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## An Assessment of Tourism Sustainability in Abaco, Bahamas

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## **An Assessment of Tourism Sustainability in Abaco, Bahamas**

### **Cover Page Footnote**

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## An Assessment of Tourism Sustainability in Abaco, Bahamas

### **1.0 Introduction**

Studies have identified that the tourism sector will increase through 2020 regarding the tourism supply and demand (Popescu, Csoz, & Ciolac, 2014). People are interested in traveling, and want to see the world around them, and will pay a price to be able to do so. “An increasing number of tourists are seeking to satisfy their hobbies and special interests, based on the nature, historical places, economic activities and professional interests” (Popescu et al., 2014, para. 1). Tourists expect excellent quality attractions, facilities, services, and prices in order to be satisfied with an excursion. This increase in tourism can be good for local people and small businesses striving to survive.

On the other hand, future global challenges of economic, political, and social changes in the world affect the tourism industry. In the long-term vision of tourism, the world is in an economic decline, with a short supply of energy, food, and other commodities, therefore making tourism more expensive (Leigh, Webster & Ivanoa, 2012). Rising costs of tourism participation will likely result in more localized tourism as the cost of living continues to rise. There will be less travel occurring for middle-class people, and the less developed countries that rely on tourism visits as part of their economy will suffer. A question for these tourism operators is: what may keep these businesses operating into the future, while maintaining positive impacts and eliminating negative ones? The tourism industry “provides services to others, as well as demonstrating consistency, excellence, and quality” (Kapiki, 2012, p.1). Local people and businesses will need to think and plan into the future to keep a successful tourism operation. Changing interests permeate tourism, and new trends will arise while others disappear, and local businesses will need to keep up with these trends and developing interests. As more globally-aware and well-informed citizens become more commonplace, the tourism industry will need to embrace sustainability.

Sustainability has become the tenet which tourism planning strives to achieve. Therefore, because of the rapid growth of the tourism industry and its many benefits, it is important to ensure sustainable growth by monitoring the environmental, social, and economic status of this growth. This is the key to sustainable tourism, planning, and management.

### **1.1 Research Problem**

Tourism in the Bahamas is a big business, and the key to the livelihoods of a vast majority of the residents. Tourism provides employment, business opportunities, a social network, and healthy economic growth. However, more recently in Abaco, Bahamas, there have been negative impacts identified due to the increased tourism, and questions raised as to the sustainability of the current tourism model. The goal of this study was to do an exploratory investigation into the perceptions

of those working in the tourism profession across each of the three spheres of sustainability (*Social, Economic, Environmental*) as mentioned in most sustainability literature (Sustainability Components, 2016). When each of the three spheres for tourism opportunities are in healthy working order, then sustainability is said to be realized. By investigating each of the three spheres across multiple tourism operations in Abaco, it was utilized as an overall measure of sustainability for a tourism location. Another intent of this study is to follow up the following year to further investigate any areas of sustainability that seem to jeopardized.

## **1.2 Tourism**

Tourism has been promoted to integrate communities and countries into the global market economy (Meyer & Meyer, 2015; Onafowora & Owoye, 2012; Popescu, Csoz, & Ciolac, 2014). Tourists are essential to many thriving and sustainable local businesses by providing support through the purchase of goods and services. Communities and countries sell elements of their culture, society, and natural environment for the enjoyment of tourists (Popescu, et al., 2014). For the Bahamians, tourism and travel to their country are important to the local businesses because of the revenue it provides, the stable employment for the local people, and the benefits it contributes to the Bahamas economically and socially. The key is to do this in a sustainable manner, where growth and development will not jeopardize the ability of future generations of hosts and visitors to meet their needs at these tourism sites.

## **1.3 Sustainability**

Sustainability is composed of three key spheres; *environmental, social, and economic*, each which need to be healthy and intact to achieve sustainability (Burghelea, Uzlău, and Ene, 2016; Carroll and Hession, 2015; “Sustainability Components”, 2016). Each sphere must not be comprised at the expense of another (Appendix A). Tourism can have many impacts to each of the three spheres, and because of such it can function to either preserve or degrade the tourism destination or experience (Carroll, Farmer, and Saa, 2016).

The *environmental* sphere involves issues around ecological integrity, environmental impacts, resource management, environmental protection, habitat restoration and preservation. Within this sphere are the often-cited environmental impacts that occur from efforts to attract tourism visitors as well as the visitor presence at these sites (Edgell, 2016)..These can include impacts such as filling in of sensitive lands to create a beach attraction, or visitors disturbing delicate coral reefs which leads to their decay.

