

Agriculture and Tourism Development: The Case of St. Kitts

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

In 2005, the Government of St. Kitts and Nevis officially closed the sugar industry, ending mono-crop agriculture and opening a space for a new chosen economic driver, tourism. Newly available lands, an agricultural- based workforce and a push into tourism led to this research examining the state of agricultural tourism development in a transitioning region. Interviews with key public and private sector personnel, coupled with an evaluation of official policies and plans, were used in this qualitative case study to explore the state of agricultural tourism development (opportunities and barriers) and the role that stakeholders play in its creation. This research not only found common geographic and technical barriers but also endemic mental and behavioural characteristics of the local populace, which hinder agricultural development and, by extension, agricultural tourism. Negative attitudes towards agriculture and a lack of entrepreneurial spirit pervade, which hampers agricultural tourism development. Hence, this research shows that local attitudes towards agriculture play an important role in successfully diversifying agriculture via tourism. Many studies focus on the addition of tourism to an agricultural product without first ensuring the successful production of agricultural products themselves so that agricultural tourism can develop. Hence, this research asserts the need for the agricultural industry to upgrade its products to meet expected tourism standards before moving into agricultural tourism. Additionally, for the successful development of agricultural tourism, there needs to be a focused and sustained plan aimed at changing the mindset of the local populace towards agriculture and entrepreneurship, coupled with the government providing a facilitative environment conducive to developing agricultural tourism.

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DEDICATION

For the love of country, this thesis is dedicated to the people of the Federation of St. Kitts and Nevis.

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LIST OF ABBREVIATIONS

CARDI: Caribbean Agricultural Research and Development Institute

CARICOM: Caribbean Community

CDE: Centre for the Development of Enterprise

CEBO: Creative Employment and Business Opportunities

CTA: Centre for Agricultural and Rural Cooperation

EC: Eastern Caribbean Dollar

FAO: Food and Agricultural Organization of the United Nations

IICA: Inter-American Institute for Cooperation on Agriculture

NEDD: National Entrepreneurial Development Division

OAS: Organization of American States

OECS: Organization of Eastern Caribbean States

ROC-ATM: Republic of China on Taiwan – Agricultural Mission

SIDF: St. Kitts and Nevis Sugar Investment Diversification Foundation

SKIPA: St. Kitts Investment Promotion Agency

SNAPPER: St. Kitts and Nevis Aquaculture Pilot Project and Environmental Research project

USD: United States Dollar

CHAPTER ONE: AN INTRODUCTION

1.0 INTRODUCTION

In October of 2005, a three-day workshop was held in St. Kitts and Nevis entitled *Agriculture and Tourism: Partners in Development*. This workshop was developed by several regional and international organizations such as the Inter-American Institute for Cooperation on Agriculture (IICA), the Technical Centre for Agricultural and Rural Cooperation (CTA, Holland), and the centre for the Development of Enterprise (CDE, Brussels), in collaboration with the Caribbean Tourism Organization (CTO) and the Government of St. Kitts and Nevis. The theme of the workshop was ‘Exploring Opportunities for Enhancing the New Agriculture’ (IICA, 2006). Across the Caribbean region it was felt that “linking Agriculture with Tourism provides for natural synergies, which when realized, can spur economic development, increase farm income and open up more opportunities for persons working in both sectors” (IICA, 2006, p. 7). As a citizen of St. Kitts and Nevis, and having previously worked in the Ministry of Agriculture, I feel very connected to the possibilities that can arise when tourism and agriculture come together.

St. Kitts has only recently ended its sugar industry and has now fully moved towards diversifying its economy, using tourism as one of its six focus areas. This puts St. Kitts in a unique position to learn from the mistakes of other islands that have already gone through this process. As such, St. Kitts has the opportunity to utilize newly available lands along with the agricultural skill set of the local people, and combine them with ingenuity to create a unique product that is sustainable and creates new opportunities for the local populace. This interest is what has fueled this research.

1.1 PURPOSE STATEMENT AND RESEARCH GOAL

The **purpose** of this case study is to explore the process of developing agricultural tourism in a transitioning region.

1.2 RESEARCH OBJECTIVES

The intention is that, through this research, the following objectives will be met.

1. To identify the barriers and challenges of developing agricultural- tourism initiatives in this transitioning region;
2. to describe current and future agricultural- tourism initiatives;
3. to establish how the private sector has fostered development of these initiatives; and,
4. to identify what the public sector should do to enhance future agro-tourism initiatives in St. Kitts, and other regions that are considering agricultural tourism as a development option.

1.3 SIGNIFICANCE OF THE STUDY

This research is significant for several reasons. St. Kitts has recently just begun to move away from sugar cane production towards tourism. Many other Caribbean islands made the same transition beginning in the 1960s. This allows for a unique opportunity to learn how the same transition is occurring in a different time period. This research will add to the general knowledge of developing agricultural tourism in the Caribbean, as well as the impact of the perception of agriculture on this type of development.

The hope is that the results from this research will be useful to tourism planners in St. Kitts and other small island developing states looking at diversifying the agricultural product with tourism, or conversely their tourism product with agriculture. This study will outline the possibilities of desirable results in providing a unique, diverse and sustainable tourism product

that capitalizes on the local environment and resources, and caters to the talents of the local populace.

1.4 OUTLINE OF THE STUDY

This thesis will continue as follows. Chapter two presents an examination of the existing, relevant literature to provide a better understanding of the linkages between tourism and agriculture in general and as it pertains to the Caribbean. This will form the basis of understanding agricultural tourism development.

Following the literature review, Chapter 3 introduces the study site and the context for using the site for this case study research. Chapter 3 also outlines the methodology and methods used to collect and interpret the data. Chapter 4 provides the findings of this research. It outlines several themes that correspond to each of the research objectives outlined above. These themes emanated from the data, which includes documents collected while conducting research in St. Kitts, an analysis of semi-structured interviews as well as on-site observations. Chapter 5 offers a discussion of the key findings in chapter 4 as well as recommendations for St. Kitts with regard to developing agricultural tourism. Finally, Chapter 6 presents conclusions as well as recommendations for future research.

CHAPTER TWO: LITERATURE REVIEW

2.0 INTRODUCTION: THE RELATIONSHIP BETWEEN TOURISM AND AGRICULTURE

The literature review outlines a series of topics relevant to this research. This chapter will firstly highlight the literature's assessment of the relationship between tourism and agriculture. Establishing that there is a relationship is central to this research. Entrepreneurship is an integral part of the relationship between tourism and agriculture and, as such, there is a discussion on entrepreneurship in tourism and agriculture.

Additionally, this chapter introduces the Caribbean region and sets the stage for the final section, which looks at the literature surrounding Caribbean agricultural and tourism development. As much of the Caribbean has developed similarly, a discussion of how these two industries developed and the effects are important to this study. Notably, much of the literature that spoke about the linkages between agriculture and tourism focused on food production in various Caribbean cases.

2.1 THE RELATIONSHIP BETWEEN TOURISM AND AGRICULTURE

The relationship between tourism and agriculture can be said to be one that ranges from opportunity to conflict. Telfer (1996) notes it as being “on a continuum from conflict through coexistence to symbiosis” (p. 74). He goes further to state that “within this continuum agriculture and fishing can be seen as being more than sources for food for they may contribute positively to tourism experiences through the landscapes and rural activities which visitors can observe” (Telfer D. , 1996, p. 74).

Many studies focus on the linkage between tourism and agriculture as being one of food supply and production ((Asiedu & Gbedema, 2011) Bowen, Cox, & Fox, 1991; Telfer & Wall,

1996; Torres, 2003; Asiedu & Gbedema, 2011). This involves the transfer of farm produce to hotels and restaurants (Richardson-Ngwenya & Momsen, 2011). The issue of food supply and production is tied both to the opportunities and conflicts noted above and will be discussed in further detail below. Bélisle (1983), outlines four ways in which tourism can influence agriculture, which also fall within the dichotomy of opportunity and conflict, stating that:

it can modify agricultural employment by attracting labor out of agriculture (competition for labor); reduce availability of agricultural land through an increase in use of land for recreational purposes (competition for land); modify land values and land use in areas surrounding tourism developments; and create incentives for local farmers to expand and diversify their production (and possibly improve techniques) to meet tourism food demand (p. 500).

2.1.1 OPPORTUNITY WITHIN TOURISM AND AGRICULTURE

The literature highlights several opportunities that arise from the intersection of tourism and agriculture. Notably, the introduction of tourism may increase opportunities for entrepreneurship. Telfer (1996) and Cukier (2006) noted that entrepreneurs took the opportunities to engage in new ventures which tourism had presented. Hermans (1981) found that the introduction of tourism allowed families “opportunities to establish enterprises, mostly not directly dependent on tourism ... [where] the money earned this way is mainly invested in agriculture” (p. 476). Associated with entrepreneurship (addressed in more detail in a subsequent section) is the idea of diversification, where tourism is said to stimulate agriculture by demanding new agricultural products and services (Bowen, Cox, & Fox, 1991).

Another noted opportunity is that of increasing environmental quality. This was noted as being two-fold, where maintaining agricultural landscapes is beneficial to tourism, as well as creating employment opportunities to maintain this aesthetic. In Europe “governments have compensated farmers to maintain aesthetically desirable production practices in certain tourist regions” (Bowen, Cox, & Fox, 1991, pp. 45-46). Moreover, due to landscape aesthetics being

beneficial, landscape services and agriculturally- based attractions are also an added benefit to increased tourism (Bowen, Cox, & Fox, 1991).

The introduction of tourism to agriculturally- based environments also affects gender roles and land value. Galani-Moutafi (1993) found that due to a shift from agriculture to wage labour, the increase in tourism led to a less structured gender division of labour in a Greek Island. Furthermore, this shifted the use of land and importance of land inheritance, which opened up new opportunities for women to work outside the home (Galani-Moutafi, 1993). Shifting land values also affect farmers in other ways. Hermans (1981) found that tourism increased land prices, which “provided farmers with the necessary capital to make agriculture productive and profitable” (p. 476).

Tourism may also increase or stimulate demand for agricultural products. Hermans (1981) states that, “tourism, by providing an excellent infrastructure and good connections with the outside world ... made diversification of outlets for agricultural produce possible” (p. 476). The increase of infrastructure and support systems for tourism can improve the market and capabilities of agricultural goods and services, and ultimately benefit local persons (Asiedu & Gbedema, 2011; Bowen, Cox, & Fox, 1991; Torres R. , 2003).

2.1.1.1 OPPORTUNITY FOR ENTREPRENEURSHIP

The term ‘entrepreneurship’ has been studied across time and through various disciplines. Hence, there has yet to be a consensus on a definition of the term (Ateljevic & Li, 2009; Morrison, Rimmington, & Williams, 1999). However, inherent in this concept is the idea that there are “lucrative opportunities and the presence of enterprising individuals” (Ateljevic & Li, 2009, p. 22), which combine for innovation and the launching of new economic activity (Morrison, Rimmington, & Williams, 1999). These new activities may be initiated by new

entrepreneurs, as an individual or collective, or a new endeavour launched by an already established organization or business.

Collective entrepreneurship, also associated with institutional entrepreneurship, highlights the notion of big businesses and government or other organisations being involved in tourism ventures (Ateljevic & Li, 2009; Morrison, Rimmington, & Williams, 1999). “Institutional entrepreneurship represents the activities of different actors or organizations, from both private and public sectors, who have an interest in particular institutional arrangements and who leverage resources to create new institutions or transform existing ones” (Ateljevic & Li, 2009, p. 24). Moreover, due to the nature of the tourism industry, Forbes (2009) notes that to increase chances of success, entrepreneurs should work collectively (Forbes, 2009). Entrepreneurs becoming involved in co-operatives, working as a group and maximizing strengths instead of individually, is such an example. Rhiney (2009) found that agricultural co-operatives "allow farmers to pool their resources together and thus tap into vital resources that may not have been accessed as individual farmers [as well as] ... allow for the establishment of direct and greater communication between farmers and tourism representatives" (pp. 251-252) which helps to reduce gluts in the market (an issue which will be dealt with in a subsequent section).

In the literature, when the agriculture and tourism industries come together through entrepreneurship, they combine conceptually as ‘agri-tourism’. Although there are variances in meaning, ‘agri-tourism’ is used interchangeably with terms such as ‘farm tourism’, ‘rural tourism’, ‘agro-tourism’, and ‘agri-tainment’. Phillip, Hunter, & Blackstock, (2010) outline several definitions of agritourism and similar terms that they found in the literature, seen in the table below.

Table 1: Various definitions of Agri-tourism in the literature

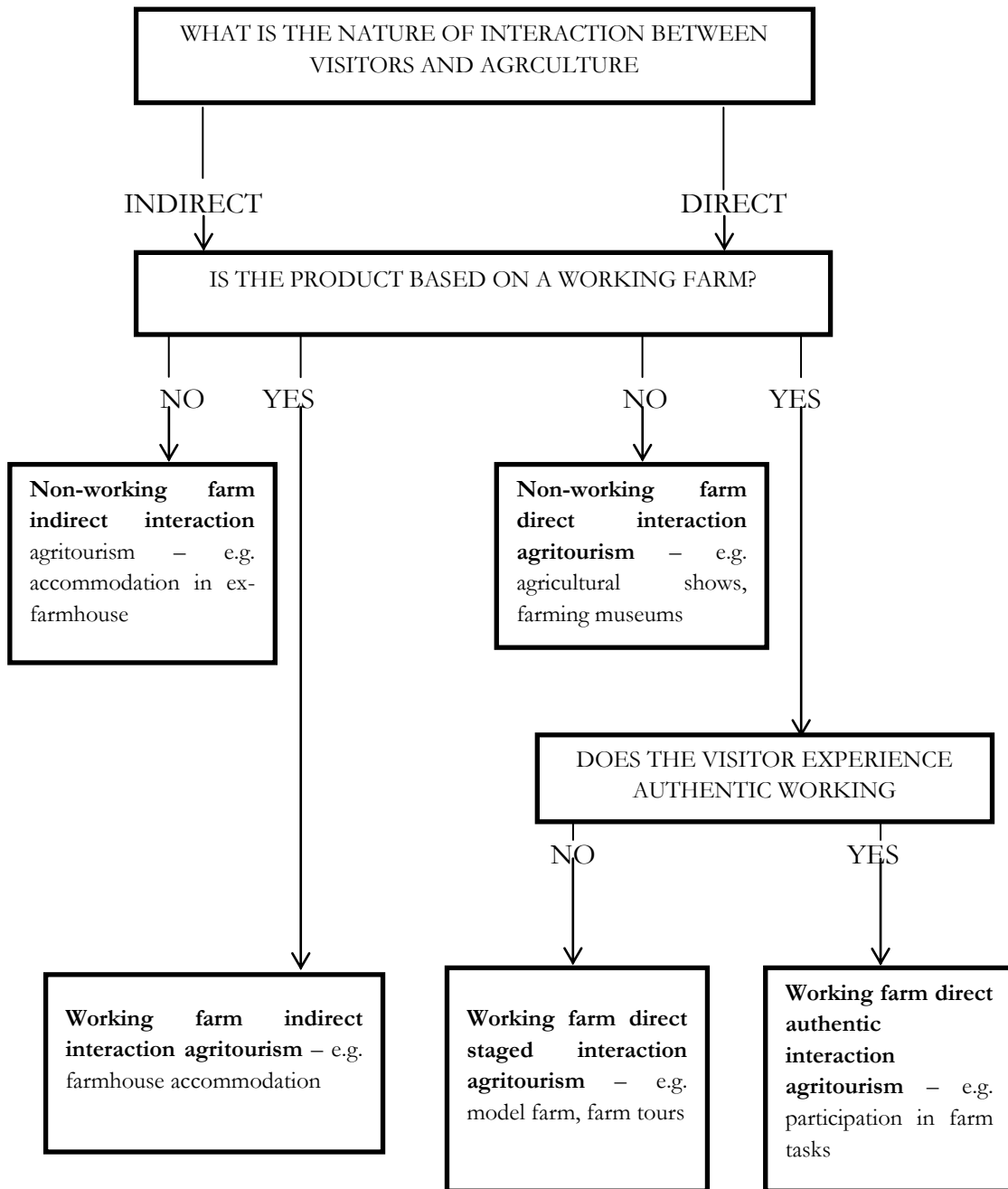
Term used	Definition	Reference
Agritourism	“any practice developed on a working farm with the purpose of attracting visitors”	Barbieri and Mshenga (2008: 168)
	“a specific type of rural tourism in which the hosting house must be integrated into an agricultural estate, inhabited by the proprietor, allowing visitors to take part in agricultural or complementary activities on the property”	Marques (2006: 151)
	“rural enterprises which incorporate both a working farm environment and a commercial tourism component”	McGehee (2007: 111) and McGehee, Kim, and Jennings (2007: 280)
	“tourism products which are directly connected with the agrarian environment, agrarian products or agrarian stays”	Sharpley and Sharpley (1997: 9)
	“activities of hospitality performed by agricultural entrepreneurs and their family members that must remain connected and complementary to farming activities”	Sonnino (2004: 286)
Agrotourism	“tourism activities which are undertaken in non-urban regions by individuals whose main employment is in the primary or secondary sector of the economy”	Iakovidou (1997: 44)
	“tourist activities of small-scale, family or co-operative in origin, being developed in rural areas by people employed in agriculture”	Kizos and Iosifides (2007: 63)
	“provision of touristic opportunities on working farms”	Wall (2000: 14)
Farm Tourism	“rural tourism conducted on working farms where the working environment forms part of the product from the perspective of the consumer”	Clarke (1999: 27)
	“tourist activity is closely intertwined with farm activities and often with the viability of the household economy”	Gladstone and Morris (2000: 93)
	“to take tourists in and put them up on farms, involving them actively in farming life and production activities”	Iakovidou (1997: 44)
	“commercial tourism enterprises on working farms. This excludes bed and breakfast establishments, nature-based tourism and staged entertainment”	Ollenburg and Buckley (2007: 445)
	“activities and services offered to commercial clients in a working farm environment for participation, observation or education”	Ollenburg (2006: 52)
	“a part of rural tourism, the location of the accommodation on a part-time or full-time farm being the distinguishing criterion.”	Oppenmann (1996: 88)
	“increasingly used to describe a range of activities. [which] may have little in common with the farm other than the farmer manages the land on which they take place”	Roberts and Hall (2001: 150)

Term used	Definition	Reference
Farm-based tourism	“phenomenon of attracting people onto agricultural holdings”	Evans and Ilbery (1989: 257)
	“an alternative farm enterprise”	Ilbery, Bowler, Clark, Crockett, and Shaw (1998: 355)
Vacation Farms	“incorporate both a working farm environment and a commercial tourism component”	Weaver and Fennell (1997: 357)

Source: (Phillip, Hunter, & Blackstock, 2010, p. 755)

The variances of the term led to the development of a typology of agritourism, providing some succinctness to the term, seen in the figure below.

FIGURE 1: TYPOLOGY OF AGRICULTURAL TOURISM



Source: (Flanigan, Blackstock, & Hunter, 2014, p. 399)

According to Phillip et al. (2010) this typology addresses many of the issues of conceptualizing agritourism. This typology brings together the characteristics of agritourism in the literature and

combines them into a framework, thus providing a “more solid foundation for empirical research” (Phillip, Hunter, & Blackstock, 2010, p. 257).

An interesting addition to the literature is that of the term ‘agriculturally based leisure attractions’. An agriculturally based leisure attraction is an “enterprise that produces and/or processes plants or animals and which also strives to attract visitors to enjoy the agricultural attributes of the operation and its site, and/or to purchase agricultural products produced or obtained by the enterprise” (Cox & Fox, 2003, p. 49). This term and its definition attempt to highlight the diversity of agricultural tourism ventures. Agriculturally based leisure attractions range from retail sales that include goods produced on-site to restaurants; tours that include processing facilities to scenic tours; and other leisure activities that include farm tourism to leisure sports (Cox & Fox, 2003).

The diversity of definitions surrounding agricultural tourism highlights the diversity of opportunities available for entrepreneurs. It also showcases that agricultural tourism can occur in various locations, be it urban or rural (Henderson, 2009); can vary in size and scale; and, can provide a variety of activities from farming, fishing, sports and selling of handicrafts (Gil Arroyo, Barbieri, & Rozier Rich, 2013).

Morrisson et al. (1999) highlighted the entrepreneurship process and the factors which contribute to its success or failure. There are various factors including personal circumstances and behaviours, coupled with external factors such as the government, policy, and the environment demand among other things, which contribute to entrepreneurial activity. Hindle (2010) provides a more holistic framework, which looks at the importance of understanding the community context when developing entrepreneurship. The figure below outlines the parameters for evaluating how the community affects the entrepreneurial process.

