

The CARICOM Regional Transformation Programme for Agriculture

EXECUTIVE SUMMARY MARKET INTELLIGENCE REPORT

PAPAYA



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Our discussion with officials in the Ministries of Agriculture in the Region proved helpful in reconciling some of the deficiencies we encountered in the review. Technical support was provided through the assistance of Brent Theophhile, Rebecca Gookool, Jai Rampersad and David Hanson, to which the Core Team also expresses support. To Ms. Martha Jiminez-Spence and Ms. Indira Buchoon-Ousman, we express our sincere thanks for their logistical organizational and communication support.

Although we tried to ensure accuracy of the database used for the review, nonetheless we accept responsibility for any errors that may be discovered. This may be the result of the multiple databases from which we had to access the data. The small ruminants sector in the Caribbean is just emerging unlike countries such as Australia and systems of data recording for this commodity have not yet entered the mainstream databases. This gap we recommend should be addressed with urgency.

Dedication

We dedicate this work to the Memory of our Colleague and member of the study team, Dr Lloyd B. Rankine. Dr Rankine passed away on October 25, 2006. He was a colleague with whom we shared many long hours in dialogue, in the field and in the class room. His life long endeavours and dedication reflect his passion for agriculture in the Caribbean.

Dr. Rankine was an integral part of the University of the West Indies having served the University (both Mona and St. Augustine campuses) from 2nd December 1968 to June 3, 2006 when he suffered a debilitating stroke. He served as Head of the Department of Agricultural Economics and Extension from 1977 to 1990 and taught in the capacity of Senior Lecturer up until 2003, when he retired. From 2003 to June 3, 2006, he lectured part-time in the Department

Dr. Rankine also served as Director and Chairman on many Boards in Trinidad and Tobago. .



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EXECUTIVE SUMMARY

PAPAYA: MARKET INTELLIGENCE

1. INTRODUCTION

1.1 Background to the Study: The CARICOM Regional Transformation Studies on Competitiveness

This Report constitutes the results of a review of the Markets for Papaya from the perspective of the CARICOM industry. It is part of a larger study commissioned by the CARICOM Regional Transformation Programme for Agriculture. The study evaluates the international competitiveness of five commodities: hot pepper, papaya, sweet potato, coconuts and small ruminants.

This Market Intelligence Report was preceded by a review of the general agricultural sector policies as well as those specific to the selected commodities in the seven CARICOM countries selected for the overall study, namely: Jamaica, Belize, Barbados, Guyana, St Vincent, St Lucia and Trinidad and Tobago.

The market intelligence study covers a review of the global situation – production and trade flows. It focuses on the Markets of interest to CARICOM producers with respect to competition, opportunities and challenges. This market intelligence report is followed by the final component of the overall study which evaluates the competitiveness of the Industry in each of the country studied as well as identifying strategies for development.

1.2 Markets of Interest to CARICOM

A necessary component of the RTP Competitiveness Studies is the determination of the competitiveness of the selected commodities. Given the globalization process that has been taking place, international competitiveness requires industries to be competitive in the domestic and relevant foreign markets since the removal of barriers to trade have resulted in the integration of both. In the case of Papaya, it is our view that the relatively small and spatially fragmented market within CARICOM is unlikely to be of significant interest to global producers of this fruit. At the same time, Regional producers have as one of the main target extra-regional markets for

the fresh fruit. Given the logistics of transportation as well as shipping costs, the feasible export markets option at this time for Caribbean Papaya are the Eastern States of the USA, Eastern Provinces of Canada and Western Europe (mainly, the UK).

We have therefore selected the above markets for our investigation of market entry requirements, as well as an assessment of the competitiveness forces. For each market, we attempt to determine the structure and functioning, as well as the key drivers of competition, including consumer preference patterns, trends in consumer demand, the main participants in these markets, the sources of competition for the main players in the market, the roles of produce quality and price, and finally, the regulatory requirements for market entry. Information from such an analysis is critical to developing an effective market entry strategy and maintaining ones market share.