The *social* sphere is composed of culture, communities, social advocacy, and the quality of life. Within this sphere are socio-cultural factors of tourism communities and providers. This can include the preservation of cultural morays in the face of an influx of tourists and sometimes opposing beliefs, or efforts to protect the standard of living of communities that host tourists in the midst of change (Moharramnejad, Rahnamai, and Dorbeiki, 2017).

The *economic* sphere includes fair distribution of resources, economic stimulation, cost of living, and smart growth. Within this sphere are the economic elements of tourism provision (Burgehelea, Uzlău, and Ene, 2016; Carroll and Hession, 2015). These can include issues like fair distribution of profit and benefits, and efforts to maintain affordable living conditions as tourism destinations become more attractive places to live.

“Sustainable tourism is an industry committed to making a low impact on the environment and local culture, while helping to generate future employment for local people. Sustainable tourism ensures that development is a positive experience for local people; tourism companies; and tourists themselves” (Defining Sustainable Tourism, n.d.). A key element to the success of sustainable tourism is the inclusion of all possible stakeholders in the decision-making process (Miočić, Razović, and Klarin, 2016). The goal is to minimize the negative impacts of tourism on the environment and local cultures, while gaining positive economic impacts through sales of goods and services.

#### **1.4 Bahamas Tourism**

The Bahamas is comprised of 700 islands and cays that stretch across 100,000 square miles of ocean with the closest islands just 50 miles off the east coast of Florida. These islands thrive and flourish in some of the clearest water on the planet (“About the Bahamas”, 2017). The Bahamas economy relies heavily upon tourism. To thrive economically as a country, Bahamians market their environment, clear waters, coral reefs, and pristine beaches to draw tourist to the islands. Each island has a different ambience that makes each destination unique and special.

The Abaco’s are in the Northern part of the Bahamas, some 100 miles north of the more well-known Nassau. These islands are claiming an identity as more of a nature-based tourism location, focusing not only on water but also trying to emerge into land-based tourism. The Abaco Islands are a popular destination for beautiful dive sites, underwater caves, and many marinas offering boat access to the Sea of Abaco’s shallow but navigable waters. Land attractions which can emerge as a tourism draw for the Abaco’s are the Abaco Parrots, which are found nowhere else in the world, the pristine Abaco Pine forests, and the complex system of blue holes, unique to Abaco. These constitute very diverse

land based attractions that have just begun to be explored by tourism operators, and are only in the planning stages on how better to market and provide these opportunities in a sustainable manner.

The Abaco's are at a point that several other tropical island destinations find themselves in, where the resources that attract visitors are being impacted by the very visitors that enjoy them. Key impacts seem to be around coral reef decline, haphazard construction, and litter, while key approaches to combat the environmental impacts seem to be around education and raising awareness of important issues. A general lack of awareness among some citizens can lead to significant environmental impacts. For example, some residents are unaware of the importance of the blue holes of the Bahamas and have historically used them as dumping grounds, failing to realize they are an extremely unique natural feature. These also act as a tremendous tourism attraction and were recently the focus of a National Geographic study and documentary (Blue Holes Project, n.d.). A healthy environment is important for the Abaco's, and the main goal is to take care, and be aware, of this. Key objectives include developing a sustainable use of tourism attractions of their water and land-based sites, to preserve their role as a unique destination in the Bahamas. Some citizens and organizations in Abaco realize this, and they are trying to align themselves with more nature-based tourism, to help differentiate themselves from Nassau, in attempt to achieve healthy growth and sustainability of their tourism market.

## **2.0 Statement of Purpose**

If Abaco is to emerge as a nature-based tourism destination for both land and sea attractions, and do so sustainably, then it is essential to understand the current perceptions of tourism operators with respect to the three spheres of sustainability. This study was exploratory in nature, and acted as the first year of a two-year investigation into the issues of tourism impacts and sustainability among particular businesses in Abaco, Bahamas. Therefore, the purpose of this study was to investigate tourism operators' perceptions of the *social, economic, and environmental* conditions in Abaco, Bahamas and to identify areas in need of improvement or attention.

