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**AN INTEGRATED VIEW: MULTIPLE STRESSORS AND SMALL  
TOURISM ENTERPRISES IN THE BAHAMAS**

by

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## **ABSTRACT OF THE DISSERTATION**

An Integrated View: Multiple Stressors and Small Tourism Enterprises in The Bahamas

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Vulnerability to multiple stressors has been a research area of increased focus as geographers and other social scientists investigate how various processes of change affect regions, industries and social groups. However, much research within the human dimensions of environmental change literature continues to focus on vulnerability to single stressors such as climate change or natural hazards. Using the double exposure framework (Leichenko and O'Brien, 2008) to explore the vulnerability of small tourism enterprises to various processes of globalization and global environmental change, this dissertation contributes to a deeper understanding of how vulnerability is affected by interactions between multiple stressors. Research was based in New Providence and Paradise Island, Bahamas, a major tourism destination in the Caribbean. A qualitative approach conducted in two phases utilized over 70 semi-structured interviews with owners and managers of small tourism enterprises and other tourism industry stakeholders.

Results of the dissertation show that climate change, extreme natural events, land use change, mass tourism, sustainable tourism and financial crises interact with each

other in complex ways to affect the vulnerability of small businesses to change while shaping their response options. These interactions have significant implications for the ability of small tourism enterprises to compete with large businesses and negatively affect their current and future market share of the international tourism industry. This dissertation reveals that interactions between multiple stressors increase the vulnerability of small tourism enterprises to change, constrain their ability to respond to change and expose the need for greater public-private partnerships to improve the viability of these businesses. This exploration of interactions between stressors makes a strong case for the need to consider how multiple processes of change affect entities of any kind.

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## **Dedication**

To My Angels

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## **Chapter 1**

### **Introduction**

Tourism, a major global industry, has undergone significant change since its early origins (Milne and Ateljveck, 2001). Global tourism blossomed in the 20<sup>th</sup> century due in part to the advances in transportation, the post-World War II creation of a Western middle class with increasing disposable income, and the use of tourism as a tool for development in third world countries (Pattullo, 2005; Thompson, 2006). International tourist arrivals have grown from 25 million in 1950 to over 980 million in 2011 and generated over US\$919 billion in export earnings in 2010 alone (WTO, 2012).

The promise of significant economic contributions has led to heavy investment in tourism in a number of countries, particularly in tropical regions, and a reliance on growth of this industry to provide foreign exchange and employment opportunities for local residents (Milne and Ateljevic, 2001; McElroy, 2003). The Caribbean is particularly reliant on tourism for economic development and is the world's most tourism dependent region in terms of the industry's contribution to GDP (Grandoit, 2005; CHTA, 2011). In this region of small island states, tourism accounts for approximately 20% of GDP and employment (CHTA, 2011). This growth of tourism has been accompanied by an increase in small tourism enterprises- small businesses with fewer than 10 employees or fewer than 75 hotel rooms (Morrison, 2004). These small tourism enterprises make up the bulk of tourism businesses around the world and account for as much as 90% of the sector in specific destinations in the Caribbean (Thurston, 2012).

However, while tourism is a significant economic force, this industry can be described as highly sensitive to stressors (Bonham et al., 2006; Li et al., 2010;

Papatheodorou et al., 2010). As an industry comprised of many sub-sectors including accommodation, transportation, entertainment and food and beverage, there are many components of tourism that are susceptible to change. Stressors that affect tourism such as economic crises and extreme natural events have been occurring throughout history. However, as connections between tourism destinations have increased due to globalization, shocks and stressors that commence in one area are no longer confined to a particular geographical region (Hall, 2010). Improvements in transportation and communication means that people and information flow easily from place to place and localized events have far reaching implications. Challenges such as natural disasters, political upheaval, health concerns and even oil and energy prices all have noticeable impacts on tourism at the global scale (UNWTO, 2010). The Severe Acute Respiratory Syndrome outbreak in 2003, intermittent increases in oil prices, terrorist attacks of September 11, 2001 and the 2007 global financial crises are all recent shocks and stressors that have negatively impacted the international flow of tourists, affecting the rate of growth for the industry (Goodrich, 2002; Zeng et al., 2005; Kuo et al., 2008). Research has found that tourism destinations around the world are increasingly exposed to and affected by large-scale stressors and shocks (Hall, 2010).

While research has investigated the implications of large-scale stressors and shocks for tourism and for small tourism enterprises in particular, the majority of research focuses on exploring only one stressor at a time (e.g. Cioccio and Michael, 2007; Amelung et al., 2007; Calgaro and Lloyd, 2008). There is a noticeable absence of studies that consider how multiple stressors interact to affect tourism and small tourism enterprises. While current research does provide insight into the effects of single

stressors, the analysis of multiple stressors is seen to be essential in understanding how entities are affected by processes of change (O'Brien et al., 2004c; Eakin and Luers, 2006; Leichenko and O'Brien, 2008). Given the global importance of tourism and its susceptibility to large-scale processes of change, there is a clear need for research into how multiple stressors interact to affect this industry. In addition, there is a dearth of literature that focuses on small tourism enterprises in the Caribbean, despite the importance of tourism for the region or the critical mass of small tourism enterprises (Pattullo, 2005).

### **1.1 Research Questions**

This dissertation aims to explore these gaps by investigating how multiple stressors interact to affect the viability of small tourism enterprises. Using a multiple stressor framework to conduct a qualitative case study of small tourism enterprises in New Providence and Paradise Island, The Bahamas, the following research questions are explored<sup>1</sup>:

1. What large-scale processes of change interact to affect the tourism industry?
2. How do interactions between processes of global change affect small tourism enterprises?

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<sup>1</sup> While addressing these questions provides much needed investigation into how multiple stressors interact to affect small tourism enterprises, this dissertation does have broader contributions. Small businesses in other economic sectors are also key areas of research as there is a need to understand how these enterprises are affected by and respond to challenges associated with globalization and environmental change (Pollard, 2003; Schmitz, 2004). This research also helps to conceptualize links between global-local interactions by exploring how globally scaled processes of change shape outcomes for locally scaled entities, a broad area of research for geographers (Milne and Ateljevic, 2001).

3. What are the implications of multiple stressors for the viability of small tourism enterprises?

The following chapters investigate these questions and are based on an extensive literature review, two scoping studies to the research site followed by long-term field investigation, semi-structured interviews with over 70 research participants and analysis of a number of secondary sources including governmental reports and newspapers. These chapters investigate how multiple large-scale processes of change manifest in New Providence and Paradise Island (NPI) and interact to affect the long-term viability of small tourism enterprises.

## **1.2 Dissertation Structure**

Chapter 2: Literature Review and Theoretical Framework provides a critical review of the literature that this dissertation both draws from and adds to. Three bodies of literature are explored: Global Change Stressors & Tourism, Small Tourism Enterprises & Stressors, and Vulnerability & Multiple Stressor Frameworks. A summary of the literature is provided in Section 2.4. This review of the literature is followed by discussion of the three research questions and theoretical contributions of the dissertation in Section 2.5 and concludes with the conceptual framework that guides this dissertation in Section 2.6.

Chapter 3: Methodology details the methodology utilized for this dissertation. A brief overview of the research site is provided in Section 3.1 followed by the research approach in Section 3.2. The research approach justifies the use of qualitative methodology and details the phased approach used to collect data. Section 3.3 delves into the methods of data collection and participants in the study. Section 3.4 details the

approach taken to analyze data. This section discusses how the three pathways of the double exposure framework were used to guide analysis of multiple stressors. Finally in Section 3.5 I discuss the limitations of this study.

Chapter 4: Research Site provides background on Caribbean tourism, globalization and environmental change in Section 4.1. A historical overview of tourism development in The Bahamas and in New Providence and Paradise Island is provided in Section 4.2. Section 4.3 then presents the results of the scoping studies and discusses how these results helped to shape the bulk of research.

Chapter 5: Setting the Context: Beach Mass Tourism and Coastal Land Use Change utilizes the pathway of context double exposure to explore how land use change and mass tourism interact to affect small tourism enterprises in NPI. Section 5.1 provides background information on how mass tourism and land use change have manifested in NPI, focusing on hotel development and coastal land use change. Section 5.2 presents research findings from interviews with small hoteliers and industry stakeholders. Section 5.3 uses the pathway of context double exposure to explore how interactions between mass tourism and land use change affect the political, biophysical and economic aspects of the contextual environment of small hotels. Finally in Section 5.4 I conclude with a summary of the chapter and thoughts about the context double exposure framework.

Chapter 6: Current Crises: Hurricanes and 2007 Global Financial Crisis uses the pathway of outcome double exposure to investigate how extreme events and global financial crises affect the responses and outcomes of small tourism enterprises. In Section 6.1, I provide a background on impacts of past hurricanes and the 2007 global financial crisis in NPI. In Section 6.2, I present research findings from interviews with

study participants. Section 6.3 uses the pathway of outcome double exposure to investigate how these processes of change interact to affect responses and outcomes of small hoteliers. Section 6.4 provides the conclusion of the chapter and recommendations to improve the pathway of outcome double exposure.

Chapter 7: Future Implications: Climate Change and Sustainable Tourism utilizes the pathway of feedback double exposure to assess how the responses of small tourism enterprises to sustainable tourism and climate change affect the drivers of these very processes of change. Section 7.1 details the implications of climate change for NPI and why a focus on sustainable tourism is needed. Findings from interviews with project participants are provided in Section 7.2. Section 7.3 presents an analysis of feedbacks between sustainable tourism and climate change. Finally, Section 7.4 provides a brief summary of the chapter and reflections on the effectiveness of the feedback double exposure framework.

