# Sustainability of the Windward Island banana Industry through Agro-tourism

**Dr. Wendy P. Isaac<sup>1</sup>**, Dr. Wayne G. Ganpat<sup>2</sup>, Dr. Clare Bowen-O'Connor<sup>1</sup>, Mr. Chaney C.G. St. Martin<sup>1</sup> and Professor Richard A. I. Brathwaite<sup>1</sup>

<sup>1</sup>Department of Food Production, Faculty of Science and Agriculture, The University of The West Indies, St. Augustine, Trinidad & Tobago; Corresponding author: wendyann.isaac@sta.uwi.edu; <sup>2</sup>Ministry of Agriculture, Centeno, Trinidad & Tobago.

#### **ABSTRACT**

With the future of the banana export industry in the Windward Islands in serious doubt, this paper considers the potential of Agro-tourism for the resuscitation of the industry. The banana industry and tourism are the main industries in the Windward Islands. The banana industry in the Windward Islands of Dominica, Grenada, St. Lucia and St. Vincent and The Grenadines has undergone constant turmoil from the inception of the industry in the 1930's to present. The mass exodus of banana farmers in the early 1990's saw a movement into the tourism sector to sustain their livelihood. This paper examines the potential of Agro-tourism as an opportunity for banana producing communities through diversification, the promotion of entrepreneurship, education and general well-being of citizens. The banana industry offers several opportunities in the areas of agro/eco/heritage tourism as a supplier of premium commodities: fresh fruit for table with all the health benefits; preparation of exotic dishes like soused banana; plantain for cooking and chips; and farm tours combined with some exposure to local customs such as foods and cultural dances. This new paradigm is not the panacea for rural renaissance but it presents a window of opportunity to embark upon revitalizing the rural banana industry that has for too long never had sustained growth. Special attention has to be paid to the ways in which the development of tourist attractions could encourage changes in attitudes toward rural assessment and entrepreneurship. What this means for any improvements in the banana industry and the question of how can we (or should we) broaden/widen the banana product base in the Caribbean to create greater wealth is examined in this paper.

**Keywords:** Banana industry; Windward Islands; Agro-tourism

#### INTRODUCTION

The banana industry was once the economic backbone, sustaining the populace of the Islands of Dominica, St. Lucia and St. Vincent and the Grenadines for over five decades. These last fifty years have been punctuated with various challenges which have threatened the very survival of the banana industry and the livelihood of the banana farmers. The industry has succumbed to low productivity rates and rising cost of inputs as well as continuous competition from Latin American producers.

The Windward Island banana is primarily grown on small farms (between one to two hectares) in hilly areas, usually owned and maintained by local family farmers. These farms are, by and large, unmechanized and unirrigated. Production is significantly different from the "Dollar banana" grown in Latin America where the farms are large, relatively flat/ gently sloping, highly mechanized and run by major multinational corporations with the use of cheap peasant labour. Consequently, the production costs for Latin American bananas historically have been about half those of their Caribbean counterparts.

These factors enable the multinational corporations to have high yields of banana that sell at a lower price relative to the banana grown by the small farmers of the Windward Islands. The small farmers of the Islands have been less competitive because of lower yields which are obtained from small farms located on steep and difficult terrain which are highly susceptible to soil erosion. Yet small farmers in the Windward Islands continue to grow banana, although some have been advised against it. The rationale for this advice, among other things, is that the cultivation of bananas on very steep slopes by most small farmers results in lower yields due to soil erosion and fertility problems (Campbell et al., 2001). However, farmers contend that banana cultivation allows them to have access to inputs which they can use to increase the profitability of other crops within their farming system, thus making the total farming system economically profitable.