## **2.1 Research Question**

This study was guided by one main research question: *what are the perceptions of tourism operators in Abaco as they pertain to the three spheres of sustainability? Additionally, are there any spheres where tourism operators are noticing negative impacts?*

## **2.2 Description of Research**

A set of specific survey questions were used in this study, and these resulted in a semi-structured interview format during delivery. Surveys were conducted with 10 businesses (Appendix B) across the Abacos in the Northern Bahamas (Appendix C). The sample sites were based on a pre-determined itinerary based on local knowledge of the area and tourism operations. The respondents were chosen based on convenience by who was present at the time of the survey. Questions were developed to understand the tourism business operators' perceptions of the three spheres of sustainability. The survey method was an efficient, fast, relatively inexpensive, and straightforward way to collect data in a short amount of time. The survey was administered via face-to-face oral contact, where results were recorded by the researcher with pen and paper. The results were transferred to Qualtrics, which electronically received the survey results and compiled the data.

The survey consisted of nine questions (Appendix D) in the form of multiple choice, rating scales, text response, and Likert Scale items. The survey questions included 3 questions for each of the 3 spheres of sustainability and centered around social sustainability, economic sustainability, and environmental sustainability. Results were analyzed using descriptive statistics such as mean, or percent of responses in each response category. The set of questions acted as a guide for the researcher, but many responses allowed the investigator to ask follow up questions in order to delve deeper into certain topics or phenomenon. By utilizing this technique the study employed a mixed methods approach.

The threats to the validity and reliability in this study are related to the instrument design, the voluntary nature of participation, timing, and environmental factors. To minimize the threats to the validity and the reliability of the survey, the survey was neutral, concise, and conducted face-to-face. As for timing and environmental factors, the survey was given orally to the business operators to help create an atmosphere of clear understanding, and conducted in their business environment to ensure participant comfort and convenience. No one refused to participate in the study.

## **2.2 Brief Business Participant Descriptions**

What follows below is a brief description of each business included in this study and their location. The Crazy Crab (Hope Town) is a little souvenir shop that sells distant and locally-made items that are significant to Hope Town and the Abacos. Tourists mostly use the shop to buy their souvenirs to take home with them. Hope Town Harbour Lodge (Hope Town) provides hospitality for tourist looking for “cute and cozy” places to stay when they visit Hope Town. There are many rooms as well as a bar and restaurant that overlook the Ocean. The Lodge

also has a pool for guests to use during their stay. Iggy Biggy Boutique (Marsh Harbour and Hope Town) is a boutique souvenir and clothing shop that began in Marsh Harbour and now has two locations due to recent growth. The Boutique targets the tourist coming to each island with a variety of clothing and souvenirs. Norman Albury Sail Shop (Man O War Cay) is a family-owned business that has been operating for three generations on Man-O-War Cay. The sail shop is well-known for its colorful fashionable items that are all made from a sturdy canvas fabric, traditionally used for sails. Popular items include bags and hats of varied sizes, mostly bought by tourists. Pete's Pub and Gallery (Little Harbour) is a working bronze casting shop where artisans design and create bronze sculptures. Locals and tourists gather there to witness the bronze casting, enjoy the scenic location, and enjoy food and beverage at the thatch-roofed restaurant on the sand beach. They also offer local music during some weekends, and boast a gallery where the artwork is for sale. Terrance Davis - Conch Salad (Marsh Harbour) is a conch salad stand that the owner/operator sets up close to the Marina in Marsh Harbour. Daily fishing excursions ensure fresh fish, and the conch salad is made upon request as people pass along the harbor's edge. The stand has become a well-known spot for a quick lunch stop among tourists and locals alike. Sail The Abacos Inc. (Marsh Harbour) is a chartered catamaran operated with a single owner/operator. They offer half day, full day, weekend, and weekly charters. The longer trips are often a sailing vacation for tourist who want to see the many islands that the Abacos have to offer. Treasure Cay Marina & Golf Resort (Treasure Cay) serves the tourist and locals with a well-protected marina, lodging accommodations at the resort, 18-hole golf course, several beach side or harbor side restaurants, and a very scenic beach, well known by both locals and tourists. Dive Guana (Great Guana Cay) is a local dive shop that gives tours to tourists for half or full day excursions. It is an owner/operator dive shop where they mainly serve tourists through dive excursions throughout the Sea of Abaco. Nipper's (Great Guana Cay) is a popular restaurant and bar located on the ocean side of Great Guana Cay. This bar attracts locals and tourists with concerts, large events, loud music, good food, and strong drinks. They also have a multi-tiered pool that is an attraction for all ages.