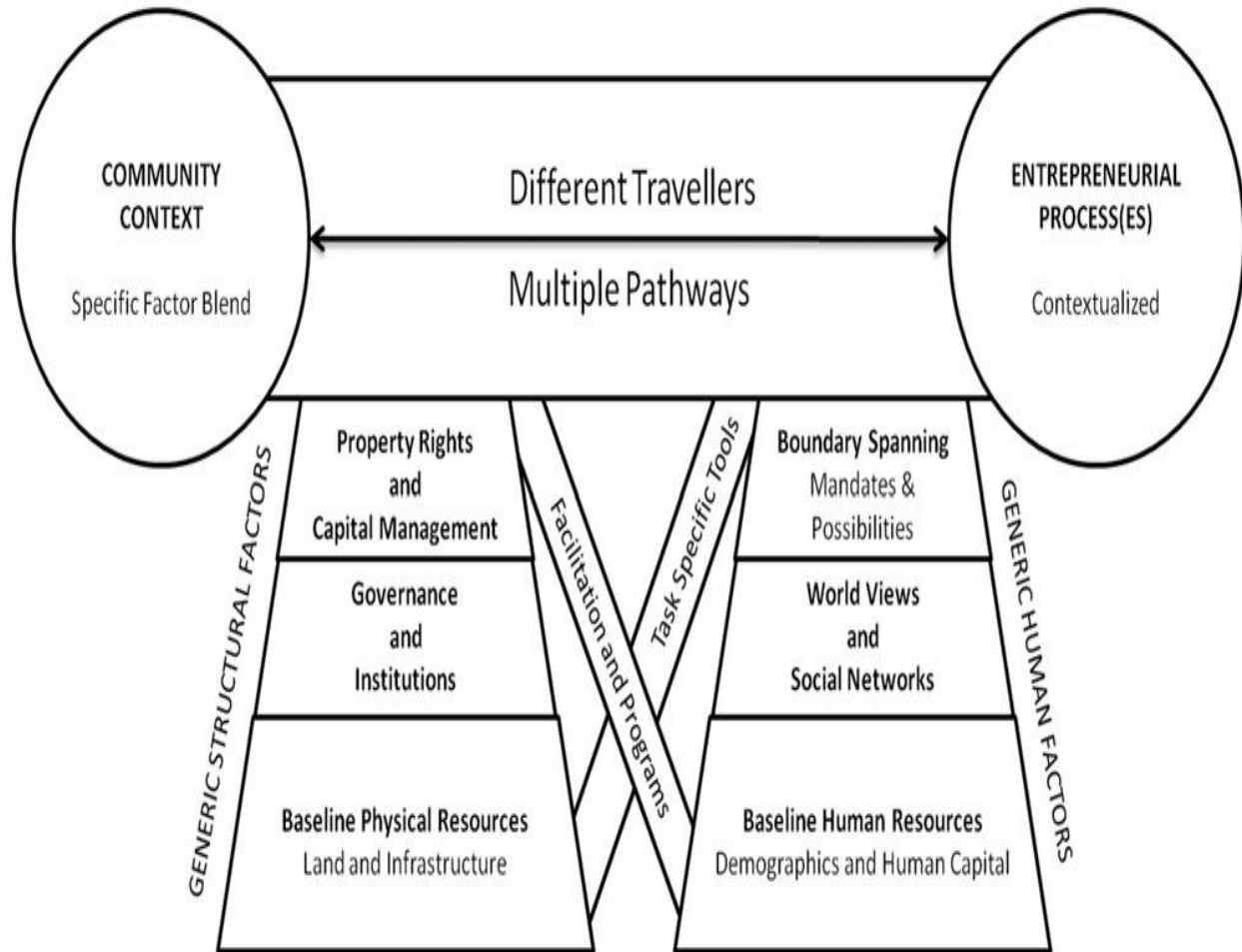


FIGURE 2: THE CONTEXT OF COMMUNITY IN THE ENTREPRENEURIAL PROCESS
 SOURCE: (HINDLE, 2010, P. 619)

The combination of generic structural and human factors allows for a better grounding of the community needs, obstacles and possible solutions. The ‘facilitation and programs’ and the ‘task specific tools’ provide support for any inadequacies or shortcomings which become apparent in the generic structural and human factors. The combination provides a basis for moving forward towards a more successful entrepreneurial path.

Motivations for becoming involved in agricultural tourism can vary, encompassing economic and socio-cultural incentives. Table 3 lists the motivations for agri-tourism

entrepreneurship among Virginia farm families, as found in a study by McGehee, N. G., & Kim, K. (2004).

TABLE 2: MOTIVATIONS FOR AGRI-TOURISM ENTREPRENEURSHIP IN VIRGINIA

Motivations
Loss of government agriculture programs
Additional income
Interest/hobby
Employment for family members
To fully utilize resources
Companionship with guests/visitors
Fluctuation in agricultural income
To meet a need in the tourism market
Tax incentives
Observed agritourism successes of others
To educate the consumer

Source: (McGehee & Kim, 2004)

These types of motivations are also cited by Barbieri (2008); Evans & Ibery (1992); Weaver & Fennel (1997) and Nickerson et al. (2001).

Notably in the literature are the barriers to entrepreneurship in agriculturally based tourism enterprises. These include but are not limited to (1) the access to finances, (2) farmers as businesspersons and (3) lack of effective training and or technical assistance. These three barriers are also not mutually exclusive but often overlap and influence one another.

Larger companies gain more incentives and tax concessions for a longer period than smaller companies, which tend to be local in nature (Chai & Goyal, 2006). As such, smaller companies have difficulties attaining loans and financial support. Further, when they manage to attain them, high interest rates and strict regulatory and financial obligations may hamper them (Ateljevic, 2009).

Moreover, connected to this difficulty in attaining finances is the perception of risk associated with small tourism enterprises. Cox and Morton (2003) found in their study that the

farmers in Hawaii had little experience with merchandising goods and services, which hampered their ability to benefit economically. Shaw and Williams (1998) further substantiate this perception of risk, noting that, “poorly developed entrepreneurial skills among local businesses involved in food production and distribution” (p. 245) hinder local small business entrepreneurship in agricultural tourism.

Lastly, the lack of business skills is tied to the third barrier, which is the lack of effective training and technical assistance. Support for local entrepreneurs is important for tourism development, especially in developing countries as it may lead to less economic leakage, better job creation and increased community support for tourism (Ateljevic, 2009; Chai & Goyal, 2006; Shaw & Williams, 1998). That said, there is a noted need to train and provide technical assistance to local entrepreneurs. Shaw & Williams (1998) note, however, that there are “very few international aid programs that have focused on the training of local entrepreneurs in developing countries ... within the tourism sector” (p. 241).

2.1.2 TOURISM AND AGRICULTURE – THE CHALLENGES

While discussing entrepreneurship through agriculture and tourism linkages, several challenges became apparent. There are other challenges that develop through the linking of agriculture and tourism, seen through competition for resources such as land, labour and water (Bélisle, 1983; Timms & Neill, 2011; Andreatta, 1998). Here, tourism is seen as competing with agriculture for those stated resources. However, this sentiment is challenged by Forsyth (1995) who found that in northern Thailand, “agriculture was more likely to extract labour from tourism than vice versa” (Forsyth, 1995, p. 888). Additionally Hermans (1981) found that even though agriculture was proving to be viable and profitable, young persons were not interested in working in that field as it was seen as less prestigious work and tied to dependence on family.

Torres (2003) notes that three types of factors constrain the linkages between tourism and agriculture, such as supply and production related factors, demand related factors and market related factors. Each factor, when broken down, corresponds with much of the literature on constraints to developing linkages between agriculture and tourism. Hence, although Torres (2003) focused on Quintana Roo, Mexico, her research is applicable for many countries trying to develop linkages between agriculture and tourism.

The supply and production related factors include, (1) poor local growing factors, (2) negative environmental constraints (soil type, unpredictable weather), (3) lack of consistent agricultural production, (4) competition for labour between tourism and agriculture, (5) inconsistent and/or poor quality of local agricultural production, and (6) high price of local production. Other supply and production related factors include financial issues such as, the undercapitalization of the agrarian sector, a lack of or low access to credit, capital and technical assistance (Torres, 2003), which were highlighted previously in section 2.1.1.1 above. On the other hand, the demand related factors focus on mass tourists with conservative food preferences; while market related factors focus on the weakness of marketing and competition from cheaper alternatives (Torres, 2003).

Torres (2003) highlights the factors that relate to food production and supply. Much of the literature relating to food production with a connection to tourism comes from the Caribbean and as such will be addressed in a subsequent section. However, what can be noted here, is that the literature purports that there should be a boost to local agricultural industries when there is an increase in tourism, due to the increase in food consumption (Bowen, Cox, & Fox, 1991; Richardson-Ngwenya & Momsen, 2011; Telfer, 1996). However, due to many of the concerns noted previously, there is, instead, an increase in imported food.

To mitigate these constraints, especially associated with food production and supply noted above, the role of government and policy are critical factors (Henderson, 2009). Furthermore, to aid in the development of agricultural tourism and the strengthening of linkages between the two sectors, farmers and government need to become more innovative to truly benefit from agricultural tourism (Hjalager, 1996), which will be expounded in subsequent sections.

This section provided a brief discussion on the opportunities that come about through the linking of agriculture and tourism. It also looked at entrepreneurship as an overarching theme that arises through the linking of agriculture and tourism.. Lastly, this chapter provided a brief discussion of some of the challenges that can also arise through developing these linkages. . The following section will give a brief overview of the Caribbean region, followed by a discussion of agricultural and tourism development in the Caribbean region, as that development plays an important role in setting the stage for this research on the Caribbean island of St. Kitts.

2.3 THE CARIBBEAN REGION

The Caribbean region, as seen in Figure 3, is defined geographically as countries bordered by the Atlantic Ocean and the Caribbean Sea.



FIGURE 3: THE CARIBBEAN REGION

SOURCE: ([HTTP://WWW.ISLANDOFCARIBBEAN.COM](http://www.islandofcaribbean.com))

Each country within the Caribbean region has their own individual stories with regard to their history with tourism and with agriculture. It is outside the scope of this research to comment on all the different histories of each country, however, there is a common thread that runs through the many individual histories, which is used for this literature review.

The Caribbean has been involved in tourism since the 1800s (Weaver, 1988). The sector has been continually growing. For example, stay-over visitors increased from 4 million to 23 million, an almost six-fold increase between 1970 to 2010 (Caribbean Tourism Organization, 2011). Jean-Claude Baumgarten of the World Travel & Tourism Council notes that the “Caribbean is the most tourism intensive region in the world. Travel & tourism currently account for 14.8 per cent of total GDP and is expected to increase its share by almost two percentage points to 16.5 per cent by 2014. Similarly, travel & tourism in the Caribbean today

generates 15.5 per cent of total employment, and this is forecast to rise to 17.1 per cent by 2014” (World Travel and Tourism Council, 2004, p. 1). Baumgarten goes further to state that the “industry’s vital role as a generator of wealth and employment across all parts of the region is indisputable [and] it also acts as a catalyst for growth in other areas such as agriculture, construction and manufacturing, which would decline if demand for Travel & Tourism were reduced” (World Travel and Tourism Council, 2004, p. 1). As such, a discussion on this growth and perceived growth in tourism in relation to the history and development of agriculture will follow, showing that tourism and agriculture both had and continue to have an impact on one another today.

2.4 CARIBBEAN AGRICULTURAL & TOURISM DEVELOPMENT

Understanding the history of agriculture in the Caribbean is very important to understanding the development of tourism in the Caribbean. In many ways, tourism has now become what sugar cane used to be for the Caribbean. The Caribbean was known as a region focused solely on the export of sugar cane and was the basis for many of the economies. Today tourism replaces sugar cane as the main contributor to GDP. Outlined below are various issues, which have affected this transition.

2.4.1 HISTORICAL OVERVIEW

The Caribbean has a history of mono-crop agriculture. This history stems from the Caribbean islands being colonized and heavily involved in slave labour to support plantation economies. The shift to tourism happened as a “result of consistent stagnation in the traditional economic sectors” and led to the Caribbean becoming one of the most tourism dependent regions in the world (Jayawardena, 2002, p. 89). Some even refer to the shift as direct

displacement due to the rapid decline in agriculture replacing a rapid growth in tourism (Hudson, 1989; Conway, 2004).

The profitability of the sugar industry ensured that the best lands were used for plantations, and the produce was exported. Thus, the poorest quality lands were left for other crop production (Gumbs, 1981). As much of the lands were used to grow export crops, a culture of importing food from Europe and North America was adopted which persists today. Jessamy (2002) concurs noting that, “a legacy of the islands is the acquired foreign tastes for imported foods ... [and] the increasing importance of tourism further exacerbates the situation” (p. 13).

When slavery ended, there was a shift in the profitability of sugar production. Emancipation meant that former slaves were able to travel and migrate, and many migrated to countries that paid well or migrated to developing countries, away from the plantation societies (Jessamy, 2002). Bunce (2007) notes with “the emancipation of the slaves, the establishment of free villages and small tenancies, fluctuations in the fortunes and technologies of sugar production and the emergence of an urban society” (p. 970) came the emergence of a diversified economy and a shift towards the manufacturing and service industries, namely tourism.

Wilkinson (1997) points out that “in 1946, Barbados had 52 sugar factories, producing nearly 100,000 tonnes of sugar and employing more than 25,000 persons during crop time; by 1980 ... there were only eight factories and the number of employees was slightly less than 9000 [and] by 1991, there were only four factories operating” (pp. 139-140). On the other hand in tourism “the contribution to GDP in 1971 was US\$13.5 million ... by 1981, it was US\$97.2 million” (Wilkinson, 1997, p. 150). This shows the continual decrease in sugar production,

which opened the door for increased tourism. The increase in tourism had a huge impact on the landscape of Barbados. Bunce (2007) notes “with the sugar economy in decline, estate after estate ... reduced its acreage or sold up entirely, and a new landscape of resorts, villas, time-shares, residential subdivisions, golf courses and associated services ... emerged” (p. 970).

We can see that a shift has occurred from sugar to tourism. However, there is another layer to this transition. Due to increasing competition from cheaper alternatives and trade liberalization, the Caribbean economies could no longer compete in the global market, so “by the 1990s sugar cane was no longer the white gold it had been for plantation owners, and the West Indies islands; for those still producing, it had become an economic albatross” (Andreatta, 1998, p. 416).

Governments in the Caribbean tried to diversify their economies by boosting the production of other crops, once ignored during the plantation era. In some islands “rural landscapes once covered in sugar cane or coconuts [are] reduced to patches of tomato, habanero (scotch bonnet) and sweet peppers, zucchini, lettuce cucumbers, and pasture lands” (Andreatta, 1998, p. 422). The introduction of banana and cotton was also futile as they were also subject to the demise of preferential trade agreements, competition from alternative cheaper sources available elsewhere in the world and the unpredictable Caribbean climate (Andreatta, 1998; Gumbs, 1981).

McElroy and de Albuquerque (1997) sum up how the land usage changed, moving from agriculture to mainly manufacturing and tourism development occurred, stating, “centuries of deforestation, plantation slavery and sugar culture produced a legacy of erosion, watershed damage, declining yields and species extinction”. They went further to state “the intensity of

monoculture and unsustainable farming practices ... degraded the vegetation and landscape” (McElroy & de Albuquerque, 1997, p. 19).

The shift from agriculture to tourism led to changing land use patterns. As indicated earlier, as Caribbean economies shifted from mono-crop agriculture to tourism, there was a noted shift in the landscape, and competition for resources, such as land and coastal areas. Latimer (1985) refutes the idea that tourism takes land away from agriculture. He posits that as most hotels are built along the coastal areas, which are not the best for agriculture; fishermen are the ones who may compete with tourism due to their need to access the shore.

The literature does support the idea that the introduction and increase of tourism is also associated with attracting labour away from agriculture, shown in various contexts. As the idea of agriculture was still connected to slavery, it is understandable that “workers were moving away from agriculture even when there were no alternatives in the islands themselves” (Bélisle, 1983, p. 501). Ultimately, any other occupation which differed from agriculture was seen as more valuable or acceptable (Latimer, 1985). Furthermore it has been noted that tourism led to an increase in wages, which led to some farmers moving away from agriculture to work in the tourism industry. This competition for labour was also detrimental, as it increased the price for labour in an already suffering agricultural industry (Bélisle, 1983).

2.4.2 ONGOING ISSUES

Previous research done on the linkage between tourism and agriculture in the Caribbean has focused on specific island case studies and looked at food production as that link. As such, many of the issues relate primarily to food production and the distribution of local produce to hotels and restaurants.

The first issue is an insufficient food supply. Local farmers are not able to meet the needs of the tourism industry. Timms and Neill (2011) state, “domestic agricultural production is unable to satisfy the large quantities, expected quality and price points demanded from hotels and restaurants serving the tourist market” (p. 105). It also must be mentioned that the tourist industry in the Caribbean region is run primarily by large international entities that remain profitable by importing cheaper food and beverages through large wholesale suppliers (Cabezas, 2008; Conway, 2004). This is further compounded by the increased food imports (Gumbs, 1981) and cheaper costs for alternatives that would be imported (Timms & Neill, 2011). Here local farmers’ inability to meet food quotas and quality on a consistent basis has weakened any confidence that hotels would have to purchase local produce (Rhiney, 2011).

The next layer of issues lies with the demand for non-local foods. As was noted earlier, many tourists have conservative tastes and as such prefer to eat food that they are more familiar with (Bélisle, 1983; Richardson-Ngwenya & Momsen, 2011). Associated with this demand for non-local foods by tourists is the issue of foreign chefs and large hotel chains. For example, in Jamaica, International hotel chains will “specialize in international cuisine, employ chefs with foreign nationalities in food management positions and overseas training” (Rhiney, 2011, p. 133). International hotels then also cater to an array of tastes and as such include international cuisine such as Mexican and French (Richardson-Ngwenya & Momsen, 2011) which does not necessarily use local products. It was also found that “foreign-born and foreign trained chefs were less willing to incorporate speciality items such as yam, sweet cassava and okra in their menus” (Rhiney, 2011, p. 130) which would add a local component to dishes. Additionally with increasing food imports, a demonstration effect has occurred in the Caribbean. This demonstration effect is that of local Caribbean people wanting or preferring to eat imported food rather than locally grown produce (Andreatta, 1998; Bélisle, 1983; Timms & Neill, 2011).

The effects of slavery still linger in the Caribbean and affect how the local population feel towards agriculture and the quality of produce (Bélisle, 1983). This issue is made even more complex as local farmers do not want to change their traditional crop production habits which are technologically inadequate and thus have difficulty producing and economically earning enough (Andreatta, 1998; Bélisle, 1983; Richardson-Ngwenya & Momsen, 2011).

Environmental concerns are also an issue. As noted above, in the Caribbean, environmental degradation occurred due to changing land use, ineffective policing and poor land use habits (National Ocean Service, 2002). These issues are further compounded by the unpredictable climate (Britton, 1977; Barker, 1993; Beckford & Bailey, 2009) and issues with water supply (Andreatta, 1998). These environmental issues affect the ability of farmers to produce the necessary quality and quantity of foods needed to support the tourism industry in many Caribbean islands.

Another issue that affects farmers is pests, i.e. monkey populations which cause damage to farmers' crops. Monkeys were said to be introduced to the islands of Barbados and St. Kitts over 350 years ago (Boulton, Horrocks, & Baulu, 1996). A study done in Barbados showed that the monkey population remained consistent over a fourteen year period (1980-1994) however farmers reported crop damage over that period increased by 30 per cent (Boulton, Horrocks, & Baulu, 1996). A change in land use and lessening of agricultural production in the 1980s was linked to this increase in crop damage by monkeys. The impact of this damage was not quantified; however, a study done in Puerto Rico quantified the damage done to farms by monkeys, which was quite substantial, growing from USD \$1.3 million to over USD \$1.46 million per year over the four year period 2002-2006 (Engeman, et al., 2010). The Puerto Rican study noted above also reinforces previous studies on crop-raiding in other countries, which

showcase that monkeys are usually attracted to certain types of crops or fruits. Hence, planting crops that monkeys are less prone to eat could lessen the damage they cause to farms (Hill, 2000). However, due to monkeys' ability to adapt (Hill, 2000), and the changing landscapes in the Caribbean (Bunce, 2008; Boulton, Horrocks, & Baulu, 1996), this problem is one that continues to constrain both agricultural production and agro-tourism.

2.4.3 MOVING FORWARD

Each island has its own dimensions, cultural, social and environmental attributes and as such, a flexible approach towards tourism development, which incorporates agriculture, is most likely to be the best choice to accommodate these particulars. As such, plans need to be strategic, collaborative and flexible. In line with this sentiment, Kim and Uysal (2002), note that “in light of the disadvantages inherent in small-island tourist destinations, it is important for small-island policy makers to be equipped with proactive and future-oriented attitudes for competing effectively with other islands or mainland destinations” (p. 276). This is a sentiment echoed earlier in this chapter.

In the Caribbean, developing policies is not the problem. The problem as Wilkinson (1997) states is that, “it seems that, however difficult policy making may be, its implementation – planning – is even more problematic, for too often policy is made without instruments being in place for its management” (p. 204). The policies, regulations, even the pieces of legislation would need to include sections that give the implementing agencies the power and authority to enforce the rules and regulations, therefore ensuring that there is no disconnect between the policy and the practice.

To address some of the ongoing issues, aside from the increased involvement of government and effective policies (Timms & Neill, 2011), other issues would include securing

both internal and external funds to ensure that farmers can be sufficiently trained and given adequate technical support (Rhiney, 2011). Additional issues include educating the community and generating public awareness, increasing public participation in any future development plans, as well as strengthening regional agreements. Taking steps to address these issues will help to mitigate some of the issues that arise through the tourism-agricultural relationship.

To address some of the concerns mentioned above, Jordan (2008) notes the need for, and importance of, regional partnerships in moving towards sustainable tourism development in the Caribbean. This need for regional development is high on the agenda for Caribbean governments, seen through the Environment and Sustainable Development Unit set up through the Organisation of Eastern Caribbean States (OECS) as well as seen in the development strategy of the CARICOM Single Market and Economy (Girvan, 2007). Moreover, regional partnerships, once enforced, can market tourism through a united Caribbean. Weaver (2001) notes that with the competitive nature of tourism in the Caribbean some investors would move from island to island trying to find the one with the least restrictions and regulations to set up a new hotel or venture (p. 166). A united region would at the very least decrease this behaviour and force investors to abide by regulations and ensure that their investments meet regional expectations. Britton (1977) echoes this sentiment and suggests that a “harmonization of national policy into a regional package is also desirable in order to avoid destructive, predatory competition between islands” (p. 271).

2.5 SUMMARY

In reviewing the literature, this study becomes significant for several reasons. Despite considerable research, there has been no consensus on what encompasses agricultural tourism. This study adds to the knowledge on deciphering what encompasses agricultural tourism by

highlighting various examples of agricultural tourism in St. Kitts as well as proposed developments that should be considered under the umbrella of agricultural tourism.

Much of the literature on agricultural tourism focuses on the addition of tourism to an agricultural product without first ensuring the successful production of agricultural products themselves so that agricultural tourism can develop. This research adds another layer to this knowledge by highlighting the importance of developing the agricultural base to ensure a successful transition into agricultural tourism. Additionally, this research adds to the knowledge on a need to build community capacity, especially with regard to entrepreneurship, to ensure that the community can truly reap the benefits of agricultural tourism.

