Caribbean Tourism and Agriculture: Linking to Enhance Development and Competitiveness
Abstract

This study examines current trends in tourism and agriculture in Caribbean countries and the strategy for linking them in order to facilitate their future development. The tourism industry has, in the past, developed largely apart from other sectors such as agriculture. On the other hand, agriculture has developed mainly to satisfy export markets. Domestic agriculture has had limited development and has therefore been displaced to a considerable extent by food imports. The recent promotion of agriculture-tourism linkages is an attempt to enhance the local value added of the tourism industry, while at the same time promoting the development of domestic agriculture. However, it is argued that agriculture-tourism linkage per se will not facilitate the development of either tourism or agriculture. The nature of the tourism product in each country has to be understood before effective strategies could be devised for improving competitiveness. A similar approach is also necessary in respect of the agriculture sector. Increased linkage between tourism and agriculture could be enhanced through the adoption of a cluster-based strategy for improving the competitiveness of the tourism sector and for improving the livelihoods of communities and rural areas.
Table of Contents

I. Introduction ................................................................................................................... 1

II. Competitiveness issues ............................................................................................. 2

III. Structure and performance of tourism and agriculture ................................................ 6
    A. Tourism ............................................................................................................. 6
        1. Performance .................................................................................................. 6
        2. Nature of the industry ................................................................................... 9
    B. Agriculture ....................................................................................................... 11

IV. Tourism – Agriculture linkage .................................................................................. 19
    A. Tourism leakage .............................................................................................. 21
    B. Agriculture supplies to tourism ....................................................................... 22
    C. Food tourism ................................................................................................... 24
    D. The tourism linkage conundrum ...................................................................... 25
    E. Spreading the benefits of tourism .................................................................... 26

V. Development of tourism and agriculture ................................................................. 28
    A. Development and competitiveness .................................................................. 28
    B. Clustering as a development tool .................................................................... 33

IV Conclusion .................................................................................................................. 34

Selected references ........................................................................................................ 36
List of Tables

Table 1: International tourism receipts per tourist arrival (US Dollars) ....................................................... 4
Table 2: Competitiveness monitor indicators 2003 ...................................................................................... 5
Table 3: Direct contribution of tourism to output and employment in Caribbean countries ..................... 7
Table 4: Increase in tourist arrivals, 1993-2003 ............................................................................................ 8
Table 5: Number of green globe certifications, 2005 ................................................................................ 11
Table 6: Growth in tourist arrivals and earnings per tourist, 1990-2003 .................................................... 26

List of Diagrams

Diagram 1: Competitiveness diamond ......................................................................................................... 20
Diagram 2: Impact of tourism expenditure .................................................................................................. 21
Diagram 3: Tourism cluster ...................................................................................................................... 33
List of Figures

Figure 1: Agriculture contribution to GDP in CARICOM countries......................................................... 12
Figure 2: Direct and indirect contribution of tourism to GDP of selected Caribbean countries............. 12
Figure 3: CARICOM agricultural trade (excluding Haiti)........................................................................ 14
Figure 4: CARICOM trade in food (SITC 0)............................................................................................ 14
Figure 5: Crop production indices in service-based CARICOM countries (base year 1999-2001)........ 15
Figure 6: Crop production indices for resource-based CARICOM countries (base year 1999-2001)..... 15
Figure 7: Production of roots and tubers in selected CARICOM countries............................................. 16
Figure 8: Production of vegetables in selected CARICOM countries.................................................... 17
Figure 9: Production of citrus in selected CARICOM countries............................................................. 18
Figure 10: Skill level of employed labour force, Saint Lucia................................................................. 29
Figure 11: Skill level of employed labour force, Trinidad and Tobago.................................................. 29
Figure 12: Skill level of employed labour force, Jamaica ....................................................................... 30
Figure 13: Tourism labour productivity in the OECS............................................................................ 31
Figure 14: Tourism labour productivity in selected Caribbean countries............................................. 31
I. Introduction

The focus of this study, which looks at tourism and agriculture in the Caribbean, was determined largely by relatively recent initiatives to increase the linkage between the tourism and agricultural sectors. The objective of those initiatives has been to stimulate the development of the agriculture sector given the high level of food imports in the subregion especially by the tourism sector. Agriculture in some countries in the subregion has been facing decline on account of trade liberalisation, the erosion of trade preferences in protected developed country markets and a number of domestic problems, including natural disasters, such as hurricanes, flooding and drought.

Tourism, on the other hand, has recovered since the downturn following the terrorist events in the United States in September 2001. However, the Caribbean has been increasing its dependence on the industry given the uncertainties facing the traditional export-oriented industries. But this increased dependence has brought increased concern about the leakage of earnings due to significant amount of imports to satisfy tourist demand for goods and services. Since most Caribbean countries have been promoting the development of their tourism industry, this has led to increased competition to attract tourists and increase tourism revenues.

The purpose of the study is to examine whether and how agriculture can be linked to tourism to enhance the competitiveness of each and how increased benefits from tourism can redound to the poorer segments of the local population. The initial methodology favoured for this study was a survey of tourist accommodations and agricultural suppliers in the subregion. This was to be followed by case studies of selected tourist and agriculture areas. A questionnaire survey of accommodations was carried out mainly through e-mail because of lack of resources to directly administer them. The intention was to elicit information on tourist establishments’ agricultural purchases from local suppliers, the adequacy of their physical and human resources, their sources of financing and their restructuring requirements. However, the response rate was poor except from the home base of the study, Trinidad and Tobago, which is not a tourism dependent country. The study has therefore not been able to explore first hand the relationship between tourism operators and agricultural producers. Nevertheless, it benefited from case studies on the linkage between agriculture and tourism that were presented at an agro-tourism workshop held in St. Kitts and Nevis in October 2005.1

The study is organized as follows. Section 2 examines the concept and indicators of competitiveness. In Section 3 the performance of tourism and agriculture is set out as well as the nature of the tourism industry in Caribbean countries. Section 4 situates the analysis of the tourism agriculture linkage within the competitiveness framework. In Section 5 competitiveness

---

1 “Agriculture and Tourism: Partners in Development”, International Workshop on New Opportunities for Agriculture in the Caribbean, organized and co-sponsored by the Technical Centre for Agricultural and Rural Cooperation (CTA), The Centre for the Development of Enterprise (CDE), The Caribbean Tourism Organisation (CTO), The Inter-American Institute for Cooperation on Agriculture (IICA) and The Government of St. Kitts and Nevis at the Eastern Caribbean Central Bank, St. Kitts and Nevis, 3-5 October 2005.
is again considered along with the possibilities for development of tourism and the supplier agriculture industry in relation to each other.

II. Competitiveness issues

Caribbean countries have been focusing on increasing the competitiveness of their tourism offerings in light of the growing importance of tourism services to their economies and the current problems facing economic sectors, such as agriculture. However, to increase competitiveness means that one would have to first know what competitiveness is and how it is measured.

The concept of competitiveness is a relative one; a country is competitive relative to other countries in some or all of the goods and services it produces; an industry is competitive relative to similar industries in other countries; and a firm is competitive relative to other domestic or international firms in the same industry. The concept then is about the ability to compete or withstand competition successfully. It is related to two other concepts – comparative advantage and competitive advantage.

Comparative advantage is about specialising and trading in products based on factor endowments and productivity. However, the theory has been criticised on account of its static nature and its failure to explain new developments such as job mobility and outsourcing based on absolute advantage in wage costs. Competitive advantage theory was proposed in response to the criticisms of the theory of comparative advantage. This new approach differs from the earlier one in its emphasis on the creation of resource endowments as against a predetermined existence of abundant factors of production. Specialised factors of production, such as skilled labour, are critical to sustaining competitive advantage and these can be created through, among other things, cooperation between public and private sectors.

The relevance of the theory of comparative advantage is in pointing to the benefits that can be derived from unrestricted trade providing all resources are fully employed and allocated according to the principle of comparative advantage. Competitive advantage, on the other hand, focuses on strategies that would effectively transform a country’s comparative advantage into international competitiveness. It emphasises key specialised factors such as specific skills, infrastructure, technology and the existence of industry clusters.

What countries, including countries in the Caribbean, focus on is achieving overall competitiveness, that is, competitiveness of the country as a whole. To get a better understanding of competitiveness, it is necessary to know what the objective of achieving competitiveness is, since competitiveness cannot be an end in itself: The implicit, if not explicit, objective is to improve/sustain the standard of living of the population. One definition of competitiveness refers to the factors, policies and institutions that determine productivity and hence the level of economic prosperity in a country. This definition informs the measures of competitiveness used to rank countries in the World Economic Forum (WEF) Global Competitiveness Reports. The aim is to highlight the determinants of the differential growth experiences of the countries surveyed.

---

2 This is the definition of the World Economic Forum in its Global Competitiveness Report 2005
Another definition of competitiveness is that of the Organisation for Economic Cooperation and Development (OECD), “the degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term”. The operative term here is “under free and fair market conditions”. To the extent that market conditions are not “free and fair”, public policy has to assume a significant role in fostering competitiveness.