Chapter 8: Conclusion: An Integrated View concludes the dissertation and takes an integrated view of the three pathways of double exposure to explore how the six processes of change affect the viability of small tourism enterprises. This is accomplished through a discussion of the research questions in Section 8.1. Section 8.2 details emerging stressors that may be important to tourism in NPI and future implications for the tourism industry. Recommendations for policies to aid small tourism enterprise development are provided in Section 8.3. Section 8.4 details my reflections on the double exposure framework and directions for further development. Finally in Section 8.5 I outline future avenues of research.

## Chapter 2

### Literature Review & Theoretical Framework

Tourism is an industry that has been widely studied from a variety of research perspectives. However, while research has delved into significant processes of change that affect the industry, there has been little exploration of interactions between stressors and how these interactions affect the industry. The purpose of this dissertation is to address this research gap by investigating how multiple stressors interact to affect the viability of small tourism enterprises. In particular, I aim to explore the implications of interactions between processes of globalization and global environmental change for small tourism enterprises. This dissertation draws from and contributes to three bodies of literature: Global Change Stressors & Tourism, Small Tourism Enterprises & Stressors, and Vulnerability & Multiple Stressor Frameworks. In this chapter, I conduct a critical review of these three bodies of literature.

This chapter is organized as follows: Section 2.1 provides an account of current literature on large-scale processes of change that are viewed as critically important for the tourism industry. This section reviews why each stressor is viewed as significant and major research strands. Section 2.2 investigates studies that have explored on small tourism enterprises. This section focuses on research that has investigated how small enterprises are affected by and cope with stressors and shocks. Section 2.3 provides an overview of vulnerability within the human-environment literature and theoretical frameworks that guide assessment of how multiple stressors interact to affect entities. This section leads to the selection of an appropriate framework to guide the dissertation. Section 2.4 is a brief summary of the three bodies of literature and highlights research

gaps. Section 2.5 details how the gaps identified are addressed by the research questions of this dissertation. Finally in Section 2.6 I present the conceptual framework that guides this dissertation.

## **2.1 Global Change Stressors & Tourism**

A number of authors identify large-scale processes of change that have implications for tourism industries both regionally and globally (Strizzi and Meis, 2001; Hall, 2010). These studies go beyond identification of locally scaled stressors to identify the processes of change that have implications for tourism industries worldwide. These large-scale processes of change manifest in specific ways in different destinations but have implications for tourism on a global scale. Challenges can take the form of long-term stressors or immediate shocks and can be external to the tourism industry such as extreme natural events or internal to the industry such as the recent focus on providing more environmentally conscious forms of tourism (Pattullo, 2005). Processes of change identified in the literature as most influential to tourism worldwide include economic instabilities (Strizzi and Meis, 2001; Milne and Ateljevic, 2001; Hall, 2010), extreme natural events (Faulkner, 2001), climate change (Scott et al., 2008), mass tourism (Torres, 2002), land use change (Allen et al., 2002) and sustainable tourism (Butler, 1999; Weaver, 2011). Although these stressors have been most commonly identified in the literature as significant for tourism, it is important to note that this is by no means an exhaustive list. Other stressors such as warfare, political partnerships and corruption also have significant implications for tourism on a global scale. However, although these stressors do have implications for tourism, they are not the focus of a significant body of

academic research and resultantly there is little known about their widespread effects. This dissertation engages with finding connections and interactions between existing strands of research within the tourism literature rather than investigating some of these less prominent and yet still important stressors. In the following sections, a critical review of each of these large-scale processes of change that have been identified in the literature provides an overview of how they affect tourism and major research strands.

### ***2.1.1 Global Environmental Change Stressors***

#### *Climate Change*

Climate change has been named as the most significant process of change facing tourism for the 21<sup>st</sup> century, affecting the development and management of the industry on a global scale (Bigano et al., 2006; Scott et al., 2008). Projected changes in atmospheric and oceanic temperatures, precipitation patterns, sea level rise and extreme event intensity and frequency are some of the many climatic changes that will have significant ramifications for tourism, an industry closely connected to environmental conditions (Amelung et al., 2007; Baker et al., 2008; Scott et al., 2008).

A significant research strand within the literature on climate change and tourism investigates the direct implications of changing climatic conditions for the environmental resources that tourism destinations rely on. These studies largely focus on how climate change will affect the attractiveness of destinations to tourists. The Tourism Climatic Index was devised as a measure of how climatic conditions relate to tourist comfort and encompasses rankings for thermal comfort, precipitation, wind and sunshine (Mieczkowski, 1985). Using projections of future environmental conditions, this index

has been utilized to forecast how future climatic conditions may alter the attractiveness of various destinations and impact their suitability for tourism. This index has been used in the Mediterranean (Amelung and Viner, 2006), North America (Scott and McBoyle, 2001; Scott et al., 2004) and globally (Amelung et al., 2007; Lewis-Bynoe et al., 2009). These studies have shown that climate change will have noticeable effects on the climatic attractiveness of destinations, shortened seasons when climatic conditions are optimal for tourists and possible changes to temporal patterns of tourist visitation. Other studies in this vein rely on a similar concept of relating climatic and environmental conditions to destination attractiveness. These studies explore the range of daily average temperatures that are most attractive to tourists (Maddison, 2001; Lise and Tol, 2002), the role of climate and the environment in destination attractiveness (Freitas, 2003; Hamilton et al., 2005; Gossling and Hall, 2006; Lin and Matzarakis, 2008), and other environmental conditions such as precipitation and extreme events that affect tourist demand (Agnew and Palutikof, 2006; Becken, 2010).

Another group of studies investigates the implications of climate change on natural resources that tourism relies on in specific destinations. There has been much research focused on implications of climate change for ski-tourism, in particular the effects of changes to snow patterns (Beniston, 2003; Burki et al., 2003; Scott et al., 2006; Moen and Fredman, 2007; Scott et al., 2008b). Destinations reliant upon skiing as a major attractor are vulnerable to the effects of tourism which will likely result from a decrease in snowfall, necessitating the need for adaptation to new environmental conditions. Another significant area of research has explored the implications of warming oceans for coral reefs and destinations that rely on these reefs as major tourist attractions (Reaser et al.,

2000; Hoegh-Guldberg, 2007). These studies have found that coral reefs have already begun to feel the effects of warmer ocean temperatures and that continued warming may prove to be catastrophic to these reefs, affecting attractiveness to tourists but also decreasing their ability to provide protection from storms and affecting sea animal biodiversity.

These studies on the environmental implications of climate change for destination attractiveness have led to research that explores changes to patterns of tourist flow worldwide. These approaches are heavily dependent on the projected environmental impacts of climate change and employ mostly quantitative methodology and computer simulations of travel patterns (Amelung et al., 2007; Hamilton et al., 2005; Berrittella et al., 2006, Bigano et al., 2006). General findings of these studies are that climate change will result in a pole-ward shift in the location of climatically ideal tourist destinations. That is, as temperatures increase, precipitation patterns change and extreme events increase in intensity, currently popular destinations such as the Caribbean and the Mediterranean will have less than ideal climatic conditions and other locations will have the environmental conditions once associated with these regions, thus resulting in an increase in their climatic attractiveness to tourists. However, these new climatically attractive locations will likely be located in the same countries that the majority of international tourists originate from: Europe and the USA (Hamilton et al., 2005; Amelung et al., 2007). Thus, there is expected to be an increase in domestic tourism in the USA and Europe and less travel to regions currently reliant on large flows of American and European tourists. This has major implications for the many regions and destinations that are reliant upon tourism as a major industry as some projections forecast

up to 50% loss of international tourists (Bigano et al., 2006).

While some research focuses on the vulnerability of tourism to climate change, another group of research investigates how tourism itself contributes to climate change and how the industry can mitigate its contributions. Tourism is a major contributor to green house gasses associated with the drivers of climate change with emissions from air and car transport, accommodations and activities associated with tourism making up a significant share of global greenhouse gas emissions. The tourism industry has been attributed with contributing as much as 5% of global carbon dioxide emissions from the various activities associated with the industry (Scott et al., 2008). Studies focused on mitigation measures of the tourism industry have largely explored opportunities within the transportation sector, which contributes approximately 75% of tourism's total emissions (Simpson et al., 2008). Ways of mitigating the environmental impact of long-haul travel without affecting destinations that rely on international tourists has been an area of inquiry with bleak forecasts (Simpson et al., 2008). Studies have also explored the implications of existing policies that aim to address the environmental impacts of air travel such as the UK's recent Air Passenger Duty (Mayor and Tol, 2007). These studies largely conclude that policies requiring tourists to pay for emissions associated with their travel will likely affect tourist arrivals for remote destinations and destinations reliant on long-haul travelers (Tol, 2007; Akter et al., 2009).

Within the literature related to climate change and tourism there is a strong focus on the vulnerability of the industry to changing environmental conditions while work delving into the need for adaptation and mitigation are relatively minor areas of research. Additionally, much of the research considers regional or national spatial scales with very

few studies using a smaller scale of analysis. Climate change is largely viewed as a significant stressor that will have extensive implications for tourism and the implications of these changes are studied without consideration of interactions with other large-scale stressors or shocks.

### *Extreme Natural Events*

Extreme natural events have significant implications for tourism industries worldwide, from direct effects such as damages to tourism infrastructure to indirect effects such as prolonged interruption in business due to changing patterns of tourist flow (Nothiger and Elsasser, 2004). With many tourism destinations located in areas of natural splendor such as near mountains, beaches or lakes, extreme natural events including floods, hurricanes, volcanic eruptions and snowstorms have immediate effects (Faulkner, 2001). These effects spread to impact other destinations as tourists often avoid a destination or region affected by an extreme event and choose to vacation elsewhere (Mistilis and Sheldon, 2005). For instance, the Indian Ocean tsunami of 2004 caused significant damage to coastal tourism infrastructure along with immediate and sustained decreases in tourism arrivals to the entire Asian region while simultaneously spurring a subsequent increase in travel to other regions (Sharpley, 2005).