This report on the Global Market Intelligence for Papaya is an attempt to determine the above parameters of market competitiveness. It provides the basis for analyzing the potential for the industry in the selected CARICOM countries.

1.3 Market Features

In our review of the three markets of interest to CARICOM, we found that the USA and the European Union dominated global imports, accounting for 38% and 33% respectively. Canada imports a relatively smaller quantity, accounting for 5% of global imports in value terms. Although opportunities exist in these markets, we found that each market had its own pre-entry conditions that must be satisfied.

In this report, the discussions emphasized the demand side factors to be satisfied, clearly (as the case of hot peppers). However, we are of the opinion that the greatest challenge of Caribbean papaya producers/exporters lies in the ability to consistently supply large volumes of papaya of high quality to these three markets. The market appears to have a stronger preference for smaller single serve fruits and in this regard there is a marked preference for the Solo and Solo Sunrise varieties giving these varieties a competitive edge over other larger varieties such as Maridol and Red Flesh. The major findings of this papaya market intelligence study are presented below.

2. THE USA MARKET FOR PAPAYA

Competitors: The USA is clearly the most important market for CARICOM producers to target given the size of the market (USD 58.3 mn), growth trends and close proximity. While this market offers opportunities there are challenges. Primary among these is the competition from low cost producers, namely Mexico, Brazil and the Dominican Republic. At present Mexico dominates this market supplying 72% of imports of Papaya. Other major suppliers are Belize (12%), Brazil (9%), Jamaica (6%) and the Dominican Republic (2%).

Market Preferences: An analysis of prices on the basis of variety clearly demonstrated stronger revealed consumer preferences for some varieties. The market was differentiated firstly, on the basis of size of fruits in terms of 'single serve sizes' and secondly, in terms of flavour. Preferences also varied in some cases across markets and also by the country of origin for the fruit.

The five dominant varieties in the USA market were Maridol, Solo, Solo Sunrise, Red Flesh and Golden. Our examination of database shows a clear preference in terms of prices for the smaller and more highly flavoured Solo and Solo Sunrise.

Solo from Hawaii attracted the highest price among all Papaya varieties traded in the market. The average annual price of Solo in New York and Los Angeles was \$3.67 per kg whereas Solo sold on the Miami Terminal Market attracted an average price of \$1.67; less than one half of the average price for the other two terminals. Since Solo traded at the Miami Terminal was exported by Brazil and Guatemala, one possible explanation for the significant price differential is a quality difference.

In the Miami Market, the highest preference was shown for the Golden and Solo Sunrise varieties while significantly lower preferences were indicated for Solo (from Brazil and Guatemala) and Red Flesh, with Maridol at the base.

In the case of New York, the two varieties for which the strongest preference is revealed (on the basis of prices) are Solo and Red Flesh while significantly lower preferences were shown for Golden and Maridol.

Price Trends: An analysis of average annual wholesale prices for Papaya at the three Terminal Markets suggests a general upward movement over the three-year period, 2003 - 2005. This was particularly discernable in the case of the Los Angeles and New York Terminal Markets. For example, the average wholesale price of Solo Papaya increased by 22% in the Los Angeles Market and by 17% in the New York Market. In the case of Red Flesh Papaya, the increases were 27% and 31%, respectively at these markets. Maridol, which is one of the major varieties traded, experienced a fall in price in 2004, but regained most of the lost ground in 2005. The noticeable decline in prices for Maridol in 2004 may be related to the quality of the produce exported in that year.

Price Differential by Terminal: A comparison of average monthly papaya prices (all papaya, unweighted) at the three Terminals showed that the New York Terminal prices were the highest at USD 2.68 / kg. Interestingly, prices at this Terminal showed an upward trend for the first five months of the year, thereafter varying within a narrow range. The lower average prices were observed at the Miami Terminal USD 1.65 / kg.