It is the absence of free and fair trade that has led to the preoccupation with the Porter model of competitive advantage. Studies adopt the “diamond” framework for assessing competitiveness, which is based on: firm strategy and rivalry, factor conditions, demand conditions and suppliers and related industries. The bottom of the diamond “suppliers and related industries” points to an industrial cluster, which has become the focus of most studies.

Now competitiveness has been applied essentially to the production of goods, which have historically been traded in international markets. Trade in services has been a relatively recent occurrence. The application of the concept of competitiveness to services is therefore a challenge given the complexity of the services sector in terms of composition as well as trade. Assessing competitiveness in tourism services is an even greater challenge given the various elements that make up the tourism sector. This is where the cluster approach could provide insights for restructuring tourism to enhance competitiveness as well as addressing poverty issues, especially in rural communities in developing countries.

Competitiveness has been measured in terms of market share. Increase in a country’s market share for a particular export product is indicative of that country’s competitiveness on the international market. On the other hand, a fall in market share indicates a decline in competitiveness. Within the Americas region the Caribbean has the second largest market share after North America. The Caribbean market share increased from 12.9 per cent in 1995 to 14.5 per cent in 2004. However, the Spanish-speaking Caribbean, in particular Cuba and the Dominican Republic gained market share whereas the share of the Caribbean Community (CARICOM) countries has remained essentially the same over the 10-year period from 1995. By contrast, all of the countries of Central America, including Belize, which is part of CARICOM, increased market share from 2.4 per cent in 1995 to 4.6 per cent in 2004. By this measure of competitiveness CARICOM countries have not increased competitiveness over the decade from the mid-1990s.

Although Spanish-speaking Caribbean countries have gained more tourist arrivals than the English speaking countries in the subregion, those gains have not translated into more earnings per tourist. Countries such as Anguilla, Antigua and Barbuda, Barbados, Saint Lucia and St. Vincent and the Grenadines have a relatively small number of tourist arrivals but their earnings per tourist are significantly higher than those of larger tourist destinations in the region such as Cuba, Dominican Republic, Puerto Rico and Mexico (Table 1).

---

3 This definition is quoted in Stéphane Garelli, “Competitiveness of Nations: The Fundamentals” www02.imd.ch/wcy/fundamentals/
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>1129</td>
<td>1282</td>
<td>1273</td>
<td>1276</td>
</tr>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>1446</td>
<td>1123</td>
<td>1406</td>
<td>1339</td>
</tr>
<tr>
<td>Bahamas</td>
<td>853</td>
<td>842</td>
<td>1123</td>
<td>1163</td>
</tr>
<tr>
<td>Barbados</td>
<td>1143</td>
<td>1407</td>
<td>1326</td>
<td>1427</td>
</tr>
<tr>
<td>Belize</td>
<td>223</td>
<td>595</td>
<td>622</td>
<td>706</td>
</tr>
<tr>
<td>Cuba</td>
<td>743</td>
<td>1297</td>
<td>997</td>
<td>999</td>
</tr>
<tr>
<td>Dominica</td>
<td>555</td>
<td>700</td>
<td>685</td>
<td>712</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>689</td>
<td>884</td>
<td>960</td>
<td>947</td>
</tr>
<tr>
<td>Grenada</td>
<td>500</td>
<td>704</td>
<td>721</td>
<td>732</td>
</tr>
<tr>
<td>Guyana</td>
<td>422</td>
<td>311</td>
<td>714</td>
<td>386</td>
</tr>
<tr>
<td>Jamaica</td>
<td>748</td>
<td>932</td>
<td>1007</td>
<td>1003</td>
</tr>
<tr>
<td>Mexico</td>
<td>322</td>
<td>305</td>
<td>402</td>
<td>501</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>533</td>
<td>584</td>
<td>714</td>
<td>826</td>
</tr>
<tr>
<td>St. Kitts &amp; Nevis</td>
<td>794</td>
<td>797</td>
<td>794</td>
<td>824</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>1092</td>
<td>995</td>
<td>1033</td>
<td>1018</td>
</tr>
<tr>
<td>St. Vincent &amp; Grenadines</td>
<td>1037</td>
<td>883</td>
<td>1027</td>
<td>1152</td>
</tr>
<tr>
<td>Suriname</td>
<td>22</td>
<td>488</td>
<td>276</td>
<td>0</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>487</td>
<td>296</td>
<td>534</td>
<td>608</td>
</tr>
</tbody>
</table>

Source: Based on data from World Tourism Organisation

Indicators of competitiveness for the tourism sector have been developed in a Competitiveness Monitor and adopted by the World Travel and Tourism Council (WTTC). The Monitor is based on data compiled using a series of indexes. These include price competitiveness, human tourism, infrastructure, environment, technology, human resources, openness and social development. Each indicator is intended to measure the performance of a country as a tourist destination relative to other tourist destinations. Table 2 compares the general competitiveness of Caribbean destinations based on the indicators. Barbados emerges as the most competitive destination with high values of most of the indexes. The Dominican Republic and, to a lesser extent, Dominica are the most competitive on price whereas Antigua and Barbuda is most competitive on technology and St. Kitts and Nevis is the most competitive on human resources.

---

4 These indicators are discussed in N. Gooroochurn and G. Sugiyarto, “Competitiveness Indicators in the Travel and Tourism Industry”
<table>
<thead>
<tr>
<th>Country</th>
<th>Price Competitiveness</th>
<th>Human Tourism</th>
<th>Infrastructure</th>
<th>Environment</th>
<th>Technology</th>
<th>Human Resources</th>
<th>Openness</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>6</td>
<td>n/a</td>
<td>n/a</td>
<td>57</td>
<td>90</td>
<td>44</td>
<td>86</td>
<td>69</td>
</tr>
<tr>
<td>The Bahamas</td>
<td>n/a</td>
<td>n/a</td>
<td>69</td>
<td>51</td>
<td>77</td>
<td>63</td>
<td>72</td>
<td>58</td>
</tr>
<tr>
<td>Barbados</td>
<td>27</td>
<td>n/a</td>
<td>87</td>
<td>43</td>
<td>79</td>
<td>85</td>
<td>73</td>
<td>67</td>
</tr>
<tr>
<td>Belize</td>
<td>n/a</td>
<td>n/a</td>
<td>41</td>
<td>36</td>
<td>51</td>
<td>35</td>
<td>68</td>
<td>60</td>
</tr>
<tr>
<td>Cuba</td>
<td>n/a</td>
<td>n/a</td>
<td>63</td>
<td>41</td>
<td>57</td>
<td>72</td>
<td>n/a</td>
<td>59</td>
</tr>
<tr>
<td>Dominica</td>
<td>37</td>
<td>n/a</td>
<td>n/a</td>
<td>40</td>
<td>67</td>
<td>37</td>
<td>47</td>
<td>64</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>58</td>
<td>80</td>
<td>54</td>
<td>42</td>
<td>42</td>
<td>49</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td>Grenada</td>
<td>n/a</td>
<td>n/a</td>
<td>81</td>
<td>48</td>
<td>62</td>
<td>55</td>
<td>48</td>
<td>69</td>
</tr>
<tr>
<td>Guyana</td>
<td>n/a</td>
<td>n/a</td>
<td>65</td>
<td>55</td>
<td>55</td>
<td>66</td>
<td>67</td>
<td>37</td>
</tr>
<tr>
<td>Jamaica</td>
<td>18</td>
<td>n/a</td>
<td>63</td>
<td>19</td>
<td>72</td>
<td>51</td>
<td>79</td>
<td>64</td>
</tr>
<tr>
<td>Mexico</td>
<td>20</td>
<td>18</td>
<td>46</td>
<td>47</td>
<td>71</td>
<td>55</td>
<td>44</td>
<td>62</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>n/a</td>
<td>43</td>
<td>n/a</td>
<td>88</td>
<td>85</td>
<td>n/a</td>
<td>47</td>
<td>n/a</td>
</tr>
<tr>
<td>St. Kitts &amp; Nevis</td>
<td>5</td>
<td>n/a</td>
<td>73</td>
<td>66</td>
<td>70</td>
<td>96</td>
<td>70</td>
<td>69</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>12</td>
<td>n/a</td>
<td>n/a</td>
<td>65</td>
<td>60</td>
<td>63</td>
<td>59</td>
<td>74</td>
</tr>
<tr>
<td>St. Vincent &amp; Grenadines</td>
<td>n/a</td>
<td>n/a</td>
<td>79</td>
<td>47</td>
<td>54</td>
<td>39</td>
<td>67</td>
<td>64</td>
</tr>
<tr>
<td>Suriname</td>
<td>n/a</td>
<td>n/a</td>
<td>64</td>
<td>10</td>
<td>58</td>
<td>60</td>
<td>21</td>
<td>56</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>19</td>
<td>n/a</td>
<td>69</td>
<td>16</td>
<td>66</td>
<td>60</td>
<td>52</td>
<td>67</td>
</tr>
</tbody>
</table>

Source: World Travel and Tourism Council (WTTC)
Index value 1= least competitive; Index value 100=most competitive
Although the indicators are useful for a general comparison among countries as tourist destinations, they do not capture non-quantifiable characteristics of specific tourist destinations within countries. Because the measures depend on quantifiable data, they are limited by data availability and the need for comparison across countries. For example, the Price Competitiveness Index is derived from the Hotel Price Index (room rate per night in current US dollars) and Purchasing Power Parity (PPP) index (amount of money to buy the same amount of goods that US$1 would buy in the United States). This price index does not take into account the quality of the product in specific locations within the country.

