Programme they would finish all what's required to make the Fermentary fully functional so we can begin operations."

Louis-Fernand says processing is not part of the original plan for the Fermentary and this is something which could be explored further down the line. He however indicated that Premium Cocoa Producers is ready to begin using the Fermentary at Anse Ger.

He said: "Our President has a lot of information in so far as the type of Dryer we need. He has a lot of knowledge in so

“ Our cocoa is actually considered to be one of the finest in the world. In fact, our cocoa makes up 25% of all cocoa used in the production of chocolates and other cocoa by-products in the world **”**



far as the fermenting style, and he has done extensive research on the type of machinery we need. He knows where to source the equipment, if we were to go into manufacturing chocolate. So generally, we are ready to start using the facility and start adding value to our cocoa."

Louis-Fernand says his Association is also keen to acquire a vehicle to collect freshly picked cocoa from the farms of its members, as well as other cocoa farmers across the island, when the Fermentary becomes fully operational. Cocoa Producers are also being encouraged to engage in composting of cocoa pods to make manure for their cocoa crops so that they cut down on the use of fertilizers and engage in more organic farming practices.



Mille Fleurs Honey Producers Co-operative

Mille Fleurs is the umbrella body for Beekeepers on the island. At present, the group comprises just over 200 Beekeepers. It is estimated that there are approximately 3000 hives on the island. While the Mabouya Valley has the highest concentration of Beekeepers, beekeeping and honey production is practised islandwide.

Past President of Mille Fleurs, William Antoine, believes climate change has affected the pattern of flowering of trees, which in turn has affected the bee population on the island. He also cited the varroa mite as a threat, saying: "Right now, we are trying to stay away from using chemicals in our hives. We are about to start joint bottling, so we are trying to be 'chemical free' and go strictly organic."



TRAINING NEW BEEKEEPERS

Mille Fleurs was recently the recipient of a \$50,000 grant from the Global Environment Facility (GEF). That funding was used to train and introduce 20 new persons on the island to beekeeping – 10 youth and 10 women. Antoine says the response was so overwhelming that 60 persons enrolled and were trained. At the end of the Training, 23 new honey producers were selected. They were each given 5 hives. The approach is that each new beekeeper will return the 5 hives after they have multiplied their hives

to 10 or more. These hives will then be passed on to another 20 who were not selected initially. This is a critical component of Mille Fleurs growth strategy. Mille Fleurs also wants to explore the rearing of Queen Bees to supply beekeepers and sustain the growth of the industry.

Under the BAM Project, Mille Fleurs has been allocated space at the La Caye IRDC. BAM will retrofit the building to house Mille Fleurs bottling operations and office space. Bam will also procure equipment for Mille Fleurs' bottling operations. TEPA is working closely with Mille Fleurs to help make the honey bottling process HACCP compliant.

Asked about the ability of honey producers to supply the local market, Antoine said: "We cannot meet the demand of our local market. Martinique, St. Vincent, and some of the other OECS islands are asking us for honey but we don't produce enough to supply them."

Antoine attributes the limited supply to low-production, due to the limited number of beekeepers and hives on the island. He explained: "We have a shortage of bees; as beekeepers, we are working with very limited resources. If we had the resources, in one year, we could increase our bee population, and our honey production to three times what we currently produce."

EXTRACTING, BOTTLING AND BRANDING

To facilitate its joint bottling initiative, Mille Fleurs intends to acquire a Mobile Extractor which would make it possible to go to Bee Farms across the island to extract honey. The idea is that the hive owner would be paid on-the-spot for the honey extracted at an agreed price, per gallon. Bottling and Labelling will be done by Mille Fleurs at its La Caye Depot. This move will facilitate marketing of St. Lucia's honey under the Mille Fleurs brand. Mille Fleurs also intends to explore the production of by-products from honey when they settle into the new facility.

Antoine says local beekeepers and honey producers should maximize the growth potential of the industry, es-



“If we have the resources, in one year, we can increase our bee population and our honey production to three times what we currently produce”

pecially since honey production is reserved exclusively for local farmers.