A major research strand within this literature focuses on the effects of disasters for specific destinations and concentrate on changes to tourism arrivals and expenditures along with time taken to recover. These studies have investigated the impacts of earthquakes (Mazzocchi and Montini, 2001; Huang and Min, 2002; Wei and Zeng, 2008), hurricanes (Granvorka and Strobl, 2010), volcanoes (Gertisser, 2010) and other extreme events (Khan et al., 2001; Cioccio and Michael, 2007). For example, Faulkner and

Vikulov (2001) explore the implications of a significant flood on the tourism industry in Australia. While the majority of tourism enterprises suffered significant damages, this loss was compounded by damages to important tourism attractions, which decreased the attractiveness of the destination to visitors. This was countered by a speedy recovery of attractions by the state along with widespread marketing to inform tourists that the destination had been returned to pre-flood conditions. In New Orleans, the devastating effects of Hurricane Katrina have had prolonged implications for the city's tourism industry with tourist arrivals taking a number of years to recover (Chacko and Marcel, 2008). Among all economic sectors in the city, tourism displayed the largest job losses and associated wages following the hurricane (Dolfman et al., 2007).

Studies on the implications of extreme events for tourism has spurred a group of research focused on hazard management for the industry. Hazard management is a complex and extensive research area within the natural hazards literature (White et al., 2001). Research on hazard management in the tourism industry has largely focused on the development of frameworks to guide management of hazards and the need for tourism destinations and enterprises to plan and prepare for natural disasters (Faulkner, 2001; Hystad and Keller, 2008; Tsai and Chen, 2010). Frameworks for hazard management have been developed for use at various spatial scales, from the destination down to individual enterprises. For example Hystad and Keller (2008) develop a destination scale tourism disaster management framework that requires the involvement of a range of industry stakeholders to develop actions for before, during and after the disaster. These efforts improve communication both within and beyond the destination, allow for individual tourism enterprises to stay connected and convey the effects of the

extreme event to tourists in a manner that will minimize negative impacts on the industry. Other frameworks focus on hazard management for individual tourism enterprises. Ritchie (2004) recommends that tourism enterprises develop plans to prepare for a host of crisis events, from terrorism to natural disasters. Regardless of the spatial scale utilized, investing time and resources in hazard management is seen to be an essential step in limiting the extensive damages brought about by extreme events (Ritchie, 2004).

While studies on extreme events and tourism do consider factors that affect the recovery of destinations such as financial conditions and insurance coverage (Hystad and Keller, 2008; Tsai and Chen, 2010), few studies investigate how extreme events interact with other large-scale processes of change. One of the few studies on how interactions between extreme events and other stressors affect tourism investigates how extensive forest fires interacted with financial recession and resulted in significant declines in tourism arrivals and expenditure in Singapore in the late 1990s (Khan et al., 2001). However, beyond this brief study, there have been few tourism related studies that link extreme events with other processes of change.

#### *Land Use Change*

Land use change is a process of environmental change that tourism both contributes to and is affected by (Pigram, 1980). Land use change can be defined as alteration of the way that land is used or alteration of the physical nature of land. Tourism development relies on altering landscapes to construct infrastructure both directly and indirectly associated with the industry (Gossling, 2002). Construction of accommodation and entertainment facilities such as resorts, golf courses, marinas and ski slopes are also accompanied by the expansion of airports and transportation networks to

accommodate the growing numbers of visitors. In addition, land needed to accommodate solid waste disposal and wastewater treatment can also be attributed to tourism related land use change (Baldwin, 2000; Davenport and Davenport, 2006). These changes are most apparent in destinations where the number of tourists far exceeds the local population and facilities are constructed primarily to accommodate these visitors (Pattullo, 2005).

However, land use change associated with tourism, particularly in undeveloped areas, has had negative implications for the industry itself. In coastal regions in particular, tourism related land use change is associated with significant changes to environmental resources (Hall, 2001; Burak et al., 2004). Extensive development has significant repercussions for fragile environmental features and ecosystems located in the coastal zone (Burak et al., 2004). Coastal erosion, degradation of wetlands and contamination of water aquifers are some of the negative environmental implications of land use change in coastal areas (Pattullo, 2005; Davenport and Davenport, 2006; Thomas-Hope and Jardine-Comrie, 2007). These negative consequences affect the very natural resources that tourism is reliant upon and have the potential to decrease the attractiveness of the destination to tourists (Baldwin, 2000; Grandoit, 2005).

Land use change has often been studied in combination with coastally based mass tourism and has been an area of research since the mid 1980s. Past research often relied on generalizations of patterns of development associated with coastal mass tourism to develop theoretical models of coastal land use change (Pearce and Kirk, 1986; Jeans, 1990; Oppermann, 1993). For example, Weaver (1993, 2001) developed a general model of the spatial pattern of mass coastal tourism in small Caribbean islands, finding that

there is often a defined tourist hub and that tourism facilities decrease in density as distance from the hub increases. These high-density coastal tourism strips with large hotels, marinas and ports for cruise ships have been a hallmark of coastal mass tourism in many Caribbean nations, culminating in loss of agricultural and undeveloped land, significant environmental damage and strain on natural resources (Weaver, 2001).

A new area of research moves beyond general models to investigate the specific land use changes associated with coastally based mass tourism. Tourism led coastal development spurs land use change associated with tourism enterprise construction, related development of infrastructure such as airports and roads, and an increase in secondary-home residential developments (Allen et al., 2002; Ayad, 2005; Atasoy, 2010). Extensive development of hotels, golf courses, marinas and cruise ship ports are most often located directly on the beachfront. These developments transform previously vacant land and are often associated with the restructuring of beaches or the construction of artificial beaches (Charlier and Bologna, 2003; Cohen-Hattab and Shoval, 2004). These specific tourism facilities are very often accompanied by an increase in residential development along the coastline dominated by seasonal homes for foreign guests (Allen et al., 2002; Ayad, 2005; Atasoy, 2010).

The transformation of land into tourism facilities and residential developments has broader implications than simply a change in land usage. The price of real estate in these coastal areas increases significantly, making ownership of beachfront land an unlikely option for many local residents (Cohen-Hattab and Shoval, 2004). Developments along the coast also limit access to beaches for the public and limit permissible beach activities (Allen et al., 2002; Collins and Kearns, 2010). These land

use changes transform coastlines into sites mainly for tourist and private residential consumption.

Research on the specific land use changes associated with coastal mass tourism is bolstered by a group of studies that utilize varied methods of spatial analysis including Geographical Information Systems (GIS), remote sensing and aerial photography analysis. This relatively small group of studies utilizes these methods to further investigate coastal land use changes spurred by mass tourism. GIS has been used to track parcel based land use changes using building permits and other detailed information in the Southern USA and in Turkey (Allen et al., 2002; Atasoy, 2010). These methods allow for quantification of specific changes in land use and support other studies that have noted the concentration of tourism facilities and vacation homes along the coast in mass tourism destinations. However, in the absence of detailed information, remote sensing and aerial photography analysis provides alternative methodologies for tracking land use change using satellite imagery. While these methods do not provide the level of detail that GIS offers, they are useful tools to track temporal changes to land use and physical changes to the shoreline (Burak et al., 2004; Esbah, 2010). Land use change has been studied in combination with mass tourism and has shown that interactions between these two stressors have significant implications for both the spatial pattern of tourism infrastructure and environmental changes, particularly in coastal areas. Studies on the particular spatial implications of these processes expose that land use change is closely related to mass tourism and associated secondary home development. However, studies often focus on the implications of these stressors at the destination level

without further analysis into how changing land use patterns, environmental degradation and beach access restrictions affects individual tourism enterprises.

### ***2.1.2. Globalization Stressors***

#### *Financial Crises*

While there are a number of crises types that affect tourism, including terrorist attacks, health related concerns and political unrest, crises related to economic recessions or financial downturns have had the most significant impacts on tourism at an international scale (Hall, 2010). Tourism demand is dependent on strong economic conditions in the markets that generate the bulk of tourists (UNWTO, 2005). Detrimental economic conditions in tourist generating markets thus result in a decrease in tourists worldwide and resultantly less tourism related expenditure on a global scale. In a review of all tourism literature regarding tourism and crises, Hall (2010) finds that the majority of research explores economic crises and that many of these studies are spurred by specific periods of internationally significant recession.

A large group of research regarding financial crises and tourism focuses on the economic outcomes of global financial crises in tourism destinations. Li et al. (2010) explore the effects of the recent global recession on China's tourism industry and focus on economic impacts using computable general equilibrium modeling. This study investigates changes in spending in tourism sectors and resultant effects on the value of tourism labor. Results from the study show that the global financial crisis caused a significant decrease in tourism expenditure and resulted in substantial increases in unemployment in the tourism sector. Song and Lin (2010) also take a modeling approach to investigate how the financial crisis affects inbound and outbound tourism and tourism

expenditure in Asia. Findings show that the financial crisis causes significant decreases in both inbound and outbound tourism to and from Asia as well as lower levels of tourist expenditure within Asia and by Asians tourists. Other studies in this vein explore the economic ramifications of financial crises in North America (Ritchie et al., 2010), Asia (Prideaux, 1999) and Europe (Smeral, 2009). The outcomes of financial crises in this category of studies are often calculated in terms of changes in tourist arrivals and expenditure at national and regional spatial scales.