Similarly, the Environment Index is computed using the Population Density Index, the CO₂ Emission Index and the Environmental Treaties Index (ratification of environmental treaties). It does not say anything about the quality of beach facilities. The Technology Index is made up of the Internet Index, the Telephone Index, the Mobile Index and the High Technology Export Index. Although the number of internet providers and telephones, including mobile connections, gives an indication of information technology capability it does not say how this is used by tourism service providers to improve the efficiency and profitability of their operations.

Since a country’s objective is to increase its competitiveness in tourism services, a case study approach incorporating the themes of the indicators and considering the constraints would facilitate policy and firm actions necessary for building competitiveness. However, such an approach is outside the scope of the present study. In any event, competitiveness should not be considered in isolation from development concerns.

III. Structure and performance of tourism and agriculture

A. Tourism

1. Performance

Tourism is an important sector in Caribbean economies. It is estimated to have contributed 4.5 per cent to the GDP of Caribbean countries in 2004. This is an improvement on a declining trend observed since 2001 (Table 3). The overall contribution of tourism (direct and indirect) was estimated at 15 per cent by the WTTC, which listed the Caribbean as the most tourism-intensive region in the world. Caribbean tourist arrivals exceeded those of most other regions as well as overall world tourist arrivals in 2004. The active hurricane season in 2005 moderated the growth of the tourism industry on account of the damage to hotels in some of the countries. Growth was also affected by the significant decline in cruise arrivals in most of the region. Jamaica was one of the few countries that continued to experience growth in cruise arrivals.
Table 3
Direct Contribution of Tourism to Output and Employment in Caribbean Countries (Percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean</td>
<td>5.1</td>
<td>4.7</td>
<td>4.2</td>
<td>4.1</td>
<td>4.5</td>
<td>4.7</td>
<td>4.9</td>
<td>4.5</td>
<td>4.3</td>
<td>4.5</td>
<td>5.2</td>
<td>5</td>
</tr>
<tr>
<td>Antigua/Barbuda</td>
<td>25.9</td>
<td>23.5</td>
<td>23.2</td>
<td>22.5</td>
<td>23</td>
<td>25</td>
<td>36.3</td>
<td>32.9</td>
<td>32.4</td>
<td>31.5</td>
<td>32.2</td>
<td>35</td>
</tr>
<tr>
<td>Bahamas</td>
<td>19</td>
<td>18.5</td>
<td>18.3</td>
<td>17.9</td>
<td>17.4</td>
<td>18.4</td>
<td>19</td>
<td>18.5</td>
<td>18.3</td>
<td>17.9</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Barbados</td>
<td>14.2</td>
<td>14.1</td>
<td>13</td>
<td>14.1</td>
<td>14.4</td>
<td>16.1</td>
<td>17.9</td>
<td>17.7</td>
<td>16.4</td>
<td>17.7</td>
<td>18.2</td>
<td>20</td>
</tr>
<tr>
<td>Belize</td>
<td>9.5</td>
<td>8.7</td>
<td>8.3</td>
<td>7.7</td>
<td>7.2</td>
<td>7.8</td>
<td>10</td>
<td>9.3</td>
<td>8.8</td>
<td>8.1</td>
<td>7.6</td>
<td>8</td>
</tr>
<tr>
<td>BVI</td>
<td>37.7</td>
<td>37.4</td>
<td>36.8</td>
<td>36.8</td>
<td>37.3</td>
<td>38</td>
<td>37.7</td>
<td>37.4</td>
<td>36.8</td>
<td>36.8</td>
<td>37.3</td>
<td>38</td>
</tr>
<tr>
<td>Cuba</td>
<td>3.9</td>
<td>3.9</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>4.1</td>
<td>3.9</td>
<td>3.9</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>4</td>
</tr>
<tr>
<td>Dominica</td>
<td>8.6</td>
<td>8.4</td>
<td>8.8</td>
<td>7.7</td>
<td>8.7</td>
<td>9.6</td>
<td>8</td>
<td>7.8</td>
<td>8.2</td>
<td>7.3</td>
<td>8.1</td>
<td>9</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>7.1</td>
<td>6.6</td>
<td>6.8</td>
<td>9.5</td>
<td>9.3</td>
<td>7.5</td>
<td>7.1</td>
<td>6.6</td>
<td>6.8</td>
<td>9.5</td>
<td>9.3</td>
<td>7</td>
</tr>
<tr>
<td>Grenada</td>
<td>8.1</td>
<td>7.7</td>
<td>8.5</td>
<td>7.9</td>
<td>6</td>
<td>5</td>
<td>8.1</td>
<td>7.7</td>
<td>8.5</td>
<td>7.9</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Guyana</td>
<td>2.8</td>
<td>2.8</td>
<td>2.2</td>
<td>2.2</td>
<td>2.4</td>
<td>2.7</td>
<td>2.3</td>
<td>2.3</td>
<td>1.8</td>
<td>1.8</td>
<td>1.9</td>
<td>2</td>
</tr>
<tr>
<td>Jamaica</td>
<td>10.5</td>
<td>9.6</td>
<td>9.7</td>
<td>10.4</td>
<td>10.1</td>
<td>10.8</td>
<td>9.5</td>
<td>8.7</td>
<td>8.7</td>
<td>9.5</td>
<td>9.1</td>
<td>10</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>1.8</td>
<td>1.8</td>
<td>1.6</td>
<td>1.5</td>
<td>1.5</td>
<td>1.6</td>
<td>2.1</td>
<td>2</td>
<td>1.7</td>
<td>1.5</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>St. Kitts/Nevis</td>
<td>7.5</td>
<td>7.7</td>
<td>6.9</td>
<td>6.6</td>
<td>7</td>
<td>7.8</td>
<td>8.5</td>
<td>8.7</td>
<td>7.8</td>
<td>7.5</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>16.9</td>
<td>15.2</td>
<td>13.9</td>
<td>12.8</td>
<td>13.7</td>
<td>15</td>
<td>18</td>
<td>16.1</td>
<td>14.7</td>
<td>13.6</td>
<td>14.5</td>
<td>16</td>
</tr>
<tr>
<td>St. Vincent/Grenadines</td>
<td>9.8</td>
<td>10.2</td>
<td>9.7</td>
<td>9</td>
<td>9.7</td>
<td>10.3</td>
<td>9.1</td>
<td>9.5</td>
<td>9</td>
<td>8.3</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Suriname</td>
<td>3</td>
<td>2.6</td>
<td>1.6</td>
<td>1.4</td>
<td>1.8</td>
<td>2</td>
<td>2.9</td>
<td>2.5</td>
<td>1.6</td>
<td>1.4</td>
<td>1.8</td>
<td>2</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
<td>2.3</td>
<td>2.4</td>
<td>2.6</td>
<td>2.8</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Based on data in WTTC 2004 & 2005 Reports
Although the contribution of tourism to the economies of the Caribbean has been significant, especially for countries such as Antigua and Barbuda, the Bahamas, Barbados, Jamaica and Saint Lucia, the subregion’s global market share has been declining. In 2005 the Caribbean’s estimated share of total world demand was, at 0.7 per cent, the lowest for all regions. The European Union had the highest share (36.6 per cent) followed by North America (30.3 per cent). Despite this, both stop-over and cruise arrivals have increased in the Caribbean over the last decade or so. Cruise arrivals have increased more significantly than stop-over arrivals (Table 4).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>44.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Barbados</td>
<td>30.4%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Belize</td>
<td>8576.7%</td>
<td>-24.9%</td>
</tr>
<tr>
<td>Dominica</td>
<td>101.6%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Grenada</td>
<td>-26.6%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Jamaica</td>
<td>87.2%</td>
<td>22.2</td>
</tr>
<tr>
<td>St. Kitts and Nevis</td>
<td>79.7%</td>
<td>-19.3%</td>
</tr>
<tr>
<td>St. Vincent &amp; the Grenadines</td>
<td>-14.7%</td>
<td>38.8%</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>154.7%</td>
<td>42.7%</td>
</tr>
<tr>
<td>The Bahamas</td>
<td>45.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>70.2%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>64.4%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Source: Based on official country data

The shift in growth towards cruise tourism has occurred along with a shift in cruise-ship arrivals towards non-CARICOM member States, in particular Cozumel (Mexico), the Dominican Republic and Puerto Rico. Cruise-ship arrivals in the Hispanic countries over the decade to 2003 were more than twice the increase registered in the CARICOM subregion. Although cruise tourism has been growing faster than stop-over tourism, the benefits accruing to Caribbean economies are far less. Cruise visitors spend less than stop-over visitors. For example, the ratio of cruise to stop-over expenditure ranges from 1:11 for Jamaica to 1:42 for Antigua and Barbuda. The ports of origin of the cruise ships are the major beneficiaries of cruise tourism as passengers arriving for the cruise frequently overnight there prior to embarking on the cruise ship.