This chapter has given a broad overview of literature pertaining to the relationship between tourism and agriculture and the Caribbean region. It has also provided the context for how agriculture and tourism have developed in the Caribbean, and the issues inherent in that development. Understanding this development will set the stage for a better grounding of the study site. Additionally it sets the stage for understanding the process of developing agricultural tourism in a transitioning region. The next chapter outlines the methods used to conduct this study.

CHAPTER THREE: RESEARCH METHODS

3.0 INTRODUCTION

The goal of this research is to explore the process of agricultural tourism development in a transitioning region, using St. Kitts as a case study. This chapter outlines the methods used to collect the relevant data to achieve this goal. The chapter is divided into the following areas: Study Site Context – St. Kitts; Methodological Approach; Methods of Data Collection; Data Analysis; and, the study Timeline.

3.1 STUDY SITE CONTEXT – ST. KITTS

As demonstrated in Figure 4, St. Kitts is an island situated in the Caribbean Sea at approximately 17°15' north latitude and 62°40' West longitude (Innis, 1985). St. Kitts is part of a twin island federation and the full name is the Federation of St. Christopher and Nevis (St. Kitts is a legally accepted shortened form of St. Christopher).



FIGURE 4: THE CARIBBEAN REGION SHOWING LOCATION OF ST. KITTS AND NEVIS

Christopher Columbus first spotted St. Kitts in 1493. However, the British (through Thomas Warner) only settled St. Kitts in 1624 (Watts, 1987). Before colonization, indigenous people called the Caribs inhabited St. Kitts. The Caribs named St. Kitts 'Liamuiga' meaning fertile land. The relationship between the Caribs and the British and French - who also briefly colonized St. Kitts - became strained, and as a result most of the Caribs were massacred (Watts, 1987). Innis (1985) noted that "by the late 1640s the sugar industry had been established ... [and] in this period St. Kitts became the 'Mother Colony' of the English and French colonies in the West Indies"(pp. 4-5). St. Kitts became the launching pad of colonization in the Eastern Caribbean (Watts, 1987).

On July 31st, 2005, the Government of St. Kitts and Nevis officially closed the country's sugar industry. Aging machinery, increased competition, and changing trade regulations and relationships led to years of increasing debt, which decreased export earnings. For example, in 1978 sugar cane in St. Kitts made up 78 percent of export earnings but dropped to 2 percent in 2004 (Potter, Barker, Conway, & Klak, 2004). Hence, as the sugar industry became no longer viable, it was felt that it would be best to close the industry and try to pursue revenue through other more lucrative avenues.

St. Kitts, once a mono-crop culture based society, has now embarked on new ventures, developing its tourism product as one of six areas to diversify its economy. Lands previously under sugar cane production have now become available due the closure of the sugar industry. The St. Kitts Sugar Manufacturing Corporation is state owned and as such, there are about 4000 hectares of newly available lands under government control. This land should be subject to careful planning and development, to ensure its longevity and sustainability (Graci & Dodds, 2010). Moreover, there is a population, once employed in this industry, which has an

agricultural skill set. The need to mobilize them into the changing economy will also be important for St. Kitts.

Geographically, St. Kitts and Nevis encompasses 260 sq. km with a population of 53,584 (The World Bank, 2014). Figure 5 shows the parish boundaries and road network for both islands.

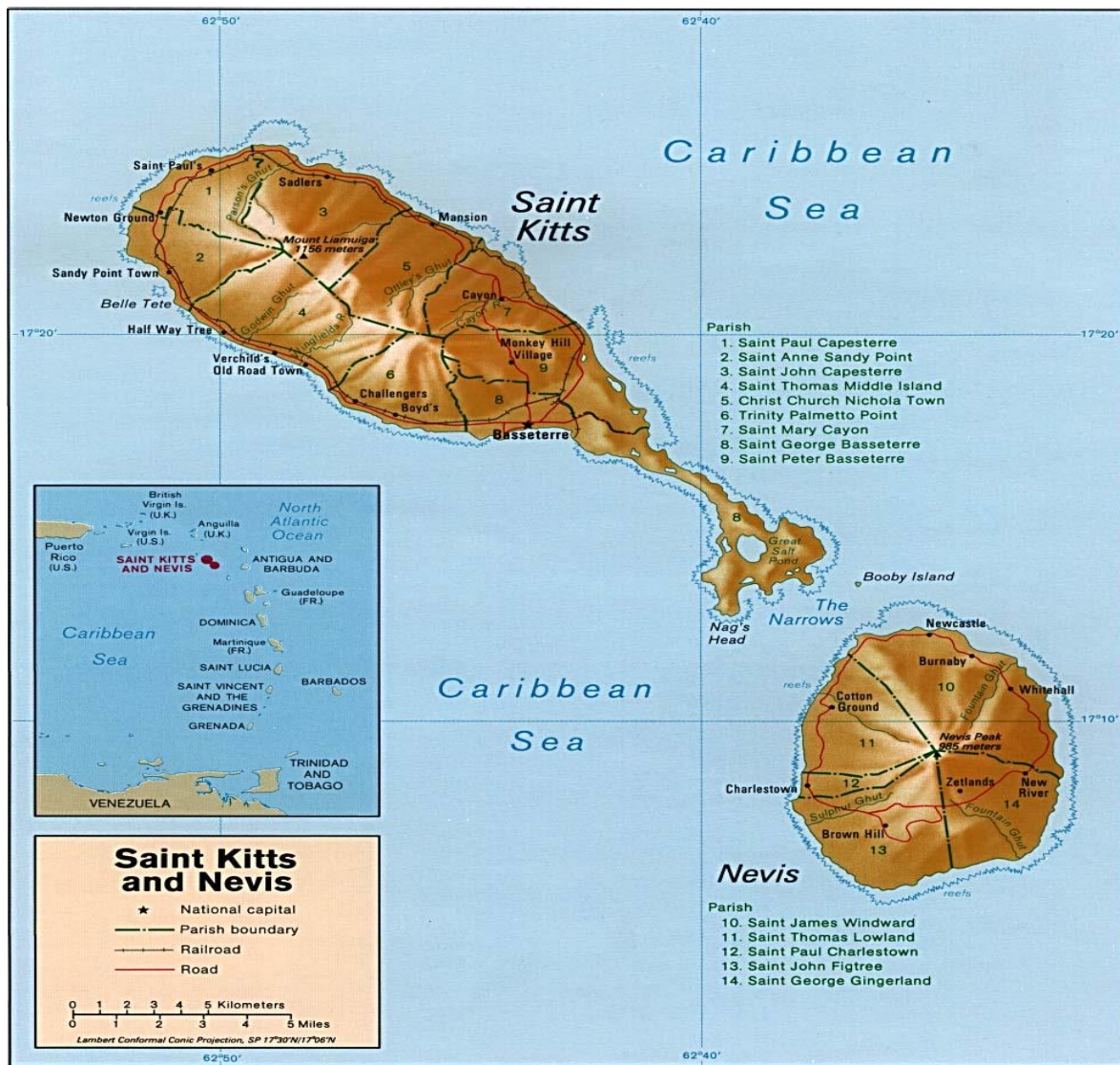


FIGURE 5: ST. KITTS AND NEVIS SHOWING PARISH BOUNDARIES AND ROAD NETWORK

Figure 5 above, showed the size of St. Kitts and Nevis being relatively small with an uncomplicated road network. Table 3 below shows the tourism arrival statistics for St. Kitts and

Nevis for the period 2003 – 2008. The tourism arrivals far outweigh the population at 53, 584 and provides for a larger market for agricultural produce.

TABLE 3: ST. KITTS AND NEVIS STAY-OVER AND CRUISE TOURIST ARRIVAL STATISTICS

Year	2003	2004	2005	2006	2007	2008
Stay-over	90,599	117,638	126,927	132,970	123,161	106,408
Cruise	150,429	254,535	216,832	203,075	247,393	247,393

Modified from (Caribbean Tourism Organization, 2010)

In the early 1980s, the federation of St. Kitts and Nevis was noted as moving slowly with development especially along its coast, being careful not to repeat the mistakes of other islands (Pattullo, 2005). Currently the federation of St. Kitts and Nevis is working towards a National Action Plan that stems from the National Action Programme for Combating Desertification and Land Degradation and complemented by the St. Kitts-European Community: Country strategy Paper and National Indicative Programme for 2008-2013. The National Action Programme for Combating Desertification (2007) notes that with the closure of the sugar industry and increased push towards tourism, the National Action Plan is necessary to protect the environment. Increased tourism will affect land degradation and “if left unchecked environmental degradation may result in a net reduction in the significance of St. Kitts and Nevis as a tourist destination.” Additionally, “conservative estimates suggest that environmental degradation and the associated impacts could lead to a 20 percent reduction in the tourism related revenues” (Ministry of Sustainable Development, Federation of St. Kitts and Nevis, 2007, p. 56).

In St. Kitts, many links have been made between agriculture and tourism, but on an ad hoc basis. Due to my past association, working with the Ministry of Agriculture, I have been

privity to some of the opportunities that have arisen through tourism and agriculture. Moreover, there has been an increasing visibility in the media of the relationship between the two sectors. According to the St. Kitts Investment Promotion Agency (SKIPA), “the government of St. Kitts and Nevis has employed a multidisciplinary approach to its Agricultural Development Strategy, encompassing vital components such as incentives packages, increase availability of land, investment in agro processing technology and increased linkages with the tourism sector” (St. Kitts Investment Promotion Agency).

This section outlined a brief description of the study area in order to provide context for my research. Understanding the shifting roles of agriculture in St. Kitts is necessary as this sets the stage for exploring the development of agricultural tourism in a transitioning region and the roles that stakeholders play in that development.

3.2 METHODOLOGY

This analysis takes the shape of a case study. This method was chosen because a case study is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin R. , 2003, p. 13). This research follows a single-case design as it “focuses on a single individual, unit, organization, or phenomenon ... [the] purpose is to clearly analyze some topic of interest in that single unit” (McNabb, 2010, p. 42).

Although the methodological approach is that of a case study, there are some disadvantages associated with the approach. There has been debate over the reliability and objectivity associated with case study results. There is concern that, as conclusions stem from insights and reflections of the researcher, there is potential for misinterpretation or bias (Smith, 2010; Feagin, Orum, & Sjoberg, 1991; Levy, 2008). Additionally, there is debate over

generalizability. Some argue that due to the specific focus of a case study, generalizing to a larger population or context is problematic (Smith, 2010; Lewis-Beck, Bryman, & Futing Liao, 2004; Feagin, Orum, & Sjoberg, 1991). These disadvantages are also seen in another light and have been argued as advantages and strengths of this approach.

A case study can offer reliability because they involve the use of overlapping measures of the same phenomenon (Smith, 2010; Feagin, Orum, & Sjoberg, 1991). Using overlapping measures also allows the case study to provide a fuller understanding of the phenomena than other methods (Smith, 2010). Additionally, case studies also utilize qualitative research in hopes of developing concepts and understandings based on the pattern reflected in the information. Research has shown that a case study can provide for generalization or theorizing as the case can provide insight and support of larger phenomena (Levy, 2008; Feagin, Orum, & Sjoberg, 1991; Campbell, 1975). Moreover, Borins notes that “case studies can be used to develop new generalizations and challenge existing ones, to develop and analyze scenarios, to illustrate exemplary solutions to recurring problems, and to analyze how practitioners frame their roles” (as cited in McNabb, 2010, p. 41). This is relevant for this study as the hope is that the findings will add to the understanding of developing agricultural tourism in the Caribbean region and developing island countries. Furthermore, it is hoped that it will aid in understanding the possible variables involved in diversifying tourism and agricultural industries as well as developing agricultural-tourism products as a mechanism to promote sustainable development.

3.3 METHODS OF DATA COLLECTION

Several methods were used to collect data, to mitigate the limitations inherent in any single method of research. Interviews were conducted in St. Kitts with various stakeholders who would influence agricultural tourism development in St. Kitts. Additionally, there was a

review of policy documents that relate to tourism and agriculture as well as local media news articles related to agricultural-tourism and entrepreneurship. A third research method came from direct observations made through site visits to agricultural-tourism ventures, as well as while conducting interviews. By collecting the data using these three methods, triangulation was achieved, which helps to “clarify meaning by identifying different ways the phenomenon is being seen” (Stake, 2000, p. 444). Triangulation of data is a major strength of a case study and ensures that the research findings are fully supported (Yin, 2009; Hancock & Algozzine, 2011).

3.3.1 SEMI-STRUCTURED INTERVIEWS

One evidentiary component came from semi-structured interviews. This type of interview was chosen as it allowed respondents to fully express themselves through the ability of the researcher to probe deeper into issues of interest for the respondents. (Hancock & Algozzine, 2011; Rothe, 1993). Interviews were conducted with key high-level personnel (which refer to top government officials and representatives of international and regional organisations in St. Kitts) who have some control over, and have firsthand knowledge of, the development of agricultural tourism in St. Kitts. The table below details the corresponding number of interviews (16 in total) which took place per organization.

TABLE 4: ORGANIZATIONS INTERVIEWED

Organization	Number Interviewed
Ministry of Tourism	2
Ministry of Agriculture	3
Ministry of Environment & Sustainable Development	1
Ministry of Youth	1
Ministry of Gender Affairs & Community Development	1
The Department of Agriculture	2
Taiwanese agents for the Agricultural mission	1
St. Kitts Investment Promotion Agency (SKIPA)	1
Inter-American Institute for Cooperation on Agriculture	1

Organization	Number Interviewed
(IICA)	
Organisation of American States (OAS)	1
St. Kitts & Nevis Sugar Diversification Foundation (SIDF)	1
Creative Employment and Business Opportunities program (CEBO)	1
St. Kitts and Nevis Aquaculture and Pilot Project and Environmental Research (SNAPPER) Farm	1
The Agro-Tourism Demonstration Farm	1
Farmer/Beverage Entrepreneur	1

A second set of semi-structured interviews was conducted with current tourism-agricultural entrepreneurs, businesses and organisations (included in table three). I was only able to garner three interviews that qualified under this category. Unfortunately, at the time of the data collection period, representatives for the Scenic Railway and the St. Kitts Sea Turtle Monitoring Society were unavailable for interviews.

To augment the interviews, commentary was provided from other entities such as the St. Kitts & Nevis Chamber of Industry and Commerce. In addition, a round table discussion with four officers from the Ministry of International Trade, Industry, Commerce and Consumer Affairs provided information on trading practices, current issues with consumer affairs, implementing national standards and attaining international standards for products.

As a Kittitian (person from St. Kitts) with an understanding of the local government structure, I was able to use my previous knowledge in deciding which ministries and departments to contact for interviews. Through these interviews, I gained the names of other possible persons or organizations that would be able to provide additional interviews and useful information. St. Kitts is a small island where ones' family name can influence ones' ability to connect with high-level government officials, which may have aided my ability to conduct very

high-level interviews. Additionally, being seen or accepted as a local person and a former employee of the St. Kitts Government may have allowed respondents to feel more at ease speaking more freely when interviewed. On the other hand, my association with the island and the position of my family within Kittitian society may have inhibited my ability to access other sources outside my social circle. Bahr & Caplow (1991) note that one's social circle limits ones access to people who are socially distant from that circle and "endows them with the prejudices" of one's social circle (p. 99).

3.3.2 SECONDARY DATA SOURCES

A second method of data collection included the review of tourism policy documents that may or may not have related to agriculture and agricultural policy as it relates to tourism. These secondary data sources were collected from various high-level respondents and include strategic and action plans, development reports and master plans. The online websites for the Caribbean Tourism Organization and the World Bank provided official statistical data and policy documents. The review of these documents provide background knowledge of the plans that governments have put in place to take advantage of the link between tourism and agriculture, as well as to see the possible plans for agricultural-tourism. The review of documents also highlights issues and important information that may "corroborate and augment evidence from other sources" (Yin, 2009, p. 103).

3.3.3 DIRECT OBSERVATIONS

Observations supplemented data from the interviews. Notes were taken during and after interviews on how the respondents reacted to questions, the attitude and behaviour of respondents as well as overall impressions of the encounter (Yin, 2009; Rothe, 1993). These notes also add context and give more meaning to what was said in the interviews (Rothe, 1993; Angrosino & Mays de Perez, 2000). During site visits, with permission from relevant parties,

photographs were taken to document the environment, the various stages of development of the sites as well as key processes taking place at the sites. These observations add another layer to the collected documents and the interviews.

3.4 DATA ANALYSIS

To analyze the collected data, several generally accepted steps for qualitative analysis were followed, including the transcription of interviews, open coding, axial coding and selective coding (Yin, 2011; Creswell, 2009). Firstly, interviews were transcribed using Dragon Naturally Speaking 12.0 dictation software. After each interview was transcribed, different highlighters and coloured post-it notes were used on hard copies of the transcripts to aid in analysis. During initial reading of transcripts, words and phrases were recorded and grouped to garner the possible themes that may emerge. When this was completed, each grouping was categorized based on the related data. At this point, there were seven categories, community/social, financial, geographical, technical, socio-economic, policy and stakeholders. These categories were colour-coded and a subsequent reading of transcripts was done using the coded coloured highlighters to identify the categories. The different coloured highlighters provided a visual that allowed the researcher to identify the categories most discussed in the interviews.

To give context to the categories the transcripts were re-read based on the research objectives. All interview questions, which cumulatively helped to provide some answer to specific research objectives, were grouped together and answers compiled. The compiled answers were then used to provide helpful insight into the categories noted above. This then led to the further breakdown of the initial seven categories based on the four objectives.

Once at the stage of combining themes from the various data sources, I was able to see relationships that emerged and make connections that would contribute to an understanding of

the development of agricultural-tourism in St. Kitts. The analysis focused on reviewing all of the compiled data on the development of the tourism and agricultural industries, as well as the factors that affect these activities in St. Kitts. “Not only is it important to understand ... [the] product, or supply, it is equally important to identify the community’s organizational structures that will influence tourism development” (Edgell, Sr, DelMastro Allen, Smith, & Swanson, 2008, p. 303). This analysis helped in addressing the research objectives, as discussed thoroughly in the following chapters of this study.

3.5 TIMELINE

The field research took place over an eight-week period from July 24th to September 12th, 2012. This timeframe resulted from convenient timing for the researcher as well as availability of the respondents. Due to the varying availability of respondents, all three methods of data collection noted in Section 3.3 ‘Methods of Data Collection’ occurred simultaneously. During the fieldwork period (July 2012 – September 2012), I also collected various tourism and agricultural policy and plans and visited agricultural tourism ventures that were currently in operation. Documents collected from respondents during various interviews allowed for additional background information for subsequent interviews. The combination of these methods allowed for a holistic coverage of the issues and provided a realistic picture of the future development of agriculture and tourism in St. Kitts. The completion of the data analysis and write-up took place between September 2012 and April 2014.

This chapter provided an outline of the methods used during the process of data collection and analysis. Chapter 4 and 5 present and discuss the data collected to enhance understanding of the process of agricultural tourism development in St. Kitts.

CHAPTER FOUR: FINDINGS

4.0 INTRODUCTION

Tourism has become the driving force of the economy for St. Kitts and Nevis following the closure of its sugar industry. This closure has provided access to lands previously used for sugar cane production. To capitalize on the new availability of land, the government of St. Kitts and Nevis has pushed for an increase in agricultural production. This combination of increased agricultural production and the intentional thrust into tourism has led to this research, which looks at the process of developing agricultural tourism in a transitioning region. This chapter provides an analysis of semi-structured interviews, documents collected while in the field as well as on-site observations. The following objectives frame the findings in this chapter.

- 1) To identify the barriers and challenges of developing agricultural tourism initiatives in this transitioning region
- 2) To identify and describe current and future agricultural tourism initiatives
- 3) To establish how the private sector has fostered development of these initiatives
- 4) To identify what the public sector should do to enhance future agricultural tourism initiatives in St. Kitts and other regions that are considering agricultural tourism as a development option

The findings that relate to objective one focus on the factors affecting development and endemic characteristics of the local populace. Specifically it highlights the current technical and environmental concerns as well as the mental and behavioural characteristics of the local populace. The findings addressing objective two focus on the current state of agricultural tourism development, the perceived opportunities for future development and the benefits of developing agricultural tourism in St. Kitts.

To address objectives three and four, the findings focus on the various stakeholders that have an impact on the development of agricultural tourism in St. Kitts. Moreover, it highlights the role they play in the development of agricultural tourism and the perception of what they should be doing to ensure the successful development of agricultural tourism in St. Kitts.

4.1 OBJECTIVE 1: BARRIERS AND CHALLENGES

‘Factors Affecting Development’ and ‘Endemic Characteristics’ are the two themes which address the barriers and challenges to agricultural tourism development. Combined, these themes display the current technical and environmental concerns as well as the mental and behavioural characteristics of the local populace, which appear as hindrances to the development of agricultural tourism.

4.1.1 FACTORS AFFECTING DEVELOPMENT

During the interview process there were several environmental and geographic characteristics identified by respondents that affected and continue to have an impact on agricultural production today in St. Kitts. By extension, these factors also influence the tourism industry. The following factors affect quality, quantity and the consistency of agricultural production in St. Kitts.

Due to the location of St. Kitts and Nevis in the Eastern Caribbean, respondents noted that weather was a factor that contributed to agricultural production issues. In particular, seasonal conditions associated with the rainy and dry seasons affect production as does the hurricane season. Agricultural Officer A noted that during the hurricane season, only certain low lying crops such as sweet potatoes and pumpkins can be planted as they would be least affected by the high winds. He continued to state that,

... we have our marked rainy season and dry season so that poses a limitation to our production in that in the first half of the year we have a marked abundance of production but because of the rains and dry spells that we have around this time and it's dry you find that we are out of most of our commodities.

In conjunction with the rainy, dry and hurricane seasons, the farms in St. Kitts are rain-fed, which also leads to the seasonal production of crops. Agricultural Officer B notes,

The consistency in supply in St. Kitts and Nevis again has to do with our rainfall. Most of the farms are rain-fed, and so the production is seasonal. We are only striving now to provide water for farms.

Investment Agent A further substantiated this, stating

Some of the difficulties that we have now in terms of agriculture overall irrespective of whether we want to tie it to tourism or not is what I call rudimentary farming, that's something we must address, we still do rain water farming and that's something we need to come to grips with.