A second group of research explores changes in tourist behavior in response to financial crises. The manifestations of financial crises such as unemployment, depreciation and insecurity of stock shares and housing insecurities have significant effects for tourism demand (Bronner and Hoog, 2011). During times of financial insecurity, consumer spending decreases in general and tourism spending in particular drops significantly (Sheldon and Dwyer, 2010). Travel and vacations are thought of as superfluous expenses and the limited funds of consumers are delegated to essential expenditures (Smeral, 2009; Papatheodorou et al., 2010). Changing financial conditions thus result in changes to the behavior of tourists. Financial crises have been related to a decrease in international travel and an increase in domestic travel as consumers prefer to remain closer to home to conserve funds (ETC, 2010). Tourists also decrease the duration of their vacations and their daily expenditures in a similar effort to curb spending (Bronner and Hoog, 2011). These studies validate findings from the previous group of studies that focus on economic outcomes of global financial crises. By exploring the drivers of tourism behavior during financial crises, these studies expose the reasons behind changes in tourism arrivals and expenditure at a smaller spatial scale.

Studies on the implications of financial crises for tourism often focus on the direct impacts of changing economic conditions such as decreasing tourist arrivals and expenditure. However, there is very little exploration of what these changes in arrivals and expenditure mean for sectors within the tourism industry or for different types of firms within each sector. In addition, there is a lack of consideration of how other large-scale stressors interact with financial crises to affect destinations.

#### *Globalization of Consumption: Mass Tourism*

Mass tourism, the form of tourism that brings large numbers of visitors to a destination for short periods of time, is associated with Fordism- mass production and consumption of goods (Milne and Ateljevic, 2001). The post World War II blossoming of Fordist or mass tourism is characterized in tourism destinations by a seasonal supply of large numbers of tourists, standardized tourism products, lack of authentic cultural experiences, abundance of hotel and restaurant franchises and a spatial concentration of tourism facilities away from local residents (Torres, 2002).

Although many destinations turn to mass tourism as a way of increasing foreign exchange, this form of tourism results in low inter-sector economic links and financial leakages outside of the destination (Andriotis, 2002). Mass tourism is also the cause of significant environmental damage, negative social and cultural impacts on destinations and the loss of economic profits due to extensive foreign investment (Liu, 2003; Schianetz et al., 2007). Studies generally conclude that as mass tourism develops, so too does environmental degradation since the increasing number of tourists taking advantage of the natural resources of a destination degrades the quality of these very resources (Butler, 1980; Hall, 2001; McElroy, 2003).

In addition to the detrimental impacts of mass tourism, this form of tourism has been critiqued as ultimately ending in demise. Tourism development theories such as the Tourism Area Life Cycle, carrying capacity and the Tourism Penetration Index conclude that destinations most dependent on tourism are also those with the shortest visitor stays, the most significant environmental and social impacts and a stagnation and eventual decline in visitor arrivals (Butler, 1980; McElroy, 2003, 2006). Empirical studies of the impacts of mass tourism in destinations in the Caribbean (Debbage, 1990; Pattullo, 2005), the Mediterranean (Ayres, 2000) and Europe (Agarwal, 2002; Claver-Cortes et al. 2007; Akis, 2011) all support that detrimental effects increase as mass tourism develops. For example, Claver-Cortes et al. (2007) find a stagnation in overnight tourist stays in Spain despite an increase in hotel rooms, thus contributing to declining occupancy rates. In Turkey, Akis (2011) finds that while mass tourism has contributed to increases in job opportunities, the industry has also resulted in significant environmental pollution and coastal degradation. This is echoed by studies in the Caribbean that find that while mass tourism increases foreign exchange and GDP, it also results in significant environmental damages (Pattullo, 2005).

As discussed previously, mass tourism is often studied in combination with land use change. The effects of both of these stressors are seen to cause significant environmental degradation in tourism destinations. However, the bulk of research focuses on implications of these stressors at the destination scale without consideration of effects for individual tourism enterprises.

*Globalization of Environmentalism: Sustainable Tourism*

Sustainable tourism is a form of tourism that attempts to minimize the detrimental environmental, economic and cultural effects that are often attributed to mass tourism. Sustainable tourism has its origins in the mid 1980s when attentiveness to the negative impacts of mass tourism combined with a burgeoning environmentalism consciousness to create an awareness of the need for practitioners to mitigate the detrimental environmental consequences of tourism (Butler, 1999; Saarinen, 2006). This awareness of the environmental degradation brought about by tourism expanded to address other seemingly negative components of the industry including the economic, social and cultural effects on destinations. From these concerns, interest in the tenacity or sustainability of tourism emerged (Choi and Sirakaya, 2006). Academics and NGOs began to voice the need to pay attention to the detrimental impacts of tourism and find ways to address these negative impacts. These concerns coincided with the focus of the widely adopted Brundtland Report, *Our Common Future*, which advocated for implementation of sustainable development- responsible and thoughtful development that meets the needs of present generations without compromising the ability of future generations to meet their own needs (Butler, 1999).

Since its beginnings, sustainable tourism has been the focus of much attention from tourism practitioners, academics, politicians, NGOs and a slew of other tourism stakeholders (Ko, 2001). Due in part to this varied and sustained interest, sustainable tourism has been understood and approached in a number of ways. Academics attempt to encompass all potential detriments of tourism and the need to manage them, environmentalists focus on the need to preserve natural resources and tourism developers

justify continuing expansion using more responsible methods (Butler, 1999). Due to the lack of a universally accepted definition, sustainable tourism can be regarded as an ideology or particular way of looking at tourism (Ko, 2001; Saarinen, 2006). At the most basic level, sustainable tourism addresses the need to manage the economic, environmental and socio-cultural impacts of the tourism industry.

Sustainable tourism can be considered a process of global change since it has had a broad reach and impact on the development of tourism industries worldwide. Sustainable tourism has given rise to a host of other types of environmentally and socially responsible tourism types. The advent of green tourism, eco-tourism and nature tourism are considered branches of the sustainable tourism concept (Font, 2002; Font and Harris, 2004). At the national and regional level, NGOs and governments have launched initiatives such as large-scale programs aimed at increasing the sustainability of tourism (UNEC, 2004). On a smaller scale, certification schemes offer a way for individual enterprises to voluntarily join in the sustainable tourism movement. Organizations such as Blue Flag, The VISIT Initiative, BIO Hotels and Green Seal are just a few of the hundreds of groups that certify and brand individual tourism enterprises as sustainable, green, eco-friendly or some other label relating to the goals of sustainability (Pattullo, 2005).

A considerable body of literature exists that focuses on the theoretical components of sustainable tourism. These studies include debates over defining sustainable tourism (Liu, 2003; Saarinen, 2006), level of scale that sustainable tourism should be applied to (Farrell and Twining-Ward, 2005) and theoretical barriers to encompassing environmental, social and economic concerns into one concept (Butler,

1999). However, these theoretical debates are seen to be ineffective at actually implementing sustainable tourism in destinations and as Butler (1999, p.9) articulates, “ a great deal more attention must be paid to the problem of how to operationalize the concept and make it applicable in appropriate situations to tourism.”

Following this call for more empirical contributions to sustainable tourism, a major research strand has focused on developing assessment tools to explore existing levels of sustainability in tourism destinations and identify areas that can be improved. Given the environmental focus of sustainable tourism, the majority of tools are either only suitable to measure environmental concerns or can be modified to also measure socio-cultural and economic issues (Lee, 2001). Although there are a plethora of assessment tools, the three most utilized are Environmental Impact Assessments (Hughey et al., 2004; Ayuso, 2007; Schianetz et al., 2007), environmental auditing (Diamantis, 1999) and indicators (Choi and Sirakaya, 2006; Schianetz et al., 2007). These tools have been developed to measure the sustainability of both destinations and tourism enterprises and to recommend areas for improvement. These tools largely focus on potential environmental impacts of proposed tourism developments and compliance of tourism facilities to previously established policies.

Sustainable tourism exposes the negative impacts of conventional tourism and focuses on the need for destinations to address destructive environmental, cultural and economic practices. However, moving from theory to practice is often difficult and left up to individual destinations to define and manage their own concepts of sustainable tourism, often resulting in a lack of formalized policies requiring that economic, environmental and socio-cultural resources be managed in a sustainable manner

(McNamara and Gibson, 2008). Studies also expose that sustainable tourism is mostly studied in isolation of other stressors, with frameworks and empirical studies of sustainability not taking into account how other stressors affect the adoption of sustainable tourism practices at either the destination or enterprise scale.

### *Summary of Global Stressors and Tourism*

While there are many studies that investigate the implications of large-scale stressors for tourism, there is little research on connections between different processes of change. With the exception of connections between mass tourism and land use change, there is little research into how different processes of change interact to affect tourism industries. Tourism is subject to many stressors and shocks simultaneously and yet the focus of much research has been on the effects of individual perturbations. Researchers focusing on each of the above discussed stressors and shocks highlight the importance of these processes of change for tourism. Given that these stressors are all important for tourism, it is clear that there is a need for research into how these stressors interact with each other to affect tourism industries.

## **2.2 Small Tourism Enterprises & Stressors**

The second body of literature that this dissertation both draws from and contributes to is Small Tourism Enterprises & Stressors. This section reviews research that has focused on how small tourism enterprises are affected by and respond to stressors.