### **3.0 Results**

The survey questions are presented and grouped according to their associated sustainability sphere. The first group of questions examined the social sphere of sustainability (Questions 1-3), and focused on culture, communities, social advocacy, and the quality of life. The second group of questions examined the economic sphere of sustainability (Questions 4-6), and included fair distribution of resources, economic stimulation, cost of living, and smart growth. The last group of questions examined the environmental sphere of sustainability



(Questions 7-9), and involved ecological integrity, environmental impacts, resource management, environmental protection, and habitat restoration and preservation.

### 3.1 Social Sphere

The first question asked respondents to estimate the percentage of users that their business served, (i.e., local verse tourists). This research question acted as a starting point in the conversation to help business owners indicate who were their major users of the tourism business, and revealed if the local businesses in the Abaco’s are providing use and benefits for the local community and providing social outlets for them. Of all 10 businesses, 82% serve tourists, while only 18% serve locals (Table 1).

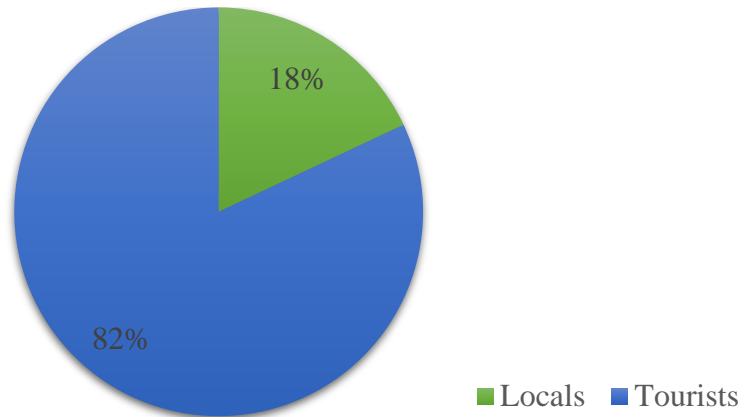


Table 1. Percentage of locals and tourists that the tourism businesses of Abaco, Bahamas served

The second question was geared toward the business owners’ perception of tourists, and often resulted in some insightful conversation. Of the businesses interviewed, Ninety percent of tourism operators reported that they “liked” tourists, while 10% were “neutral” and not one respondent indicated a “disliking” of tourists (Table 2).

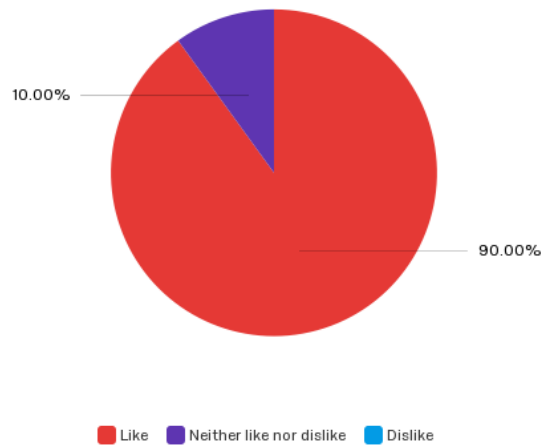


Table 2. Tourism business operators' perceptions of tourists

The third question asked respondents to determine their inclusiveness towards the community. During the survey, the administrator provided examples of inclusive business activities and this helped to broaden the discussion. All 10 businesses indicated they were inclusive to the local community by providing activities and events, or by providing goods and services to them (Table 3).

