Intra-ACP Agriculture Policy Programme (APP) Caribbean Action, with funding by the European Union under the 10th European Development Fund (EDF)

Improving the way Fresh Agricultural Produce is Marketed in the Caribbean will have positive Economic and Social Impacts in the Region

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Key Messages:

- Fresh produce is naturally perishable, often suffering quality loss during the physical journey through the marketing system. ‘Post-harvest losses’ affect many factors, including the food supply, commodity prices and income for producers.
- Investment in markets and other market infrastructure offers important social and economic rewards through increased incomes, economic value-adds, improved food security and enhanced earning potential of small farmers, including women and youth.
- ‘Marketing’ of fresh produce is more than just a commercial transaction between buyer and seller; it captures all business interactions and activities in the flow of products ‘from farm to fork’.
- A review of the current system underscores the importance of an adequate local marketing infrastructure, which effectively links farmers to the other main actors in the system.

Outside vending at St.Kitts Basseterre Public Market

(Photo: Department of Agriculture St. Kitts)
This policy brief focuses on the adequacy of the market infrastructure and better business facilitation mechanisms in the Region for fresh produce. It addresses the current trade, logistics and transportation and market situations, as well as the outlook for the future, including policy recommendations at both national and regional levels. The brief has been completed based on market adequacy research carried out in 2015 under the APP in five selected countries, as well as an on-going business facilitation study.

When we think of fresh produce and the Caribbean, many wonderful thoughts come to mind. For some it might be picking a ripe banana or juicy mango from their own, sunny backyard. For others, it means strolling in the established, or sometimes impromptu, outdoor farmers’ markets; seeing and smelling fresh, beautiful local fruits and vegetables that tempt the dollars out of their wallet. And again for others, it means a quick trip to the ‘veggie marts’ or local supermarket on the way home from work where they can still get quality, regionally grown sweet potatoes, peppers, avocado, string beans, ackee, coconut and more.

Fresh produce of the Caribbean has, traditionally, been ‘sold’ on its own strengths of flavour and versatility and not based on fancy packaging or catchy slogans. However, in today’s competitive market, even the most flavorful and versatile fresh produce must now go beyond just ‘selling’ to effective ‘marketing’. ‘Marketing’ of fresh produce is more than just a commercial transaction between buyer and seller. It is an important process that needs attention and support in the Caribbean in order to make the most of the agricultural commodities that the Region has to offer. The ‘marketing’ of fresh produce includes the entire process flow of goods from the producer to the consumer. It includes production planning, harvest processes, loading, transportation and unloading, grading, storage, and dissemination to the consumer. It is affected by several factors including administrative requirements and trade policies within the Region, logistics and transportation networks and the state of local and regional markets. With the rich variety of options offered in fresh produce in the Caribbean, investing in the ‘farm to fork’ process is an important initiative in the development of the agriculture and food system in the Region.

Marketing local:

Putting fresh produce into the hands of consumers and money back into the system

Improving the overall ‘marketing’ of fresh produce in the Region means so much more than just getting local fruits and vegetables to local dinner plates. The “eat local” trend is important and is making great strides in the Caribbean and around the world. But, the motivation to improve the fresh agricultural market infrastructure is much broader than that. Improving the market system will provide economic benefits through both increased contribution and value-adds. Improvements will also foster food security, reduce poverty and bolster the earning potential of female and small farmers. It is an important social and economic initiative.
Is the infrastructure for fresh agriculture produce adequate?

According to agricultural consultant, Dr. Lennox Sealy, in his report on the Adequacy of Agricultural Markets in the Caribbean, ‘Agricultural Marketing’ is “the performance of all business activities included in the flow of products from the beginning of agricultural production until they are in the hands of consumers” or, to put it simply, “from the farm to the fork.”

Local markets play a very significant role in the ‘agricultural marketing’ process flow. Neighborhood markets provide a place for local farmers to sell their goods that are accessible and available. The reality is that these farmers may not have the opportunity to get their products into export, or even wider regional markets, due to limited resources and connections. Therefore, it is important to understand the market infrastructure that is available to them and do what is necessary to foster positive change in those environments, driving further growth and opportunity.

Adequate markets that can support local farmers from planning and communication, right through to safe, clean facilities with good parking is of great benefit to agricultural enterprises in any area. In his report on market adequacy, Dr. Sealy acknowledged the positive effects that investments in markets and other market infrastructures could make in the Caribbean. “Like access to finance and services at the production level”, he says, “market-related services and physical infrastructures are crucial to lifting small farmers, women farmers and generally, subsistence farmers out of poverty and into the mainstream of economic life.”