Limited land for expansion in these small islands have meant that some of these soils have been farmed in some cases for over 40 years without crop rotation, resulting in decreased soil fertility,

considerable soil erosion and increased weed infestations with significant levels of the noxious weed including *Commelina diffusa* (watergrass). This weed which was once encouraged as a ground cover to reduce soil erosion (Edmunds, 1971) has now become a pesky problem as it has been identified as the host of the reniformis nematode (*Rotylenchulus reniformis*), the root burrowing nematode (*Radopholus similis*) and the banana lesion nematode (*Pratylenchus goodeyi*) which all significantly reduce banana production (Edmunds, 1971). Additionally, the banana industry has always been plagued with the threat of pest and disease, Moko disease (*Ralstonia solanacearum*) and black sigatoka (*Mycosphaerella fijiensis*) are the most recent threats to the industry.

With these limitations, threats and problems it is difficult for farmers from the Windward Islands to compete with the lower price of the multinationals from Latin America.

Predicting the demise of the industry, many small farmers who have lost confidence in the banana industry have since exited, either by migration to surrounding Caribbean territories or by indulging in the socially unacceptable drug trade. On top of these woes, the industry has also suffered a further blow by the removal of the preferential treatment they enjoyed by the European Union.

In order to overcome some of these economic and social drawbacks, thousands of farmers in the Windward Islands have adopted the Windward Island Banana Farmer's Association (WINFA) / Fairtrade (FT) initiative as the most logical solution (Myers, 2004). Today, FT has become more consolidated as the main mode of production in the Windward Islands. In St. Vincent and the Grenadines for example, the FT marketing arrangement began with a total of 200 farms shipping an average of 1000 boxes per week to 16 registered FT groups with 1,138 registered farmers and an average export of 17,000 boxes per week. According to the European FT Association (2006) "FT is a trading partnership, based on dialogue, transparency and respect that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South (Myers, 2004).

Farmers in the Windward Islands have described FT as "a shining light pointing us to one response to free trade if we are to survive at all in the export of agriculture. In fact, FT has been the saviour of the farmers in Dominica, not only of agriculture but the whole economy" (Fairtrade Foundation, 2004). The initiative has helped to maintain the extra-regional market for banana from the Windward Islands into the United Kingdom. In so doing, FT has enabled thousands of banana farmfamilies in the islands to sustain their livelihood as well as continuing to make and important contribution to the economies of these small island states (Personal Communication, Mr. Renwick Rose, May 25<sup>th</sup> 2009). "By demystifying global relations of exchange and challenging market competitiveness based solely on price, the Fair Trade movement creates a progressive opening for bridging the widening North-South divide, and wresting control of the agro-food system away from oligopolistic transnational corporations, infamous for their socially and environmentally destructive business practices" (Raynolds, 2000).

One of the pillars of the FT initiative is an emphasis on an environmentally friendly production, insuring both a healthy product to the consumer as well as a safer working environment, thus guaranteeing health benefits to farm workers. Thus, the need for more sustainable production systems through the use of fewer chemicals, the promotion of diversification and an integrated approach to crop management is emphasized. To address the issue of finding alternatives to the chemical dependency and meet FT criteria, the WINFA/FT unit in the Windward Islands has in April 2006, embarked on a project "Advancement of Environmentally Friendly and Sustainable Banana Production". This project has sought to: develop a more environmentally safe production system, expand farmers' education/training support to farmers, implement an effective farm waste collection and disposal programme, provide technical support to rural farmers seeking new markets for FT banana and expand the FT initiative to other agricultural produce. Since its inception, the project has accomplished the following achievements:

• A structured system for collection and disposal of farm waste.

- Farm training and public education of FT environmental criteria and other sustainable farm practices.
- Farmers trained in soil management and soil testing.
- Developed a strategy for weed control without herbicides. Using participatory research
  methods, farmers, together with researchers, identified three cover crops that could
  reduce weed infestation and nematode damage, and enhance soil fertility, thus providing
  a possible pesticide-free solution to some of the problems faced by low resource small
  banana farmers (Isaac et al., 2007).
- Monitoring of record keeping in the use of pesticides, fertilizers and cleaning chemicals by FT farmers.

Windward Island FT banana has also benefited from name recognition in the United Kingdom as coming from former colonies now familiar to many holidaymakers. Sainsbury which is one of the major British supermarket chains went to the Windward Islands to try to assist in the survival of small-scale farming in what has been referred to as one of the most dramatic corporate interventions in any country's economy since the 18<sup>th</sup> century (Vidal, 2007). The company announced that all the banana it sold from that date on would be Fair Trade and that 100 million would come from St Lucia (Vidal, 2007). Presently the supermarket is buying 80 percent of Dominica's export banana and much of those from the other Windward Islands.