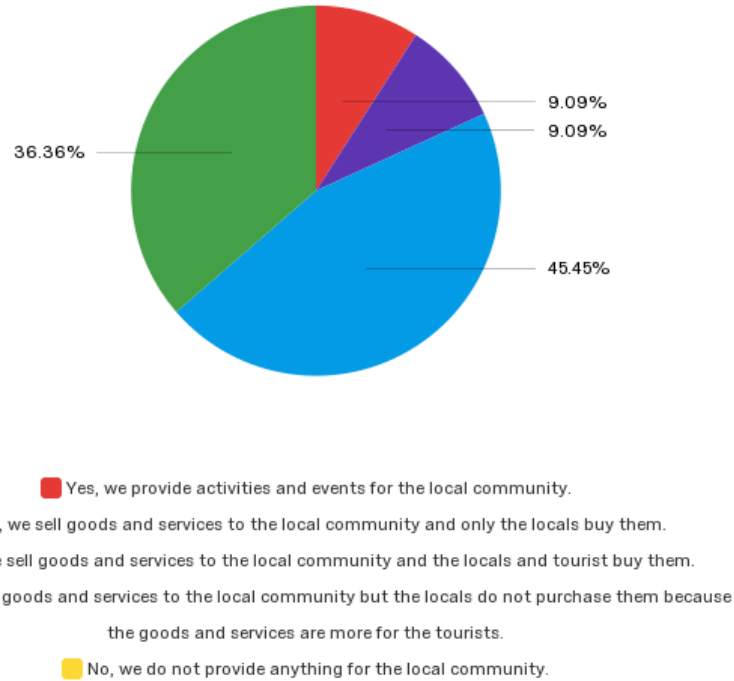


Table 3. Tourism operators' perceptions of their provision of good and services for local residents and tourists

During further discussion many respondents reported either providing discounts for residents or free events, goods, or services to help better server the local community. This also strengthened the results of the sustainability of the social sphere investigation.

### 3.2 Economic Sphere

The fourth research question asked each respondent to indicate how long their local business had been operating. These results helped to determine the economic sustainability of the local businesses. Of the 10 businesses, 10% have been in business for 4-7 years, while another 10% have been in business 8-12 years, and a vast majority (80%) have been in business for 15 or more years (Table 4).

#	Field	Choice Count
1	1-3 years	0.00% 0
2	4-7 years	10.00% 1
3	8-12 years	10.00% 1
4	13-15 years	0.00% 0
5	15+ years	80.00% 8
		10

Table 4. Length of tourism business operation in years

The fifth question asked respondents to indicate the growth, decline, or steadiness of their business. This question helped to identify any growth patterns and business stimulation activities. Eighty percent of businesses indicated they are growing, while 20% are holding steady (Table 5). Zero percent reported any decline in the business, indicating successful growth.

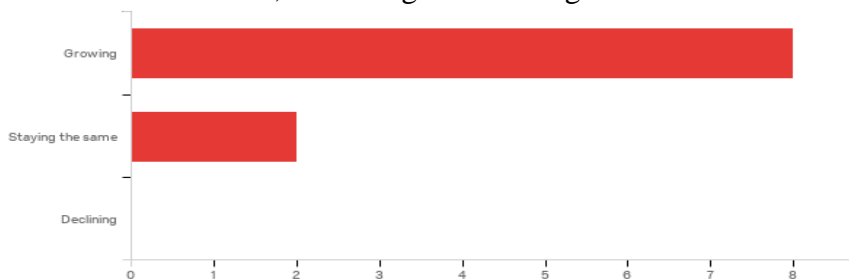


Table 5. Tourism operators' self-assessment of business status

The sixth question was aimed at understanding future business plans. This question asked if there were future plans to expand their business and target more customers. Thirty percent indicated that they are planning to expand their business, while 60% indicated they do not have future business expansion plans and are content with the current size of the business (Table 6). Ten percent of

tourism businesses are considering expansion and see future potential in it.

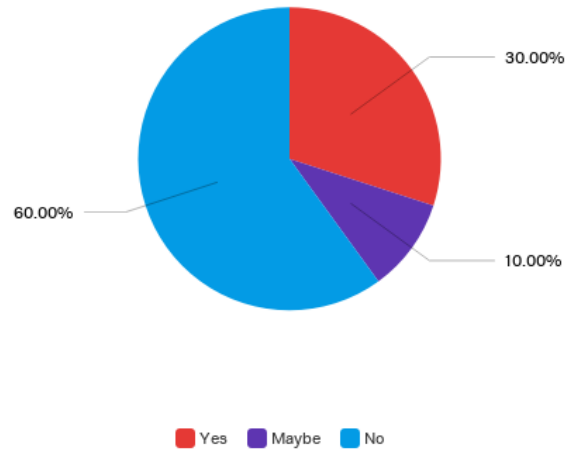


Table 6. Tourism operators indication of future business expansion plans

Follow up questions with respondents also revealed that U.S. and Canadian visitors are very important to the Bahamian tourism economy, and that positive relations with these countries are essential for economic success in the tourism industry.

### 3.3 Environmental Sphere

The first question in this group asked respondents to indicate the importance of the natural environment to the success of their business. Eighty percent reported the natural environment as either *very* or *extremely* important to the success of their business, while 20% reported the natural environment to be *slightly* or *not at all* important to their business (Table 7).