Traditionally, the responsibility for improvement of the marketing of fresh produce in the Caribbean would be in the hands of marketing “boards” within a country. They have historically been tasked with providing market infrastructure, guaranteed markets and in some cases guaranteed prices for farmers and bulk buyers. However, this approach has not fully stimulated the agriculture development desired.

Marketing systems are dynamic and competitive and require continuous change and improvement. Today, an ideal market system must link all of the stakeholders so that they are up to date with the most current information and working together to foster the necessary change. Farmers, wholesalers, storage brokers, retailers and consumers are the five major actors in the system and in order to create an efficient and effective market structure, each of these stakeholders needs to be involved.

As part of an APP study, Dr. Sealy was tasked with collecting information on the current market situation in the Caribbean. The study involved the analysis of markets in five selected countries including Grenada, Barbados, Guyana, St. Kitts & Nevis and Trinidad & Tobago.

These countries represent a wide range of economic and agricultural conditions that could generally be seen as representing the Caribbean as a whole. For example, in Guyana agriculture represents a large contribution to the GDP at 20% however in Trinidad, the largest of the countries, agriculture contributes to only 0.5% of the GDP. Trinidad also has the largest population with 1.4 million people however, St. Kitts & Nevis has only 56,000 people.
In his report, Dr. Sealy noted the importance of each stakeholder and identified 20 characteristics of a good market:

**20 for 20: Features of an ‘ideal’ fresh produce market**

1. An active group of farmers who consistently supply the market with bulk quantities.
2. An active group of wholesalers who purchase farmers goods in bulk quantities.
3. Collection points (wholesale markets) conveniently located based on the road networks and location of production areas.
4. Suitably located markets based on traffic and other considerations.
5. A Market Information System that connects all stakeholders.
6. Trading that takes place based on grades and standards.
7. Packing and cooling facilities available for fresh produce that are centrally located or close to collection points.
8. Retailers that are located in approved, safe, convenient areas with an adequate number of stalls to service the vendor population.
9. Physical conditions in the market that are conducive to safe, convenient trading.
10. Availability of facilities within the market for overnight storage.
11. Opening hours that are convenient to customers.
12. The availability of security for both goods and consumers.
13. The availability of parking for both vendors and customers.
14. The availability of sanitary facilities for both vendors and customers.
15. Managers and supervisors that are trained in the basics of agricultural marketing.
16. A shared vision of how the marketing system should work best in order to facilitate all users.
17. Maintenance in place for the facilities.
18. Training carried out for produce handling, food safety, etc.
19. Efforts in place to combat theft of agricultural produce in both transport and the market.
20. Monitoring at all points of the network in the interest of improvement.

**Towards the ‘ideal’ fresh produce local marketing infrastructure**

The 20 characteristics were used as standards by which to measure each of the markets that were assessed in the Caribbean and the basis on which Dr. Sealy created his market adequacy report. Based on these characteristics, the model used to score the adequacy of the markets included examination of the physical characteristics of the market, as well as the facilitating factors such as farmers groups, supply, information systems and more. A maximum score of five was allowed for each of the 20 ‘Ideal’ Market Characteristics for a possible maximum score of 100 for each country. The table below shows the overall score for each country, based on the markets examined, as well as an average score for the Region as a whole:

<table>
<thead>
<tr>
<th>Country</th>
<th>Total # of Markets</th>
<th># of Markets Assessed</th>
<th>Average Score out of 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbados</td>
<td>8</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td>Grenada</td>
<td>5</td>
<td>5</td>
<td>33.8</td>
</tr>
<tr>
<td>Guyana</td>
<td>33</td>
<td>2</td>
<td>44.0</td>
</tr>
<tr>
<td>St. Kitts &amp; Nevis</td>
<td>2</td>
<td>2</td>
<td>31.5</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>14</td>
<td>4</td>
<td>24.5</td>
</tr>
<tr>
<td><strong>Total Overall</strong></td>
<td><strong>62</strong></td>
<td><strong>17</strong></td>
<td><strong>30.46</strong></td>
</tr>
</tbody>
</table>

With an average score of 30.5 out of a possible 100, it is evident that there are many opportunities for improvement in market adequacy for fresh produce in the Caribbean. A wide overview of the report shows that markets in Guyana are in the greatest needs of physical upgrade however the country scored the highest in the report
because of its consistency of supply, excellent market locations and market hours. And, though Trinidad & Tobago has an active group of wholesalers that supply bulk quantities for the market, they scored the lowest because the reliability of the supply is not consistent, in many cases there are no formal contracts in place with wholesalers and farmers and they do not share information that can influence pricing.