Stop-over arrivals in the Hispanic Caribbean (including Cuba) also exhibited more than a twofold increase relative to CARICOM. The relative decline in market share in the CARICOM region can be explained by lower cost for similar offerings by the Hispanic Caribbean. The boom in tourist arrivals in the Spanish-speaking Caribbean can be explained by the significant investment by Spanish hotel chains in those countries.
The advantage of the Spanish-speaking Caribbean is expected to be somewhat reduced on account of the expansion of investment by Spanish chains in the English-speaking Caribbean, in particular in Jamaica and the Bahamas, to capitalise on increased demand from North Americans for vacations in the English-speaking Caribbean. In Jamaica, for example, the Spanish RIU International chain operates two hotels in the Negril area and the inflow of tourist arrivals has been facilitated by increased airlift from Spain. In addition, the Caribbean hopes to attract tourists from China in the near future. The Bahamas, Grenada, Jamaica and Saint Lucia have been granted approved destination status by China to receive Chinese tour groups.

2. Nature of the industry

The structure of the tourism industry varies among countries in the Caribbean subregion according to size, topography and the overall structure of the economy, among other things. Countries can be grouped into three categories according to the degree of dependence on tourism and the nature of the tourism product. The first category would comprise Antigua and Barbuda, the British Virgin Islands and the Bahamas, which are the most tourism dependent countries within the CARICOM subregion. These countries are also among those that have the highest per capita GDP in the Caribbean.

Most Caribbean countries promote a product based on sun, sea and beach. The tourism industry in Antigua and Barbuda as well as in the Bahamas is based on large resort hotels and on casino gambling. The industry in the British Virgin Islands is based largely on yachting activities. Yachting is also a significant feature of tourism activities in Antigua and Barbuda.

The second category of countries consists of Barbados, Saint Lucia, Jamaica, Dominica, St. Vincent and the Grenadines, Belize, Grenada and St. Kitts and Nevis in order of the contribution of their tourism industries to national output. Although tourism is a significant industry in these countries there are other significant industries such as sugar in Barbados, Belize, Jamaica and St. Kitts and Nevis, bananas in Jamaica and in most of the Organisation of Eastern Caribbean States (OECS) and bauxite and alumina in Jamaica.

The tourism product in these countries is varied. Traditional sun, sea and beach are again a common feature except in Belize and Dominica where emphasis is more on eco-tourism and heritage tourism. Sports, in particular water sports and cultural festivals, are features in most countries. Large-scale and upscale hotels largely define the product in Barbados, Jamaica and St. Kitts (Nevis) and St. Vincent (Grenadines). Small-scale properties are mainly in Belize and Dominica.

Guyana, Trinidad and Tobago and Suriname are in the third category of countries with low dependence on the tourism industry. The product is essentially nature-based or eco-tourism, with the exception of Tobago, which is similar to the countries with high dependence on tourism in terms of emphasis on sun, sea and beach as well as water sports. These countries are more dependent on products based on agricultural, energy and mineral resources. However, they have been putting greater emphasis on diversification into tourism activities.
High volume mass tourism has been the main feature of the tourism industry in Caribbean countries. Most cruise and stop-over tourists travel on pre-paid packages. So that although the tourism industry contributes significantly to the GDP of the tourism-dependent economies, the actual contribution to national income in those incomes is significantly less. The leakage of tourism earnings is due not only to foreign-based tour operators and repatriation of income by foreign owned hotel chains and resorts, but also to the importation of most inputs for the tourist industry.

To compete with cruise tourism and attract more stop-over visitors countries established large-scale all inclusive resorts. The resorts were also aimed at insulating visitors from some of the adverse conditions in the host countries, such as rising crime and harassment from beggars as well as vendors plying their trade in tourism areas. The gains in terms of increased tourist arrivals were offset by losses both in terms of revenue leakage and the failure to involve the local population in meaningful ways that would contribute toward the improvement in their welfare.

A number of countries cater to the high income tourism market with exclusive and luxury villas and boutique hotels. These are mainly the islands of Anguilla, Antigua and Barbuda, the Bahamas, Barbados, British Virgin Islands, Jamaica, St. Kitts and Nevis, Saint Lucia and Tobago (Trinidad and Tobago). Exclusive islands in the Grenadines also cater to the up-scale tourism market. This is a niche that countries have been trying to exploit in order to increase their tourism earnings.

Recognition of the shortcomings of enclave tourism has led to a focus on diversification of the tourism product as well as the type of tourist. Countries in the subregion, having committed to the development of sustainable tourism, are now promoting ecotourism and cultural and heritage tourism. Whereas ecotourism is based on principles of “responsible travel to natural areas, which conserves the environment and improves the welfare of the local people”,5 cultural tourism relates to travel in order to attend festivals (food, music and carnival), visit historical and heritage sites and/or more generally to experience the cultural diversity of a particular place.

Jamaica has been the most successful in terms of ecotourism, with 24 certified “Green Globe” sites6 in the country (Table 5). Nevertheless, other countries in the region have been moving in this direction. Dominica has launched a tourism strategy that focuses on its ecotourism destination in general and specifically on the Morne Trois Pitons National Park, the only United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Park in the Eastern Caribbean. The country was the first nation to be declared a Green Globe 21 Benchmark Certified destination.

---

5 Definition of the International Ecotourism Society, see http://www.ecotourism.org/
6 GREEN GLOBE 21 is the worldwide benchmarking and certification program which facilitates sustainable travel and tourism for consumers, companies and communities. It is based on Agenda 21 and principles for Sustainable Development endorsed by 182 governments at the United Nations Rio de Janeiro Earth Summit in 1992 and can be found under http://www.greenglobe21.com/.
### Table 5
**Number of Green Globe Certifications, 2005**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>4</td>
</tr>
<tr>
<td>Bahamas</td>
<td>1</td>
</tr>
<tr>
<td>Barbados</td>
<td>6</td>
</tr>
<tr>
<td>Dominica</td>
<td>4</td>
</tr>
<tr>
<td>Jamaica</td>
<td>24</td>
</tr>
<tr>
<td>Grenada</td>
<td>1</td>
</tr>
<tr>
<td>St. Kitts</td>
<td>2</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Green Globe

**B. Agriculture**

The tourism sector in Caribbean economies developed as countries attempted to diversify away from agriculture, which was the dominant economic sector since the inception of the economies. Sugar was the dominant industry followed by banana, cocoa, coffee, rice and citrus. Tourism has become the dominant sector in some countries, as indicated earlier, whereas agriculture has remained significant in others such as Belize, Dominica, Guyana, Jamaica and St. Vincent and the Grenadines. Nevertheless, the contribution of the agriculture sector to economic output has declined significantly since the 1970s (Figure 1). The overall (direct and indirect) contribution of tourism to output also declined in countries such as Belize, Grenada and Saint Lucia (Figure 2).
Fig. 1 Agriculture Contribution to GDP in CARICOM Countries

Source: Based on FAOSTAT

Fig. 2 Direct and Indirect Contribution of Tourism to GDP of Selected Caribbean Countries

Source: Based on Tourism Satellite Account, World Tourism Organization
Agriculture in the region developed in response to external demand. Major export crops produced include sugar, banana, rice, cocoa and coffee, which benefited from preferential access to developed country markets. However, agricultural exports declined during the 1990s due to trade liberalisation as well as preference erosion. On the other hand, imports of agricultural products increased significantly from the mid-1990s (Figure 3). The same trend is observed in respect of food trade with the gap between imports and exports widening from the mid-1990s (Figure 4).

Most countries increased production of crops between the late-1970s and the early-1990s. However, production declined for most countries during the 1990s. Exceptions are Antigua and Barbuda, Bahamas and Belize, which consistently increased production over the years. On the other hand, production in Barbados and Trinidad and Tobago exhibited a declining trend over the same period (Figures 5 and 6). Aside from the major export crops, Caribbean countries produce a number of staples (roots and tubers), such as yams and sweet potatoes, as well as vegetables and fruits mainly for domestic and regional markets. These are also the type of products consumed by the tourism market.