#	Field	Choice Count
1	Extremely important	70.00% 7
2	Very important	10.00% 1
3	Moderately important	0.00% 0
4	Slightly important	10.00% 1
5	Not at all important	10.00% 1
		10

Table 7. Indication of the importance of the natural environment for tourism businesses in Abaco, Bahamas

The next question asked respondents to indicate their perception of the natural environment of Abaco and if they believed it was changing. Fifty percent responded that the environment is changing, while 30% responded that they believed it was not changing, and 20% were unsure if the natural environment was changing or not (Table 8).

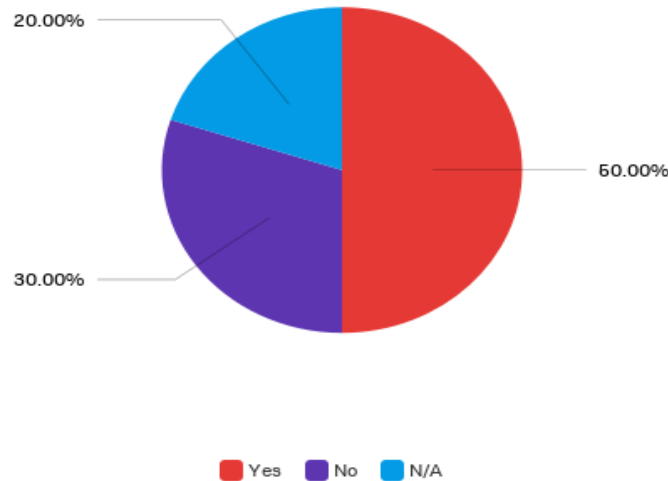


Table 8. Tourism operators' indication of whether the natural environment of Abaco is changing or not

The final question asked respondents that if they believed the natural environment was changing, to determine if the changing natural environment was indeed having a negative impact on their business. Sixty percent indicated that the changing natural environment was having a negative impact on their business, while 30% indicated the changing environment was not negatively affecting their business (Table 9). Ten percent were not able to answer this question.

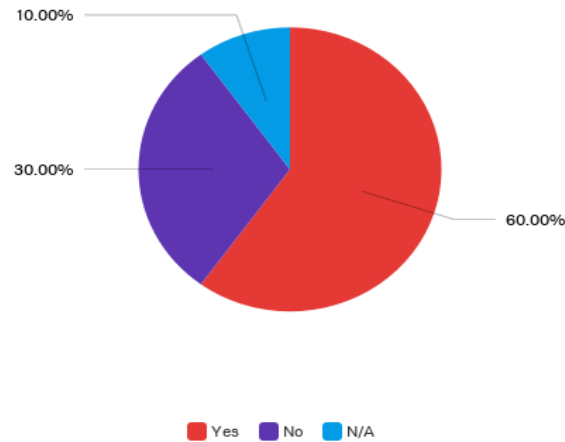


Table 9. Tourism operators' perceptions of whether the changing natural environment in Abaco is negatively impacting their business

Further discussions with respondents around the environmental sphere revealed some recent changes that had negative environmental impacts or future plans that were creating some concern about their pending environmental impacts. A large golf resort was recently developed on Guana Cay after many years of local opposition. One tour operator of a dive shop reported that he measured more than 40% of the reef near the golf course had been severely impacted by nutrient run off. Other tour operators indicated concern about a proposed marina in Little Harbour. The proposal calls for a dredged channel, 44 slips, fuel dock, and considerable changes to the shoreline of the now mostly natural cove. These are the types of the environmental impacts tourism operators are concerned about in Abaco.

#### 4.0 Conclusions and Implications

Results seem to indicate that perceptions of the *social sphere* are positive. Respondents indicated 100% of businesses are involved in community or inclusive efforts, 90% hold positive views of tourists, and 82% are serving mostly tourists, and 18% serving local residents. *Economically*, the tourism industry in Abaco seems to be sustainable with eight tourism businesses growing, two holding steady, and none in decline. In addition, businesses are mostly well-established with 80% of businesses in operation for 15 or more years, about half of them content with their size and volume of business, and a third currently expanding. *Environmentally*, however, Abaco seems to be at the forefront of some environmental crossroads. While 80% of businesses identified a healthy

natural environment as *very* or *extremely important* for their business, 60% of tourism operators also noticed environmental changes that are negatively affecting their business.