Based on the Sealy report, collectively, there were five broad factors that stood out as opportunities for improvement:

**Improved market information system that connects all stakeholders (Characteristic 5):** Currently there are little to no information systems in place to support the market structure in the Caribbean. Trinidad & Tobago scored the highest in this area, but the stakeholders there were only indirectly connected when price collection officers visited the market and input information into the National Agricultural Marketing Information System (NAMIS). Guyana scored the lowest, with no system at all.

This represents a significant area where changes can be made to meaningfully improve the market structure through connecting people and information.

**Trading that takes place based on grades and standards (Characteristic 6):** To date, none of the countries in the study have been successful at introducing trading by grades and standards. As noted by Dr. Sealy in his report, this is “a critical step for the development of serious export marketing linkages.”

Fresh produce should conform to specific criteria such as size, weight, shape and firmness as well as labeling requirements. Grades and standards are an important tool in the marketing of produce in local and export markets due to the commercialization of agricultural produce in the rest of the world.

According to the Rural Agricultural Development Authority (RADA) in their 2015 manual on grades and standards, these assignments are necessary to foster a good market system. If implemented in the Caribbean they can be used to define contracts for delivery, reduce the risk of fraudulent marketing, facilitate price and quality comparison, assist in disputes regarding quality of products and help distinguish among quality levels to ensure that better products get better prices.

**Availability of packing, sorting and cooling facilities (Characteristic 7):** One of the inherent difficulties is that the fresh fruits, vegetables and root crops that make up what we call fresh produce, are naturally perishable commodities. Over time and during their physical journey through the marketing system they can often suffer quality loss through spoilage such as rooting and sprouting, inadequate storage facilities, poor handling practices and much more. The current market system in the Caribbean lacks sufficient packing, sorting and cooling facilities. Each of these factors can lead to what are called “post-harvest food losses” which affects many things including the food supply, commodity prices and income for producers.
With the investment of resources into markets for packing, sorting and cooling facilities much could be done to limit post-harvest food losses, providing more food for customers and more income for farmers.

**Marketing system visioning and management (Characteristics 15 & 16):** The overall vision for the fresh produce market in the Region seems to be lacking. Understandably, managers have tried to get the most out of their markets to appeal to tourists, create “vendor malls”, sell clothing and much more. For the most part, markets are viewed as ‘revenue generating’ as opposed to ‘trade facilitating’. This however, has been to the detriment of the produce market.

As noted by Dr. Sealy, this market needs a unified vision where vendors get involved in the operation and see themselves as stakeholders in a facility that meets their needs, not just tenants that take what they can get. He notes the need to “refocus on the importance of the market for agricultural trade.”

With a focused vision, market managers trained in agricultural marketing, maintenance and development planning and stakeholder feedback, the potential for market system improvement is in the Region is vast.

**Facility maintenance and parking (Characteristics 12, 13, 14, 17, 18):** The weakest area in the survey was the physical infrastructure of the markets. In terms of safety, sanitary conditions, security of goods and parking, most markets scored fairly low. By improving each of these areas, markets will attract more vendors and consumers, lessen losses due to theft and increase satisfaction in the local market experience.

**Going beyond local:**

**Facilitating the movement of fresh agricultural produce within CARICOM**

**Opening up the Regional Market by removing trade barriers**

In the Caribbean region, large scale agriculture for trade beyond local and subsistence farming was traditionally relegated to large plantation operations. With the lifting of non-tariff barriers (NTBs) to trade, improvement of the logistics and transportation sector and better markets, small and medium-scale enterprises will have a much easier time entering export markets, including the CARICOM market.

If the vision and approach of the 1973 CARICOM Community & Common Market (CARICOM) and the 2001 CARICOM Single Market and Economy (CSME), which is to be “integrated, inclusive and resilient”, are applied to the marketing of fresh agricultural produce in the Region, the effects could be transformational, releasing the enormous potential of intra-regional trade within CARICOM. When it comes to agriculture in particular, mature trading agreements which focus on harmonization of procedures must be established and NTBs that hinder the process must be identified, assessed and if appropriate, mitigated. This will facilitate the movement of agricultural produce within CARICOM and allow for capturing the vast opportunity for CARICOM producers, bringing new life to the produce market in the Region.
In her book, “The Caribbean Community: Facing the Challenges of Regional and Global Integration”, Anneke Jessen points out the many excellent opportunities that can be taken advantage of through CARICOM countries working together. Inputs from one island can be combined with another to create more competitive products; demands from the tourism industry in one country can be supplied by another; regional shipment centers can be developed to include processing and packaging of commodities combined from several regions and so much more. Jessen points out that “deeper CARICOM integration could enhance the development of productive activities in the region but the realization of that potential depends on the effective functioning of the customs union and the removal of obstacles to the free circulation of goods.”