The largest producers of roots and tubers are Haiti and Jamaica in the Northern Caribbean, Guyana in the Southern Caribbean and Dominica in the Eastern Caribbean (Figure 7). Other significant producers are Saint Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. The major vegetable producers are Haiti and Jamaica, each producing over 100,000 metric tonnes per year (Figure 8). Countries producing between 20,000 and 50,000 metric tonnes per year are Guyana, the Bahamas, Trinidad and Tobago and Suriname in descending order of production magnitude.

Haiti, Jamaica and Trinidad and Tobago are major producers of fresh fruits. There are a number of countries that are significant producers of specific types of fruits. Belize and Jamaica are the most significant producers of citrus fruits. Production in the Bahamas has been most impressive since the early 1990s (Figure 9). Belize and Jamaica are also the main producers of papayas. Haiti is the main producer of avocados, bananas and mangoes. Jamaica is the main producer of pineapples and watermelons. Besides Jamaica, other significant producers of such fruits are Saint Lucia and Guyana.
Fig. 3 CARICOM Agricultural Trade (Excluding Haiti)

Source: Based on FAOSTAT

Fig. 4 CARICOM Trade in Food (SITC 0)

Source: Based on FAOSTAT
Fig. 5 Crop Production Indices in Service-Based CARICOM Countries (Base Year 1999-2001)

Source: Based on FAOSTAT

Fig. 6 Crop Production Indices for Resource-Based CARICOM Countries (Base year 1999-2001)

Source: Based on FAOSTAT
Fig. 7 Production of Roots and Tubers in Selected CARICOM Countries

Source: Based on FAOSTAT
Fig. 8 Production of Vegetables in Selected CARICOM Countries

Source: Based on FAOSTAT
Fig. 9 Production of Citrus in Selected CARICOM Countries

Source: Based on FAOSTAT
Although all countries produce some fruits and vegetables, the most significant producers, if one excludes Haiti which is a dominant producer of most crops, are Belize and Jamaica in the Northern Caribbean, Dominica and Saint Lucia in the Eastern Caribbean and Guyana and Suriname in the Southern Caribbean. A noteworthy development is the significant growth of agricultural production in the smaller islands of Antigua and Barbuda and the Bahamas.

Growth and development in the agriculture and tourism industries have been pursued separate and apart from each other. Indeed, even within the agriculture sector development of export and domestic agriculture has been mutually exclusive. This is indicative of the traditional approach to development in Caribbean countries whereby most inputs for the productive process are imported and most of the output is exported. Few backward and forward linkages were therefore created as policy and institutions were not geared toward fostering such linkages. The recent focus on increasing linkages between tourism and agriculture therefore poses significant challenges.

IV. Tourism – Agriculture linkage

It is useful to centre discussion of linkages between tourism and agriculture within the competitiveness framework, given the objective of countries to increase their competitiveness. The usual approach is to apply the competitiveness diamond in assessing the extent to which a country is competitive and how it can improve its competitiveness (Diagram 1). The four points of the diamond refer to: factor conditions such as resource endowment; demand conditions in relation to domestic and international markets for tourism products; firm strategy and rivalry within the context of the macroeconomic environment, sources of financing and government regulation and support; and related and supplier industries linked to the tourism sector.8

---

7 This constitutes the competitiveness framework developed by Michael Porter. See M.E. Porter (1990), The Competitive Advantage of Nations, The Free Press, New York
8 This is the approach used in a study of tourism in the Dominican Republic. See Joaquin Vial et al (2002) “Enhancing Competitiveness of Tourism in the Dominican Republic”
Since the main focus of this study is the linkage between tourism and agriculture, it would seem logical to concentrate on the bottom point of the diamond, that is, on the related and supporting industries. However, the logic is ultimately in the need to maximise the benefits of tourism to the local population. Tourism earnings impact directly on the tourism sector, essentially on tourist accommodation, restaurants and other service industries such as entertainment and domestic transport. Workers in this sector benefit directly through wages. Supplier industries benefit through supplying inputs to tourism and through purchases by employees of the tourism sector. The various impacts of tourist expenditure can be visualised within a diamond framework (Diagram 2).
A. Tourism leakage

All of the earnings from tourism do not accrue to the domestic economy. A portion is lost through what is termed leakage. Leakage of tourism earnings occurs when the earnings accruing to the tourist destination are less than the total expenditure of tourists. The difference is the leakage and refers to, among other things, amounts paid for imports of goods and services for the tourism industry as well as payments to foreign companies including airlines and tour operators and repatriation of profits by foreign-owned hotel chains. The degree of leakage varies among countries. There have been various estimates of tourism leakage, most of them done during the 1990s. The World Bank has a general estimate of 55 per cent of tourism income leaving countries in the South. Other studies have estimates ranging from 75 per cent in the case of Caribbean countries to 70 per cent in Thailand, 60 per cent in the case of Fiji and 40 per cent in the case of India.\(^9\)

The critical point in what can be termed a tourism expenditure diamond (see Diagram 2) is that of leakage of income. The main contributors to leakage are imports and the value added accruing to service providers such as airlines and tour operators based in the North.\(^10\) Efforts to increase retained earnings from tourism would therefore have to focus on these areas. It is in the area of supplier industries and particularly food and beverage industries that countries have been

---

\(^9\) Tourism and People [www.peopleandplanet.net](http://www.peopleandplanet.net); UNEP [www.unep.org](http://www.unep.org)

\(^10\) The World Wildlife Fund (WWF) estimated that about two thirds of tourism income in the Mediterranean region accrued to less than 10 tour operators in Northern Europe, Tourism and People [www.peopleandplanet.net](http://www.peopleandplanet.net)
trying to reduce leakage of earnings through imports. Such leakage is estimated (by the United Nations Conference on Trade & Development (UNCTAD))\textsuperscript{11} at between 40 and 50 per cent of the gross earnings from tourism by small countries.

Most tourism leakage is attributed to large international hotel chains mainly on account of the need to maintain the same standard throughout the chain. A comparison of all-inclusive tourist accommodation and other types of accommodation in Jamaica indicated that the former imported more and employed fewer workers than the latter for every dollar generated.\textsuperscript{12} One of the reasons given for the significant level of imports by hotels is the inability of small countries to provide adequate supplies of products and/or to meet the quality standards of hotels. However, there are a number of other factors influencing the supply of agricultural products to the tourism industry such as the type and ownership of tourism accommodation, small scale of agriculture production, underdeveloped production and marketing infrastructure and processing technology.

Foreign owned all-inclusive accommodations and large-scale resorts tend to import most of their supplies including food and beverage. This has been partly due to the focus of their chefs on international cuisine and the reluctance of their purchase managers to deal directly with local farmers. Preference has been to secure supplies through agents or middlemen who more often than not would source supplies through imports. The high price of local produce, due in part to small scale of production, inconsistency of supply and poor quality of products were also deterrents to reliance on local supplies.

Large hotel chains and all-inclusive resorts are features of the highly tourism dependent countries that offer sea and beach tourism, such as Antigua and Barbuda, the Bahamas, Jamaica and Saint Lucia. Ownership of most of such properties is foreign. This means that there is little that can be done about leakage due to repatriation of investment income. The same may apply to payments that accrue to foreign based tour operators.

\textbf{B. Agriculture supplies to tourism}

To address the supply leakage of tourism income, some all-inclusive hotels and large resorts have been increasing their intake of local agricultural products. A programme to link tourism to agriculture was initiated in 1990 in Nevis by the Nevis Department of Agriculture in collaboration with the Four Seasons Resort, a five-star hotel whereby farmers would supply local produce to the hotel. The Nevis Growers Association (NGA) was formed with 12 farmers in order to facilitate business relations with the hotel. Six crops were selected based on farmers’ capability to produce such crops: cucumber, tomato, lettuce, sweet pepper, watermelon and cantaloupe. Planting schedules and target quantities were developed based on information from the hotel on its crop requirements. The NGA reviewed monthly the cropping schedule and production targets.

The Department of Agriculture set up a Marketing Division to coordinate the marketing of the output from the NGA. The Marketing Division acted as the middleman between the hotel and the NGA. It collected the produce, washed, graded, labelled and provided storage (in its chill

\textsuperscript{11} Quoted in “Economic Impacts of Tourism” (www.unepie.org)

\textsuperscript{12} www.oas.org
room) and delivered to the hotel. An administrative fee of 5 per cent of payments received for farmers’ produce is retained by the Marketing Division. A similar arrangement was made with livestock producers to supply products to the hotel. Crop sales to the Four Seasons Hotel grew significantly especially within the first four years of the project. Sales have remained stable at about their 1994 level since 2003. On the other hand, sales of meat products to the hotel have declined during the 1990s.

One of the advantages of the programme is the incentive it provided for cooperation among farmers and among livestock producers. Although it provided a single market for producers’ output the market was not guaranteed by contractual arrangements. The hotel has therefore purchased produce from other local sources leading to reduced sales and spoilage of produce in storage at the Marketing Division.