Abaco, Bahamas are in an interesting position with regards to sustainability. Socially and economically they seem to be in good standing, while environmentally there seems to be a need for more awareness and productive changes. Healthy growth and sustainability in Abaco are important because of the heavy reliance on tourism in the area, and the island nation as a Country. Tourism is what provides revenue to the businesses, stable employment for local people, and a sense of pride for the people of the Bahamas.

During discussions, one local Bahamian said an interesting comment about the tourism industry in the Bahamas. He said, “If the United States coughs, the Bahamas gets the cold”. He realized how important the United States tourism is for his country, and how inexorably connected they both are. “Each year 5-6 million tourists visit the Bahamas from the United States” (United States Department of State, 2015, para. 3), and when United States citizens reduce travel to the Bahamas for various reasons, the economy of the Bahamas suffers noticeably. Abaco tourism is tied to the U.S. market and without U.S. tourism it would be difficult for many local Bahamians to survive. The economic sphere is an important piece of the three components of sustainability, but one that is implicitly reliant on a healthy environment. It is the environmental component that is showing signs of stress, as indicated by the results of this study.

Socially, the local Bahamians like tourists because they bring business, but after many years of travel throughout the island nation I think they also genuinely like people. The Abaco islands in particular, are very socially inclusive, meaning each island and cay includes and respects the others. One unique concept that showcases the inclusiveness throughout the Abaco islands is that each island or cay has an event or attraction where they attract visitors and residents of the surrounding cays to gather socially and enjoy themselves. One island hosts a Sunday pig roast, while another has an artist gallery showing with free appetizers. These are open to all and generate a very welcoming atmosphere. These often-weekly get-togethers encourage locals to engage themselves with other locals, and visitors to mix and mingle, while witnessing the great diversity across the sea of Abaco. The social sphere of sustainability appears to be doing well in Abaco, however, once again the spheres do not operate in isolation, but rather as a comingled partnership. Sustainability experience would say that as the environmental sphere suffers, so will the others in time.

Meeting with the local Bahamians, they understood that their environment was changing, but they were less aware of how to change the current state of



environmental degradation. They were not only less educated about environmental issues, but also less motivated to take efforts to protect the environment. This is especially the case when it appears that tourists have not noticed the environmental changes and are still visiting, and business is still thriving. This study has shown that the concern of the environment is important to the local Bahamians, but in present time does not appear to be extremely important, mostly because the influx of tourism has not dwindled. However, as indicated previously, there are several tourism operators who are noticing the negative impacts of tourism, and it is only a matter of time before this deters a larger amount of visitors.

Year after year tourists visit the pristine beaches, clear waters, and warm sun for their enjoyment without noticing the impacted coral reefs, litter filled blue holes, or decline in fish species. As the environmental impacts become more widespread, visitors may choose not to return to the Bahamas. This will cause distress to the local people and the economic longevity of the Bahamas.

In an expanding global economy, where air travel is so common, tourist can easily fly to other areas of the world to enjoy pristine beaches and clear waters instead of going to the Bahamas. This makes it extremely important that the environmental sphere of sustainability in the Abaco Islands be more closely examined, and the importance be recognized. One thing that complicates this is that there are no environmental laws in the Bahamas. The Bahamian government allows unchecked construction and makes little effort to raise a sense of environmental awareness among residents or visitors.

Sustainability is extremely important for Abaco, Bahamas. When the three spheres of sustainability are not compromised at the expense of another this will allow for Abaco to survive and thrive. In Abaco today, both the economic sphere and the social sphere of sustainability seem healthy and seem to support one another. Due to economically thriving businesses, life is good and social benefits are widespread. The environmental sphere seems to be struggling, due to lack of noticeable, direct impacts on the tourism economy. This may change in the not too distant future.

However, the situation is not yet destitute. Environmental education and awareness programs such as those conducted by Friends of the Environment (FOE), a local environmental organization located in Marsh Harbour, Abaco are moving in the right direction. FOE runs programs aimed at school groups, residents, and visitors, and has several environmental awareness campaigns throughout the year. These programs facilitate an atmosphere where residents and visitors are learning about the ecosystem in which they live and play, and the impacts of their behaviors and their actions.

## **5.0 Limitations and Future Research**

This study has several limitations that must be mentioned. First of all, it includes only a very small sample of the tourism operations in Abaco, and generalizations are therefore limited. Also, the sample of respondents were based on convenience, and this poses further limitations on generalizations of the results. Furthermore, the instrument validity was not pre-tested due to time constraints within the country, though one of the investigators had several years of experience working with the Bahamian people and tourism industry before survey design or sampling began.