Small tourism enterprises are essential components of global tourism and can be defined as tourism related businesses that employ fewer than 10 people or consist of fewer than 75 rooms in the case of accommodation providers (WTO, 1999). Small

tourism enterprises make up the bulk of tourism businesses worldwide (Morrison, 2004). On a global scale, the number of small tourism enterprises far outweighs the number of large businesses (Bastakis et al., 2004). Small tourism enterprises are also important components of tourism since they “provide the bulk of the essentially local ambience and quality of visitor experiences at tourism destinations on which future growth of overseas and domestic markets depend” (Morrison, 2004, p.5). This provision of authentic cultural experience is seen to be essential in differentiating destinations from each other and attracting tourists to the destination (Ritchie and Zins, 1978; Dunbar-Hall, 2001; Harrison, 2002).

Given the importance of small tourism enterprises to the industry, the majority of research on these businesses focus on assessing business performance and identifying common characteristics that affect rates of failure (Ateljevic and Doorne, 2004). Characteristics that affect failure are often attributed to various manifestations of personnel and financial resource scarcity and can be grouped into three main categories. Firstly, small tourism enterprises are often family run businesses with low levels of financial support and business experience (Morrison, 1998; Getz and Carlsen, 2000). Secondly, owners of small enterprises are often primarily motivated by the perceived lifestyle benefits of tourism entrepreneurship rather than solely by economic goals (Morrison et al., 2001). The many small tourism businesses that have been started by individuals anticipating a slower pace of life has resulted in a lack of focus on continuous economic growth and instead a focus on maintaining an attractive lifestyle (Atlejevic and Doone, 2000; Carlsen et al., 2008). Lastly, small tourism enterprises are often non-effective at marketing their businesses. Marketing is often seen as a superfluous expense

and decisions on where and how to market are often cost driven rather than being motivated by effectiveness (Moriarty et al., 2008).

These characteristics of small tourism enterprises have been attributed to increasing their vulnerability to all types of perturbations including changing market conditions, extreme natural events and financial crises (Hildmann and Stierand, 2010; Cioccio and Michael, 2007). For example, small tourism enterprises are seen to be highly vulnerable to extreme natural events. Owners and managers of small enterprises often fail to prepare for hazards, lack insurance coverage and do not have the financial resources to recover after significant damages (Cioccio and Michael, 2007; Calgaro and Lloyd, 2008). In a study of how small tourism enterprises prepare for natural hazards, Cioccio and Michael (2007, p.10) find that, “The operators of very small tourism firms lack the training, skills and resources to initiate the kinds of preparatory planning that larger organisations might consider appropriate to ameliorate some of the impacts in any disaster scenario”. This lack of planning by small businesses is often associated with unawareness, lack of interest in hazard management or lack of funds to purchase appropriate insurance (Calgaro and Lloyd, 2008).

Similar characteristics of small tourism enterprises are seen to contribute to their low resilience to financial related change. In an in-depth case study of small hotels, Hildmann and Stierand (2010) find that managerial weaknesses such as outdated marketing and ineffective organizational structures have exacerbated loss of profitability during the current global financial crisis. A study of small tourism enterprises in the Mediterranean region found that lack of financial resources and marketing expertise contribute to the inability of small businesses to negotiate with tour operators (Bastakis et

al., 2004). This has resulted in a forced decrease in rates, reduction of services offered to guests and ultimately a significant loss of profitability for small tourism enterprises. An inability to develop effective responses to changing tourism patterns and adapt to decreases in tourist expenditure has led to the failure of many small enterprises during other financial crises (Henderson, 1999; Okumus and Karamustafa, 2005).

The general research approach to studying small tourism enterprises and stressors is to identify characteristics of the businesses that affect their susceptibility to processes of change (Morrison, 2004). This has led to a general understanding in the literature that these businesses are vulnerable and un-resilient to change because of inherent attributes (Wanhill, 2000; Morrison, 2004). Personality features of owners/managers of small tourism enterprises such as managerial skills and commitment to obtaining high levels of revenue and profitability are seen as the main determinants of either the success or failure of these businesses (Lerner and Haber, 2001).

However, while there has been much research on how the various individual characteristics of small tourism enterprises make them prone to failure and highly vulnerable to stresses and shocks, there are very few studies that consider how large-scale processes of change interact to affect the viability of these businesses. Studies often focus on how small tourism enterprises address isolated stressors and do not consider how these businesses are affected by having to cope with many stressors and shocks simultaneously.

This focus in the literature on identifying impacts of single stressors may be related to the theoretical frameworks that these studies rely on. For example, a focus on crisis management has guided research into how small tourism enterprises cope with

financial crises (Okumus et al., 2005). This focus results in research that investigates the existence of crisis management plans and methods of coping with changing financial conditions. Hazard management theory has guided research into how small tourism enterprises prepare for and respond to extreme events and has focused on evidence of hazard planning and preparation and recovery strategies (Cioccio and Michael, 2007).

The use of narrow frameworks that are only applicable to exploring the effects of single stressors prohibits investigation into how multiple stressors interact to affect small tourism enterprises. Although these studies provide in-depth analysis of the implications of single stressors, small tourism enterprises are subject to many stressors simultaneously (Klint et al., 2012). Studies that only focus on single stressors thus ignore the effects of other processes of change for these businesses and how the combination of stressors affects susceptibility to all types of change and not just the particular stressor that is being researched.

In addition to the lack of studies that consider how small tourism enterprises are affected by multiple stressors, there is a dearth of literature on small hotels in particular. With all visitors to a destination in need of some type of lodging arrangement, the accommodation sector is an integral and lucrative component of the tourism industry. In general, accommodations account for approximately one third of tourism expenditure and are a major subsector of the tourism industry (Cooper et al., 1998). Hotels provide employment, opportunities for linkages with other economic sectors and are often a major factor in the choice of destination for tourists as well as influencing their overall experience (Morrison, 2004). Within the literature on small tourism enterprises, small hotels have been identified as particularly prone to failure (Morrison, 1998). Small hotels

display the same characteristics as other small tourism enterprises but are additionally affected by intense competition from large hotels and resorts that are able to capitalize on economies of scale (Smeral, 1998). Small hotels are often unable to compete with these larger enterprises that are able to offer modern and upscale amenities at comparable prices. These businesses often find it difficult to compete with larger hotels, largely since they are often family-run establishments with less tourism-focused expertise, limited financial resources, an inability to capitalize on economies of scale or offer the extensive amenities of large hotels (Aaby and Slater, 1989; Andriotis, 2002; Claver-Cortes et al., 2007).

There is a clear need for research into how small tourism enterprises, in particular small hotels, are affected by and respond to multiple stressors. As seen in the literature on Global Change Processes & Tourism, there are a number of stressors that have dire consequences for tourism industries and individual enterprises. However, without studies that consider how these stressors and shocks interact to affect enterprises, understandings of the implications of processes of global change for small businesses are incomplete. Burgeoning research such as Klint et al. (2012) does attempt to explore how multiple stressors affect small tourism enterprises. This study investigates how small tourism enterprises are affected by a number of current shocks and stressors that may be exacerbated by future climate change impacts. This study finds that climate change or other large scale processes of change cannot be studied in isolation and that small tourism enterprises are challenged by a host of stressors and shocks (Klint et al., 2012). This is one of the few studies uncovered in this literature review that consider how multiple processes of change affect small businesses in the tourism industry. Research on how

small tourism enterprises are affected by multiple stressors allows for a more realistic understanding of challenges facing these businesses and also allows for insight into appropriate and integrated action.

### **2.3. Vulnerability & Multiple Stressors Frameworks**

The last body of literature that this dissertation both draws from and contributes to is Vulnerability & Multiple Stressors Frameworks. This section reviews research that has explored vulnerability to multiple stressors and frameworks that have been developed to guide analysis of how multiple stressors interact to affect entities.

Vulnerability is a concept that has been used in a myriad of disciplines to describe different levels of susceptibility to harm. Within the broad research field of human-environment interactions, the fields of natural hazards and poverty are credited with the origins of the concept (Adger, 2006; Janssen and Ostrom, 2006). Early conceptualizations of vulnerability within these fields focused on physical elements of hazard exposure or emphasized political and structural factors that affected vulnerability (Eakin and Luers, 2006; Adger, 2006). These early theories have evolved into more recent conceptualizations that consider a range of biophysical and socio-economic factors that affect the exposure of entities to stressors and their ability to respond.

Contemporary vulnerability research is a broad and fragmented field despite some efforts towards integration and calls for greater synthesis (McLaughlin and Dietz, 2007). As a significant concept within the climate change and hazards literature, vulnerability has been understood and utilized in a myriad of ways. A number of reviews attempt to categorize the many interpretations of vulnerability to allow for improved collaborations

between different research communities. O'Brien et al. (2004a) theorize that vulnerability has been conceptualized in two different ways: as an end point or as a starting point. As an end point, vulnerability is conceived as the net impact of change; any susceptibility to change that remains after adaptation measures have been implemented. As a starting point, vulnerability is a measure of current ability to cope with change, without consideration of future adaptation capabilities. Other studies have categorized vulnerability by whether the concept is thought of as an outcome caused by a particular stressor or as a dynamic condition of the system (Eakin and Luers, 2006) or by fields of research (Adger, 2006; Fussel, 2007).