The St. Kitts and Nevis National Biodiversity Strategy and Action Plan (2004) also highlights the issue of water resources stating; "the distribution and availability of freshwater in St. Kitts and Nevis is related to climate variability, rainfall changes and land use patterns as this influences infiltration and runoff" (23).

Moreover, connected to the issue of providing water to farms is the location of farms. Many farms are located in areas that are more mountainous or within the interior of the island. There is a problem with water availability because structures are not in place to provide water in the hills, away from physically developed areas. The over-arching issue of competition for land also includes the location of farms. When questioned about being able to have a successful agricultural tourism industry, one agricultural -based respondent noted that it was not just about the availability of land but also about the appropriateness of the lands for the activities.

Well I think one of our qualms in agriculture is not just having land for agriculture but having the appropriate lands, because for getting the quantity and quality, and you should add the consistency of supply you

need water. And making former sugar lands available is fine but if they are up in the hills and away from water you cannot guarantee proper sanitation if you want to wash your stuff (Agricultural Officer C).

Another issue attached to the location of farms is that of road conditions. Some respondents were concerned about how the condition of roads would affect accessibility, safety and the quality of produce in two ways. The first being that produce transported from farms in the mountainous areas to the markets can become bruised easily due to the condition of roads. The second reference came with the thought that there is a need to provide better accessibility to farm attractions through better road conditions with proper lighting, which would also ensure that visitors feel safe when venturing to farm attractions.

The issue of land availability for farmers highlighted diverging views by respondents. Some respondents felt that Government distribution of land to farmers was insufficient and the manner in which land ownership is handled (leased or rented as opposed to title deeds) is a hindrance. When asked about opportunities for locals to engage in agricultural tourism, an agribusiness person stated,

If the government would say that land is available. People don't have land here you know. It is the hardest thing for a man to get a piece of land here to grow anything you know. First of all, you have to get good connections and all of that. The thing is government should really have a program with lands that you can lease and let people go on it and do what they do, raise animals, plant and so on. That doesn't exist. There are no available lands for people who are disposed to them (Entrepreneur Wilson).

Another respondent from an allied agency, when questioned about foreseeable challenges noted,

As you know most of the land the farmer is using is still owned by the state. The government may have another design in the future, maybe land for lease or whatsoever. I don't know that part but that would be one of the burdens of people is that they won't invest because if the

land is not properly leased or sold or is not a title deed then the farmer would be scared of investment (Allied Agent C).

The St. Kitts and Nevis National Biodiversity Strategy and Action Plan (2004) substantiates this as it highlights that acquiring agricultural lands occurs through leasehold tenures and not freehold tenures, the practice for residential lands (14). The Ministry of Health and Environment in St. Kitts, through funding provided by the Global Environmental Facility, implemented the St. Kitts and Nevis National Biodiversity Strategy and Action Plan (2004) to fulfill commitments made to the Convention on Biological Diversity.

Alternatively, some respondents felt that the Government was giving out more lands to farmers, and as such, the issue of land availability was no longer a concern.

Generally, three things limited farming, finance, water and land. The land thing was solved after we went out of sugar and the land distribution has been faring well since (Tourism Officer A).

Pests, particularly monkeys, was another issue highlighted. Monkeys were described as being very destructive, and after a monkey census in 2010, it was noted that their population was comparable to the population of St. Kitts and Nevis. The statistics from the more recent study were unavailable however according to the St. Kitts and Nevis National Biodiversity Strategy and Action Plan (2004) a study from 1988 estimated the population to range from 35,000 – 40,000 (44-45). This number is comparable to the population of people in St. Kitts and Nevis moving from 41,045 in 1988 to 53,584 in 2013 (The World Bank, 2013). When questioned about developing a successful agricultural tourism industry, one respondent noted the monkeys' ability to devastate a farmer's livelihood through crop destruction.

The one challenge that we have that we can't seem to find an adequate solution for is pests, monkeys. Whenever they can't find food in the hills, they'll come down and create havoc for the farmers and I've known farmers to go out of business because of monkeys ... so that is

a problem that would definitely affect consistency of production, because you can have a nice crop of watermelons, and a monkey troop passes through and bites every one of them. Or carrots, you could have a designated plot for the hotels and target that and they would pull up every single one, even if they are not ready yet (Agricultural Officer B).

The location of the island, the location of lands for development, weather, water availability and pests all pose challenges for the successful development of an agricultural tourism industry. These barriers have also affected the relationship between farmers and different hotels in St. Kitts.

In St. Kitts, there are varying types of accommodations, such as bed and breakfasts, inns, guesthouses, small local and foreign-owned hotels and larger international hotels. The debate around accommodations focuses more on the larger international hotel chains, specifically, examples emanating from the Marriott hotel in St. Kitts and the Four Seasons resort in Nevis. Respondents indicated that there were differences between these two hotels with regard to the type of tourists they attract, the type of service they offer as well as their interaction with farmers and the agricultural industry.

Both hotels have varying histories with regard to their relationship with the agricultural industries. The Four Seasons Resort was deemed to have a very successful relationship with the farmers, Agricultural Ministry, and Department in Nevis while the Marriott Hotel seems to have a more tumultuous relationship with farmers and the agricultural Ministry and Department in St. Kitts.

The term 'Nevis Model' was coined due to the successful arrangement between the Four Seasons Resort and the agricultural industry in Nevis. The Nevis Model was essentially, "a market led production system ... which coordinated the activities of producers, research and extension units in the Department of Agriculture, Nevis with the FSR [Four Seasons Resort]"

(IICA, 2006, p. 11), which began in 1992. Farmers were put into a group, the Nevis Growers Association, and given specific crops that they had to plant at specific times in order to meet the needs of the Four Seasons Resort. To maintain schedules, extension staff provided planting and harvesting support to the farmers. A single agent, representing all farmers, sold produce to the resort. This meant that farmers were not able to negotiate on an individual basis with the resort. Twice weekly, the hotel received produce. The Four Seasons was given a ten-day advance notice if there was any problem with meeting the quota, so that they would be able to order what they needed from another source, whether regionally or internationally. Farmers and resort representatives were in continuous communication through scheduled weekly meetings. In order to elevate the business relationship between the resort and farmers, the resort representative would meet annually with the resort to establish what produce was needed as well as to negotiate prices (Allied Agent B).

Respondents deemed this arrangement as successful in the long term, even though initially the arrangement was not very steady. The example was given that in the beginning, there was an incident where the resort had ordered produce from overseas but also had their order filled by local farmers. As a result, the resort ended up with double the produce. In response to that, the Minister at the time got involved.

I called the Minister who is the Premier now, Parry and told him and he wrote to the general manager and asked to meet at his office and basically said in no uncertain terms that anything you want from today has to go through the department. So they [the Four Seasons Resort] had to comply like everybody else. So that's the way you are going to force [them] (Allied Agent B).

This buying arrangement between the resort and the farmers via the Ministry and Department of Agriculture was established through a Memorandum of Understanding (MOU) agreement, which is not legally enforceable but was nonetheless maintained. In St. Kitts, there

was an MOU established between the Ministry of Agriculture in St. Kitts and the Marriott hotel that did not fare as well. Initially the Department of Agriculture represented the farmers. This arrangement ended when the Marriott hotel started requesting insurance on the produce and thus a “farmers’ cooperative” took over from the Department of Agriculture. The Department of Agriculture still provided assistance in the form of quality checks and paper work. This system further broke down and the Marriott hotel eventually breached the agreement. The perception by respondents was that the initial agreement in which the government offered incentives to the Marriott, affected the relationship between the Marriott and the farmers. Generally, incentives for hotels holding more than 30 rooms receive a 10-year income tax exemption and a full exemption on import duties among other things (St. Kitts Investment Promotion Agency, 2013). However, the specific incentives afforded to the Marriott were not made available. The perception by respondents is that other issues such as consistency of production and uncompetitive pricing further exacerbated the farmer-Marriott relationship.

The Marriott has special preference to bring in all that it wants and the farmers are sometimes very annoyed because they are saying that ‘the Marriott doesn’t even bother with us because they bring in everything from their prunes, to their watermelons to their bananas, to the mangoes whatever and it is a sore point. But I still understand that farmers do have an agreement with them, where they can sell to the hotel. Marriott it is big and the reason why I mention this is because it is mainly, it is the only business in town per se because they are a big entity and they have so much power. But that power was given to them from the beginning and they are not going to relinquish it and they will stay put and bring in whatever they want because they can say ‘sometimes your papayas are big and sometimes they are small’, there is no consistency in size (Allied Agent A).

Outside of the farmer-hotel arrangement, the pricing of produce and products is an issue. Respondents felt that the farmers do not understand or know what the true cost of production is and, as such, may charge more or less than they should. One agricultural-based

respondent explained that farmers often price goods based on how much they feel they should get for their produce, which may be too high or higher than the costs of imported goods.

We need to know what is the real cost or approach the true cost of production so that farmers could say 'if my thing cost a dollar to produce, I want a markup of 30% so now I am only to sell for \$1.30. So this is something we are grappling with (Agricultural Officer E).

Another challenge, which affects the tourism industry, is the poor co-ordination of matching demand to supply. Half of the respondents felt that there needed to be a way to have a production base linked to a targeted number of visitors. This mismatch of information is a challenge in St. Kitts. One tourism-based respondent noted,

I don't think the production side is as big a problem as it was. What is a problem now is meeting demands at the right standards and is at the right time and right price. It's marrying the production with the demand right now and creating an active market or improving the active market so that products can get reliably, on time, consistently on the supermarket shelves, into the restaurants and hotels (Tourism Officer A).

Technical and environmental challenges within the agricultural industry affect the tourism industry. These challenges affect quality, quantity and consistency of production, which in turn have negatively affected the farmer-hotel relationship. A negative farmer-hotel relationship can act as a barrier to the successful development of agricultural tourism. Moreover, the issues with proper pricing and matching supply to demand all become additional layers to the complex relationship between agriculture and tourism.

4.1.2 ENDEMIC CHARACTERISTICS

This theme became apparent during the interview process after many respondents openly admitted that Kittitians were generally less likely to take risks especially with regard to new ventures. Through further analysis of the interviews, this theme highlighted another aspect

of Kittitian attitudes. There are two common perceptions of the local populace, which deem them as being (a) risk-averse and (b) having negative attitudes towards agriculture; the latter identified in the literature explicitly, the former not yet fully identified. In entrepreneurship, there is some risk involved in starting a new business or adding to or growing an already established business. In St. Kitts, respondents found that the local populace is less inclined in this regard. When questioned on how local people may be able to take advantage of new entrepreneurial opportunities, one respondent noted that,

It is difficult to convince people to go into uncharted courses, to go into business by themselves and you have to take certain risks. We find it easier that if the persons are already in business to show them how to expand and where to reach different markets rather than someone not working at all. We seem to be risk-averse (Agricultural Officer B).

Furthermore, in identifying the local populace as being risk-averse, respondents also determined that there was a lack of innovation or creativity inherent in the local population. As such, Kittitians were perceived to either prefer to wait and see how something developed before becoming involved, or copy something that was seen to be successful. One respondent noted,

In St. Kitts, we like to copy a lot. We wait for people to come up with an idea and we feel that they are making money from it and then all of us jump into it. But we don't like to think things out creatively and go into it. And then when you think it out creatively and you start making a living from it other people come in with it too (Gov. Planning Official)

One respondent shared his own experience of other persons trying to copy his business, stating,

All the people who come here, the Japanese come and they say, 'so how do you do the acclimatization?' and they are the experts in this field. So I say 'I'd love to tell you but I'd have to shoot you after' and I laugh and they laugh and we shake hands [laughs] ... But people would come for tours with the idea that they will see what I am doing and try to copy it and they don't give you any credit for it. And some people have gone off and tried it and killed off all their fish and then they

come back. One guy came back and just bought more fish from me (Entrepreneur Wilson).

Another interesting aspect of the populace being risk-averse is that Kittitians are taught not to be creative, but rather to go into traditionally expected careers such as law or medicine. One respondent noted,

You have to get people to rethink what education is really about because a child might say, 'I want to become a horticulturist' the parent might ask, 'what's that? No man, you will become a doctor or lawyer'. We still have that traditional way (Gov. Youth Official).

Another respondent stated that,

In this part of the Caribbean, we still looking forward to coming out of school and working for somebody. I don't think we have that entrepreneurial spirit (Agricultural Officer C).

As noted earlier, the second aspect of this theme is that of a negative perception with regard to agriculture. Sixty percent of respondents acknowledged that Kittitians still associated agriculture with hard labour attached to a history of mono-crop sugar-cane agriculture stemming from the colonial past. This was also a noted concern in the St. Kitts & Nevis Sugar Industry Diversification Foundation: Report on Exploratory Workshop (2012) where one of the barriers to economic diversification and food security was the negative attitudes towards agriculture stemming from its connection to slavery. Furthermore, agriculture is seen as work for older, poor and uneducated individuals of the community. One respondent noted this perception and the need to foster some change stating,

Agriculture is coming from a post sugar economy and sugar and they associate the evil of slavery creating a cultural perception about agricultural work. And so at times when people think of agriculture they think of the dreariness of agriculture which is in part why now you have to transform that, you have to think of hydroponics, you have to think of greenhouses which really changes fundamental ways what agriculture used to be. And that I think will excite more young people

to come, more trained and qualified people to come (Agricultural Officer D).

Additionally, local people see agriculture as only working as a farmer in the fields and do not realize the full extent of what agriculture could or does offer. Agricultural Officer D stated,

When you speak of agriculture for example, people have a narrow view; it's crops. People for example hardly think of livestock and forestry development as being typical under the agriculture remit. And so people don't see the full range of support services. You talk about agriculture perhaps they think of the farmer but they don't see the veterinary officer as part of that. Like the person who is doing food safety and the qualifications needed for that are superior so a lot of those things are not seen. And they don't see the business man or the agriculture yet as a business. I think we have work to do in orienting people to a broader view of agriculture and its place in national development and the criticality of it.

Associated with this negative perception of agriculture is the idea that imported food and products are better than local produce and products, leading to a preference by locals to buy imported products.

I believe the changing of the mindset and attitude applies to local consumers so that they do not think that because it is coming from North America or Europe or any other place it is better than what is being produced here (Allied Agent A).

Moreover, there was agreement that the overly positive perception of imported products and produce over local products and produce was questionable.

There is no reason why we should import the quantities that we do if we can produce. Some the stuff I see coming in I know we produce them but I think you have to crack the mindset of certain persons that what you get from outside is better. You try to tell them you don't know how long these things have been travelling in trucks to get to the point of shipment whereas here you go to the supermarket and to me the market is always full of food so it is a lot of education to me (Tourism Officer B)

The preference for imported products and produce holds some historical context.

Usually persons in the Caribbean and living on islands tend to have a preference for things that are imported, and that's a historical thing. We will have to improve our marketing and our packaging in order to be more attractive, so we overcome that threat of preference for the imports (Investment Agent B).

These endemic characteristics are all possible threats or challenges to development and need to be acknowledged and incorporated into agricultural tourism planning.

4.2 OBJECTIVE 2: OPPORTUNITIES

This objective is broken down into three sections. These three sections outline current agricultural tourism initiatives, the perceived opportunities for future development and the benefits to developing agricultural tourism in St. Kitts.

4.2.1 ONGOING INITIATIVES

The data revealed several ongoing agricultural tourism initiatives in St. Kitts. One such initiative is the St. Kitts Scenic Railway (as seen below).



IMAGE 1: ST. KITTS SCENIC RAILWAY

Source: (<http://www.stkittsscenicrailway.com/>)

The scenic railway is a steam-operated railway, which uses former sugar-cane tracks and allows tourists to journey around the island, viewing the sugar-cane landscape. It is unique as it is one of the few steam-operated railways in the Caribbean region and offers an upper observation deck which is also an added feature not common for this type of venture (Dodds & Jolliffe, 2013).

Another major initiative highlighted by respondents is the Agro-tourism Demonstration Farm, which when complete, will utilize the Scenic Railway. The Agro-Tourism Demonstration Farm (set to be complete in 2014) is borne from collaboration between the Government of the Republic of China on Taiwan (ROC) and the Government of St. Kitts and Nevis. This farm will include “an agricultural field station, a modern green house, a tea house and a farm located at the turn-around point of the St. Kitts Scenic Railway Train, giving visitors an opportunity to tour the farm as well as pick and pay for fruit. The farm will also feature cultivation of vegetables” (SKNIS, 2012).

According to the Typology of Agriculture outlined in Figure 1 (pg. 10) the Agro-Tourism Demonstration Farm falls under several different types of agritourism. It would be considered Working Farm Direct Authentic Interaction Agritourism as it would include having visitors pick their own fruits while giving them the option to work on the farm to learn different farming techniques. The Farm also falls under Working Farm Direct Staged Interaction Agritourism, as visitors will be able to tour the farm. Lastly, the Farm would also fall under Working Farm Indirect Interaction Agritourism, as visitors will eat farm produce provided in meals in the restaurant/café at the Farm. The following pictures were taken during a walking

tour of the Agro-Tourism Demonstration Farm on August 20th, 2012.



IMAGE 2: ROADSIDE VIEW OF ENTRANCE TO FARM

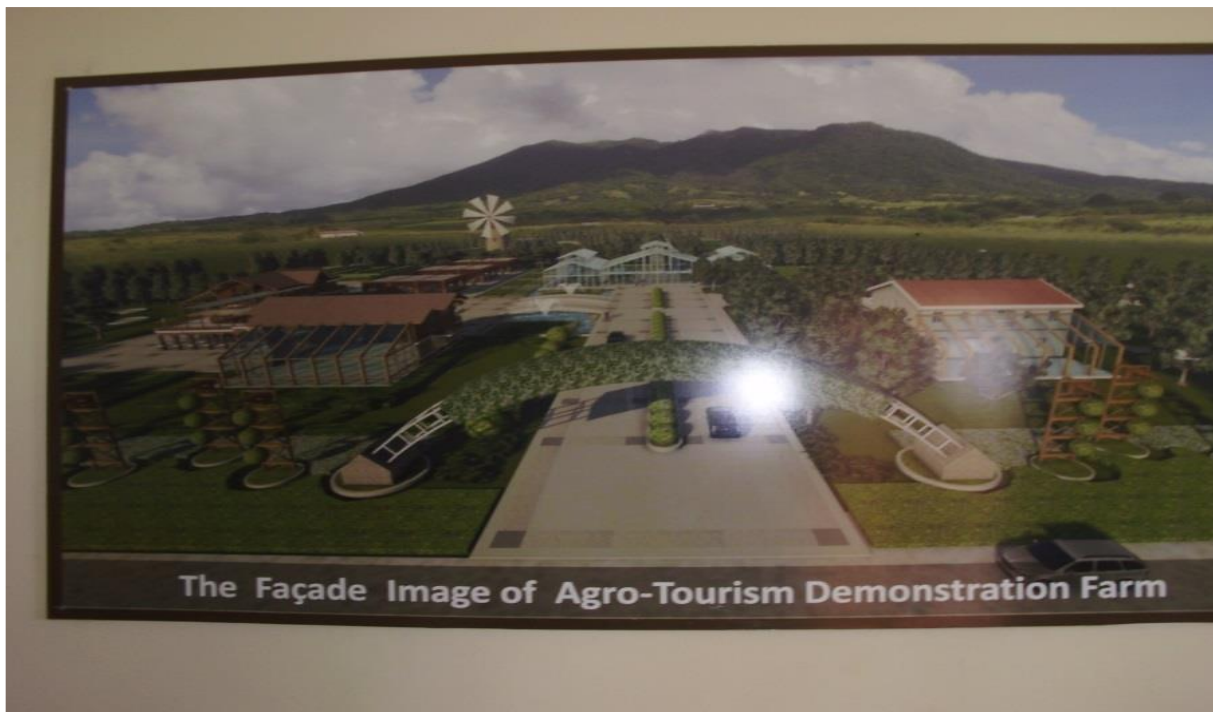


IMAGE 3: PROPOSED VIEW OF FARM



IMAGE 4: PINEAPPLES - ONE OF THE MANY FRUITS GROWN AT THE FARM

View from north end of Agro-Tourism Farm on the left



View from north end of Agro-Tourism on the right



View of training facility at Agro-Tourism Farm

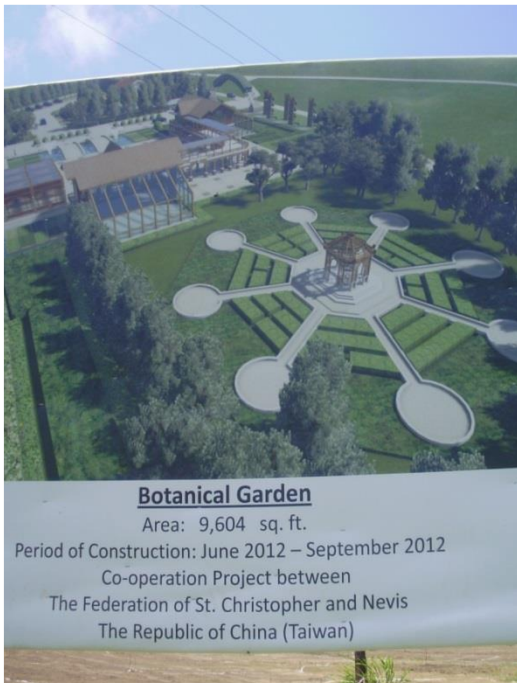


Workers at the Agro-Tourism Farm



IMAGE 5: TAIWANESE AGRO-TOURISM DEMONSTRATION FARM SERIES 1

Visual of proposed garden area



View of garden area being prepped



Construction of green house - View from main office at southern tip of farm



Second view of garden area being prepped



IMAGE 6: TAIWANESE AGRO-TOURISM DEMONSTRATION FARM SERIES 2

Another form of agricultural tourism occurs when hotels use locally grown produce and products in their restaurants and stores. There have been new negotiations between the Marriot hotel and the Ministry of Agriculture on behalf of local farmers. These new negotiations have seemed to garner some improvements as “so far from January up to June, we have comparatively increased business with the Marriott over 2011” (Agricultural Officer B). This is seen in the Marriott sales comparison data sheet for 2011-2012 below.