Regulations: CARICOM Access: Papaya is allowed entry into all ports of the USA except Hawaii from Barbados, Jamaica, St Lucia, St Vincent, Trinidad and Tobago and Belize. In the case of Belize, boxes containing the Solo variety must be stamped '*Not for sale in Hawaii*'. In the case of Guyana, papaya is not allowed entry into the USA. These restrictions are on the basis of SPS factors.

3. THE CANADIAN MARKET FOR PAPAYA

Major Suppliers / Competitors: Canada imports an estimated USD 10 mn of papaya on an annual basis. The Western Canadian market is dominated by supplies from Hawaii whereas in Eastern Canada the market is largely controlled by two exporters, Belize and Brazil. During the early 1990s, Jamaica controlled this market but with the onset of diseases, exports disappeared.

Preferences: There appears to be a distinct seasonal preference for Papaya in the Canadian market during the summer months. This is revealed by price movements, whereby average summer prices were higher than for the rest of the year. For example, the average price for Solo Sunrise during the months May – August period was \$3.16 per kg whereas for the rest of the year

prices declined to \$2.92. In the case of the Red Flesh Variety, the summer average was \$2.29 per kg compared to \$1.78 during the rest of the year. These represent, respectively, seasonal premiums of 8.2% and 28.9%.

A varietal preference was also observed in the Canadian papaya market. In 2005, the market was dominated by two varieties: Solo Sunrise and Red Flesh. During that year, the average wholesale price for Solo Sunrise was \$3.02 per kg compared to \$2.00 per kg for Red Flesh – that is, consumers were willing to pay a 33% premium for Solo Sunrise. We therefore assume that the price differential reveals preference for one variety relative to the other.

Price Trend: Average prices for papaya in the Canadian market have shown a definite upward trend consistent with other markets. During 2005, average monthly prices showed steady increases.

Regulations: Papaya from the Caribbean can enter the Canadian market without any major restrictions. Nonetheless, importers are required to be licensed with the Canadian Food Inspection Agency and /or be a member of the Dispute Resolution Council and imports must be accompanied with an Inspection Certificate indicating that products meet the minimum import requirements for quality, labeling, and packaging. Fresh fruits must comply with the health and safety requirements of the Food and Drug Regulations (eg. maximum chemical residue levels) and a phytosanitary certificate or an import permit is also required from certain countries.

4. THE MARKET FOR PAPAYA IN THE UK

The size of the EU market is estimated at USD 59 mn. Within the EU, the United Kingdom Market is the most attractive for CARICOM exporters of Papaya on account of the higher level of demand in comparison to other EU countries, transportation logistics and cost.

Major Suppliers / Competitors: Brazil dominates the exports of Papaya to the UK market. Other exporters to this market are Bangladesh, Cote d'Ivoire, Ghana, Hawaii and Barbados.

Regularity of supply seems to be an important factor for entering this market and maintaining market share.

Preferences: Price data on Papaya traded in the UK market was not differentiated by variety, as was the case for the USA and Canadian markets. However, the major exporters to this market supply the smaller varieties. For example, Brazil (with the largest share of the UK market) has as one of its major varieties Solo Sunrise. So too are Jamaica and the Canary Islands.

Our analysis of prices also revealed that both the size of fruit and packaging influenced prices. We note that there is a market preference for fruits that constitute an individual serving (300 – 440 gm). This is reflected by the significantly higher prices in comparison to the larger fruits (by a factor of about 1:2 at the wholesale level).

Market Prices: In the UK, both the Glasgow and Liverpool markets showed a relatively constant price throughout the year, with slight fluctuations around the USD 2.50/kg level. However, the average monthly price at Birmingham was significantly lower than the Glasgow and Liverpool markets, and also showed significant fluctuations from month to month. The much lower annual average price at Birmingham (USD 1.50/kg), is assumed to reflect the trade in much larger fruits - - which command the lowest prices in the market. Prices at Western International averaged USD 2.25/kg (annual average) and exhibited wide fluctuations, reflecting a situation where there is a mix of both “high-end” and “low-end” produce being traded.