## Agriculture and Tourism in the Windward Islands

Agriculture throughout the Caribbean has been facing significant decline on account of trade liberalization, the erosion of trade preferences in protected developed country markets and a number of domestic problems, including natural disasters such as hurricanes, flooding and drought (Bain, 2007). Small banana producers in the Windward Islands will continue to face these and other challenges,

especially those relating to pest and disease. The tourism industry, on the other hand, has shown a steady increase over the past decade. Since its recovery post September 11<sup>th</sup>, 2001 terrorist attacks in the United States, the Caribbean region has been increasing its dependence on the tourism industry given the uncertainty of traditional export oriented industries. The tourist of today is generally more eager to learn about the social, environmental and political issues, while enjoying the sun, sea, exotic flora, vibrant culture and food.

It should be emphasized however, that the tourism industry has developed largely from sectors such as agriculture. Unfortunately, agriculture has had limited development as it has mainly supported the export trade. Currently, Hayle et al. (2006) points out that there is no established durable dynamic for agro-tourism despite the availability of the resources, the interest of the key stakeholders and the increasing demand for goods and services to be supplied from this synergized industry. The emphasis should therefore be in developing agriculture-tourism linkages to enhance the local value added of the tourism industry, while at the same time promoting the development of domestic agriculture.

## Potential for Agro-tourism to revive the banana industry

There are a number of issues to be determined if agro-tourism is to revive the banana industry in the Windward Islands. Firstly, how can a dying banana industry benefit from the concept of agro-tourism? Secondly, how can the farming experience and everyday plight of the farmer within the farming community be marketed into a "touristic" product? And finally, what is the potential for value added products of the banana industry?

Agro-tourism is a potentially attractive option that can be used in concert with FT. The concept of agro-tourism is a direct expansion of eco-tourism, which encourages visitors to experience agricultural life first hand. Visitors take the opportunity to work in the fields alongside farmers for example (Hayle et al., 2006). This will offer tourists the opportunity to be part of the banana production experience. This of itself can also be a very powerful marketing tool for the industry. The first-hand banana production

experience can serve as an incentive for tourists to actually purchase more banana on their return home and to also advertise through word of mouth. Drawing from the success of agro-tourism in Jamaica, agro-tourism within the banana revitalization context can be defined as the strategic utilization of the tourism system to reposition the FT banana producing Windward Islands. The tourism product can be marketed as a healthy lifestyle destination based on value-added products (raw, minimal and end process) derived from inputs from its unique biodiversity (terrestrial and marine), strategic clustering of the supply chain and empowerment of the micro-enterprise sector in both the agriculture and tourism sectors through community-based agro-tourism initiatives.

The emergence of more specialized tourism product will help to improve their situation of the Windward Island banana farmers. However, there is need for continued exploration of the FT option as it can provide the "bread and butter" foundation on which other initiatives can be developed. There is the potential for diversification within the banana industry itself, namely the development of niche markets for unique varieties of bananas such as the small "lunch box" bananas, e.g. "sucrier" or exotic varieties e.g. "figue rose" which is a pink flesh banana. Additionally, there is the possibility of the processing of banana into a variety of products such as baby foods, condiments, snack foods, and so on. Recent structural changes within the Windward Islands banana industry have been focusing on diversification initiatives even beyond a single crop (banana). In St. Vincent and The Grenadines, for example, the Montaque Products Ltd., an Agro-processing factory on a 12-acre farm was launched in 2007 to address such initiatives in the wake of increasing challenges to banana producers.