Mille Fleurs has a small warehouse of equipment such as extractors, hive frames, hats, overalls, smokers, sorters, and other tools used by beekeepers. The Cooperative's Treasurer, himself a tradesman, also builds hives which beekeepers can purchase on demand. However, due to financial constraints, the stock is moving very slowly. Antoine hopes for a turn-around in fortunes when the La Caye Depot becomes fully operational.

THE ART OF BEEKEEPING

For those not familiar with Beekeeping and Honey Production, Antoine explained that the process from Hive to Honey is roughly 6 months. He says the best month to start is February, and harvest by August. He said newcomers should avoid starting in the rainy season as this will seriously hamper progress. Antoine says as a rule, all new Beekeepers should work with a mentor to guide them through the process, at least in their first cycle. He said seasoned beekeepers can harvest 3 – 4 times a year and extract between 8 – 10 gallons of honey per hive. The average cost of maintaining one hive is \$400.

Antoine believes beekeeping can make a serious dent on unemployment in rural communities. From his observations and the recent Training of new beekeepers, he says there is a lot of interest in beekeeping, especially among young persons. In addition, he notes that unlike other crops and agricultural commodities, honey is a non-perishable product. Honey is less price sensitive, and more sustainable over the long term.





Diagnostic Facility

critical to the Future of Agriculture in St. Lucia



Hon. Ezechiele Joseph - Minister for Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives.

St. Lucia's Minister for Agriculture, Ezechiele Joseph, believes the National Diagnostic Facility, soon to be constructed at Union, is critical to the development and success of the island's agriculture sector.

Mr. Joseph has been integrally involved in the EU funded ATP-BAM Programme from inception. He was the Minister of Agriculture Back in 2010 and guided development of the National Adaptation Strategy which resulted in Saint Lucia becoming a beneficiary of the said Programme.

Now in his second stint as Minister of Agriculture, Hon. Ezechiele Joseph is elated to preside over the implementation of the ATP-BAM Programme. According to Minister Joseph, back in 2010, the initial amount requested by Saint Lucia for BAM was over the 10.3 million Euros. He said the idea then was to support banana production and productivity while simultaneously transforming the agricultural sector, noting that "at the time, our banana production

was at a level that would allow us to realize that contribution from the EU." However, when the Agreement was signed, the focus was on diversification and transformation of the agricultural sector. In addition, recent declines in the value of the Euro have further reduced the funds available for implementation of Projects under ATP-BAM.

"As a country, if we are serious about agricultural development, a Diagnostic Facility is critical, and necessary, to give support to our farmers and to position us for export of agricultural products and services. I am happy that after so many years, we are here today to signal the commencement of construction of this Facility."

Despite the many challenges and significant decreases in banana production levels and exports, Minister Joseph maintains that "the banana industry is critical to our agricultural development and as a Government, we will do all within our power to achieve production levels which could impact positively on rural communities." Discussions have been held with officials in Martinique and France. Coming out of these talks, St. Lucia is exploring the supply of 3000 boxes of bananas per week to Martinique.

The Agriculture Minister recognized the efforts of all those who have contributed to making the National Diagnostic Facility a reality. He had special praise for personnel of the Ministry of Agriculture as well as the Office of the NAO for surmounting the challenges and making St. Lucia a model of good project implementation under the EU's ATP-BAM Programme.

Minister Joseph notes that quite apart from the physical structure and equipment, it is critical to staff the Facility with the requisite trained personnel. In that regard, he said, an assessment of the human resource needs of the Facility must be undertaken as a matter of priority, to



avoid any undue delays in operationalizing the Facility when it is completed.

TRAYVIS, a construction firm from Martinique has been issued the contract to build the Diagnostic Facility. The Facility, which will be a 66,000 square feet structure with a top floor and a ground floor, is valued at 2.5 million Euros. An additional 500,000 Euros has been allocated for the Procurement of Equipment. The building was designed by the St. Lucian firm FDL Consult, which will also supervise construction works. Well-known local contractor, Collins Lynch will serve as Project Manager. The Diagnostic Facility is expected to be completed within approximately 15 months.