Despite longstanding relationships and agreements, the percentage of intra-regional trade within CARICOM is very low due to NTBs. 50% of Caribbean export is directed to the United States and only 15% is traded internally. Today, trade within the Region is restrained by several NTBs.

According to tradebarriers.org, NTBs refer to “restrictions that result from prohibitions, conditions, or specific market requirements that make importation or exportation of products difficult and costly.” NTBs are generally measures taken by governments to try and protect domestic industries from foreign competition.

**Examples of Common NTBs are:**

- Import Bans
- Quotas
- Rules of Origin
- Quality Conditions
- Unjustified packaging, labelling and product standards
- Complex regulatory environments
- Import/Export eligibility requirements
- Trade document requirements and licenses
- Subsidies
- Product classification
- Challenging customs procedures

With the removal of such NTBs, farmers will have the opportunity to go beyond local markets and will have the security of knowing that there is a wider regional market for their fresh produce. The next challenge will be to figure out how to get their products into regional markets.

**Opening up the Regional Market by improving logistics and transportation**

Logistics and transportation are key elements in the marketing system for fresh produce in the Caribbean. Logistics involves the detailed coordination of a complex operation, in this case transportation of fresh produce, involving many people, facilities and supplies. Transportation involves the movement of goods on roads, in the air and by sea. Logistics and transportation together form a network for getting products from one place to another.

According to United Nations Conference on Trade and Development (UNCTAD) 2014 report on “Small Island Developing States: Challenges in transport and trade logistics”, the main challenges in this area include:
• **Limited Infrastructure Development and Maintenance for Roads:** Access to strategically located and well-maintained road networks is a key to supporting the transportation side of fresh produce marketing. Many post-harvest losses in the Caribbean are caused by products being damaged while travelling over rough terrain. The identification and maintenance of key road networks would go a long way in improving the situation for farmers and shippers alike.

• **Restrictive Cost of and Access to Shipping for Land, Air and Sea:** Small cargo volumes, which are common for the Caribbean, limit the ability to benefit from economies of scale or attract more competition in shipping services. Small cargo loads combined with remote delivery locations means smaller modes of transportation and more frequent trips which bring higher costs. Better communication amongst farmers, shippers, exporters and other markets will allow for all parties to work together to combine shipments and maximize value.

• **Limited Port Infrastructure and Equipment:** Aging ports, limited port and equipment maintenance and complex dockside procedures and processes challenge port facilities as they relate to both ferry cargo and dry ports. Ferry ports also have the added challenge of competition for dock space between cruise ships and cargo ships. There is a need to establish an efficient, harmonized freight processing system across the region, as well as taking into account the need to accommodate both small and large vessels to make things efficient for shipping loads no matter the size. The harmonization of procedures and processes will make things quicker and easier and the availability of different shipping options will facilitate wider intra-regional trading, as well as exports.

Each of these areas represents important links in the value-chain that make up a large part of the market system for fresh produce in the Caribbean. An additional challenge identified as part of the Caribbean Action under the APP and being addressed through a consultancy on "The Development of Business Facilitation Mechanisms (BFM) in CARICOM" is the linking of all of the elements together through information and mediating technologies.

In the Caribbean there is a need to improve the logistics and transportation environment in which agricultural producers and traders operate in order to reap the full potential benefits of agriculture. Currently, there are limited mechanisms to tie all of the pieces together and enable the flow of important information. For example, farmers
need to connect with exporters, who require information on transportation services in order to plan for the provision of necessary commodities as negotiated with other countries in the CARICOM region. If these infrastructure, information and transportation needs can be met, the process for moving fresh produce in the Region will be greatly enhanced (Fig. 1).

**Investing in fresh produce marketing**

**Recommendations**

In terms of putting money back into the economy, in his report, Dr. Sealy suggests that there is “a positive and statistically significant relationship between increases in infrastructure investment and economic output.” It stands to reason that if money is spent on better transport and information systems, to get more produce to markets where facilities are improved, to attract more vendors and consumers, more money will change hands.