Two locally owned all-inclusive hotel chains with home base in Jamaica have also developed linkages with agricultural producers in the Caribbean. The Sandals Group of hotels started their farmer’s programme in Jamaica in 1996. Sandals works directly with farmers through a farmer extension officer that they fund to improve the production of the farmers. Management teams from the hotels hold workshops for the farmers in relation to quality of produce and marketing procedures. In turn, farmers visit the hotels to understand the specific requirements for their products.

The project started with 10 farmers supplying two hotels but graduated to 80 farmers in 2004. Agricultural support is provided by the Rural Agricultural Development Agency (RADA) in terms of matching supply with demand. Sandals has replicated the programme in Saint Lucia where the average size of farmers’ holding is less than two hectares. Sandals Saint Lucia is a large tourist accommodation with 780 rooms. Its purchasing manager is critical in terms of the hotel’s purchasing arrangements with the farming community. What Sandals does not source from the local farmers it sources from importers. The advantage of the Sandals programme is the security it has afforded farmers who produce good quality products at competitive prices.

The other all-inclusive hotel chain that has been promoting linkage between agriculture and tourism is the Super Clubs resort chain based in Jamaica. The hotel promotes the ‘Eat Jamaican’ campaign, which was launched in 2003 by various Jamaican associations and businesses including the Jamaica Agricultural Society (JAS). In February 2004 the Super Clubs hotel signed a Memorandum of Understanding with the JAS under which the JAS would supply the hotel with at least JS50 million (less than US$1 million) worth of agricultural produce during the first year of trading of its Central Marketing Company (CMC) which was established in May. The CMC has established links with other major hotel chains. The JAS is a farmers’ organization and is therefore well suited to assist farmers in improving the quality of produce. Super Clubs hotel, on the other hand, would work with the JAS to develop technical assistance programmes for the farmers. The main challenge for the farmers is to maintain a supply of high quality produce.

Another area of enclave tourism is the cruise ship which operates in like manner to a land-based all-inclusive accommodation. Passengers spend most of their time and money on the ship which provides food and beverage as well as entertainment. Time spent at ports of call is
also limited and carefully managed so that host countries do not derive significant benefits from cruise tourism. However, countries in the Caribbean have been trying to maximise the returns from cruise tourism by, among other things, organizing speciality tours. For example, Dominica has tours for cruise passengers to organic farms. Operators can make as much as US$2750 per day from tours that cost about US$55 per person. More recently, countries have been trying to break into the cruise market for food products. Barbadian businesses are hoping to capture that market for their fish burgers and fish cake batter as well as for tropical condiments.\textsuperscript{13}

C. Food tourism

Food tours and food festivals are other, and in some cases alternative, means of promoting linkages between agriculture and tourism. Within the last few years culinary tours and food festivals have become important selling points for tourists who have grown more sophisticated and demand authentic food experiences. Chicago was one of the first cities to market food events since the late 1990s. In the Caribbean food festivals are now common events. Some of these are organized by some of the large resorts. In Jamaica, for example, one of the Super Clubs all-inclusive resorts started a food festival in 2002, which over a weekend highlights a number of activities such as cooking demonstrations by guest chefs, a Friday night fish fry and a Saturday marketplace showcasing the work of local artisans. Another hotel, the Renaissance Jamaica Grande, celebrates the Jamaica Spice Food Festival in September with traditional spicy foods and cooking demonstrations and workshops.

Whereas the food festivals held at hotel resorts are intended to attract tourists, the food festivals in specific towns and parishes cater to the local population primarily and tourists secondarily. Examples are Jamaica’s Yam Festival (Trelawny), Curry Festival (Westmoreland) and Barbados’ Oistins Fish Festival and Fish Fry (Oistins). Although the name of the festival, for example yam or fish, is the food being celebrated, other local food items are usually available such as “jerk”\textsuperscript{14} in the case of Jamaica and “sweet potato” in the case of Barbados.

Food tourism has the potential to strengthen and expand the linkage between tourism and agriculture in Caribbean countries. The question that needs to be asked, though, is how the benefits from increased tourist expenditure would be distributed among the various stakeholders especially farmers and small scale food processors. There is no study of the impact of tourist expenditure on local producers of farm and other food products. There is only anecdotal evidence of the linkage between tourism and the food and agriculture sectors. The absence of data on purchases has constrained empirical studies to assess the extent of the linkage. However, this shortcoming is to be addressed by a research project launched by the Caribbean Hotel Association to determine the expenditure on local goods and services by the tourism sector in the Caribbean.\textsuperscript{15}.

\textsuperscript{13} Samples of products were distributed at the 2006 Sea Trade convention and trade show held in Miami – \textit{Nation News} Barbados, 20 March 2006
\textsuperscript{14} This refers to meat, usually chicken or pork flavoured with special Jamaican seasonings and cooked on open fire.
\textsuperscript{15} This was reported in the \textit{Barbados Advocate} on 22 February 2006 <www.barbadosadvocate.com>
D. The tourism linkage conundrum

In the meantime, questions can be asked such as whether meaningful intersectoral linkages can be increased for all types of tourism, namely high-income tourism, mass tourism, ecotourism, cultural- and community-based tourism. High income tourism and mass tourism are the types of tourism that may generate the lowest levels of linkages and hence benefits to the local economy. High income tourism operated by large resorts and other five star hotels and villas, which provide high quality and hence highly priced goods, does not facilitate increased linkages with local supplier industries on account of the difficulty the industries have in meeting the supply requirements of the operators. In the case of mass tourism, the difficulty in increasing linkage lies in the requirement for bulk supplies of low priced goods, which are more conveniently sourced through imports.

Ecotourism and cultural and community tourism are types of tourism that have the greatest potential for reducing tourism leakage and enhancing intersectoral linkages. Equally important is the potential for poverty reduction and empowerment of small scale producers and communities as a whole. Caribbean countries have been increasing focus on these types of tourism in order to diversify their tourism product offering as well as to promote increased linkage between tourism and other sectors of their economies. Belize, Dominica, Guyana and Trinidad and Tobago are the countries that do not have a comparative advantage in sea and beach tourism and hence focus instead on ecotourism and cultural and heritage tourism. Nevertheless, the sea and beach destinations such as Antigua and Barbuda, Barbados, Jamaica, Saint Lucia and St. Kitts and Nevis have also been promoting the other types of tourism.

There are no data on the returns on this type of tourism vis-à-vis the traditional types such as sea and beach tourism. Although ecotourism and cultural tourism have lower levels of leakage compared with the traditional forms of tourism, they are considered to be low-income tourism, that is, tourism earning less than the traditional forms. On the other hand, the higher level of leakage attributed to high income tourism and mass tourism is offset by increased tourism earnings. It is instructive to note that the countries with high earnings per tourist ($1000 and higher) are those with high income tourism and sea and beach tourism. The countries that are not endowed with the natural resources to exploit sea and beach tourism, in particular Belize, Dominica, Guyana and Trinidad and Tobago, have been exploiting ecotourism and cultural tourism based on their specific endowments. These countries have lower earnings per tourist than the countries with sea and beach tourism (Table 6).

Growth in earnings per tourist would seem to bear little relation to the growth in the number of tourists. With the exception of Barbados and Jamaica, growth in earnings per tourist has not been dependent on the growth in tourist arrivals. In the Bahamas, for example, tourist arrivals declined by 3 per cent whereas earnings per tourist increased by 36 per cent between 1990 and 2003. In Belize, earnings per tourist grew by 216 per cent whereas tourist arrivals increased by only 12 per cent between 1990 and 2003. Further study is needed to explain the significantly divergent trends observed in some countries, such as Guyana and Saint Lucia, between growth in tourist arrivals and growth in earnings per tourist.

---

16 Leakage effects of different forms of tourism are discussed in David Diaz Benavides, “The Viability and Sustainability of International Tourism in Developing Countries” at the Symposium on Tourism Services, WTO, Geneva 2001.
Table 6
Growth in Tourist Arrivals and Earnings per Tourist, 1990-2003