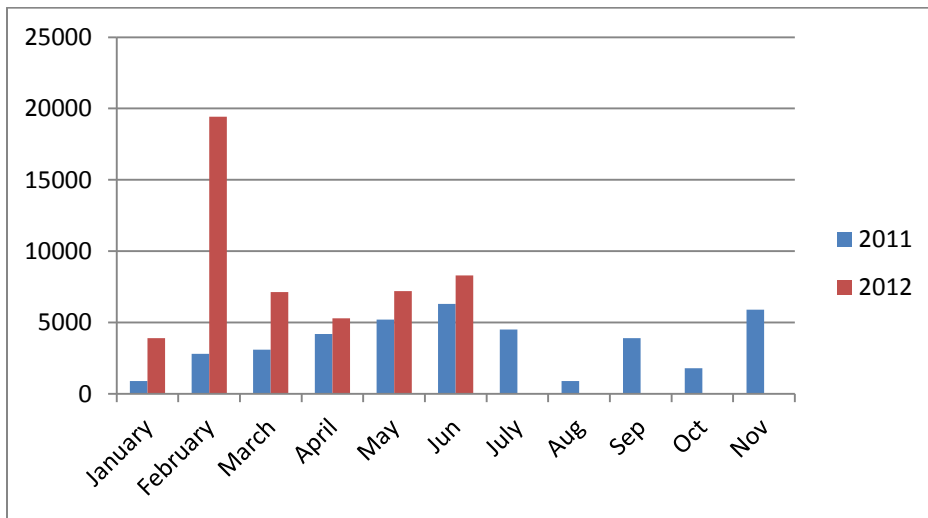


FIGURE 6: SALES REPORT FROM THE MARRIOT

Despite a general lack of creativity, some local residents have capitalized on tourism opportunities. Several examples of success stories were highlighted, including a situation where a farmer went into business supplying coconut products to restaurants instead of farming, and a woman who tapped into the organic health food niche market by developing her own locally made non-dairy ice-cream (Agricultural Officer C).

Another example of local residents being entrepreneurial came in the form of using the local monkeys. Although some locals see the monkeys as pests, some view them as possible avenues for entrepreneurship through animal attraction sites. While in the field, I was able to see these monkeys being used for photo opportunities around the downtown port area. Local persons were charging tourists using their (the tourists) own cameras up to USD \$20.00 to take photos with monkeys that were leashed. The photo below displays a tourist posing with a monkey at Porte Zante in St. Kitts.



IMAGE 7: TOURIST POSING WITH LOCAL VERVET MONKEY

Also mentionable was a project aimed at having a Kittitian Fruit Plate available for breakfast at hotels. However, due to the inconsistency of crop supplies hotels began inserting imported fruits into the plates that led to the Kittitian Fruit Plate eventually being discontinued. One respondent acknowledged that he also uses imported fruits in his beverage business because of a lack of availability of local fruits stating,

I started selling the fruit bags and I realized that St. Kitts has a dry weather and a rainy season, so in the dry weather time it's like you don't get your fresh fruits, you don't get a constant supply of fresh fruits (Entrepreneur Barry)

The above examples showcase different attempts at initiatives geared towards the development of agricultural tourism in St. Kitts.

4.2.2 FUTURE OPPORTUNITIES

Respondents saw that, with the combination of these two industries, there were quite a few opportunities for growth and expansion into other areas. When questioned about the type of developmental opportunities that would be available through the linking of agriculture and tourism, the number one response was 'experiential' referring to things such as farm-stays and pick and pay type ventures among other things. Table 5 below displays the areas that the respondents saw as developmental opportunities with regard to tourism and agriculture.

TABLE 5: DEVELOPMENT OPPORTUNITIES THROUGH TOURISM AND AGRICULTURE

Area for Opportunity	Frequency
Experiential	12
Culinary	8
Agro-processing	6
Ornamental/Horticulture	5
Expansion/increased planting/agricultural sector	5
Arts/Crafts	4
Historical Sites	4
Animal Attractions	4
Selling to Cruise ships	2
Festivals	1

Table 5 presents the total number of times each area was identified, ranked from highest to lowest. Most of these areas also correspond with the typology of agriculture outlined in Figure 1 (pg. 10). Several of these opportunities were also highlighted in the St. Kitts and Nevis National Strategy for the Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector (2007), which focused on six major areas for opportunities in agricultural development in St. Kitts, namely:

1. Farm to Table/Direct Sales to Tourism sector
2. Culinary tourism
3. Farm tours/attractions/entertainment
4. Herbal, Health and Wellness tourism, eco, organic and garden tourism
5. Agricultural education, scientific tourism, historical and anthropological tourism
6. Cultural and agro-heritage tourism (11-12)

Although these areas and opportunities have been identified, it is important to note that when respondents were questioned about opportunities for locals to engage in agricultural-tourism, the answer dominant was yes (with the exception of two respondents who were not questioned on this). However, almost half of the participants who responded positively did so under conditions, highlighted in table 6 below.

TABLE 6: CONDITIONS FOR THERE TO BE OPPORTUNITIES FOR LOCAL PERSONS IN AGRICULTURAL TOURISM

Conditions	
1.	Opportunities need to be explored – haven't begun to encourage and develop
2.	Need for Government to provide lands
3.	Need for a much more facilitative environment
4.	Need for people to be creative (we don't capitalize on opportunities) – need to be creative and think of special theme
5.	Need for government and private sector involvement

Many of these conditions were highlighted and discussed in section 4.1 'Barriers and Challenges' above, and are addressed in sections 4.3 and 4.4 below.

4.2.3 BENEFITS TO DEVELOPMENT

An overarching positive impact was on the effect of the food import bill as well as foreign exchange leakage. The perception was that the development of agricultural tourism would lead to a decrease in the food import bill, as well as lessen foreign exchange leakage. Allied Agent A explained the local perception of this development.

They [local populace] understand it would increase farmers' income and they understand that it will also help in reducing food prices because if we can produce what we need here rather than importing it, it benefits the economy in the sense that we won't have those leakages of foreign exchange to buy products from the outside to bring in. If we can keep our foreign exchange we can invest in other things for the greater good of the country.

However, since St. Kitts does not manufacture many of the products that the tourism industry uses, there will still be some leakage. Tourism officer A explained,

What this is really about, it's getting visitors to optimize the economic returns on expenditures, keeping as much of the dollar spent in the country for as long as possible. Ultimately, we know that 80-85% of the dollar is going to leave the country because even if you are buying local foods and produce, the producers are going to have to spend that money buying vending machinery and fertilizers and other things that we don't produce but it is about spreading the dollar for as wide and as long as possible across the economy.

Attached to the idea of lowering the food import bill is the notion that this type of development can further food security in St. Kitts. Over 60 per cent of respondents felt that this push towards agricultural tourism would have a positive impact on agriculture specifically by showing its importance for securing food for the nation. Agricultural Officer D notes this, "at the end of the day food security is a major challenge for countries and at the end of the day if we are not able to achieve a minimal level of our own food security our society becomes in peril." This importance was further substantiated by SKIPA who has the Agricultural sector as

one of its priority areas and has been encouraging large scale commercial farming (St. Kitts Investment Promotion Agency; Investment Agent A).

Everything in terms of development also goes hand in hand with agriculture because people have to be able to feed themselves and the security of food is very important whether you tie it to tourism or not (Investment Agent A).

As Investment Agent A stated above, food security goes hand in hand with development and connects with building national and community development. National development being achieved through increasing local economic activity. Investment Agent B explains this stating,

Basically if you can have a large number of persons participating as to the use of SIDF funding then to me it's going to have the multiplier effect, the money is going to be spent in the country and go around inside the country, it's going to reduce our food bill for example and so we keep more of a foreign exchange. Basically the country can develop because of internal economic activity, it's going to drive the kind of economic engine in the country.

Additionally, the Agro-Tourism Demonstration Farm in St. Kitts is seen as a source of opportunity, especially for the surrounding community as it serves as a source of income for many people in the community who were once employed in the sugar industry (Allied Agent D).

Respondents saw community and national development through other avenues outside of economic activity. Communities were able to develop aesthetically as well as through increasing healthy eating habits for community members. One respondent explained how one could see community development through agriculture.

Agriculture as a vehicle for strengthening communities because to my mind there are different kinds of agriculture; you have

those with the production of food, what about the horticulture and the landscaping part of it, that would help to improve the aesthetics of the community and the promotion of backyard gardens to promote more healthy eating for persons in the communities (Gov. Gender Affairs Ministry Official).

The largest positive seen by respondents was the notion that the development of agricultural tourism would expand the agricultural sector. More specifically, it would create a larger market for agricultural produce and products as well as introduce new consumers to the produce as well. Below are a few quotations that highlight this sentiment:

Tourism sector expands the local market. The local market is small so that the tourists coming in, the numbers give us an additional market for the local produce (Agricultural Officer C)

Agriculture being impacted by tourism, it opens up a whole new wider scope of clientele to satisfy. It increases the demand for your agriculture products (Agricultural Officer A)

Tourism is going to give us that added jump. One, we are a small country in terms of the scale of economy, but the added persons we get through tourism and provide a bigger market for our produce (Allied Agent B).

A second aspect of the expansion of the agricultural sector into tourism comes in the form of entrepreneurship: generating new employment opportunities as well as creating and building new businesses. One respondent explained,

there will be if those linkages occur and we think there are some in place, we are going to see a greater expansion of the agricultural sector to meet the demands from the tourism side. A greater expansion of the agricultural sector suggests more employment (Allied Agent A).

He goes further to state that,

we see development in the context of expansion and everything expands, everything gets bigger so there are opportunities I say for employment, opportunities for income increasing, opportunities and when we say employment I really mean not

just on the land itself but in things like marketing, in agro-processing and what have you.

As noted above, over 90 percent of the respondents were able to see positive aspects to the linking of tourism and agriculture. The reduction in the food import bill and foreign exchange leakage, increased food security, building of national and community development, and the expansion of the agricultural sector were all positives attached to the development of agricultural tourism. One respondent was able to sum up these positives, stating,

If both sectors are linked together (1), we could reduce the amount of food that we have to import. We can reduce the amount of food we have to import because we are planning and scheduling for visitor arrivals. We are giving people an experience that they can go back and tell people and if you tell people that, you had this wonderful experience in St. Kitts then people may want to come to St. Kitts. So there is the component of employment generation possibilities. There is the possibility of the creation of new enterprises. There is the possibility of a reduction in the leakages of foreign money and of course when you do all of that and people are happy and money is flowing it reduces the social ills in the country (Agricultural Officer E).

Important to note is that many of these positive impacts have been highlighted and discussed in St. Kitts and Nevis National Strategy for the Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector (2007). Below is a modified table from this document highlighting positives for agricultural tourism development in St. Kitts and Nevis, where those bolded denote the positives or benefits mentioned by respondents.

TABLE 7: BENEFITS SEEN THROUGH TOURISM AND AGRICULTURAL LINKAGES

Benefits of Agricultural Tourism
Higher per capita tourist and agriculture earnings
Foreign exchange savings from import substitution
Expanded market for participants in agriculture
Increase in farm revenue and income

Benefits of Agricultural Tourism
Enhanced tourism product and extend the tourism season year-round
Entrepreneurial development
Improved knowledge and better appreciation of national agro-tourism heritage assets
Poverty alleviation
Broader economic participation in the industry
Sustainable partnerships created between key stakeholders in both industries and among stakeholders within each industry
Repeat visits by tourists

This section looked at the benefits of the development of agricultural tourism in St. Kitts. Moreover, it discussed current and possible future opportunities seen through this development and identified several initiatives to highlight the variety of opportunities that can be considered as agricultural tourism. The next section moves from opportunities and onto the impact of the private sector on the development of agricultural-tourism initiatives in St. Kitts.

4.3 OBJECTIVE 3: PRIVATE SECTOR ACTION

The theme ‘Private Sector Action’ identifies the private sector stakeholders that affect agricultural development and tourism development, and explores the link between the two. This theme goes further to identify the impact these stakeholders have on current initiatives as well as some of the challenges they face.

Using a compilation of interview data, the diagram below highlights the stakeholders noted as being relevant to the development of agricultural tourism.

FIGURE 7: STAKEHOLDERS' ROLE IN THE DEVELOPMENT OF AGRICULTURAL TOURISM IN ST. KITTS



This theme looks at these groups individually and considers how they can affect the potential development of agricultural tourism.

Respondents feel that the private sector needs to take a more active role in aiding the development of agricultural tourism. Culturally, government is usually in the forefront pushing for the development of many new sectors. Only after they are established does the private sector become involved. Allied Agent C notes,

In the Caribbean, I find that most countries are not private sector led. Always it is the public sector leading first and will make sure it is profitable and then the private sector would start to become involved and even buy the government shares and that's why lots of State enterprises in the end become private enterprises.

There was a repeated sentiment that the private sector would need to become more involved and join with Government to aid in the successful development of agricultural-tourism.

There is also a need for financial and investment institutions to provide more funding and opportunities to aid in the further development of agricultural tourism. Investment Agent A acknowledged this need by stating that, "I think we need to pan out a little bit more and get the banking institution to understand the need for there to be capital available" (Investment Agent A). Although there was a call for increased financial support, there was also acknowledgment that there are some investment institutions that provide funding for agricultural-tourism type ventures; namely the St. Kitts Investment Promotion Agency (SKIPA) and the Sugar Industry Diversification Foundation (SIDF).

SKIPA promotes investment in St. Kitts that will serve to generate economic growth (Investment Agent A). The SIDF on the other hand "provides and mainly grants funding to other organizations, businesses and individuals that are involved in the process of transforming the economy from one of a sugar bias to a more diversified economy" (Investment Agent B). The SIDF provided an agricultural development fund to the Development Bank of St. Kitts with the purpose of funding projects that link agriculture, fishing and tourism (Investment

Agent B). According to the official website of the SIDF, to date EC \$2, 107,206.50 has been provided to this fund, and farmers can receive interest free loans up to EC \$25,000 (St. Kitts & Nevis Sugar Industry Diversification Foundation, 2013). Additionally, to date the SIDF has given over USD five million to fund six agricultural projects; the Agricultural Subsidized Loans Program, the Agricultural Training Employment Project, the Cappisterre Farm Project, the Floricultural Project, the Hydroponics Community Farms and the Agricultural Resource Management Project (St. Kitts & Nevis Sugar Industry Diversification Foundation, 2013).

As irrigation was one of the noted barriers to agriculture, one of the projects through the SIDF aims to help with the preservation of water, through the introduction of upgraded irrigation techniques such as plastic mulching.



IMAGE 8: PLASTIC MULCHING AT THE TAIWANESE AGRO-TOURISM DEMONSTRATION FARM

Photo taken on August 20th 2012

This process, seen in the image above, involves “a plastic covering you put over your soil, it retains water as well as keep down your weeds and cuts down on your labor costs which means your productions costs are being reduced as well” (Agricultural Officer A). Moreover, according to respondents there are somewhere between 5 and 10 dams being constructed around the island in order to help farmers manage their water requirements.

There is a project called the Agricultural Resource Management Project, which among its components has water harvesting. So it’s building water catchments in some areas for some groups of farmers. There has been better cooperation from the water department which controls water so that in some cases where there are sources which they are either not using or are being under-utilized they are allowing some feeding from those sources into the catchments (Agricultural Officer C).

Respondents note that this Agricultural Resource Management Project, also referred to as the Agricultural Resource Development project, supports other technical upgrades. According to the official St. Kitts and Nevis Sugar Investment Diversification Foundation (SIDF) website, this project “aims at fostering agricultural development and sustainability by building infrastructure and providing farmers with technical support and training” (St. Kitts & Nevis Sugar Industry Diversification Foundation, 2013). Specifically, aside from the irrigation technical upgrades noted above, some of the other noted agricultural technical upgrades include the introduction of shade houses and greenhouses, which have helped alter traditional farming practices on the island. The Agricultural Resource Development project also addresses the maintenance of field roads to farms. One respondent commented that the maintenance of these roads was critical for agro-tourism development, stating,

It is those roads that are used to do a lot of hikes and tourists are involved in those hikes as they go to various places. It also is part of providing support to agro-tourism projects like for farm tours etc. (Investment Agent B).

Another development, geared towards the upgrading of farming practices, is the introduction of hydroponic farming. Over half the respondents saw this as one of the ways to get young people interested in farming and a way of changing the cultural and historical perception of farming. Additionally, it is less labour intensive than traditional farming practices while producing higher volumes.

Government has been introducing recently but then again this is the Ministry of Agriculture more than the Ministry of Community Affairs, is these controlled environments or what we call green houses. They providing them, actively going around and constructing them as infrastructure for farmers to do the hydroponic farming and introduce hydroponics because the productivity is higher, the organic aspect of it is in demand and it is easier to irrigate (Tourism Officer A).

Below features a series of pictures taken at a hydroponic farm in Basseterre, St. Kitts on September 10th 2012.

IMAGE 9: CLOSE UP VIEW OF PLANTS AT HYDROPONIC FARM IN BASSETERRE, ST. KITTS

Plants in shade house



Plant - Close up view



Shade houses



Plants inside shade houses



View into shade houses



View of plants



IMAGE 10: LAYOUT OF THE INSIDE OF SHADE HOUSES ON A HYDROPONIC FARM IN BASSETERRE, ST. KITTS

Another layer to this need to increase youth appreciation for agriculture was the start of two initiatives; that of the Backyard Gardening Project and the School Gardening Project. The Department of Agriculture started both initiatives to get people to begin planting small gardens on their properties and for schoolchildren to get a better appreciation for agriculture.

We are looking at backyard gardens, encouraging persons to grow their own fruits and vegetables in their backyards. Using whatever means, using containers, using tires and those kinds of things, hence cleaning the environment by growing their own food and supplementing their household income. All of this is geared towards bringing down the price of the food as well ... You also have to look further down the road and the continuity of the agricultural sector. So therefore we look at the school gardens and enhancing the school gardens. We go in from the primary schools because we find that you start them from a tender age and we go in and we try our best with the school gardens to get them up and going. We give them a little input here and there and get assistance right now from the FAO for six schools giving them the inputs that they need and enhancing their production as well. It's mainly for teaching the children about agriculture, getting them interested, taking away the stigma that agriculture has had for so many years and opening their minds to the fact that it is another viable option for a career. We even go as low as the pre-school but with the pre-school concept it is not geared towards educating the children. It is geared towards enhancing the diet of the children and staff (Agricultural Officer A).

The Government has started these programs from the elementary school level and are aiming to establish a different view of agriculture than what culturally has been the case.

Alongside these projects aimed at upgrading farming practices and changing the negative perception of agriculture, there was also a call for more attention to be paid to entrepreneurial building institutions. The institution most commonly acknowledged was the National Entrepreneurial Development Division (NEDD). Although many respondents acknowledged that this unit did exist, there were varied responses on its purpose. That said, it was seen as an avenue for people who were seeking help in developing business plans. In addition to NEDD, there was the introduction of a new project, the Creative Employment and

Business Opportunities (CEBO), which aimed to deliver a compressed program providing people with the necessary tools that would assist them in starting their own businesses (Entrepreneurial Training Agent).

The last grouping, connected to the successful development of agricultural-tourism, was the allied agencies. As explained previously, for the purposes of this research allied agencies refer to regional and international organizations that have a relationship with St. Kitts and Nevis by providing services in varying ways, such as through funding, providing training and policy guidelines, among other things. Such organizations include the FAO, OAS, IICA, CARDI, ROC-ATM CARICOM and the OECS. Respondents identified these allied agencies as having a positive impact on development in general terms and specifically concerning the development of agricultural tourism. Further, these agencies provide funding, training, workshops, technical assistance, research and resources towards helping with needed programs and projects outlined by the government.

When questioned on the matter of engaging stakeholders, one respondent outlined the basics of how the allied agencies operate within St. Kitts stating,

Of course when you ask for other allied institutions of course you have FAO, IICA and CARDI and so they don't really come here and impose their work programs on us. So at the start of the year we will say to them this is our work program for the year, how can you help us to achieve these activities? So through that if we have a policy that speaks to agro-tourism and IICA for example has strength in agro-tourism they will say this is a possible area for collaboration. So we establish that so throughout the year we might say 'ok Mr. Merchant [IICA representative in St. Kitts] we will like to have some training in agro-tourism' and they will say 'ok well we have given our endorsement for that so we will move forward.' But it is just a letter of course for the record (Agricultural Officer E).

As such, the allied agencies have been working alongside the Department of Agriculture to help alleviate some of the barriers noted earlier through increased training in areas such as marketing, finance, post-harvest techniques and overall agronomic practices. The sessions provided all aim to upgrade the farmers' skills in farming and in business. Although these training sessions are ongoing, happening several times each year, 50% of respondents felt that there was still a need for more sessions.

For tourism and agriculture the biggest challenge would be, are the people ready? These two things have to merge together. What I'm saying is that the farmers have to think in themselves as not just a producer. Some of the farmers yes they are ready, they know they can produce it and sell it but produce and sell is not what we call entrepreneurship; it's a little bit different. So the farmer they still have to change their mindset and get more training, absorb more and more information provided to them. And have to know why it is they go to agriculture and they have to be ready to be entrepreneurs (Allied Agent C).

Another allied agency, dealt with separately, is the Republic of China on Taiwan, specifically the Agricultural Technical Mission (ROC-ATM). The ROC-ATM, singled out heavily by a majority of respondents, is involved in a somewhat different capacity in St. Kitts. The most noted connection with the ROC-ATM is the collaboration between the ROC-ATM and the Government of St. Kitts and Nevis in the development of the Agro-Tourism Demonstration Farm (highlighted above in section 4.2.1), slated to be completed in 2014.

The second highlighted aspect of the ROC-ATM involvement in St. Kitts comes with the introduction of processing facilities. The ROC-ATM provides training in agro-processing as well as giving assistance in the proper packaging and labelling of the products. These facilities boosted agro-processing in St. Kitts and there has been a noticeable increase in the amount of persons doing agro-processing along with an upgrade in the packaging of products. Allied Agent C explained the agro-processing project as follows,

The agro-processing project also links with the tourism project. You can see traditionally that the people were making different types of juices even here you can find cucumber juices and local carrot juices and the breadfruits and whatsoever but they never had a good package, you would see that they just took from an empty bottle and just put it. So the agro-processing that we have, sure we would teach you how to process, we do have a lot of equipment, hydrators, a mixer, a juicer, a squeezer whatsoever to make those juices and jams and dry fruits, yogurts and peanuts. We have fifteen kinds of products already in the supermarkets. Indeed we have developed more than that, in total we have developed twenty something but because of availability of raw materials and also market accessibility I think at this moment only fifteen of them are on supermarket shelves and even in hotels. So if you want to sell the products to tourism you cannot use a traditional package. So the packaging and labeling and branding, marketing issues must evolve to the processing and the tourism as well.