The prices received for Papaya exported to the UK from the Caribbean and Brazil, suggest the supply of individual fruits of preferred varieties. For example, exports of Solo Sunrise from Jamaica and Brazil earn over USD 2.50/kg. Similarly, exports from Barbados and Costa Rica attracted prices in excess of USD 2.50/kg in 2005.

Regulations: The EU has a series of health, food safety and other regulations such as those related to packaging, waste, recycling and labour laws. The Union also has a coordinating programme and has set Maximum Residue Levels for an estimated 600 active substances and many crops/foodstuffs. Further, management of packaging and packaging waste as it relates to environmental protection, tracability and the issue of Genetically Modified Foods have been gaining increasing attention.

5. THE CARICOM MARKET

Within the Region, Papaya is used both as a table fruit and in its green form, the latter intended as a processing raw material. Today the Regional demand for Papaya remains undersupplied with respect to the various uses. Given the strong preference for Papaya as a fruit by the local population as well as the Tourism sector, the potential of the regional market needs to be more fully explored. Also given the perishability of the fruit, supply chain management is of critical importance.

6. THE CHALLENGES: KEY COMPETITIVENESS FACTORS

Markets: All three extra-regional markets analyzed for Papaya offer opportunities to CARICOM entrepreneurs. While the CARICOM domestic market also offers tremendous opportunities for expansion, the challenges to supply chain management including avoiding excessive post harvest losses are rather daunting to the typical entrepreneur. It is for the latter reason that most large scale producers of papaya target the extra-regional market, primarily on account of their ability to absorb large volumes of the fruits on an ongoing basis.

Drivers of Competitiveness: The opportunities offered by extra-regional markets are not without challenges. These markets are characterized by increasing levels of competition as existing suppliers expand their production base and also new entrants are attracted to the market. Expansion and development of the CARICOM Papaya Industry must therefore be premised on an efficient and competitive production and marketing base. Based on the analysis of the market, we now highlight some of the key drivers of competitiveness in the extra-regional papaya markets:

1.Competitors in the market	<p>The attractiveness of the US market for Papaya in terms of prices, size and growth potential has attracted increasing competition from a number of countries. Although Belize has a 12% share of the market and Jamaica a minor presence, the market remains controlled by Mexico, both in terms of volume of exports and cost. The Dominican Republic and Brazil are also in the market, both noted for their low cost of production, but Brazil more so for its capacity to export large volumes. Mexico, as does Belize and Jamaica, have the advantage of proximity and lower transportation cost.</p>
2.Price Competitiveness	<p>In all three markets, prices have shown an increasing trend over recent past. This trend reflecting an increasing acceptance of the fruit. However, over the longer term it is our view that real prices are likely to hold at their current levels or decline as supplies into these markets expands.</p> <p>Competitiveness therefore calls for a highly efficient production and marketing/transportation system.</p>
3.Quality Attributes	<p>The market has shown a definite preference for the smaller single serve fruits. However, we recommend a market evaluation of the range of smaller varieties with a view to selecting varieties that are also preferred on the basis of other important consumer attributes including:</p> <ul style="list-style-type: none"> • Texture • Sweetness • Ripening qualities • Shelf life • Resistance to bruising / good handling characteristics
4. SPS Market Entry Req'ments	<p>Increasing concerns regarding invasive alien species and food safety suggest that CARICOM producers need to adopt high standards to ensure SPS measures and other access regulations are complied.</p>
5.Supply Conditions	<p>Papaya importers and brokers would not handle small volumes of Papayas. Getting into the main stream markets requires a capacity to:</p> <ul style="list-style-type: none"> • Supply fruits in large volumes • Regularity of supply • Consistency in quality • GAP, traceability and other export requirements (eg bioterrorism)