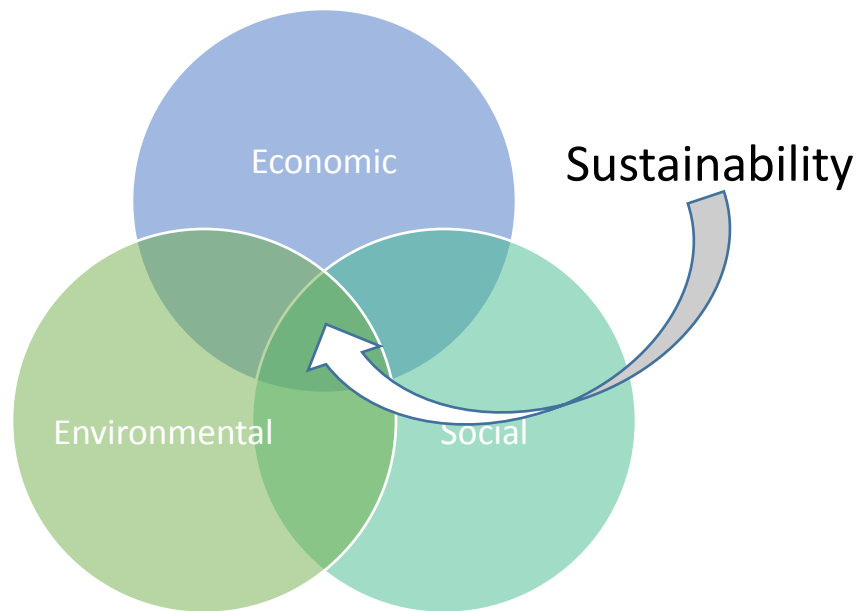
Future research could further investigate the perceptions of negative and positive impacts of tourism in the area. For example, are the positive impacts overshadowing the negative ones, and therefore leading to a lack of action by the stakeholders? Also, what about more elusive impacts due to tourism, such as those to culture? Another area of future research would be to investigate whether perceptions differ by either locally-owned or out of country owned businesses.

This study provides an indication of an “early warning sign” for the tourism industry of the Bahamas, primarily with regards to impacts to the natural environment. For these nature-based tourism attractions to survive, the signs indicate that a greater level of protection needs to be put into place, monitored, and have local buy in. These are no simple tasks, but the good work of organizations like Friends of the Environment, and future studies to raise awareness of the issues, are certainly moving in the right direction.

## 6.0 Appendix

### Appendix A.

**Diagram depicting the relationship between the three spheres of sustainability**



## **Appendix B.**

Ten Key Local Businesses stretching from as far North as Treasure Cay to as far South as Little Harbour

1. The Crazy Crab (Hope Town)
2. Hope Town Harbour Lodge (Hope Town)
3. Iggy Biggy Boutique (Marsh Harbour and Hope Town)
4. Norman Albury Sail Shop (Man O War Cay)
5. Pete's Pub (Little Harbour)
6. Terrance Davis- Conch Salad (Marsh Harbour)
7. Sail The Abacos Inc. (Marsh Harbour)
8. Treasure Cay Marina & Golf Resort (Treasure Cay)
9. Dive Guana (Great Guana Cay)
10. Nipper's (Great Guana Cay)

### Appendix C.

Map of the study area, which stretched from Treasure Cay to the north, and Little Harbour to the south.



## Appendix D.

### Survey questions used in semi-structured interviews with tourism operators in Abaco, Bahamas

The survey questions provided an outline for more of a semi-structured interview format. The questions are presented and grouped according to their associated research question (i.e., social, economic, and environmental spheres).

The first group of questions examined the sustainability of the social sphere:

1. Estimate the percentage of local versus tourist users of your business. (Ex. 25% locals' vs 75% tourists).
2. How do you as a local perceive tourists?
3. Does the business promote itself as inclusive to the local community?

The second group of questions examined the sustainability of the economic sphere:

4. How long have you been in business?
5. Overall, do you believe your business has been growing, staying the same, or declining?
6. Are there future plans to expand the business?

The third group of questions examined the sustainability of the environment sphere:

7. How important is the natural environment for the success of your business?
8. Do you believe that the natural environment is changing? Explain.
9. Do you believe the changing natural environment is having a negative impact on your business? Explain.

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