Although there have been noted strides in agro-processing, it was acknowledged that there is room for further growth and improvement in producing the products consistently and at a high standard.

Respondents thought the ROC-ATM was especially important because they also have plans to hand-over the processing facilities as well as the Agro-Tourism Demonstration Farm completely to the Government of St. Kitts. Agricultural Officer A notes “there is one at Needsmust to be turned over that is operated by the Taiwanese to be turned over to the Government some time shortly where presently the agro-processing persons go to do there dry fruits, their jams and jellies.” Additionally, there is a transfer of knowledge in preparation for the hand-over of the facilities and the farm. There is training happening for locals who in turn would then be able to run the facilities, use the machinery and continue to produce at a high level.

This theme looked at the contribution of private sector stakeholders to the development of agriculture and agricultural tourism initiatives in St. Kitts. The following section looks at

options for the public sector to enhance future agricultural tourism initiatives in St. Kitts and other regions that are considering agricultural tourism as a development option.

4.4 OBJECTIVE 4: PUBLIC SECTOR OPTIONS

Several options became apparent on how the public sector may enhance future agricultural tourism initiatives. Firstly, there was some thought that government needed to have policies that are more effective when it came to tourism ventures. These policies should include stipulations to ensure the support of local produce and products. Agricultural Officer C stated,

if when new developers come, I think upfront they have to put something in about supporting local business right, agriculture or otherwise. I think somewhere in those agreements there should be a policy where concessions and so forth are given. If that is not done then they can get whatever they want from wherever they want, once they could get it cheaper even if the quality is not as good as the local product.

The table below reflects respondents’ responses to questions about critical components to an agricultural tourism policy. The responses are grouped and listed in ranking order from most frequent to least frequent. The two most important aspects for respondents were that of ‘Expectations for products and standards’ and ‘Expectations for relationships’.

TABLE 8: COMPONENTS FOR AN AGRICULTURAL TOURISM POLICY

Component Category	Component Specifics	Frequency
Products/Standards Expectations	a. Consistency of production	10
	b. Quality of production	
	c. Production base	
	d. Highlight different areas of agro-tourism	
	e. Projected demands (expected arrivals statistics)	
	f. Preferences of locals and tourists	
Relational Expectations	a. Building strong relationships	7
	b. Comprehensive stakeholder input	
	c. Trust	
	d. Communication	
Policy Expectations	a. Incentives for stakeholders	5
	b. Regional collaboration and awareness	
	c. Encourage hotels to buy local	
	d. Awareness component	

Component Category	Component Specifics	Frequency
Fundamental Expectations	a. Marketing	4
	b. Flexibility	
	c. Clear purpose	
	d. Methodical and systematic planning	
Targeted Expectations	a. Encourage new and young farmers	2
	b. Target women	

Furthermore, respondents acknowledged that even though the preference is to have the types of policies as noted above, one of the challenges was that there is not any type of legislative framework in place to support it. This was noted by Agricultural Officer D, who stated,

I would say another challenge or constraint is a lack of a legislative framework that imposes that requirement directly on the hotel sector. Most of them are MOU and gentlemen's' agreements where people can more easily avoid rather than something for which there is well known consequences that you get from the legislative arm where I can come and sue you and those kinds things.

The Ministry of Tourism, in conjunction with the St. Kitts Investment Promotion Agency (SKIPA), tried this type of policy previously. The procurement of local produce was connected to incentives for small hotels and restaurants, through a local policy in 2009. The program was down for two years but has been recently renewed (Tourism Officer A).

The addition of a separate unit or department dealing with the promotion and development of agricultural tourism ventures is another option for the public sector. Some respondents expressed concern that the various Ministries often pursued their own agendas, and thus stifled possible growth of the industry. Allied Agent D acknowledged this, stating, "hopefully we will have some people who will be able to focus on this particular aspect, like combine different ministries because everyone is grabbing for their own ministry so that's the problem. Everyone wants to see it succeed but everyone has their own angle."

As noted above, the suggestion was given that putting together some sort of combination Ministry or entity whose sole purpose would be to fuse the two industries (agriculture and tourism) together would allow for greater possibilities for growth. Agricultural Officer E explains this sentiment stating,

When we opened the agriculture tourism demonstration farm one of the statements I made was there is a possibility for we to have an Agriculture-Tourism Ministry. Because the plans and objectives would fit right in because you have tourism one place, you have agriculture one place and it seems to me, and it happens not only in St. Kitts, that different departments, different Ministries like to hold their own turf and they are not coming together to find the synergies that could be had if the Ministries work closer in collaboration with each other. Because everybody sit down and says ‘yes agri-tourism linkages and there is a lot of benefit’ but there is no policy on that.

This idea of a single entity focused on the development of Agricultural Tourism was also a recommendation in the St. Kitts and Nevis National Strategy for the Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector (2007). The recommendation states, “Create an Agrotourism Advisory Council (AAC) with a plan and budget to coordinate, promote and drive the expansion and development of Agrotourism in St. Kitts and Nevis” (32). Conrad Kelly, a national (local) consultant for the Inter-American Institute for Cooperation on Agriculture (IICA), prepared the St. Kitts and Nevis National Strategy for the Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector (2007) through funding provided by the OAS. The development of this strategy came as part of a larger project that looked at the following objectives:

- To increase trade in agricultural goods and services to the tourism sector;
- To establish partnerships between communities and the tourism industry;
- To identify and possibly introduce new and unique agro-tourism products and services with a view to expanding and diversifying the tourism product mix beyond triple “S” (Sun, Sea and Sand);

- To increase awareness and improve the capability of stakeholders to comply with international tourism and safety and service standards; and
 - To improve access to tourism marketing and promotion programmes
- (3)

The recommendation in The St. Kitts and Nevis National Strategy for the Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector (2007) was also a noted recommendation in the Agro-Eco Tourism in St. Kitts: An assessment of Development Potential report.

Over eighty percent of respondents felt that there was a high level of stakeholder engagement in general terms about reaching out and garnering input from the necessary agencies and other government offices when needed. When questioned on practices and/or procedures for stakeholder engagement, there was consensus that each respondent felt that there were open avenues for communication and collaboration with all stakeholders, through annual conferences, forums and planning meetings as well as through ad hoc meetings whenever needed. Investment Agent A gives a general breakdown of an example of how consultation happens after the initial meeting with a potential investor,

We also try to have that potential investor sit with us to talk about the project. We'll call in Sustainable Development from a land point of view. We'll call in Environment because we need to look at what it is that you're growing, how is that going to impact. We'll call in the Ministry of Health, call in the Ministry of Agriculture, so it's an opportunity for all of us to examine that project and so that we can know if this is a feasible project.

This example was typical of stakeholder engagement. The Gov. Gender Affairs Ministry Official emphasized that the general rule is that “you have to ensure that it's [policy development] highly consultative with a wide variety of stakeholders.”

There was only one respondent who noted that, although consultation is always sought, it is not always given or received; stating; “The allied agencies, the other Ministries they don’t always show up. When we have workshops we try our best to invite the other Ministries, they don’t always show up but we try as much as possible to collaborate with the others” (Agricultural Officer A). The Agro-Eco Tourism in St. Kitts: An Assessment of Development Potential report, through a SWOT analysis, found that some of the weaknesses included:

- lack of collaboration between tourism and agricultural industries and agencies,
- lack of collaboration between public and private sectors
- lack of interest on part of certain tourism stakeholder groups – as witnessed by lack of participation in stakeholder meetings (30)

There was a need for Government to work alongside financial institutions to institute crop insurance policies that would help mitigate or alleviate some of the financial burdens of farmers. The Gov. Youth Official explained, “Government along with private sector must provide the necessary assurance in terms of crop insurance and those things. Help to mitigate the risk because very often that is what discourages young farmers.”

There is an emphasis on using education and awareness campaigns to change the mindset of local people enabling them to become more engaged in the development of agriculture, and by extension agricultural tourism. A highlight in the St. Kitts and Nevis Tourism Sector Strategy for 2006 is the need to launch both education and public awareness campaigns as a key to ‘unlocking the full potential of Kittitians’ (63-64). There were programs and materials developed to guide students and teachers from grades four to six at the Primary school level and forms one and two at the High school level. The start, success or continuation of these programs is unknown, as the respondents did not acknowledge them. However,

respondents thought that through education and awareness campaigns changes can be made on several fronts, as highlighted below.

Firstly, there is a hope that the efforts through education and awareness campaigns can help to push locals to see entrepreneurship as an option for themselves as opposed to always looking to gain employment through another person or organization. One respondent noted the hope for a new entrepreneurial program, stating,

We hope to change mindsets. That was one of the key focuses at the workshop that we attended, the trainers attended. We will be educating people on the fact that entrepreneurship is an option. That is one of the big things in St. Kitts and Nevis; we don't have an entrepreneurial culture (Entrepreneurial Training Agent)

There is also the hope that through these education and awareness campaigns, they will be able to showcase the viability of not only entrepreneurship but of agriculture for employment, especially among young people. However, the targeting of young people is an area that may need more emphasis, as one respondent noted his experience with training young people to work on his farm.

I have trained eight people so far, some young people and they have gone home to sit down. They go home and they don't come back. The work too hard. They allergic to sun. You know this is outdoor work. You have to get broad hats and all those kinds of things and in some cases water boots and gloves. They are not accustomed to this kind of thing. They want to work in a restaurant or a shop or a bank (Entrepreneur Wilson).

Similarly, in the Agro-Eco Tourism in St. Kitts: An Assessment of Development Potential report, it was acknowledged through a SWOT analysis that one of the weaknesses was the fact that “youth do not perceive tourism as an attractive employment option” (30).

Due to these types of occurrences, there was a need to find a solution that would have tourism and agriculture appeal to younger persons. Over half of the respondents noted the new system of hydroponics and use of technology as a way to bridge the gap between young people and agriculture. A program was developed, which incorporated hydroponic farming for young men who were trying to leave gangs. This program, the Skills Training and Entrepreneurial Program (STEP) received funding of EC \$832,126.76 through the SIDF and runs in collaboration with the Ministry of Agriculture and the Department of Education (St. Kitts & Nevis Sugar Industry Diversification Foundation, 2013). This program also provided learning opportunities in business, marketing and general life skills.

I think that young people feel that agriculture is too much of a hard job for them to do. Mark you that system of hydroponics is not a lot of manual labour and maybe that's why it is attractive to that group of young men, it is not a lot of manual labour ... So I think with the awareness, models would have to be introduced to people to open their mind on the possibilities (Gov. Gender Affairs Ministry Official)

Moreover, along with providing hands on experience through the education and awareness campaigns, 60% of respondents acknowledged the need for an initiative that would set a good example for moving into this type of development and would showcase that a change in mindset would allow for more benefits, to not only the individual but also the nation as a whole. One respondent noted that because of the characteristics of the people of St. Kitts, it is best to have some initiative that would pose as an example to spark the interest of the people.

The people think of agriculture is only people who are old , who are poor uneducated to go into agriculture so we find in this country that you have fertile land and nice background and there is no reason to just kick out the agriculture as there is a lot of potential. So the initiative was trying to bring the people who have a background in agriculture

and tourism together which is a rising star in this country and try to link it together (Allied Agent C).

A highlighted example was that of the St. Kitts and Nevis Aquaculture Pilot Project and Environmental Research (SNAPPER) project which grows tilapia, a freshwater fish using salt water. The project aims to decrease the food import bill for fish, train and educate young persons, provide employment, provide a valuable protein source and exploit the potential for export (SNAPPER). Pictures below are a series of photos taken at SNAPPER on August 18th, 2012.



IMAGE 11: MANMADE PONDS TO HOLD TILAPIA IN DIFFERENT STAGES OF GROWTH



IMAGE 12: CLOSE UP VIEW OF TILAPIA IN PONDS



IMAGE 13: VIEW OF SNAPPER SIGN SHOWING AREA FOR PROPOSED EXPANSION OF PONDS



IMAGE 14: FISH DESIGN MADE OUT OF RECYCLED MATERIALS SHOWING OUTSIDE OF SCHOOL AND RESTAURANT AREA

An investment respondent, when speaking on SNAPPER, stated,

That to me is a fantastic program on how you can get children into looking at how research and development can enhance something, because this is somebody who had a burning belief that you can use salt water to grow tilapia which is historically and normally a fresh water fish and so again this is a good way of getting kids into research and development and to look at developing different components of food whether through agriculture or aquaculture (Investment Agent A).

Using the idea behind this aquaculture project with agricultural products, it could be an excellent example of Working Farm Direct (staged/authentic) Interaction Agritourism as explained in the Typology of Agriculture in Figure 1.

4.5 SUMMARY: MAIN FINDINGS

This chapter presented the main findings from an analysis of interviews and relevant collected documents. The findings addressed the four objectives that form the basis of this research. The first objective addressed the challenges and barriers in developing agricultural

tourism initiatives. In addressing the first objective, two themes emerged, 'Factors Affecting Development' and 'Endemic Characteristics'. The first theme outlined geographic, climatic and technical issues, which hinder the development of agriculture and by extension agricultural tourism. These issues further confounded the relationship between farmers and different hotels in St. Kitts, adding another layer to challenges for the successful development of agricultural tourism. It became clear that the challenges facing the agricultural industry, if not addressed will hinder the development of agricultural tourism. Additionally, a second set of barriers outlined mental and behavioural characteristics of the local populace, which serve to hamper the growth and development of agriculture and agricultural tourism in St. Kitts.

The second objective looked at the current and future opportunities for agricultural tourism development as well as the perceived benefits. Although respondents saw many benefits and opportunities to developing agricultural tourism, they were conditional on the development of a more facilitative environment provided by both government and the private sector. The final two objectives dealt with how the private sector has fostered agricultural tourism development initiatives, and highlighted options for the public sector to enhance future agricultural tourism initiatives.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

5.0 INTRODUCTION

This study endeavoured to explore the process of developing agricultural tourism in a transitioning region. The findings for this research, laid out in the previous chapter, addressed the four objectives. The findings reveal not only the current situation facing the development of agricultural-tourism in St. Kitts, but the hopes for future development as well.

This chapter will be broken down into four sections, 'Growing Pains', 'Opportunities', 'Altering Perspectives' and 'Recommendations'. The first three sections address the findings and provide a discussion based on the relevant literature. Furthermore, they address the challenges facing St. Kitts, opportunities to address those challenges as well as what kind of role stakeholders would play. The three sections also highlight two areas, (1) the local populace and (2) a facilitative environment, which form the basis for the final section, 'Recommendations'.

5.1 GROWING PAINS

St. Kitts has challenges improving its quality, quantity and consistency of agricultural production, not only for the local market, but for the growing tourism market as well. A lack of consistent agricultural supply that meets the required quality and quantities for the tourism market is a constraint to the development of agricultural tourism. This finding supports earlier academic research that notes this as a limitation to the creation of linkages between agriculture and tourism (Rhiney, 2011; Timms & Neill, 2011; Torres, 2003). The challenge results from various issues ranging from environmental conditions, irrigation issues, land issues, pests and needed farming and technical upgrades (each dealt with separately). All of these are documented in other academic research (as seen in Beckford, 2012; Torres R. , 2003; Berno, 2011; Barker,

1993 among others) and seem to be common issues that affect the development of agricultural tourism, especially in developing countries.

It appears that, as St. Kitts is in the early stages of developing agricultural tourism, the previous experiences of other countries that faced similar challenges may be beneficial. In this regard, St. Kitts has been making strides in combating some of these issues through help from allied agencies as well as local investment agencies. A grant was provided to the Agricultural Resource Management Project which specifically looks at upgrading farms and farming techniques, and to date has been provided EC \$5,734,111.57 of EC \$10,078,445.00 (approximately USD two million of USD four million). Although the funding comes from the SIDF, the Ministry of Housing, Agriculture, Fisheries and Cooperatives executes the Agricultural Resource Management Project. As this funding is from a local foundation, St. Kitts is able to avoid issues of attaining funding from international aid groups who do not necessarily provide such opportunities (Shaw & Williams, 1998). The question remains, how will the agricultural industry progress after the funding has depleted? In China, “when government support was withdrawn the industry declined and business operators faced difficulties” (Yang, 2012, p. 379). Hence, continual government support will be essential to help sustain the agricultural tourism industry (Kosmaczewska, 2008; Su, 2011; Yang, 2012).

The research highlights challenges based on the geographic location of the island, the inherent environmental characteristics that affect agricultural production, and the difficulty in producing sufficient quantities at consistent quality. Climatic conditions, including the rainy and dry seasons as well as the hurricane seasons, affect growing conditions and farmers’ abilities to grow produce consistently. These constraints support previous research, which highlights negative environmental characteristics such as unpredictable climatic conditions that affect

farmers' ability to produce sufficient quantity of foods at required quality for the tourism industry (Rhiney, 2011; Torres, 2003; Britton, 1977; Barker, 1993; Beckford & Campbell, 2013). Additionally, connected to these climatic conditions are irrigation issues. Farms in St. Kitts are rain-fed, which means that production hinges on the levels of rainfall, which can be inconsistent. Irrigation issues have been found as a hindrance to agricultural production (as seen in Andreatta, 1998; Gumbs, 1981; Torres R. , 2003).

Understanding these climatic constraints is the first step in moving towards improved technologies and techniques that would allow for mitigation. As mentioned earlier, in St. Kitts there are ongoing programs and projects to help in upgrading farms and farming techniques, such as the Agricultural Resource Management Project. This Project includes the building of dams and water catchment areas, the teaching of new irrigation techniques to farmers such as plastic mulching, and the introduction of shade and green houses for controlled growing environments, all of which can all help off-set some of the negative environmental factors related to rainfall irrigation that negatively impact agricultural production. Even though there are the six ongoing projects mentioned earlier, realization on the effects of production make take some time. Nevertheless, these efforts are in line with previous research that suggests that farmers need sufficient training and technical support in order to produce appropriate higher quantities and quality of produce (Rhiney, 2011; Gumbs, 1981; Beckford & Campbell, 2013).

Issues surrounding land, land availability, appropriate land allotment and land ownership were all said by respondents to impact upon linkages between agriculture and tourism. Research suggests that tourism development takes away land from agricultural development resulting in competition for land (Bélisle, 1983; Timms & Neill, 2011). The data in this case do not necessarily support this point. There was no correlation between the location of farmlands and

tourism. Respondents agreed that due to the closure of the sugar industry there was more land available for other uses, such as non-sugar agricultural production. Some respondents felt that the location of distributed land for agricultural production was not a concern or was secondary to the fact that lands are being made available. Alternatively, some respondents felt that when making land available, the location of the land was of utmost importance. For example, if government distributes land in an area where there is limited water supply and poor road conditions, then even though the quantity of land distribution has increased, the quality of that land may impede efficient production.

A larger concern for respondents was land ownership. Normally, persons lease land for agricultural use and as such, the farmers are not able to hold title. Lack of ownership can inhibit farmers from being able to pursue investments, as they have no ownership of the land that they work. Torres (2003) also points to the uncertainty around land ownership in Mexico and concludes that it is also a constraint to the linkages between tourism and agriculture. In this regard, attaining financing to invest in the expansion of one's farming operations may prove to be difficult due to a lack of appropriate land ownership (as seen in Beckford & Bailey, 2009; Berno, 2011).

The perception surrounding the issue of land, its availability, its location and its ownership by respondents makes it clear that there is some confusion as to what is actually happening. As such, I speculate that there is some miscommunication with regard to information on land distribution for agricultural production as well as a lack of understanding concerning land-based necessities for agricultural production. The National Physical Development Plan (2006) for St. Kitts is the document that would identify areas set aside for tourism or agriculture, among other land uses. As the National Physical Development Plan

(2006) is not a public document, it was unavailable for use as a reference. Hence, there is no comparison of respondents' perceptions about land use patterns via this document. Hudson (1989) noted that in the 1980s, if there were any new developments occurring in St. Kitts, then they had to involve “either the loss of land in cultivation or that which has agricultural potential” due to the fact that “all the most easily accessible non-agricultural land suitable for housing ha[d] already been settled” (p. 199). Hudson wrote at a time when much of the land in St. Kitts was still under sugar-cane production. Graci & Dodds (2010) note that “former sugar plantations still dominate the St. Kitts landscape; however many of the cane fields are being burned to make room for land development” (p. 100). The question remains then, how are the land use patterns decided and how is the balance struck between utilizing the appropriate lands for agriculture versus use for other types of development?

Another obstacle to crop production, and by extension to agricultural tourism development, is the local vervet monkeys. Monkeys have the ability to devastate crops. Previous research studies have found monkeys to cause substantial damage to crops (Boulton, Horrocks, & Baulu, 1996; Engeman, et al., 2010). Boulton et. al. (1996) suggested that changing landscapes was a possible reason for increased monkey crop raiding in Barbados. The landscape in Barbados changed due to a drastic reduction in agricultural land under production as well as an increase in other developments such as tourism. These changing landscapes meant that there was a decrease in available crops for monkeys to raid. With the closure of the sugar industry, much of the former sugar-cane lands were converted to other uses such as housing developments, farms, or left fallow. I speculate that such as the case in Barbados, as the land use changed in St. Kitts, monkeys ventured further into areas where they would be able to gather food and with farms located closer to the hills, monkeys would have easy access. Hill (2000) also found that farms most at risk for crop raiding from baboons were those closest to

the edge of forests. To help in the reduction of crop raiding by monkeys previous research suggests, farmers may plant more of the crops which are least preferred by monkeys as well as having a buffer zone of crops least preferred by monkeys surrounding other crops which they may like (Hill, 2000; Boulton, Horrocks, & Baulu, 1996).