The economic value-adds of improving the fresh produce market infrastructure are substantial as well. Each year and in every Caribbean country, thousands of dollars in food is lost due to product damage from bad roads, inadequate storage facilities, theft and more. In the Caribbean, 40% of food losses occur during post-harvest handling and processing. These losses have a significant impact on farmers’ incomes as well as food costs and availability. Simply put, if farmers have less to sell they will make less money. And, it is not just about money earned, it is also about money saved. If farmers have more product to sell, the price of the commodity will go down, keeping more money in the pocket of the consumer to spend elsewhere.

Another major benefit to improving the market system for fresh produce will be improved food security, or food availability and access. A more appropriate market infrastructure will lead to more access to food for consumers, especially if accompanied by an increase in agricultural production motivated by better market conditions. Improved infrastructure would also result in poverty reduction with increased income for farmers, farm workers, vendors and processors. Also, new jobs would be created in the area of logistics, transportation, market maintenance and other service jobs.
The following recommendations for improving the ‘marketing’ of fresh Caribbean produce are offered for consideration. They are premised on the need to establish national and then harmonized regional policies to which all members can commit with the aim of supporting the Caribbean fresh produce market.

Enhancing the Adequacy of Local Market Infrastructure

Invest in Infrastructure Improvements

1. Build market facilities into master development plans to avoid problems related to ‘spontaneous’ markets.

2. Establish agreements with the private sector for the development and management of market facilities.

3. Provide facilities for wholesaling and vending on the outskirts of urban areas.

4. Create wholesale markets, where appropriate, with appropriate storage and cooling facilities.

Strengthen Essential Marketing Services & Regulatory Frameworks

5. Develop Management Information Systems in each country to increase confidence in the pricing mechanism for domestic food production, increase the ability for forecast demand and increase the pool of buyers.

6. Develop individual Market Information Systems with data on number of users and vendors, parking spaces required, available facilities etc. to support management and planning for future facilities.

7. Develop criteria for facilitating fresh produce marketing for small-scale farmers, women and disadvantaged groups.

8. Establish special licences for wholesalers, including licences for vehicular transport.

9. Create licensing and regulations for food sellers with clear provisions being made to accommodate small-scale retailers, including fees for use of space set at realistic levels.

10. Establish grading standards for produce trading at the wholesale level.

11. Provide powers for local authorities to develop and manage markets.

Promote Coordinated Management Systems

12. Identify/establish one national coordinating body in each country for all agricultural marketing related matters.

13. Move agencies responsible for markets, including the design of facilities, programming, operations, professional management, statistics and price information, under the Ministries of Agriculture in each country.

14. Include traders and farmers as equal partners, with officials acting as facilitators to create marketing programmes, develop market plans and solve market problems.

15. Create long-term proposals for agricultural marketing networks in each country which are established by and shared with all stakeholders, including wholesalers.

16. Collect a portion of revenues from vendors in order to invest back into market development, maintenance and security.

17. Establish group marketing arrangements among farmers associations so that small farmers can cluster their produce for sale where there are difficulties in the distribution of small quantities.

18. Formalize linkages between agriculture and other sectors of the economy such as agri-food processing, tourism, pharmaceuticals are more.

Improve the Movement of Fresh Produce within the Region

19. Identify all regional NTBs, assess each and create a framework to eliminate identified barriers facing agricultural products.

20. Harmonize regional import procedures to facilitate the movement of agricultural products within the Region.

21. Create a regional registry for the CARICOM transportation corridor, which includes basic data as well as cost, availability, reliability and protocols for (a) Importers, (b) Exporters, (c) Brokers, (d) Shipping Agents, (e) Shipping Lines, and (f) Aircraft Operators.

22. Identify and maintain key transportation corridors within CARICOM which can facilitate the efficient transport of fresh agricultural produce and agro-processed goods and create a robust, web-enabled Regional transportation portal that supports the efficient movement of agricultural goods within these corridors.
23. Formulate effective dockside operational procedures and processes, for ferry and dry cargo, which aid in establishing an efficient freight process handling system for the distribution of agricultural produce, taking into account the needs of both small and large vessels.

24. Create a Regional, searchable database for freight logistics and market information to support the trade of agricultural and processed products between and among CARICOM member states.

25. Develop and maintain a Regional mechanism to facilitate on-going consultations and exchanges between producers, exporters and transportation logistics service suppliers with the aim of facilitating forward planning and negotiations for the provision of required services.

Time, effort, dedicated resources and cooperation are all required in order to implement these recommendations and see them through to their intended results. However, the potential for improvement in the ‘marketing’ of fresh produce in the Region is vast and the residual results will be positive and far-reaching.

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