



Center for Responsible Travel

Transforming the Way the World Travels

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Fact Sheet #3: Linking Sustainable Tourism to Local Industries: Focus on Agriculture

What's the Situation?

Tourism in the Caribbean has historically been heavily dependent on imports. In 1979, Grenada's Prime Minister Maurice Bishop told an international tourism conference in St. George's that a "New Tourism" was necessary – one that built linkages to other businesses in the national economy. Bishop estimated that Grenada was only keeping about 20% of the tourism dollars and that by linking to local industries, more tourism spending would stay in island.¹

Linkages to agriculture, as well as fishing, handicrafts, and other sectors, strengthens the local economy; in addition, *less imports = less international transport = less carbon emissions*. For instance, the "carbon cost" of importing tomatoes from Houston, United States, to Kingston, Jamaica, is 2 times greater than for locally produced tomatoes, according to a Soil & More International study.²

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However, climate change is threatening and disrupting local agriculture in various ways, including:

- **Increasingly heavy precipitation:** Already there is 4% more water vapor in the air than there was 30 years ago. With each additional 1 degree Celsius of temperature rise, the air holds ~7% more water vapor.⁴ This means increases in heavy precipitation and flooding, as well as shorter rainy seasons, all of which disrupts agricultural production.
- **Drought:** As the atmosphere's capacity to hold water increases, evaporation also increases, and this leads to more droughts. When it does rain, the parched ground is unable to soak up the water it needs. The entire water cycle has become more intense. Scientists project "severe and widespread droughts" over the next 90 years as the atmosphere warms.⁵
- **Storms:** Warmer ocean water also fuels more intense storms. Hurricane Ivan (2004) gained energy, moving through waters greater than 28 degree Celsius. Ivan destroyed 70% of Grenada's nutmeg trees, reducing production to just one-tenth the quality of previous years.⁶ Nutmeg is a main agricultural export, and tourism has long marketed Grenada as "the Isle of Spice".
- **Salt-water infiltration:** Rising sea levels are also pushing salt into the water table, forcing farmers to make significant investments in pumps and irrigation systems and face the possibility of having to finance costly desalination systems.

Negative Tourism Impacts

Hotels, spas, and golf courses typically require large quantities of fresh water, and this competes with agricultural needs. Tourists may also demand packaged tours – all-inclusive resorts and large cruise ships – which are often sold as bargain vacations based on the comforts of home and rely heavily on imports. This type of low value tourism is typical in much of the Caribbean. Stay-over tourists are more likely to

seek out local foods and handicrafts, carrying the tourist dollar further through Grenada. While Grenada is fortunate to have many small, family owned hotels which tend to put more into the local economy, in recent years cruise tourism arrivals have grown, and this brings far fewer residual benefits.

Tourism Solutions

Fortunately, the growing consumer interest in high-value, authentic travel helps to foster local linkages.⁷ These tourists want local cuisine, local handicrafts, and pristine natural attractions. A desire for sustainable options also encourages local farmers, fishermen, and artisans to source products in an earth-friendly way. In Grenada, there are several examples of high-value linkages to local industry and sustainable production:

- **Pure Grenada & Geotourism:** The new marketing identity for Grenada was launched in 2014 and is rooted in the geotourism concept. Geotourism is defined as tourism that sustains and enhances geographical character of place: its culture, heritage, environment, aesthetics, and well-being of residents.⁸ In Grenada, geotouristic experiences such as the chocolate and nutmeg festivals have become popular tourist attractions. Geotourists will not only support these localized experiences, but they also often are willing to contribute additional ‘time, talent, and treasure’ to help address local needs. When dealing with climate change and implementing adaptation and/or mitigation projects, tourists should be kept in mind, as they can provide financial support or volunteer. Well-organized opportunities, which might include tree planting, coral replanting, coastline repair, etc., add value to their vacations.
- **Climate Smart Agriculture:** In Mt. Moritz, the community is collaborating with People in Action and other organisations⁹ to develop a model farm that supports both climate change mitigation and adaptation through “permaculture”. Permaculture exemplifies the idea of working with the environment. The project seeks to create a model farm that engages the community as an experiential learning center demonstrating sustainable, profitable, climate smart agriculture & agro-processing practices. This intervention is crucial to the ecosystems that border farms in the area. These protected areas -- Grand Etang/Annandale Rain Forest Watershed, Moliniere-Beausejour Marine Protected Area, and Perseverance Grenada Dove Habitat¹⁰ -- all contribute to Grenada’s tourism product. Not only can this be a model for other agricultural initiatives in Grenada, it can also become an innovative, geotouristic experience if opened to visitors.
- **Maca Bana Resort:** Following Hurricane Ivan, Maca Bana purchased a 15-acre plot that previously held a nutmeg plantation. The resort has worked diligently to restore the land to a pre-hurricane state and protect it from further development. Local farmers are employed to care for nutmeg, avocado, and bamboo. An onsite organic farm provides produce for the Aquarium restaurant, and guests have the choice to select the ingredients for their meals. This is a value-added geotouristic experience.¹¹
- **Belmont Estate:** Traditionally, countries like Grenada exported their cash crops, often unprocessed, and imported processed and manufactured products. Sustainable tourism offers opportunity to link cash crops to both local processing and tourism. Belmont Estate is a premier agritourism experience in the Caribbean, employing many residents from neighbouring communities and purchasing from the farmers, thereby increasing the local value chain and benefits to Grenada. The Estate grows organic cocoa, which is then processed at the solar-powered Grenada Chocolate Company to produce organic chocolate. This is chocolate with a low carbon footprint, requiring little transport of raw material. Some of the first chocolate bar exports to Europe were actually transported by sail boat and then bicycled and featured solar refrigeration!¹²

Belmont Estate is also a member of the World Fair Trade Organisation and complies with their principles that include fair trading practices, fair prices, high labour standards, and respect for the environment. Tourists can take tours of the farm, enjoy the herb garden, learn how to harvest and treat cocoa beans, experience a farm-to-table lunch buffet with Grenadian cuisine, visit a sustainable goat dairy, and buy a range of locally produced products.¹³

- **Kittitian Hill, St. Kitts:** This resort in St. Kitts has come up with an innovative way to harmonize its recently completed Irie Fields Golf course with the natural environment. Described as “an edible golf course” its boundaries create a “blur between the course and the farm. Instead of the usual shrubs and trees, you’ll find organic crops and trees bursting with fresh fruit. Smart water management and the abundant crops also serve to reduce the course’s environmental impact while providing a challenging and memorable golf experience.”¹⁴

¹ M. Bishop, “Bishop Speech – The New Tourism,” December 1979, <http://www.thegrenadarevolutiononline.com/bishnewtourism.html>

² Soil & More International, “Carbon footprint of local produced fruits and vegetables compared to imported goods from overseas in the Caribbean and Latin America,” March 2011, <http://dapa.ciat.cgiar.org/wp-content/uploads/2011/07/Carbon-Footprint-in-the-Caribbean-and-Latin-America.pdf>

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⁴ K.E. Trenberth, “Changes in precipitation with climate change,” *Climate Research* 47 (March 31, 2011): 122-138. http://www.int-res.com/articles/cr_oa/c047p123.pdf

⁵ A. Dai, “Increasing drought under global warming in observations and models,” *Nature Climate Change* (August 5, 2012). <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1633.html>

⁶ Integrated Climate Change Adaptation Strategies (ICCAS) Project, “How to Protect Our Nutmeg from Climate Change,” 2014, <https://www.giz.de/en/downloads/giz2014-en-protect-nutmeg-from-climate-change-grenada.pdf>

⁷ Joshua O’Driscoll, “Tourism and Agriculture: Creating Linkages,” 2005, <http://www1.american.edu/ted/niagra.htm>

⁸ National Geographic Center for Sustainable Destinations, “About Geotourism,” http://travel.nationalgeographic.com/travel/sustainable/about_geotourism.html

⁹ Implementing Partners: People in Action, Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment, GIZ

¹⁰ GIZ/ICCAS, “Project Summary: Climate Smart Agriculture in Mt Moritz,” November 2014

¹¹ Maca Bana Luxury Boutique Resort, “Green Luxury,” <http://www.macabana.com/resort/green-luxury.htm>

¹² Grenada Chocolate Company, <http://www.grenadachocolate.com/>

¹³ Belmont Estate, <http://belmontestate.net/index.htm>

¹⁴ Kittitian Hills, “The Future of Golf at Irie Fields – the World’s Most Edible Golf Course,” <http://www.kittitianhill.com/experience/golf/>