Although there are many ways to categorize, conceive and understand vulnerability, there are some integral components of the concept that are common to many of the different theories. Vulnerability is generally understood as the susceptibility of an entity to stressors. Stressors can be natural, economic, societal or political and can be external to the entity such as an extreme natural event or internal such as soil degradation (Gallopín, 2006). An entity can be conceived of as an individual, group, place or system. Given this general understanding of vulnerability, there are a number of characteristics of the concept that are generally accepted. Firstly, it is difficult to isolate vulnerability to any one particular stressor without considering vulnerability to other stressors (O'Brien et al., 2004c; Eakin and Luers, 2006; Leichenko and O'Brien, 2008). Secondly, although there are many different theories on exactly which factors affect vulnerability, it is accepted that both physical and socio-economic factors must be considered (Cannon, 2008). Thirdly, vulnerability changes through time since both stressors and the factors that affect vulnerability are dynamic (Adger, 2006). Fourthly, the spatial scale of

analysis affects perception of vulnerability with varying spatial scales revealing different vulnerabilities (O'Brien et al., 2004b.). Lastly, vulnerability differs for different entities even at the same spatial scale (Cannon, 2008; Gaillard, 2010).

Studies from a number of different research perspectives have investigated how multiple stressors interact to affect the vulnerability of a variety of entities. Belliveau et al. (2006) explore the vulnerability of wine industry enterprises to stressors related to climate and weather changes, governmental policies and international market conditions. They find that the combination of these stressors have direct effects on the profitability of enterprises, strategies of adaptation to changing conditions and future vulnerability to climate change. Drimmie and Casale (2008) investigate how food insecurity, poverty and HIV/AIDS interact to affect the long-term security of children in Southern Africa. The study finds that these stressors interact to constrain the coping strategies of households and create situations where parents must make difficult decisions about the education, nourishment and health of their children. Other studies initially focus on the effects of a single stressor but quickly discover that it is difficult to ignore the impacts of related stressors (Ziervogel et al., 2006). For example, Eakin et al. (2006) initially aim to explore how fluctuating market conditions affect coffee farmers in Mexico and Central America but find that institutional change is a significant stressor that affects how farmers respond to changing prices of coffee.

These studies highlight the need to explore how multiple stressors interact to affect entities. Considering the interactions and effects of multiple stressors and shocks is seen to be essential to understand how entities are affected by processes of change (O'Brien et al., 2004c). However, considerations of how multiple stressors interact with

each other and affect entities is a complex process (Eakin and Luers, 2006). It requires the identification of stressors, analysis of how they interact and exploration of the implications of these interactions for entities under analysis. In order to facilitate the exploration of how multiple stressors affect entities, a number of theoretical frameworks have been developed. These frameworks often focus on assessing the vulnerability of human-environment systems, social groups or geographical regions to different types of stressors and shocks.

Schroter et al. (2005) propose an iterative eight-step framework for assessing the vulnerability of human-environment systems to multiple processes of global change. This framework progresses from the involvement of stakeholders in the identification of the study area and stressors of concern to the development of indicators to measure vulnerability to formulating projections of future vulnerability and communicating results. Use of this framework results in place-specific assessments of vulnerability since the development of a unique model that takes into account the specific factors that affect how the system under analysis is affected by change is required. Other steps in the framework such as the development and assessment of appropriate indicators tailor assessment to the particular conditions of the system under analysis.

This framework has been used to explore the implications of climate change and land use change for ecosystems and humans in Europe (Metzger and Schroter, 2006) and as the basis of assessment of vulnerability of watersheds in the southern USA to drought (Polsky et al., 2007). However, the complexities of the framework require the efforts of a coordinated interdisciplinary research team with a homogenous understanding of how multiple stressors interact with the system, making it a difficult framework to apply to

research studies without these attributes (Schroter et al., 2005). In addition, the focus on place-specific conditions of this framework makes it difficult to compare the vulnerabilities of different locations (Polsky et al., 2007).

Menzie et al. 2007 also use an iterative approach to evaluate how multiple stressors interact to affect entities. This framework requires the development of a conceptual model that considers which stressors should be analyzed, potential effects on the entity under analysis and methods of assessing these effects. The implications of individual stressors are first evaluated before considering interactions between stressors and consequences for entities. This framework results in a place-specific assessment of impacts of multiple stressors and requires the researcher to develop a conceptualization of how stressors interact and affect entities. Although this framework is similar to Schroter et al (2005), it was developed to assess the impacts of multiple stressors on human health and ecological conditions (Menzie et al., 2007). As such, it has been used in a number of cases focused on non-human entities such as exploring how chemical exposure and changing biodiversity affect fish health (Wenger et al., 2010)

While both Schroter (2005) and Menzie et al. (2007) use step based, iterative frameworks, Turner et al. (2003a) developed a more dynamic and integrated framework for assessing the vulnerability of coupled human-environment systems to multiple perturbations. This framework considers how changes in both human and environmental conditions at a variety of spatial scales interact and manifest as distinct stressors that affect the system under analysis. The vulnerability of the system to these stressors is affected by both its human and environmental contextual conditions that affect exposure, sensitivity and resilience. The vulnerability of the system ultimately affects the impacts

of the stressors as well as responses to the stressors. Actions taken by the system in response to stressors in turn affects future vulnerability of the system as well as future stressors. This framework acknowledges the complexity and dynamics involved in assessing how multiple stressors interact to affect human-environment systems.

This framework has been utilized to study the implications of environmental and social stressors for agriculture in Mexico (Turner et al., 2003b) and to explore the implications of food and financial insecurity along with water scarcity and illness for communities in Ghana (Westerhoff and Smit, 2009). These case studies utilizing the framework highlight the need to consider how multiple stressors affect coupled human-environment systems and expose gaps resulting from studies that only focus on single stressors. However, while the framework does attempt to understand how multiple stressors interact to affect systems, the complexity of the framework makes it difficult to utilize for research projects that lack a large interdisciplinary research team or extensive funding (Eakin and Luers, 2006). As the developers of the framework note, “Indeed, a full vulnerability assessment following the framework...may lie well beyond the capacities of most research efforts....For practical and theoretical reasons, such frameworks should be modified (simplified) to suit the specifics of a given application” (Turner et al., 2003a, p. 8085).

Focusing on multiple stressors associated with globalization and global environmental change, the double exposure framework also takes a dynamic approach in developing a multiple stressor framework (O’Brien and Leichenko, 2000; Leichenko and O’Brien, 2008). This framework connects vulnerability with concepts of sustainability, adaptation and resilience and can be used to assess how multiple stressors affect a range

of entities or exposure units including individuals, social groups, geographical regions or economic sectors. In this framework, interactions between global environmental change and globalization affect the vulnerability and resilience of entities to change. Rather than considering large-scale processes solely as stressors that entities are vulnerable to, this framework investigates how processes affect the contextual environment of entities, outcomes, available response options and how responses affect the processes themselves. Thus processes of change are not just stressors that exposure units are vulnerable to, but rather processes have a dynamic relationship with entities and are also affected by the responses of entities. The double exposure framework uses three pathways to investigate the contextual environment, outcomes and feedbacks between processes of global change and exposure units under analysis.

The double exposure framework has been utilized in a number of studies to explore the interactions and implications of global environmental change and globalization in both rural and urban contexts and at spatial scales varying from the individual to the national level (O'Brien et al., 2004c; Leichenko and O'Brien, 2008; Silva et al., 2010; Finley-Brook et al., 2010; Leichenko et al., 2010). For example, a mapping approach is used to illustrate vulnerability to climate change and trade liberalization in India at the state level to identify regions in need of policy intervention to reduce negative impacts (O'Brien et al., 2004c). The double exposure framework has been lauded as an innovative theoretical frame to spur new research into how processes of global change interact to affect the vulnerability and resilience of entities (Bailey, 2009). However, the framework has been found to be ill-suited for analysis of the effects of multiple stressors for entities at large spatial scales (Bailey, 2009; Finley-Brook et al., 2010). At the regional or

national spatial scale, the double exposure framework is seen to lose some of the detailed analysis that allows for a holistic understanding of how entities are affected by interacting global forces. At these scales, lack of data availability, use of quantitative indicators and simplification of issues is seen to detract from the ability to obtain a nuanced understanding of how exposure units are affected by multiple stressors.

This review of studies and frameworks focused on multiple stressors reveals a number of insights. Firstly, consideration of how multiple stressors interact to affect entities is a complex process. Many of the studies have required the use of extensive research teams and budgets. Secondly, the use of a framework helps to guide analysis of multiple stressors. Lastly, frameworks differ based on their applicability to entities of different types. For instance, Turner et al. (2003a) and Schroter et al. (2005) specifically intend for their frameworks to be used to study socio-ecological systems.

For the purposes of this dissertation, the double exposure framework offers the most benefits for studying how multiple stressors affect small tourism enterprises. This framework can be used to study entities at a variety of scales and is simple enough to be utilized by a single researcher. However, the double exposure framework does have two significant limitations.

Firstly, the framework has been primarily used to study the effects of two stressors at a time. This approach is exemplified by Finley-Brook et al. (2010) that utilize the double exposure framework to explore four varied case studies. Looking at the Jamaican health sector, they find that poverty and risk to dengue fever are dire issues that the government is neglecting while focusing on other areas of environmental change. The spotlight of environmental concern for many NGOs has been sea level rise, leaving

important issues such as health concerns associated with environmental change without much attention or funding. Exploring Argentinean agricultural production through the double exposure lens finds that different types of agricultural practices and levels of access to water affects the success of farmers. In Panama, the framework is used to explore the energy sector, in particular, the equity concerns of installing a new dam in a rural area. While urban and industrial areas will benefit from clean energy produced, the rural population that is displaced and forced to change livelihoods often do not have access to electricity. Lastly, the authors use the double exposure framework to investigate mitigation of climate change via carbon trading. They find that while less developed nations may be most impacted by the effects of climate change, these nations are least equipped to take advantage of carbon trading, a highly profitable method of obtaining funds to aid with much needed adaptation.