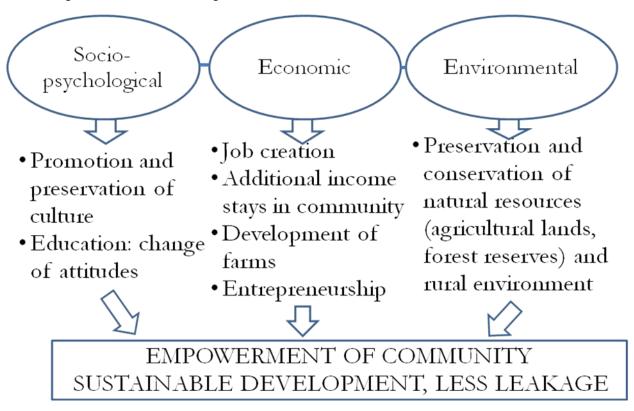
Hayle et al. (2006) states that if the key drivers of these multi-sectoral linkages are not sufficiently actualized, the dynamic for agro-tourism will not be sustained. To achieve its full potential the approach must be based on:

1. Using a matrix management approach by first identifying a leader that can manage the development of agro-tourism for a period until it can be sustained.

- 2. Promoting the new agro-tourism product which will attract foreign and domestic markets using a healthy lifestyle destination.
- 3. Developing an agro-tourism policy with input from the Ministries of Agriculture, Tourism and Health.
- 4. Stimulation of policies aimed at micro-enterprise development with a view of encouraging more people to participate in the creation of small business relating to agro-tourism.
- 5. Creating policies that address financing for research and development.
- Creating a long term sustainable link with agriculture and tourism focusing on value added products.

Agro-tourism is very important for both urban and rural communities. A developed agro-tourism sector can provide the impetus needed to build banana producing communities within the Windward Islands, thus providing new structures of opportunity, new sources of income, using paid accommodation in farmers' homes thereby activating the rural areas, preserving natural sources and also recreation and education of the urban community providing new possibilities for production. It can, therefore, promote sustainable development by empowering communities through the cohesive strength between key sociopsychological, economical and environmental aspects (Figure 1).

Figure 1. The benefits of Agro-tourism



Chaney St. Martin, 2009

For true empowerment to be achieved, people need help acquiring technology, skills and information about how to attract enterprises. They need to know about environmental issues and how to use the resources that are already available. To address this task, an initiative by a research team from the Department of Food Production, The University of the West Indies (UWI) is underway. It will assist WINFA/FT in St. Vincent and The Grenadines to work with a model farming community in Langley Park (Figure 2). The stages in the project include actions to:

- 1. Develop a feasible plan of action.
- 2. Engage policy makers & planners to "buy-in" to concept
- 3. Sensitize target community (ideally 10-15 farmers (namely women and younger farmers) in Langley Park banana farming community).

- 4. Conduct site visits and assessment: farming communities representative of difficulties of production in the Windward Islands.
- 5. Conduct a series of Focus groups with stakeholders: community groups, governmental and non governmental, private.
- 6. Participatory Strategic Planning workshop
- 7. Seek Funding
- 8. Implementation of a phased plan
- 9. Establishment of model communities
- 10. Participatory monitoring and evaluation

# Banana agro-tourism: Banana producing communities servicing the key sectors of tourism

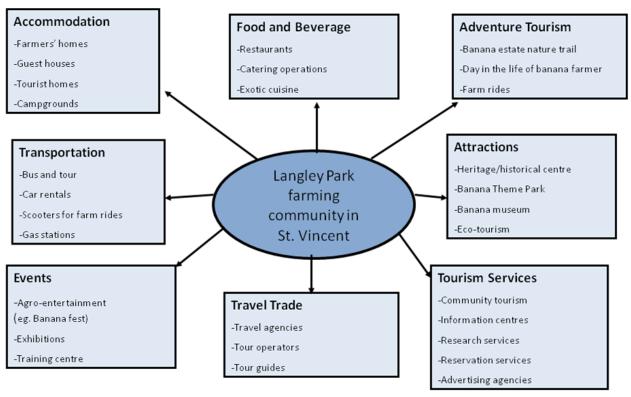
In the context of this proposed study, the focus will be on community-based tourism which will be the vehicle to provide the link through the eight sectors of tourism as outlined in the proposed model for Langley Park (Figures 2 & 3).