The research shows that St. Kitts has been making efforts to contend with the above-noted obstacles. The research also suggests a need to be able to match demand to supply. Upgrading farming techniques so that farmers are able to produce more efficiently while also upgrading the quality of their produce is only one-step in advancing the agricultural industry. For farmers to meet quotas for the hotel and restaurant sector in St. Kitts, there will need to be effective planning. What occurs currently is the opposite, where farmers plant and then inform hoteliers and restaurants about what produce they will have available. An example of this is shown in the attached Appendix F-Market Intel Report. Agricultural Officer B elaborated, stating,

When a farmer plants, our extension staff would go out and forecast the production of what is expected. This would then be aggregated according to the districts in St. Kitts. This information is then forwarded to the marketing officer, and from that information, the market officer produces a simple tool that we call 'Market Intel'. The Market Intel is a fact sheet that bears the forecast of between 12 to 14 commodities that we focus on, and that information is hand delivered to about 90% of the service sector. So we give them the information as to what is on the ground. The back of the sheet, like I said very simple, has who has the commodities, and the contact numbers. So by that simple tool, it was a long way of connecting the two – the agriculture that is on the ground, and hotels who need food.

In this way, it appears that the agricultural sector is matching demand to supply instead of matching supply to demand. If the agricultural sector can secure data on expected arrivals then they would be able to plan their growing schedules in order to meet the demand. Planting in

order to meet demand would mean that there is a target one would be trying to meet and may also mean that there would be fewer gluts in the market of excess produce (Beckford & Campbell, 2013) which has been noted as an obstacle to consistency in food supply (Bélisle, 1983). To facilitate this, the data would need to be collected from hotels, airlines and cruise lines.

Key to addressing these issues is the use of stakeholders. Even though respondents found that there was some form of stakeholder engagement, one respondent admitted that although stakeholders are alerted to opportunities to provide input, they often would not. This was further substantiated by documents from St. Kitts which found that there needs to be more stakeholder collaboration for a more focused and successful development of tourism. This is a concern also found in previous research (seen in Colton & Bissix, 2005; Byrd, 2007). Finding ways to engage relevant stakeholders, from the hoteliers, restauraners, farmers to the lay local resident will be key to developing agricultural tourism.

5.2 OPPORTUNITIES

The perception from respondents was that developing agricultural tourism would open St. Kitts to a wider variety of tourists. Agricultural tourism would attract tourists interested in more outdoor, eco-style tourism ventures, which would be a good niche market for tourism development in St. Kitts due to a perceived lack of partying/night-life style tourism. In the St. Kitts Agro-Eco Tourism in St. Kitts: An assessment of Development Potential report (2010) there was acknowledgement that tourists were now increasingly more interested in “physically active/adventure travel experiences” and in “sustainability and environmental/green issues and travel” (31). Torres & Momsen (2011) also noted the shift in tastes and preferences of consumers towards more organic, natural foods as well as sustainable agriculture and tourism.

In a study based on the Dominican Republic, Catalino & Lizardo (2004) found that tourists interested in agricultural tourism were also highly interested in eco-tourism, cultural tourism and sports-tourism. The study in the Dominican Republic also found that tourists who were interested in beach tourism were not interested in agricultural tourism. The relationship between different types of tourism may provide insight into the type of tourism that a destination such as St. Kitts would seek to create. This would in turn determine the marketing strategies adopted.

An added dimension to consider would be the mechanisms used to develop and/or grow certain products. If the intention in St. Kitts is to attract more tourists that are interested in eco-style adventure tourism then more attention may have to be paid to the type of farming systems that they utilize. Catalino and Lizardo (2004) found that 78% of tourists that visit the Dominican Republic are “attracted to positive externalities associated with the adoption of conservationist farming practices ... [and] some 60% of agro-tourists stated their interest in organic farming systems rather than conventional farming systems” (p. 111). Hence, the type of method used for farming may also influence visitor satisfaction for agro-tourism based developments, which may be something St. Kitts would also need to take into consideration.

Previous studies postulate that certain types of tourism marketed in St Kitts may also have some impact on the strengthening of linkages between agriculture and tourism as well as the reduction of foreign exchange leakage. Higher percentages of leakage occur with high-income tourism (traditional/mass tourism) as opposed to low-income tourism (eco-style adventure/community tourism). Low-income tourism supports the use of local resources, while high-income tourism looks to increased importation of goods (Benavides, 2001; ECLAC, 2005; Telfer & Sharpley, 2008). The only thing to consider with low-income/low-leakage tourism is the fact that it may also limit opportunities to expand and develop due to lower income receipts

over all (Benavides, 2001). This will also need consideration if St. Kitts wants to increase and strengthen the linkages between tourism and agriculture.

The type of tourism also influences the type of hotels or accommodations available. Studies have found that larger, international hotels buy less local produce than smaller, locally owned hotels (Bélisle, 1984; Rhiney, 2011; Beckford & Campbell, 2013). In St. Kitts it was reported that 90-95% of food and beverage purchases for large scale hotels and resorts were imported, while smaller accommodations were noted as buying substantial amounts from local farmers and processors (USDA Foreign Agricultural Service, 2006). Recent studies have found that there have been improvements with this regard in the Caribbean in places like St. Lucia and Jamaica (Timms B. , 2006). However, the fact remains that larger international hotels still purchase significantly less local produce than smaller, locally owned hotels.

For this study, the two prime examples of hotels were the Marriott Resort on St. Kitts and the Four Seasons Resort on Nevis. Both are large, internationally owned hotels. The difference between the two, however, stems from the type of relationship garnered between the hotel and the agricultural sector. Both hotels established MOUs with the agricultural industries; however, the relationships formed were opposite. The relationship between the agricultural industry and the Four Seasons Resort fared better than that with the Marriott Hotel. I speculate that the type of relationship which developed between the hotels and the agricultural sector, stemmed from two factors: (1) who the purchasing officers were at the hotels and how they were able to connect with key persons in the agricultural sector, and (2) who the chefs were at the hotels. Purchasing Officers and Chefs are key people who would be able to affect the food bought and served at the hotel.

Research shows that these international hotels hire foreign chefs and food purchasers who are more comfortable purchasing and using produce and products which are more familiar

to them (ECLAC, 2005; Torres, 2003; Rhiney, 2011). Local produce is incorporated less into the menu if the hotel chefs are not comfortable using them. Researchers have found several examples of chefs tailoring menus to include more local produce and products (Berno, 2011; Telfer & Wall, 1996). However, these initiatives often end due to lack of consistent supply, not meeting the desired quality (Berno, 2011) or the loss of the chef who would have initiated the project (Telfer & Wall, 1996). The example of the Kittitian Fruit plate initiative in hotels in St. Kitts ended due to lack of availability of local fruits. Hence, to ensure that there is a planned schedule to ensure consistency of supply, there needs to be proper planning. Additionally, another option would be to provide a packaged, professional cookbook or information packet, which may help in providing chefs with inspiration and knowledge for preparing local produce, as exemplified in Fiji (Berno, 2011). The issue however, remains that there are legal issues with regard to purchasing polices and international trade regulations. One respondent clearly states,

These are not things you can legislate; you cannot force a hotel to buy locally. Basically you have to encourage and incentivize and then at the same time you have to make sure the Ministry of Agriculture does everything it can to get farmers to be more business-like, to be more reliable, adhere to standards and understand what the demand is (Tourism Officer A).

My findings suggest that there is the perception that the development of agricultural tourism would be an avenue to decrease the food import bill. This could aid in reducing the foreign exchange leakage and contribute to food security for the island. This perception is one that has been touted in previous research, however, the reverse happens and there is any increase in food imports (as seen in Torres, 2003; Duval, 2004; Timms, 2006; Rhiney, 2011). Weak linkages to other sectors (Duval, 2004; Ahmed & Afroz, 1996), farmers being ill-prepared to manage the growth needed to facilitate the needed quantities and quality of poduce for the toursim industry (Torres, 2003; Ahmed & Afroz, 1996) and the destinations' lack of control over the tourist industry (Cabezas, 2008; Conway, 2004) have all affected the realization of a

decreased food import bill and reduced leakage. St. Kitts imports 75% of its food and beverages with only 25% being supplied from local production (USDA Foreign Agricultural Service, 2006). As such, St. Kitts was grouped with other Caribbean countries who have a high level of food import dependency reaching close to 80% (Kendall & Petracco, 2009; Beckford & Campbell, 2013). From previous research, it would appear that if the focus is only on increasing tourism to the destination without developing linkages to other sectors, the opportunity for a multiplier effect on other sectors of the economy could be lost.

Food security was seen as an added benefit through agricultural tourism. Over 60% of respondents felt that a push towards agricultural tourism would impact positively on agriculture, specifically by showing its importance for securing food for the nation. However, as noted above, what generally happens is an increased dependence on imported foods. Research shows that issues arise with a dependence on imported food as external shocks can affect those imports (Beckford & Bailey, 2009; Beckford & Campbell, 2013; Timms & Neill, 2011). The need to be self-sufficient and produce enough food to feed locals and tourists is a huge undertaking; however, not attempting to do so may in the long-run cause more negative impacts for the country. The island's seeming intent to promote backyard gardens, increase the visibility and use of local produce (through Eat Local days), and invest into primary school and pre-school gardens programs are all positive steps towards developing a culture of eating local. This could lead to decreasing the heavy dependence on imported foods and may also lead to increasing healthy eating habits for community members (Beckford & Campbell, 2013).

In the supply of foods to hotels, research shows a divide between farmers and hoteliers, as well as a lack of coordinated production amongst farmers which leads to a lack of understanding of the needs of hoteliers (Beckford & Campbell, 2013). Timms & Neill (2011)

found there needed to be better communication between hoteliers and farmers in order to help to strengthen the relationship that would lead to stronger linkages between agriculture and tourism; effectively communicating the demand to producers. Increased communication through co-operatives is a viable opportunity to enhance relations that would promote growth in the agricultural industry and by extension, agricultural tourism (Rhiney K. , 2009; Timms B. , 2006).

Another opportunity would be the ability to procure for cruise lines. Although a previous attempt failed in St. Kitts, there is some hope that it may be re-tried. There is no extensive research on procurement for cruise lines as a diversification method for tourism and agricultural tourism. However, there have been reports of other Caribbean islands, such as Barbados, trying to establish procurement opportunities. Barbados, for example, was “hoping to capture that market for their fish burgers and fish cake batter as well as for tropical condiments” (ECLAC, 2005, p. 24). The extent of the success is unknown at this time. However, with St. Kitts not being able to satisfy local and tourists’ demand, procurement for cruise lines may be an over-extension.

Respondents perceive that the development of an agricultural tourism industry would provide a larger market for local agricultural produce and products. This perception also supports previous research that found that there should be a boost to the agricultural industry due to an increase in food consumption (Bowen, Cox, & Fox, 1991; Richardson-Ngwenya & Momsen, 2011; Telfer D., 1996). However, the increase in tourism usually amounts to an increase in imported food. Seventy five percent of the tourists to St. Kitts originate from North America and Europe (Caribbean Tourism Organization, 2010), with certain expectations and standards for food and beverages. Hence, although there is the potential for an increased use of

local produce, this produce would have to be at an acceptable standard of quality. St. Kitts is working towards maintaining and improving certain standards for their produce and products in order to be competitive for the tourism market, as previously discussed.

A second aspect of the expansion of the agricultural sector into tourism comes in the form of entrepreneurship, i.e. generating new employment opportunities as well as creating and building new businesses. Moreover, research suggests that tourism would help to stimulate agriculture by demanding new agricultural products and services (Bowen, Cox, & Fox, 1991; McGehee & Kim, 2004; Henderson, 2009). Due to the growing tourism industry, there is this hope that there will be entrepreneurial growth through the creation of new opportunities. However, locals in St. Kitts are characterized by respondents as lacking ingenuity and being risk-averse, essentially lacking that entrepreneurial spirit. Here lies a problem which if not addressed would also be cause for concern.

There may be a need to have more foreign investment development for there to be real growth in agricultural tourism, which is seemingly contradictory to reducing leakage. The use of foreign investment is also “crucial in contributing to the homogenising aspect of consumer food consumption” (Mak, Lumbers, & Eves, 2012, p. 180) which is counter to the goals set in St. Kitts. However, Hummelbrunner & Miglbauer (1994) found that external investments would be one strategy to combat this entrepreneurial deficiency as well as a key asset to raise the standard of tourism projects. They also found that increasing the capacity of entrepreneurs through local development was essential before attempting to introduce external investments.

Shaw & Williams (1998) found that when entrepreneurial skills are lacking it causes a hindrance to any real growth and development in agricultural tourism ventures. The need for this type of capacity building was also an understood need for St. Kitts. There are entrepreneurial development groups (SKIPA, NEDD and CEBO) in St. Kitts, which would

work towards preparing persons or groups to create new enterprises or expand their already established businesses. Using entrepreneurial development groups is one of the strategies to aid in developing agriculture, tourism and diversification, which combines the two industries (Hummelbrunner & Miglbauer, 1994; Embacher, 1994; Yang, 2012).

Another factor that can enhance farmers and entrepreneurs' ability to expand and grow is the availability of capital (Timms B. , 2006; Rhiney, 2011; Kosmaczewska, 2008). The research revealed that there is a desire for financial institutions to provide more loans or capital to assist farmers in growing their businesses. Cox and Morton (2003) found in their study that the farmers had little experience with merchandising goods and services, which hampered their ability to benefit economically. Previous research notes that government and private sector involvement is vital to the growth of the industry by providing incentives and helping to ensure a less antagonistic environment for small businesses to grow (Yang, 2012; Henderson, 2009; Beckford & Bailey, 2009). Moreover, Barbieri & Mshenga, (2008) found that, "performance of agritourism farms is associated with their superior access to resources, suggesting that it is necessary to facilitate access to financial and marketing resources and a wider clientele" (p. 179). I contend therefore, that there is a need for government to aid in helping farmers compete in the market place. There were financial hindrances as well, such as insurance being a requirement by hotels before purchasing produce/products from farmers, possibly addressed through co-operatives. As noted earlier, Rhiney (2009) found that co-operatives could also be a good way to tackle financial issues as farmers can pool their resources. Additionally, providing adequate training and assistance for farmers would aid in ensuring that they are in a better position to access loans and investments (Beckford & Bailey, 2009; Malkanathi & Routry, 2011).

My findings suggest a need for increased government involvement, especially with a more direct policy approach to agricultural tourism. There needs to be the development and

implementation of a cohesive plan, bringing all sectors together to work towards agricultural tourism development. Torres (2003) found that linkages failed between tourism and agriculture in Mexico due to the fact that “concrete agricultural development interventions, appropriate to the local social and environmental context, and backed by real investments, were not incorporated into the tourism development process” (p. 563). Comprehensive policies that have implementation strategies and result in a facilitative environment for sustained growth and development need to be implemented (Henderson, 2009; Yang, 2012; Hepburn, 2009; Beckford & Campbell, 2013). Previous studies have found that “the issues that St. Kitts faces are a lack of long-term planning and policy implementation, focusing on short-term numbers rather than yield, and lacking the vision to develop a diversified tourism product to compete with other islands in the region” (Graci & Dodds, 2010, p. 106). This was also a noted criticism across the Caribbean region, as found in other research (as seen in Wilkinson, 1997 and Ahmed & Afroz, 1996).

5.3 ALTERING PERSPECTIVES

The research revealed that there is a negative perception towards agriculture, stemming from the colonial and slave past of the island. Bélisle (1983) concluded that the effects of slavery have tainted how the local populations feel about agriculture. Furthermore, there is a view of agriculture as work for older, poor and uneducated individuals of the community, which supports previous work by Hermans, 1981; Latimer, 1985; Mangal, 2009. Mills (2004) asserts that this negative colonial history also acts as a deterrent to entrepreneurial activities associated with agriculture. This negative perception not only affects opportunities through entrepreneurship but it also affects how persons see opportunities within the agricultural sector. In St. Kitts, the view is that working in agriculture means working as a farmer. There is no connection made towards other aspects of agriculture, which include the need for chemists and

biologists, researchers and engineers, among other high-skilled occupations (IICA, 2012). A negative history attached to slavery, hard labour and a lack of education reinforces this negative perception of agriculture, all of which pose as roadblocks to the development of agricultural tourism in St. Kitts.

There is the perception that local people have a preference for imported food and products over local products stemming from the islands' colonial history, documented in previous research studies (as seen in Andreatta, 1998; Bélisle, 1983; Timms & Neill, 2011; Jessamy, 2002). I speculate that this preference for imported food may also be attributed to a demonstration effect, through tourist visits and globalization (Beckford & Campbell, 2013; Mak, Lumbers, & Eves, 2012). Andreatta (1998) found that “patterns of local food consumption are influenced by the need to provide international tourists and returning migrants with familiar foods, and by CNN broadcasts and other USA television programs” (p. 425). Hence, in the Caribbean, American fast food chains such as Kentucky Fried Chicken are prevalent surrounding the tourist areas. Additions of these fast food chains catering to international tourists in turn have an effect on the consumption preferences of local people. I agree with Timms (2006) who concluded that, an “increased use of local products by both the tourist industry and the local population may combat the manifestations of this ‘demonstration effect’ of global consumerism while promoting local products and industry” (p. 38). The steps to reversing this demonstration effect would take time as these consumption patterns have been developing over a long period of time (as seen in Andreatta, 1998; Bélisle, 1983)

Many respondents found that an overly positive perception of imported products and produce over local products and produce was problematic. Respondents questioned the alleged safety of pesticides and chemicals used in the imported foods and the length of travel time of those imported produce. They raised doubts about them being better than locally grown foods.

This contention is also revealed in previous research that questions the safety of imported food, the risks of them being contaminated and the farm conditions in the exporting countries, which are usually large and uniformed making them prime for the easy spreading of diseases (Beckford & Bailey, 2009; Halweil, 2005; Beckford C. , 2012). These concerns would need further study to cement their validity with regard to St. Kitts. I speculate, however, that if there was public dialogue about imported versus local produce and products, it may have some effect on the use of local products and produce on the public.

Telfer (1996) found that entrepreneurs in Lombok responded to opportunities to supply goods and services to the tourism industry, which supported Telfer & Wall (1996) and Cukier (2006) who also found that entrepreneurs took the opportunities to engage in new ventures that tourism had presented. In studying agro-tourism in Singapore, Henderson (2009) found that farm operators appeared to be “inspired by an entrepreneurial spirit and the need to diversify to maximize profits” and that “the assorted interpretations of agro-tourism are also reflective of the creativity of suppliers” (p. 265), which helped in spurring growth in agro-tourism in Singapore. This however does not seem to be the case for St. Kitts. The data revealed the perception of locals as being risk-averse with a lack of ingenuity, which is counter-intuitive to characteristics typically thought of with regard to entrepreneurship. According to Morrison, Rimmington, & Williams (1999) there are certain personal characteristics such as risk taking, education and experience that, when combined with other environmental factors such as opportunity, creativity and role models, can lead to innovation and a triggering event, which leads to entrepreneurial activity.

Culturally, children are pushed towards certain desirable professions. A lack of ingenuity is linked to this practice. Traditionally Kittitians are compelled to go into certain desirable careers such as law or medicine. This is also a concern throughout the Caribbean Region, where

negative perceptions of agriculture push students towards perceived popular and socially acceptable pursuits and away from agriculture (Laiji, 2009; IICA, 2012; Mangal, 2009). Mangal (2009) found that even when people are successful in agriculture they still “discourage their children from pursuing careers in the field” (p. 4). The perception of agriculture is one of lowliness. Although there appears to be some understanding that the development of agriculture is imperative for the country, it appears that there is not enough prestige in working in the agricultural industry. Hence, there needs to be a change in perception for agriculture to develop any further in St. Kitts, and by extension agricultural tourism. The question becomes how does one alter or change this perception.

The introduction of education and awareness campaigns were deemed as possible solutions to aid in changing the mindset of local people; enabling them to become more engaged in the development of agricultural tourism through increased employment and entrepreneurship in the agricultural field. Research shows that to change perceptions, especially with regard to young people in agriculture, there needs to be practical, hands on training involved in any education or awareness campaigns (Movahedi, Latifi, & Sayyar, 2013; Mangal, 2009). This idea was also a proposed component for changing attitudes towards agriculture in St. Kitts. These education and awareness programs should also include entrepreneurial or self-employment components (Movahedi, Latifi, & Sayyar, 2013; Griffith, 1995) as this would also ingrain in students career options available through entrepreneurship.

Research shows that, to not only change perceptions but also increase positive perceptions towards agriculture, you must start agricultural education before students reach the secondary school level (Wright, Stewart, & Birkenholz, 1994; Townsend, 1990; Kuempel &

Spivey, 1990). Currently in St. Kitts there are school gardening and education programs starting from the pre-school level.

The research revealed an emphasis on changing youth perspectives with regard to agriculture and finding new ways to make agriculture an attractive career option. This is a concern through the Caribbean region seen through many proposals geared towards youth involvement in agriculture (Laiji, 2009; CARICOM View, 2011; Mangal, 2009; Hepburn, 2009). One suggestion is to use technology. Over half of the respondents noted the new system of hydroponics and use of technology as a way to bridge the gap between young people and agriculture. This suggestion was also popular in regional initiatives introducing new technological upgrades in the processes used in farming. However, I speculate that changing the traditional look of farming is not going to be the key determinant for enticing youth towards farming. Changing the traditional look of farming has to include added incentives and a profitable example that would allow youth to see the benefits of going into agriculture. Of the respondents, 60% saw the need for an initiative that would set a good example for moving into this type of development. This supports Griffith (1995) who also found that education alone without incentives and visible opportunities will not push youth towards agricultural employment.

The endemic characteristics of the local populace are a noted barrier. However, developing agricultural tourism provides the opportunity to change those characteristics and behaviours deemed problematic. Additionally, Byrd (2007) found when local communities are educated and informed tourism, is strengthened. Hence, educating the local community provides the opportunity to make the necessary changes, which will only serve to aid in having a

successful and thriving agricultural industry and by extension a successful agricultural tourism industry.

5.4 RECOMMENDATIONS

This section provides a summation of recommendations for St. Kitts and countries like St. Kitts trying to develop agricultural tourism. Moreover, it entails additional recommendations not previously expressed in the sections above. From the data, there are two major areas that need immediate attention, namely, (1) the local populace and (2) a facilitative environment that fosters growth.