Another example of this focus on exploring only two stressors at a time is Silva et al. (2010) that use the double exposure framework to investigate the combined effects of environmental stress and economic restructuring on farmers in Mozambique. Economic stressors and shocks associated with restructuring such as the loss of governmental aid along with environmental issues including drought and flooding were found to impact the security and livelihoods of Mozambican farmers. While farmers were capable of responding to environmental risks by altering crop production and location, these responses did not contribute to success with obtaining financial security. The study found that the combined effects of economic and environmental changes are making farmers less resilient to socioeconomic change. The rapid changes in the economic structure of the country combined with environmental shocks made it difficult for rural

farmers to develop appropriate responses that would allow for secure livelihoods.

While these case studies show that the double exposure framework can be utilized to explore the implications of interactions between many types of stressors for a variety of entities, they also each only focus on two processes of change at a time.

The second limitation of the double exposure framework is that while in theory the three pathways of the framework allow for analysis of dynamics between stressors and entities, in practice there has been little use of these pathways to explore their usefulness. Rather than utilizing the three pathways that Leichenko and O'Brien (2008) detail, most studies simply use the concept that globalization and global environmental change interact to affect exposure units. Failure to utilize the three pathways thus results in a focus on direct implications of these processes for entities under analysis and fails to consider dynamic connections within the framework. However, a few studies do demonstrate use of the three pathways. Leichenko and O'Brien (2008) utilize the three pathways but use each pathway to study a different pair of stressors for different entities in different case studies. While the pathways are successfully used to explore dynamics within the framework, utilizing different case studies for each pathway does not allow for analysis of how these pathways fare for a single case study. The sole study that utilizes the three pathways to explore the framework using the same case study considers the implications of the global financial crisis and environmental change in California (Leichenko et al., 2010). This study investigates how changing environmental conditions and financial instability has resulted in increased vulnerability for agricultural workers and has affected the long-term resilience of farming for the state. However, while the three pathways of double exposure are utilized in the same case study, the entity under

analysis is different in each of the pathways. For outcome double exposure, Leichenko et al. (2010) focus on households that are similarly negatively impacted by water scarcity and changes in livelihoods. Context double exposure shifts focus to explore how farmers in particular are affected by lack of credit markets and decreasing water availability. Finally in feedback double exposure, the responses of counties to changing water allocations and reduced housing values are the focus of study. While shifting the entities being analyzed does provide a broad understanding of how processes of change interact to affect a variety of groups, this changing focus does not allow for an analysis of whether these pathways work together when studying the same exposure unit.

While the double exposure framework does provide a useful guide for studying how multiple stressors interact to affect entities, it is clear that prior studies have failed to contribute to development of the framework. Utilizing the framework to study manifestations of more than two processes of change and investigating how the three pathways interact when studying the same entity are new applications of the framework that can provide useful feedback for improvements.

## **2.4 Summary of Literature Review**

Section 2.1 reviewed the literature regarding significant stressors that affect tourism on a global scale. These stressors can be categorized as either related to global environmental change or globalization. The environmental change stressors were found to be climate change, extreme natural events and land use change. The globalization stressors were found to be financial crises, mass tourism and sustainable tourism. While these stressors have significant implications for flow of global tourism patterns and

tourist related expenditure, there have been few studies that attempt to investigate how interactions between these processes may affect tourist destinations.

Section 2.2 reviewed the literature regarding small tourism enterprises and how they are affected by and respond to stressors and shocks. The vast majority of these studies focus on personal characteristics of small tourism enterprises as the reason for their widespread failure and inability to cope with stressors and shocks. However, studies largely focus on how these businesses are affected by single stressors and do not consider how multiple stressors interact to affect their viability.

Section 2.3 explored vulnerability and frameworks that have been developed to guide analysis of how multiples stressors affect a wide range of entities. These frameworks highlight the complexity of assessing the implications of multiple stressors and with the exception of the double exposure framework, have been mostly utilized by large research teams with extensive funding. While the double exposure framework was identified as the most suitable framework to guide this dissertation, the framework has two major shortcomings. It has largely been used to study the interactions and implications of only two stressors at a time and there have been few research studies that utilize and critique the three pathways of the framework.

This review of the literature reveals a number of gaps that require further investigation. Firstly, there is a need for exploration of how multiple stressors interact to affect tourism and small tourism enterprises in particular. Secondly, it is clear that the double exposure framework can be used in new ways to investigate multiple stressors. Thirdly, while the vulnerability literature suggests that multiple stressors are important, there are still few studies that utilize a multiple stressor approach. In particular, there are

few studies that investigate economic vulnerability as opposed to the vulnerability of particular demographic groups. In the following section, I detail how my research questions contribute to addressing these gaps in the literature.

## **2.5 Research Questions & Theoretical Contributions**

The review of literature on Global Change Stressors & Tourism, Small Tourism Enterprises & Stressors, and Vulnerability & Multiple Stressor Frameworks has revealed a number of research gaps. This dissertation aims to address these gaps through the following research questions:

*Research Question 1: What large-scale processes of change interact to affect the tourism industry?*

Addressing this research question contributes to the literature on Vulnerability & Multiple Stressor Frameworks by using the double exposure framework to investigate multiple large-scale processes rather than focusing on the implications of only two processes as in other studies. I also utilize the three pathways of double exposure to focus on the vulnerability of small tourism enterprises, another novel application of the framework. By focusing on interactions between multiple stressors, I also contribute to the literature on Global Change Stressors & Tourism that has largely focused on investigation of single stressors for the industry. My study exposes connections between large-scale processes of change that have previously been mostly studied in isolation and reveals how these connections and interactions have inter-related effects for tourism.

*Research Question 2: How do interactions between processes of global change affect small tourism enterprises?*

This research question contributes to the literature on Small Tourism Enterprises & Stressors. Utilizing the three pathways of double exposure to focus on how multiple large-scale processes interact and affect small tourism enterprises is a new contribution to literature on small tourism enterprises that mostly focus on the implications of single stressors. This research question allows for exploration into how multiple stressors affect the conditions that small tourism enterprises operate in and how these conditions interact with characteristics of these businesses to affect vulnerability. This is a different approach than past studies that have largely focused only on the characteristics of businesses and not on how these characteristics are affected by large-scale processes of change.

This question also contributes to the Vulnerability & Multiple Stressors Frameworks literature by exploring how multiple stressors interact rather than focusing on single stressors. This single stressor approach has been common in the human dimensions of environmental change literature, particularly in studies exploring vulnerability to natural hazards and climate change (Eakin and Luers, 2006). However, this study highlights why consideration of interactions between multiple stressors is necessary when assessing the vulnerability of entities of any kind to processes of change.

*Research Question 3: What are the implications of multiple stressors for the viability of small tourism enterprises?*

Addressing this research question contributes to the literature on Small Tourism

Enterprises & Stressors by exploring how multiple stressors affect the viability of these small businesses. Moving beyond assessing the vulnerability of small tourism enterprises to change to explore how the future of these businesses is affected contributes to understanding the long-term implications of these stressors.

## **2.6 Conceptual Framework**

This review of the literature has contributed to the development of a conceptual framework for this dissertation. The conceptual framework guides analysis and is thus an integral component of the dissertation. The conceptual framework for this dissertation is based on the double exposure framework that provides a guideline for studying multiple stressors (Leichenko et al., 2008). While it has been utilized in other studies, this dissertation is a new application of the framework. Firstly, I use the three pathways to explore how multiple processes of change affect the vulnerability of small tourism enterprises. Rather than focusing on only two processes, I aim to understand how six different processes interact. Secondly, I utilize the three pathways to focus on small tourism enterprises that allows for insights into the usefulness and effectiveness of the three pathways. While not changing the framework at the onset of the project, I do apply it in a different way than used previously. This allows for insight into how the framework can be improved for future studies. My suggestions for further development of the framework are provided at the conclusion of the dissertation.

### *Definitions*

The double exposure framework utilizes a number of terms that are necessary to define. A *process of global change* is a group of actions that incite large-scale change.

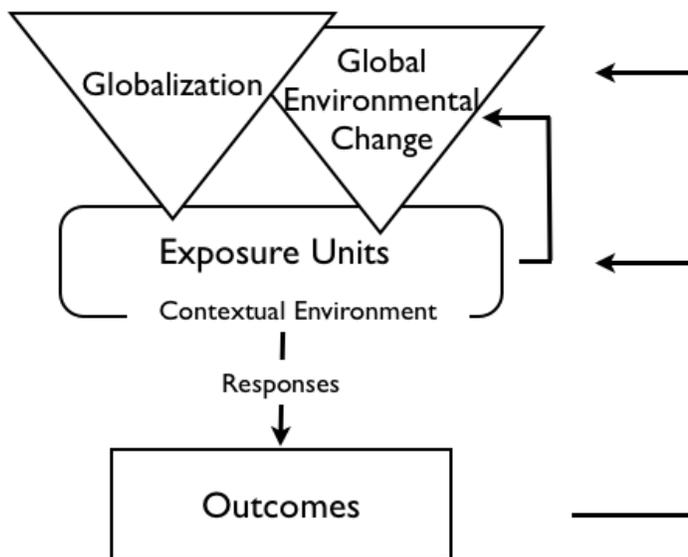
These processes are collectively termed globalization and global environmental change. However, these processes have individual facets and manifestations. Facets of globalization include international trade and cultural homogenization while manifestations of these facets would be changing employment types and a decrease in traditional practices. Facets of global environmental change include climate change and biodiversity loss while manifestations would be sea level rise and a decrease in population of a particular species. These manifestations are termed stressors if they are gradual, long-term changes in conditions or shocks if they are short-term, unexpected events.