Project Manager, Collins Lynch, says just over 150 persons are expected to be employed in the construction phase. These will include heavy equipment operators, truckers, masons, plumbers, electricians, painters, tilers, and carpenters. Lynch added that as much of the building materials that are available locally will be purchased on

island within EU guidelines, the materials used must be produced within the EU.

Most EU Contracts are open to companies within European Union member countries. As an overseas territory of France, Martinique qualifies under the Procurement Guidelines for EU Funded Projects. On February 4th 2015, Martinique became an Associate Member of the Organization of Eastern Caribbean States – OECS. The Agreement makes provision for closer cooperation between Martinique and OECS Member States in Education, Sports, Health, Air and Sea Transportation, Leisure and Boating Tourism, Arts and Culture.

St. Lucia is exploring closer Collaboration and Cooperation with Martinique, in Agriculture and other areas. Minister Joseph says the awarding of the contract to build the Diagnostic Facility to TRAYVIS of Martinique should give added impetus to efforts towards functional cooperation between St. Lucia and the neighbouring French Isle.





The Banana Accompanying Measures (BAM) Programme

The Banana Accompanying Measures (BAM) are a support package for a number of banana-exporting countries from the African, Caribbean and Pacific (ACP) group of states. They finance projects in Belize, Cameroon, Côte d'Ivoire, Dominica, Dominican Republic, Ghana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname. The total financial allocation is €190 million. The BAM are designed to foster competitiveness and encourage diversification where necessary and to facilitate these countries' adjustment to a new trading environment.

The beneficiary countries were selected for the BAM support based on the level of banana exports, measured as import volumes by the EU over the last ten years. The projects implemented are country-specific and they are identified and prepared by ACP countries in coordination with the EU within wider agriculture and development strategies. In the case of Saint Lucia, St. Vincent and Dominica, the instrument is termed the Agricultural Transformation Programme (ATP) of the BAM, since the

activities are providing support for diversification and transformation of the agricultural sectors.

The projects selected to be funded for Saint Lucia total 10.350,000 Euros and include the construction of an Agricultural Diagnostic Facility, the on-going implementation of a management plan for the Black Sigatoka disease, the rehabilitation of Agro-processing facilities, training for youth in Agri-business and the rehabilitation of rural infrastructure such as agricultural feeder roads, to name a few.

The funds provided under BAM for Saint Lucia are highly relevant to the target groups and the final beneficiaries. The priority is focused on smallholder agriculture, local producer groups, and vulnerable groups. The BAM Saint Lucia aims at the heart of the challenges in the sector, covering low productivity, weak linkages between producers and markets, high risk exposure of small farmers to natural disasters, high poverty rates in rural areas and environmentally harmful practices

The BAM is also expected to further support the local sector in re-orientation towards the domestic markets, whilst building on previous interventions, strongly linking the Banana Accompanying Measures (BAMs) with the earlier programmes such as the Special System of Assistance – SSA 1994 to 1999 with EUR 75 million, followed by the Special Framework of Assistance SFA 1998 to 2008 amounting to EUR 376 million. Both programmes benefited twelve ACP traditional banana suppliers.

ATP/BAM is a great opportunity for the agricultural and related sectors and signals the continued commitment of the government of Saint Lucia and the European Union to the sustainability and continued viability of the agricultural sector. The National Authorizing Office is committed to ensuring that all interventions under the ATP/BAM yield maximum benefit.





CONSTRUCTION AND INDUSTRIAL EQUIPMENT LTD.

WORKS EXECUTED UNDER BANANA ACCOMPANYING MEASURES (BAM) PROGRAMME

PROJECT TITLE



**Anse - Ger Cocoa
Micro-fermentary**

**Anse - Ger Agro-Processing
Facility for Rural Women**



**LaCaye Mille Fleur Honey
Processing Facility**

**Fond Assau Agro-Processing
Facility**



Bois Canon, Micoud



**Mighney - Derache,
Soufriere**



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Transforming Agriculture - Restoring Livelihoods