<table>
<thead>
<tr>
<th></th>
<th>International Tourist Arrivals (000)</th>
<th>Earnings per Tourist (US$)</th>
<th>Growth in Tourist Arrivals (%)</th>
<th>Growth in Earnings per Tourist (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>31</td>
<td>47</td>
<td>1129</td>
<td>1276</td>
</tr>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>206</td>
<td>224</td>
<td>1446</td>
<td>1339</td>
</tr>
<tr>
<td>Bahamas</td>
<td>1562</td>
<td>1510</td>
<td>853</td>
<td>1163</td>
</tr>
<tr>
<td>Barbados</td>
<td>432</td>
<td>531</td>
<td>1143</td>
<td>1427</td>
</tr>
<tr>
<td>Belize</td>
<td>197</td>
<td>221</td>
<td>223</td>
<td>706</td>
</tr>
<tr>
<td>Cuba</td>
<td>327</td>
<td>1847</td>
<td>743</td>
<td>999</td>
</tr>
<tr>
<td>Dominica</td>
<td>45</td>
<td>73</td>
<td>555</td>
<td>712</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>1305</td>
<td>3282</td>
<td>689</td>
<td>947</td>
</tr>
<tr>
<td>Grenada</td>
<td>76</td>
<td>142</td>
<td>500</td>
<td>732</td>
</tr>
<tr>
<td>Guyana</td>
<td>64</td>
<td>101</td>
<td>422</td>
<td>386</td>
</tr>
<tr>
<td>Jamaica</td>
<td>989</td>
<td>1350</td>
<td>748</td>
<td>1003</td>
</tr>
<tr>
<td>Mexico</td>
<td>17172</td>
<td>18665</td>
<td>322</td>
<td>501</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>2560</td>
<td>3238</td>
<td>533</td>
<td>826</td>
</tr>
<tr>
<td>St. Kitts &amp; Nevis</td>
<td>73</td>
<td>91</td>
<td>794</td>
<td>824</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>141</td>
<td>277</td>
<td>1092</td>
<td>1018</td>
</tr>
<tr>
<td>St. Vincent &amp; Grenadines</td>
<td>54</td>
<td>79</td>
<td>1037</td>
<td>1152</td>
</tr>
<tr>
<td>Suriname</td>
<td>46</td>
<td>na</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>195</td>
<td>409</td>
<td>487</td>
<td>608</td>
</tr>
</tbody>
</table>

Source: Based on data from World Tourism Organisation

From the above discussion, it can be argued that the development of the tourism sector to maximise income as well as to contribute toward poverty reduction is more dependent on the type and quality of the tourism product than on the sheer increase in tourist arrivals. This means that countries will have to decide what level of tourism leakage they are willing to tolerate in order to derive the maximum value added or income and at the same time increase the multiplier effects of increased linkage. Such decision could be informed by the fact that the economic, social and environmental sustainability of tourism economic activities in Caribbean countries, and developing countries as a whole will depend on the linkages that the tourism sector can successfully forge with other sectors of the economy. Since a major focus of this study is the linkage between tourism and agriculture, this is the linkage that will be considered. Nevertheless, it is important to note the importance of other linkages such as with manufacturing, transport, business services, security services and government services.

E. Spreading the benefits of tourism

Caribbean countries began to shift emphasis from sun, sea and beach tourism in order to differentiate their product and encourage growth and development of their tourism sectors. Ecotourism and cultural tourism are the types of tourism that have been pursued. These were also
the choices of countries, such as Belize, Dominica, Guyana and Suriname, that lacked some of the resources to exploit the sea and beach tourism. They facilitate a more sustainable tourism as well as greater access to tourism income for the local population.

Most countries can offer an ecotourism product as activities are associated with nature and the environment and include hiking, camping, rafting, bird watching and exploring walks through areas such as rainforests and caves. Countries such as Barbados, Belize, Dominica and Guyana have exploited their ecotourism resources more than others. A good example is the Shanklands Rainforest Resort in the Essequibo region of Guyana. The resort is located 96.5 kilometres from the capital Georgetown and is on 60 hectares of land most of which is pristine rainforest. The resort caters to international, regional and domestic visitors with, among other things, organized tours and summer camps.

Cultural tourism is the type of tourism based on historical, educational and artistic attractions. This type of tourism has become popular in Caribbean countries. It includes sightseeing and heritage tours, food festivals, carnivals and music festivals. Music festivals have become significant drawing cards for destinations, in particular the Barbados Jazz Festival, the Saint Lucia Jazz Festival and the Tobago Jazz Festival. However, it is at the community level that tourism can impact the livelihoods of the local population.

Community tourism incorporates eco as well as cultural tourism and facilitates a better distribution of the economic returns from tourism. The 3 Rivers Eco Lodge Hotel in Dominica promotes community-based tourism. The activities offered include a visit to an organic farm to discover herbal medicines, sharing experiences with children in the village primary school, participating in the picking and processing of coffee and cocoa, harvesting coconuts and learning to make crafts with them. The cost of the whole package excluding accommodation is about US$700. Alternatively, one can choose individual activities such as a half day on a root vegetable farm learning traditional farming methods and sampling a national dish – Callaloo Soup – at a cost of US$30.17

The key thing to note in this community-based tourism is the linkage with agriculture through participation in farm activities. It can therefore be referred to as agricultural tourism or agri-tourism or agro-tourism. It differs from the traditional mode of supplying agricultural products to the tourism sector. It is about bringing the tourist to the agriculture sector to experience farm life and participate in activities on the farm. In essence, it is about transforming the farmer into a tourism operator. Whereas this type of linkage does provide some benefit to the national economy and to specific segments within it, it may not contribute to any significant reduction in the high leakage due to imports. This is partly because agro-tourism activities are still in an embryonic stage. However, it could increase the demand for local products and hence stimulate agriculture production and development of the agriculture sector.

Bringing tourism to towns and villages can have the positive effect of enhancing the development of the tourism industry as well as community and rural life. One of the best examples is the Oistins Fish Festival held every year at Easter in the seaside fishing town of Oistins in Barbados. Activities include food (fish, of course), music, fashion shows and fish fry,

---

17 Community tourism package holiday at www.3riversdominica.com
fishboning and fish skinning competitions. This festival attracts locals and tourists alike. There is also a Fish Fry on every Friday and Saturday night that is the second highest rated attraction in Barbados after Harrisons Cave. This activity sustains the fisher folk in Oistins.

V. Development of tourism and agriculture

A. Development and competitiveness

This section is concerned with whether, and to what extent, tourism can enhance the competitiveness of agriculture and vice versa and how increased linkage between agriculture and tourism can help to sustain the livelihoods of the poor. The first thing to note is the relatively well developed nature of the tourism in most Caribbean countries. The countries are endowed with natural tourism resources such as sea, beach, sun all year round, rainforests, mountains and waterfalls. Most countries have good basic infrastructure such as roads, electricity, telecommunications and water and sanitation especially in the cities and tourist areas. However, skilled human resources are scarce in most countries and relatively unskilled workers are difficult to obtain in some high wage tourism dependent countries.

Countries compete less on price and more on the basis of their natural endowments including location and on their product offering. In terms of the various elements of competitiveness, countries are less competitive on the basis of specialised factors such as skills required to drive innovation. Caribbean countries have relatively low levels of high and medium skilled workers (Figures 10, 11 and 12). The productivity of workers in the tourism industry varies among countries. The highest levels of labour productivity are found in the Bahamas, Antigua and Barbuda, Barbados, St. Kitts and Nevis and Trinidad and Tobago. However, whereas productivity increased in Antigua and Barbuda, St. Kitts and Nevis and Trinidad and Tobago over the period 1999-2003 it declined in Barbados and remain more or less constant in the Bahamas (Figures 13 and 14).

Clusters have been advocated as a mechanism for the development of competitiveness of tourism. This is because clusters are seen as a means of developing the industry’s value chain to reduce tourism leakage and thus strengthen the industry’s position in the destination. They are defined as “geographic concentrations of interconnected companies in a particular field, linked by commonalities and complementarities”. When applied to the tourism industry the cluster would refer to enterprises such as hotels, shopping outlets, travel agencies, tour operators, taxi operators, car rental agencies, other businesses such as agricultural suppliers and public institutions such as tourism agencies. The defining feature of the cluster is the interdependence or strong linkage between the various entities in the cluster. It is important to note that the cluster is not synonymous with the filiere or chain. The latter refers to the direct service providers, namely the hotel, tour operator, travel agency, carriers such as airlines and other service providers.

---

18 Festival Success, Nation News Barbados 18 April 2006
Fig. 10 Skill Level of Employed Labour Force St. Lucia

Source: Based on National Data

Fig. 11 Skill Level of Employed Labour Force Trinidad & Tobago

Source: Based on National Data
Fig. 12 Skill Level of Employed Labour Force Jamaica

Source: Based on National Data
Fig. 13 Tourism Labour Productivity in the OECS

Source: Based on National Data

Fig. 14 Tourism Labour Productivity in Selected Caribbean Countries

Source: Based on National Data
A cluster-based strategy could strengthen the tourism value chain if the chain is conceived in terms of a broad tourism *filiere* that includes agriculture suppliers, artisans and providers of cultural services such as musicians and artists. Since this study is concerned mainly with the linkage between tourism and agriculture, its interest is in whether and how that linkage could be strengthened. At present the relationship between the tourism and agriculture sectors is rather tenuous. To deepen the relationship would require, among other things, development of subsistence agriculture and a shift from the almost exclusive focus on export-oriented agriculture towards commercial agriculture geared toward satisfying a variety of needs including those of the domestic and tourism sectors.

The problems with agriculture supplier industries have been articulated at various agriculture forums in the Caribbean. They include inconsistent and inadequate supplies of output and poor quality, insecurity of tenure of farm holding, lack of irrigation and poor infrastructural development, among other things. Although tourism entities, namely hotels such as Sandals, have been working at improving the linkage between farmers and hotels, that linkage can only be developed and sustained with significant input from public sector entities charged with the responsibility for agricultural development. As was observed earlier, the Ministry of Agriculture in St. Kitts and Nevis and the Rural Agricultural Development Agency in Jamaica have been playing significant roles in the development of the linkage between hotels and farmers.