Investment needs to be made into the local populace that would foster a change in the eating preference and habits of locals as well as the viability of careers in agriculture and entrepreneurship for locals. These investments should be twofold involving both school programs and media campaigns, which would affect the wider population. The research shows that starting programs at an early age not only alters perceptions, but also increases positive perceptions towards agriculture. That is why I conclude that for there to be any real change in the mindset of the local populace, there needs to be focused attention made towards children seen in the following:

1. School Programs
 - a. Continue Garden programs and implement them in each school at every level.
 - b. Implement curriculum geared towards particular topics such as entrepreneurship, tourism, agriculture, agricultural tourism, agri-business, food security, organic foods, health and nutrition (starting from primary/elementary schools through to high school)

- c. Develop appropriate supplemental materials that also feature examples and data from throughout the Caribbean region
- d. Provide training to teachers so that they may be able to effectively deliver knowledge to students
- e. Ensure that field trips, work placements, workshops and conferences are integral parts of these programs as they will provide students with real life examples of these ventures currently underway, provide some experience for them, and allow them to interact with persons in the field
- f. Develop competitions in schools geared towards entrepreneurship with specific focus on tourism, agriculture and agricultural tourism development

Using media campaigns along with the implementation of the school programs will aid in affecting a wider cross-section of the population.

2. Media Campaigns (via social media, television, radio)

- a. Heighten community awareness of farmers through Farmer profiles, which highlight local farms, what they produce, contact information etc.
- b. Use local entertainers, athletes and high-profile personnel in ad campaigns that encourage the consumption of local produce and products
- c. Organize Cooking shows/competitions which utilize the use of local ingredients
- d. Develop and sell a Kittitian cook book/guide
- e. Develop and feature local brands in supermarkets having special discounts/prices during certain time periods

Additionally, the government along with the private sector needs to establish a facilitative environment that would allow entrepreneurship to grow and flourish in St. Kitts, allowing local

farmers to upgrade their skills and produce while still being able to compete with imported goods and produce.

- a) Investments through the following means:
 - a. Increase the number of business development programs made available to youth, women and the general public interested in agricultural tourism ventures
 - b. Increase financial support through micro loans, low-interest rate loans etc.
 - c. Land – A revamping of the land program may be necessary. Communicating to the public the options available for land ownership or rentals for agricultural tourism development will aid in de-mystifying the current status of land development options in St. Kitts. In addition, it may be beneficial to invest in lease-to-own options that will allow farmers the ability to eventually own the land. This will also aid in providing farmers with the needed collateral to gain extra financing for their farms and diversification efforts into tourism.
- b) Formation of a special unit or department geared at:
 - a. Building/strengthening ties between agriculture and tourism
 - b. Conducting market study research to confirm demand for expanding linkages between tourism and agriculture
 - c. Effectively developing and implementing policies and projects to develop agricultural tourism
 - d. Promoting the interests of agricultural tourism
 - e. Engaging entrepreneurs in establishing agricultural tourism ventures
 - f. Hosting bi-annual meetings which engage stakeholders on various levels. Include relevant new data and information which will only be provided at meetings which will have an impact on the future developments for that given year. This

will ensure some compliance from relevant stakeholders who would wish to gain insight into new developments as well as provide input which will also prove beneficial for them.

- c) Re-engineering farmer/producer – hotel/restaurant relationship (This can also be handled by the new unit/department for agricultural tourism development noted above)
- d) Invest in local produce subsidies so that they may be more competitive with cheaper imported alternatives
- e) Provide central outlets for local farmers/producers to display and sell produce
- f) Encourage Adopt-a-farmer programs for businesses across St. Kitts

Many of these initiatives will require government funding. However, if these initiatives are managed through an established agricultural-tourism unit, funding through grants should be sought from the SIDF. Additionally, including these initiatives in work programs for agriculture will allow for funding to be attained from many allied agencies such as the OAS, IICA and the FAO. I speculate that these two areas, when invested in appropriately, will lead to a more successful development of agricultural tourism in St. Kitts.

CHAPTER SIX: CONCLUSIONS

6.0 CONCLUSION

The purpose of this research has been to explore the process of developing agricultural tourism in a transitioning region, through a case study in St. Kitts. Several objectives framed this research, which looked at the opportunities, barriers and challenges to agricultural tourism development. The impact of both the private and public sector on the development of agricultural tourism also framed this research. The results of this research support many long-standing assumptions in the literature. The findings have also highlighted new assumptions, which will have implications for future literature and for governments in their policy making and implementation strategies.

This case study shows that St. Kitts will have to contend with several challenges developing agricultural tourism. Previous research studies document many of these challenges as well. The major challenges affect the agricultural industry, which in turn affects agricultural tourism. Geographic and environmental conditions hamper the agricultural industry's ability to meet quality and quantity consistently, which is a major concern. However, in St. Kitts there are several programs currently on stream, which look to mitigate some of these concerns. This help comes in the form of regional agencies and local foundations who have invested in the upgrading of farming techniques.

Additionally, the local monkey population remains a threat to agricultural production. Conflict between farmers and local monkeys has been a cause for concern, as this particular pest is one that has a large impact on agriculture and the ability of farmers to reach required quotas.

In St. Kitts, land and financing opportunities are both weaknesses and strengths. There are financing options made specifically available for entrepreneurs in agriculture and tourism. However, there is still the sense that there needs to be an expansion of these opportunities, provided in a more favorable manner for young people and farmers. With the closure of the sugar industry, there are now newly available lands for different types of development. The issue becomes the process of attaining the land. An over-arching issue here comes from a lack of information or miscommunication on how to gain access to lands and appropriate financing. There needs to be a change in the dissemination of information to the public. This adds to the need for there to be a building of community capacity, so that the local populace will be prepared to become involved in the development of agricultural tourism.

Another major concern is the local populace and their perceived negative attitude towards agriculture and general apathy towards entrepreneurship. If local persons are not interested in starting or expanding into agricultural tourism ventures, the available opportunities will not be utilized and a successful foray into this type of development will prove futile. Attempts to alter these perceptions will lead to increased benefits for the island; leading to an expansion of the agricultural sector, the ability to become more food secure, the possibility to lower the food import bill and a lessening of foreign exchange leakage.

The various stakeholders (government, non-governmental and allied agencies) appear to be on board with moving towards successfully upgrading and diversifying the agricultural sector as well as tourism. However, there seems the need for more investment and collaboration in developing agricultural tourism. A lack of effective communication between the two sectors and among other stakeholders will only hamper any gains made in developing agricultural tourism. For this case study, many plans and policies were collected which spoke to agricultural tourism

in some form. However, many respondents were unaware of them. I suggest that for the best products to be developed and marketed there needs to be effective and ongoing communication and collaboration. Although respondents acknowledged that the connection between agriculture and tourism was something positive and the visions of opportunities were apparent, there still seemed to be a lack of ownership for moving this type of development forward. As such, the recommendation to have a single unit or department geared solely towards agricultural tourism development is of utmost importance.

St. Kitts is facing a few challenges in developing agricultural tourism. However, there are positive steps underway, which will aid in setting up a successful agricultural tourism industry. What is important here is the need for government to take control and invest heavily in ensuring that the agricultural sector is upgraded so that products and produce are able to meet demands consistently at needed quality and quantities. Further, government along with other stakeholders need to work together to ensure that there is clear communication and a distinct plan, which moves agricultural tourism development forward sustainably. Lastly, government and other stakeholders need to work towards altering perspectives towards agriculture and entrepreneurship. Building community capacity is of utmost importance to ensure that the community can truly reap the benefits of agricultural tourism.

6.1 LIMITATIONS

After the analysis of the data, several limitations of this research became clear. Firstly, not being able to garner responses from lay local persons may have affected results. As a result of this, there was no data from lay local persons that could challenge or confirm the data on the endemic characteristics of the local populace.

Secondly, the perspective for pushing forward this type of development is top-down, government focused. This is a noted limitation as there are other perspectives, such as a more community-level, bottom-up approach to development. Having the impetus for this type of development come from the local populace and pushed forward to government may garner different results.

Lastly, after the data collection process, it became clear that the research focused on food-production and the agricultural industry and not agricultural tourism. This was especially the case due to the lack of developed agricultural tourism ventures in St. Kitts. Although, there were potential agricultural tourism ventures, a lack of established ventures limited the ability to garner results based on agricultural tourism.

6.2 RECOMMENDATIONS FOR FUTURE RESEARCH

There have been many studies done on agricultural tourism. However, this study has highlighted other areas in need of further research. As Caribbean islands have very similar historical backgrounds, a comparative study done on another Caribbean island would aid in either supporting or distinguishing the results from this study. This will also aid in creating a framework for addressing cultural issues, which may impede agricultural tourism development, as is the case here for St. Kitts.

I speculated that the changing landscape on St. Kitts has affected the monkey population on the island. Monkeys have seemingly become more of a pest to local farmers and have affected the abilities of farmers to produce consistently. This hindrance affects not only the farmer but extends to agricultural tourism development. As such, further research into the effect of changing land use patterns on monkey behaviour and the actual versus perceived threat of monkeys to farmers would prove beneficial. Additionally, strategies to combat monkey

crop raiding and ways to mitigate issues in the farmer-monkey relationship also need further research.

The research revealed that the study of agriculture in schools is an option for students beginning at the high-school level. In addition, as this field of study becomes an option, fewer students continue to take it as a course of study. Research to determine (1) exactly what percentage of students cease to continue taking agricultural science/studies, (2) reasons for this change and (3) students' perceptions of agriculture would be valuable for St. Kitts in determining how to proceed in changing attitudes towards agriculture.

Findings from this study resulted from data gathered mainly from government entities, and lacked input from the 'lay local person' who would be the entrepreneur who invests in agricultural tourism. Hence, research geared towards understanding the perspectives of local persons on the potential for agricultural tourism development would be beneficial. Such research would aid in understanding how local persons view this type of development as well as their possible interest in this type of development.

Lastly, in order to understand the local perspectives, it is necessary to research the local perspectives, specifically on agriculture. Results from this study found that there is a negative connotation to agriculture. However, research which is able to understand how locals actually feel about agriculture will aid in either substantiating or refuting these results. This type of research will also aid in establishing ways in which these perspectives or feelings would affect using agriculture to diversify the tourism product and vice versa.

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APPENDIX A – LIST OF INTERVIEWEES

Investment Agent A – Representative from SKIPA

Investment Agent B – Representative from SIDF

Agri officer A – Officer at the Department of Agriculture

Agri Officer B – Officer at the Department of Agriculture

Agri Officer C – Representative from the Ministry of Agriculture Policy Unit

Agri Officer D – High-ranking official at the Ministry of Agriculture

Agri Officer E – High-ranking officer at the Ministry of Agriculture

Tourism Officer A – High-ranking official at the Ministry of Tourism

Tourism Officer B – High-ranking official at the Ministry of Tourism

Allied Agent A – Representative from OAS

Allied Agent B – Representative from IICA

Allied Agent C – Representative from the ROC-ATM

Allied Agent D – Representative from the Agro-Tourism Demonstration Farm

Entrepreneur Barry – Small business entrepreneur in food and beverages

Entrepreneur Wilson – Representative from SNAPPER

Entrepreneurial Training Agent – Representative from an entrepreneurial training program

Gov. Gender Affairs Ministry Official – High-ranking official at the Ministry of Gender

Gov. Youth Official – High-ranking official at the Ministry of Youth

Gov. Planning Official – High-ranking official at the Ministry of Planning

Supplemental Interviews

The St. Kitts & Nevis Chamber of Industry and Commerce

Officials from the Ministry of International Trade, Industry, Commerce and Consumer Affairs

Appendix B – Interview Guide

Agricultural/Tourism Organisations

Name:

Post:

Organization/Group Represented:

- 1) How do you see agriculture being impacted by tourism and vice versa?
- 2) Are there any plans or policies in place to bring these two industries (tourism and agriculture) together?
 - a) If so, what are they and do they cater to the linkages between tourism and agriculture?
 - b) If not, do you think having an actual stated plan or policy would have an effect on the establishment and or progression of agricultural tourism in St. Kitts?
 - c) What would you consider a critical component of an agricultural-tourism policy?
- 3) What role does your organization play in the development of agricultural tourism?
- 4) What are present inputs, new initiatives being made/put forth towards the development of agricultural-tourism?
- 5) For an agricultural-tourism industry to be successful, guaranteeing quality, quantity and affordable pricing are essential, how could this be achieved?
- 6) What are some developmental opportunities you envision through the linking of agriculture and tourism?
- 7) What are some threats/challenges that you would envisage to your ministry/department that would impede or inhibit the creation/implementation of the policy towards the development of the agricultural-tourism industry?
- 8) How do you see your organization being impacted by the development of agricultural tourism/the linking of the two industries?
 - a) What impact will your organization have on the successful development of agricultural tourism as well as the development of policy and implementation of the industry?
- 9) Are there any practices/procedures for stakeholder engagement?
 - a) If not what other mechanisms/ways are used to deal with entrepreneurs or other organizations/agencies/ministries/departments?
 - b) How does your organization engage with entrepreneurs or other organizations/agencies/ministries/departments towards taking advantage of possible opportunities?
- 10) Has there been any public response to this agricultural-tourism fusion?
 - a) If so, what has it been (negative/positive)?
- 11) Are there opportunities for local persons to engage in agricultural tourism?
- 12) Would you say locals are generally made aware of these opportunities?
- 13) How can locals take advantage of these opportunities?

Non-Agricultural/Tourism Organisations

Name:

Post:

Organization/Group Represented:

- 14) How do you see agriculture being impacted by tourism and vice versa?
- 15) Has your organization been involved in the development of agricultural tourism?
- 16) Are there any plans or policies in place to bring these two industries (tourism and agriculture) together?
 - d) If so, what are they and do they cater to the linkages between tourism and agriculture?

- e) If not, do you think having an actual stated plan or policy would have an effect on the establishment and or progression of agricultural tourism in St. Kitts?
- f) What would you consider a critical component of an agricultural-tourism policy?
- 17) Do you think you have a role to play in the development of Agricultural tourism, if so what role does your organization play?
- 18) What are present inputs, new initiatives being made/put forth towards the development of agricultural-tourism?
- 19) What are some developmental opportunities you envision through the linking of agriculture and tourism?
- 20) What are some threats/challenges that you would envisage to your ministry/department that would impede or inhibit the creation/implementation of the policy towards the development of the agricultural-tourism industry?
- 21) How do you see your organization being impacted by the development of agricultural tourism/the linking of the two industries?
 - b) What impact will your organization have on the successful development of agricultural tourism as well as the development of policy and implementation of the industry?
- 22) Are there any practices/procedures for stakeholder engagement?
 - c) If not what other mechanisms/ways are used to deal with entrepreneurs or other organizations/agencies/ministries/departments?
 - d) How does your organization engage with entrepreneurs or other organizations/agencies/ministries/departments towards taking advantage of possible opportunities?
- 23) Has there been any public response to this agricultural-tourism fusion?
 - b) If so, what has it been (negative/positive)?
- 24) Are there opportunities for local persons to engage in agricultural tourism?
- 25) Would you say locals are generally made aware of these opportunities?
- 26) How can locals take advantage of these opportunities?

Appendix C – Information Letter

9/11/12

Dear Sir/Madam

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the Department of Geography at the University of Waterloo under the supervision of Professor Judith Cukier. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

St. Kitts has only recently ended its Sugar industry and has now fully moved towards tourism. St. Kitts has the opportunity to utilize newly available lands, the agricultural skill set of the local people and combine them with ingenuity to create a unique product that is sustainable and creates new opportunities for entrepreneurship. Hence, the purpose of this study is to explore linkages between tourism and agriculture as a stimulus for entrepreneurial activities for residents of St. Kitts. Furthermore, this study will focus on the dynamics of stakeholder relationships that lead to entrepreneurial opportunities through agricultural-tourism linkages. I would like to include your organization as one of several organizations to be involved in my study. I believe that because you are actively involved in the management and operation of your organization, you are best suited to speak to the various issues, such as policies and organizational roles.

Your Involvement

Participation in this study is entirely voluntary and there are no known or anticipated risks to participation in this study. It will involve an interview of approximately one hour in length to take place in a mutually agreed upon location. You may decline to answer any of the interview questions if you so wish. You may decline to answer any of the questions you do not wish to answer. Further, you may decide to withdraw from this study at any time, without any negative consequences, simply by letting me know your decision.

With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the summary of the interview to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. Your name and the name of your organization will not appear in any thesis or report resulting from this study, however, with your permission anonymous and or attributed quotations may be used. All information you provide will be considered confidential unless otherwise agreed to, and data collected during this study will be retained for three years encrypted on my personal computer and a memory stick in a secure location. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study

Contact Information

If you have any questions regarding this study, would like additional information to assist you in reaching a decision about participation, or would like to participate in this study please contact me at **465-6809/760-9606** or by email at **r2jenkin@uwaterloo.ca**. You can also contact my supervisor, Professor Judith Cukier at 519-888-4567 ext. 35490 or email **jcukier@uwaterloo.ca**.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Maureen Nummelin in the Office of Research Ethics at 1-519-888-4567, Ext. 36005 or maureen.nummelin@uwaterloo.ca.

I hope that the results of my study will contribute to a better understanding of the dynamics of stakeholder relationships that lead to entrepreneurial opportunities through agricultural-tourism linkages.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Rae-Gean A. Oneika Jenkins
MES Tourism Policy and Planning Candidate

Appendix D – Consent Form

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted Rae-Gean Jenkins of the Department of Geography and Environmental Studies at the University of Waterloo, under the supervision of Professor Judith Cukier. I have had an opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from the research, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Office of Research Ethics at 519-888-4567 ext. 36005.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Yes No

I agree to have the in-person interview and any follow-up telephone conversations audio-recorded.

Yes No

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

Yes No

I agree to the use of direct quotations attributed to me only with my review and approval.

Yes No

Participant Name: _____ (Please print)

Participant Signature: _____

Witness Name: _____ (Please print)

Witness Signature: _____

Date: _____

Appendix E – Letter of Appreciation

Date

Dear Participant;

I am writing to thank you for a stimulating meeting last week. It was indeed a pleasure meeting you.

My project, Agriculture and Tourism: Creating New Entrepreneurial Opportunities – The Case of St.Kitts, is proceeding according to design. As you know I am seeing a few more individuals such as yourself who can lend additional information and insights.

I hope you will get in touch with me if further thoughts occur to you about the subject of our conversation, particularly if you decide in retrospect that you would like to designate some of it for non-attribution. Should you have any comments or concerns you could also contact Dr. Maureen Nummelin, the Director, Office of Research Ethics, at 1-519-888-4567, Ext. 36005 or maureen.nummelin@uwaterloo.ca.

This project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo.

I shall as promised, be sending you a copy of the summary of the interview, for your criticism and comments. I expect it to be ready for your review by October or November 2012.

Sincerely,

Rae-Gean Jenkins
MES Tourism Policy and Planning Candidate
Department of Environmental Studies
University of Waterloo

869-465-4169 (SKB)
519-729-3736 (CDN)

APPENDIX F – MARKET INTEL REPORT

MARKET INTEL

June– July 2012

A production of the Marketing Unit — Department of Agriculture — St. Kitts

The following represents the forecast production of several commodities grown/produced locally. The status is based on whether or not the production can satisfy estimated local demand.

Commodities	Week ending June 23rd	Week ending June 30th	Week ending July 7th	Week ending July 14th
Boneless beef	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>
Pork	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>
Tomato	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>
Sw Potato	abundant	abundant	abundant	abundant
Pumpkin	abundant	abundant	abundant	abundant
onion	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>
Sweet Pepper	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>
Watermelon	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>	<i>adequate</i>
Peanuts	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>
Cucumber	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>
Herbs	adequate	adequate	adequate	adequate
Green Fig	<u><i>available</i></u>	<u><i>available</i></u>	<u><i>available</i></u>	<u><i>available</i></u>
Cabbage	<i>scarce</i>	<i>scarce</i>	<i>scarce</i>	<i>adequate</i>
Carrots	abundant	abundant	abundant	abundant
Wh Potato	scarce	scarce	scarce	scarce

If you wish to have the Marketing Unit facilitate the movement of produce please contact us at **465 -XXXX. Ask for Marketing Officer**¹

¹ Names and phone numbers changed to safe guard the identity of persons

Who has what?

Tomato	Sweet Pepper	Carrots	Sweet Potato	Peanuts
Esme Henry	Carl Pinard	Mark Prentice	Charlie Evans	Clevon Issac
Rory Mitcham	Lavar Benjimin	Kev Armstrong	Eustace Jeffry	Calvin Berry
Ashly Herbert	Ken Ashlyn	Eustace Jeffry	Teresa Prince	
Earl Phipps	David Nicholl	Erica Brady	Winston Jeffers	
Teresa Prince	Ozzie Debra	Frank Maynard	William Marks	William James
David Nicholl	Quincy Nathaniel	Esme Henry	Rory Mitcham	Winston Jeffers
William Marks	Teresa Prince	Michael Mason	Esme Henry	Greg Lawrence
Ken Ashlyn	Telca Matthews	Mason Farmers	Davina Doras	Cabbage
Eric Chambers	Kenneth Matthew	William Marks	Groves Co-op	David Nicholl
J Amber	J Amber	Orin Byrone		Teresa Prince
Frank Maynard		Clevon Issac		Jacob Percival
Eustace Jeffry	Eustace Jeffry	Diego Mills		Kenneth Matthew
	Levi Charles			
Davina Doras	Charlie Evans			
		Pumpkin	Watermelon	Green Fig
Kenneth Matthew	Charlie Evans	Ken Ashlyn	Ervin Archibald	Dane Henry
Ervin Archibald	Esme Henry	Charlie Evans	Frank Maynard	Joanna Nash
	Davina Doras	Lauren Berry	Blake Brown	
		Erica Brady	McCleod Tully	

		Frank Maynard	Eric Chambers	
		Esme Henry	Carl Pinard	
		Ashly Herbert	Rory Mitcham	
		J Amber	Leonard Herbert	
		Teresa Prince	Kenneth Matthew	
		Flora Wattson		
		Anthony Mason		
		Manson Farmers		