There are three distinct products and potential markets that can be derived from the development of agro-tourism within the proposed community-based project in the Windward Islands:

- The production of raw products (banana and other fruits, vegetables, meats, seasoning etc) to service potential target markets such as hotels, festivals and attractions throughout the Caribbean region.
- 2. The production of minimal process products (raw products packaged for convenience) to service domestic households, the Diaspora, festivals, attractions.

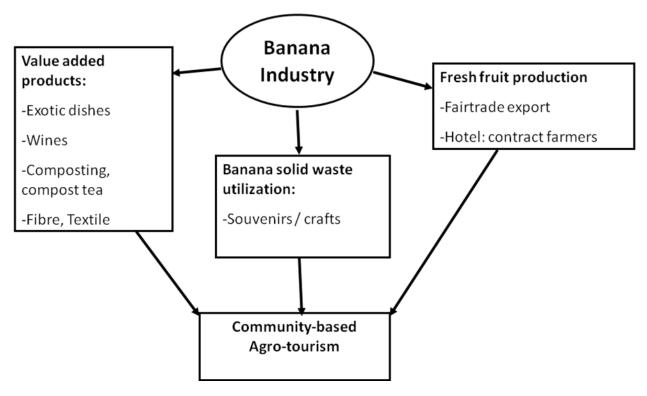
The production of end point processing (raw products processed to finished goods ready for export) to both domestic and export markets.

Figure 2: Proposed Langley Park model for Community-based agro-tourism servicing the eight sectors of tourism.



Adapted from: CTO, 2000

Figure 3: Conceptual model for Agro-tourism in for the Windward Island banana industry



## **CONCLUSIONS**

Efforts to sustain the banana industry would be mindful that agro-tourism is not a panacea for rural renaissance. However, a sustainable, customised agro-tourism sector can be the foundation of a wider process of development that places emphasis on minimizing negative environmental and social costs (Hayle et al. 2006). Because at present, the strength of the linkages and competitiveness of the sectors directly impacts on the reduction of food costs and imports, careful attention must be paid to the development of low cost high value products and services. This will require Research and Development involving collaborative and participatory work, as well as feasibility studies and on-farm research. Information and incentives will also be crucial in this regard.

#### REFERENCES

- Bain, H., 2007. Caribbean Tourism and Agriculture: Linking to enhance development and competitiveness. ECLAC Studies and Perspectives The Caribbean No.2. United Nations Publications, New York, U.S.A.
- Campbell, D., G. Olney and M.L.B. Mulraine, 2001. Windward Island's Banana Farmers Livelihood Study. St. Michael, Barbados: DFID Caribbean.
- Edmunds, J.E., 1971. Association of *Rotylenchulus reniformis* with 'Robusta' banana and *Commelina* sp. Roots in the Windward Island. *Tropical Agriculture* 48(1): 55-61.
- European Fair Trade Association, 2006. Definition of Fairtrade. Accessed August 2<sup>nd</sup>, 2006.
- Fairtrade Organisation, 2004. Fairtrade banana impact study. Dominica Windward Islands, June 2004. London: The Fairtrade Foundation.
- Hayle, C.E., M. Harvey and K. Emmanuel, 2006. Market Research on Agro-tourism Products and Services (Final Report). Inter-American Institute for Cooperation on Agriculture, Kingston, Jamaica.
- Isaac, W.A.P., R.A.I. Brathwaite, J.E. Cohen, and Isaac Bekele, 2007. Effects of alternative weed management strategies on *Commelina diffusa* Burm. Infestations in Fairtrade banana (*Musa* spp.) in St. Vincent and the Grenadines. Crop Protection 26:1219-1225.
- Myers, G., 2004. Banana Wars: The Price of Free Trade. New York: Zed Books Ltd.
- Raynolds, L.T., 2000. Re-embedding global agriculture: the international organic and Fairtrade movements. *Agriculture and Human Values*. 17 (3): 297-309
- Vidal, J., 2007. Saving St. Lucia: UK supermarket sweeps up 100m bananas. *The Guardian*, 26<sup>th</sup> February, p.9