Linkage between tourism and agriculture is not going to increase the competitiveness of tourism unless it significantly reduces the food costs, including imports of the tourism sector. It is claimed that the linkage between Sandals Saint Lucia and farmers, in particular fruit and vegetable farmers, facilitated a reduction in the import bill of the former by over 30 per cent. However, it is not clear what the import bill refers to. If agriculture is to benefit from high income tourism in the subregion it would have to produce high quality inputs that meet strict standards in order to be preferred by suppliers to that tourism segment. Those inputs would have to be more than just fresh fruits and vegetables and would have to include processed foods such as concentrates and cut fruits and vegetables. The agriculture sector would have to be restructured to meet such demand.

The flip side of the question, which is how tourism can enhance the competitiveness and development of the agriculture sector, can be answered by pointing to the need for a broad focus on the rural economy rather than a narrow focus on the agriculture sector. In this way, one can consider the role of rural tourism in improving the livelihoods of not only farmers and other agricultural workers but of communities as a whole. The focus on community tourism could address the key issues of poverty and crime in Caribbean societies.

One way of fostering the development of agriculture and rural areas is to make the latter into popular tourist destinations. This would also help in spreading the benefits of tourism at the grassroots level. The destination could be the community or town organized around specific events such as the Oistins Fish Fry in Barbados, the St. Catherine Nature Resort in Jamaica or the Morne Trois Pitons Nature Park in Dominica. The intermediary between the tourist and the destination is important as foreign tour operators and travel agents would contribute toward

---

tourism leakage whereas a well developed internet portal would increase the benefits to the destination. Local tour guides and other service providers would also benefit from community events.

**B. Clustering as a development tool**

A cluster within the competitiveness framework refers to a group of sector specific entities engaged in similar or related activities. Clusters can exist within specific geographic areas or within thematic areas such as ecotourism or cultural and community tourism. What determines the success of the cluster is its contribution to the competitiveness of the area through the strength of the linkages between the entities within the cluster. The success of the cluster is also dependent on critical mass which would limit it to a broad tourism cluster rather that several thematic clusters within relatively small Caribbean economies. Ecotourism, cultural and community tourism can each be developed using a tourism cluster strategy as illustrated in Diagram 3.

**Diagram 3**

Tourism Cluster

Each of the components of the cluster is important to its effectiveness. However, the tourism product is central to the cluster. The offering or attraction could be a music festival, an agricultural festival or a sporting event. The human resource factor is critical to upgrading the tourism product, which makes training facilities an important part of the cluster. On the other hand, the infrastructure and social development components are important for providing the
cultural environment unique to a specific community but with amenities that are necessary for attracting visitors.

A cluster-based strategy is useful in guiding the development of competitiveness of the tourism product by identifying weaknesses in the links among the various components of the cluster. Focus can then be placed on the specific component and the requirements for strengthening its position within the cluster. Although the tourist factor is external to the cluster, it can play a significant role in the development of the tourism product, in particular ecotourism and cultural and community tourism. This is especially the case in relation to domestic tourists and tourists from within the Caribbean subregion.

The Caribbean is the second largest tourist market (28 per cent) for Caribbean countries after the United States (38 per cent). More and more people from the subregion are holidaying in the Caribbean and seeking tourist experiences in the various countries. Many of these domestic and regional tourists are opting to take advantage of specific events such as music festivals (Jazz in Barbados, Saint Lucia and Tobago) and carnivals (Trinidad) in specific destinations. These travellers would be more willing than foreign tourists to tolerate less than perfect amenities in tourism destinations. They therefore constitute an important market for testing new tourism products and developing a more internationally competitive tourism sector.

Promoting the development of each of the sectors, tourism and agriculture would enhance their competitiveness. But exclusive focus on the ability of each sector to be internationally competitive may not necessarily ensure its development if development is conceived in terms of improving the living standards of the local population especially the poorer segments. However, improving competitiveness through the use of the cluster-based strategy would mean enhancing the development of the specific components of the cluster, which in turn would improve the conditions of the human resources in each component.

IV Conclusion

This study has been concerned with the emphasis placed by Caribbean countries on the development of tourism as against and even at the expense of the development of agriculture. The importance of agriculture is not only because of its historic role in Caribbean economies, but also because of the need to ensure a level of food security and sustainability of environmental resources. If promoting the development of agriculture would enhance the development of tourism as well, then public policy in tourism-dependent Caribbean countries may be stimulated to actively pursue the development of the agriculture sector.

The preoccupation with achieving competitiveness of tourism destinations should be tempered by the need to develop a sustainable tourism that would facilitate the development of communities and rural areas and thus contribute toward the reduction of poverty and crime. Instead of playing the tourism numbers game (highlighting numbers of tourist arrivals) countries should move away from the “Fordist” type of mass tourism to a “customized” (quality) tourism based on high income tourists in order to maximise earnings and an “attraction” based rural and community-based tourism to facilitate environmental sustainability and improve the living standards of communities.
High income tourism facilitates leakage of tourism earnings. Countries therefore need to determine the level of leakage permissible and balance that with the promotion of ecotourism and cultural tourism, which facilitate the reduction of leakage. Diversification of the tourism product to include these other types of tourism has already been taking place in most Caribbean destinations. However, with few exceptions, the new product offerings do not significantly involve the participation of local communities, which are stakeholders in sustainable development.

Agro-tourism is a product offering that could help to preserve agricultural land as well as spread the benefits of tourism to the rural areas. It presupposes a certain level of development of the agriculture sector and farming areas in particular. Countries such as the United States that have embraced this type of tourism already have reasonably well-developed agriculture sectors and farm areas. In the Caribbean these areas have to be developed. A cluster-based strategy within a competitiveness framework would facilitate identification of the areas within the tourism cluster that need to be developed or strengthened such as infrastructure, supplier industries, human resources and social and cultural capital.

The two important issues for Caribbean tourism are competitiveness and sustainable development. Competitiveness of Caribbean tourism is limited not only by internal constraints such as those discussed in this study but also by external constraints such as the anti-competitive behaviour of the few dominant operators such as tour operators and travel agents based in developed countries. The control of these operators over tourist packages and distribution networks facilitate the leakage of tourism earnings of Caribbean destinations. Greater use of internet portals and the development of a Caribbean distribution system would minimise those effects. The implications of the General Agreement on Trade in Services (GATS) are also important for the sustainable development of Caribbean tourism. Examination of this aspect was outside the scope of the present study.

The area of cruise tourism was not a focus of this study. It would seem that Caribbean countries place too much emphasis on increasing cruise tourism, which incur costs in terms of port infrastructure and security but provides minimal returns in terms of both taxes and direct tourism earnings. However, improving attractions for cruise visitors could benefit local providers of goods and services. Despite some of the disadvantages, cruise tourism could be seen as providing a positive demonstration effect on potential tourist visits to Caribbean destinations.

Finally, it could be argued that tourism *per se* will not enhance the development of the agriculture sector in Caribbean countries. However, a developed agriculture sector can enhance the development of (rural) tourism and hence facilitate its own sustainability, in terms of preservation of agriculture land, among other things. It is less likely that a developed tourism would enhance the development of agriculture in any substantial way. The development of each sector – tourism and agriculture – requires support systems such as research, information and incentives. An in-depth study of tourism and its linkages is required to inform strategies and policy actions to facilitate both competitiveness and development.

---

21 There is a recent study on this aspect. See ECLAC, *Issues and Challenges in Caribbean Cruise Ship Tourism*, 21 December 2005
Selected references

Benevides, David Diaz (2001), “The Viability and Sustainability of International Tourism in Developing Countries”, Symposium on Tourism Services, World Trade Organisation, Geneva

Boix, Rafael and Capone, Francesco (2004), “Sources of Competitiveness in Tourist Local Systems”, Department d’Economia Aplicada, Universitat Autònoma de Barcelona


ECLAC (2005), Issues and Challenges in Caribbean Cruise Ship Tourism, LC/CAR/L.75


Nordin, Sara (2003), Tourism Clustering and Innovation – Paths to Economic Growth and Development, European Tourism Research Institute

Regional Technology Strategies, Inc. (2003), Clusters of Creativity: Innovation and Growth in Montana. A Report to the Montana Governor’s Office of Economic Opportunity on The Experience Enterprise and Tourism Cluster, Carrboro, North Carolina

Schaerer, Jorge y Dirven, Martine (2001), El turismo rural en Chile: Experiencias de agroturismo en las Regiones del Maule, La Araucanía y Los Lagos. Red de Desarrollo agropecuario, Unidad de Desarrollo Agrícola, División de Desarrollo Productivo y Empresarial, ECLAC, Santiago de Chile