*Exposure* is the state of being influenced by a process of global change. An *exposure frame* defines the boundaries of considering which groups are assessed for their exposure to processes of global change. An exposure frame may be a geographical area, an economic sector or some other functional boundary. Within the exposure frame are *exposure units*, entities that are exposed to processes of global change. Exposure to processes of global change for exposure units is based on the intensity of the manifestations as well as the contextual environment of the exposure units.

The *contextual environment* is a group of conditions that affect the intensity of exposure and how an exposure unit can respond. The contextual environment is comprised of a range of factors including social, economic, political and cultural conditions. Within an exposure frame, the contextual environment is dynamic and may be different for different exposure units thereby resulting in differential impacts of global processes. The contextual environment is comparative to the biophysical and socioeconomic factors that are considered to affect vulnerability.

*Responses* are actions taken by exposure units either before or after exposure to a process of global change. Responses can be anticipatory such as purchasing insurance before an extreme event or reactive such as repairing damage after an event. *Outcomes* are the assessable impacts of processes of global change for exposure units. Outcomes can be measured at different spatial scales and from different viewpoints, making determination of outcomes a value-laden and time-specific exercise. Outcomes are assessed at a particular period of time, giving a snapshot of the effects of global change processes. However, outcomes change with time and assessing outcomes at another point in time may yield different conclusions.

*Framework*



**Figure 2.1: Double Exposure Framework**  
Adapted from Leichenko and O'Brien, 2008

The double exposure framework posits that multiple processes of global change result in beneficial or detrimental outcomes for entities. These processes of global

change affect exposure units and culminate in outcomes. Exposure to processes is influenced by characteristics of the process as well as the contextual environment. The contextual environment of the exposure units affects responses and thereby the outcomes of the processes. However, rather than static relationships between the aspects of the framework, connections between components of the framework are dynamic and all affect each other. Outcomes and contextual environments can alter processes, processes can affect the contextual environment, and responses can change the contextual environment. Therefore, the framework allows for analysis of global change processes and their impacts across both space and time as simplified in the diagram in Figure 2.1.

The double exposure framework provides a way to explore the interactions between processes of globalization and global environmental change and how they affect the current and future conditions for particular groups. The basic framework presented is further clarified through three pathways that highlight the equity, resilience and sustainability impacts of global change processes on particular exposure units and illustrate the dynamics of the framework. These three pathways: context double exposure, outcome double exposure and feedback double exposure allow for a more nuanced understanding of the implications of exposure to global change processes.

Context double exposure focuses on how processes of global change affect the contextual environment of exposure units and vulnerability to perturbations. The contextual environment affects exposure and ability to respond thereby directly affecting vulnerability and resilience to other perturbations. Alterations to political, economic, biophysical and other factors of the contextual environment affect the exposure, responses and outcomes of exposure units to global change processes. Over time, these

changes to the contextual environment affect the vulnerability of exposure units by impacting the extent of exposure to global processes and affect resilience by impacting ability to recover from continual shocks and stressors.

Outcome double exposure focuses on the current outcomes of global change processes. Within an exposure frame, exposure units are exposed to manifestations of global environmental change and globalization and result in measurable outcomes. Exposure varies according to characteristics of the processes and the contextual environment. This pathway emphasizes the importance of the contextual environment in shaping responses and affecting outcomes. In this pathway, the global processes under analysis do not have to be directly related since this lens focuses on how the contextual environment affects exposure, responses and outcomes. Through this pathway, it becomes apparent that exposure units that are negatively impacted by manifestations of globalization are also often negatively impacted by global environmental change manifestations because of the way that the contextual environment affects exposure and responses. Outcome double exposure highlights equity issues by showing how the contextual environment of double losers increases exposure, decreases ability to respond and culminates in negative outcomes. By exploring the effects of two seemingly unrelated processes of global change, it is apparent how significant the contextual environment is in shaping outcomes and responses.

Feedback double exposure focuses on the time-dependent connections between the components of the framework. This pathway explores how responses and outcomes to global processes can affect the drivers of those processes. These responses that in turn affect the drivers of global change are termed feedbacks. Feedbacks highlight the

connections between global processes, the contextual environment and outcomes by showing that local responses have global repercussions. This feedback from system outputs to inputs can attenuate or amplify processes of change. That is, global change processes do not remain unchanged, the responses and outcomes that they create in turn affect the processes themselves. In the feedback double exposure pathway, responses and outcomes from one process of change may affect another process. This pathway highlights the sustainability of current practices by focusing on the temporal linkages in the framework. By focusing on how current actions affect future processes of change, this pathway shows that current responses do not only affect current outcomes but may have significant implications on how processes affect future generations. Feedback double exposure also highlights the relationships between processes of global change by showing how responses to one process may affect drivers of the other process.

## **Chapter 3**

### **Methodology**

The purpose of this dissertation is to investigate how multiple stressors interact to affect the viability of small tourism enterprises. To explore this problem, I aim to answer three related research questions: 1. What large-scale processes of change interact to affect the tourism industry? 2. How do interactions between processes of global change affect small tourism enterprises? 3. What are implications of multiple stressors for the viability of small hotels?

This chapter details the methodology used to explore these research questions and is organized as follows. Section 3.1 provides a brief overview of the research site. This section introduces the reader to the research site used for this dissertation while further details of the site are provided in Chapter 4. Section 3.2 details the research approach and rationale for choice of methodology. Section 3.3 provides details of participants in the study as well as methods of data collection utilized. Section 3.4 provides an account of how collected data was analyzed utilizing the three pathways of double exposure. Finally, Section 3.5 discusses limitations of the dissertation.

#### **3.1 Research Site**

In order to investigate the research questions for this dissertation, New Providence and Paradise Island, Bahamas, a popular tourism destination in the Caribbean, was chosen as a research site. As the most tourism dependent region in the world, the Caribbean has become increasingly reliant on millions of visitors per year as a vehicle for

economic development (Grandoit, 2005). The tourism industry is an important sector for the region with many nations reliant on the industry as a major source of foreign exchange and employment opportunities (Grandoit, 2005; Blanke and Chiesa, 2011). However, the industry is far from stable, with large-scale processes of change having significant implications for patterns of tourism arrivals and expenditure (Pattullo, 2005). The Caribbean is viewed as one of the most vulnerable regions in the world to climate change (IPCC, 2007), has an open economy that is affected by global financial crises (Schrank and Kurtz, 2005), and is frequently impacted by extreme natural events (Smith et al., 2005; Scott et al., 2008). In addition, tourism in this region is closely related to environmental conditions (Lewis-Bynoe et al., 2009), has a long history with mass tourism (Weaver, 2001) and has undergone significant land use changes associated with tourism development (Weaver, 1993; Colmenares and Escobar, 2002).

New Providence and Paradise Island (NPI) is one of the top ten destinations in the Caribbean, ranking sixth in total numbers of tourists in 2010 (CHTA, 2011). The Bahamas has been a destination for tourists since the late 1800s with a focus on tourism as the major industry for economic development beginning in the mid 20<sup>th</sup> century (Cleare, 2007). Tourist arrivals to this Caribbean nation have grown from 1.4 million in 1971 to over 4 million in 2009 (BMT, 2010). Tourism has grown to be the primary industry for The Bahamas, accounting for 51% of the GDP, 61% of all wages and 63% of the employment base (Sacks, 2006). With tourism as a primary industry of the destination, a mixture of both small and large tourism enterprises and past experiences with processes of global change, NPI was a suitable case study for exploration of how multiple stressors interact to affect the viability of small tourism enterprises.

### **3.2 Research Approach**

While the double exposure framework does offer a guideline for investigating how multiple stressors affect entities, it does not provide methodological direction (Leichenko and O'Brein, 2008; Schroeter, 2005; Menzie et al., 2007). Rather, the particular methodologies are left to the researcher to determine. This has resulted in a variety of methods for applying the framework including mapping (Leichenko and O'Brien, 2008), qualitative analysis (Finley-Brooke et al., 2010) and quantitative indicators (Silva et al., 2010) to illustrate how processes of globalization and global environmental change interact. This lack of methodological guidance means that the researcher must select methodology most suitable for their particular research project.

The choice of methodology for a particular research project is an important decision that guides the project (Bloomberg and Volpe, 2008). Choice of methodology is dependent upon the contextual framework, goals of the project, potential sources of data as well as time and funding parameters. The purpose of this dissertation is to explore how multiple processes of change interact to affect the viability of small tourism enterprises using the double exposure framework. This is a new area of research that aims to address gaps regarding multiple stressors, small tourism enterprises and the double exposure framework itself. This project contributes to new understandings of how multiple stressors interact to affect small tourism enterprises and thus a detailed analysis is necessary. The study was also based in NPI, a tourism destination in a developing country where there is a paucity of past research or readily available quantitative data regarding tourism development.

For studies that explore new areas of research where theories are being developed and not tested, a qualitative methodological approach is seen to be most suitable (Crang, 2003; Bloomberg and Volpe, 2008). The use of qualitative research methods is conducive to understanding individual perspectives and gleaning in-depth insights into new phenomena (Bell, 2005). Within the field of geography, qualitative methods have been used extensively in sub-disciplines from feminist to economic geography (Crang, 2003). Qualitative analysis has also been used in many studies of multiple stressors in order to provide an in-depth understanding of the complexities of these interactions and how they affect entities under analysis (Finley-Brook et al., 2010; Ziervogel et al., 2006).

For this dissertation, qualitative methodology was determined to be the most suitable approach for exploring the three research questions. Semi-structured interviews were selected as the primary method for data collection. This method of interviewing facilitates a nuanced discussion of issues by allowing the interviewer to explore a broad range of subjects, clarify opinions and probe for additional explanation (Marshall and Rossman, 2006). Information from interviews was supplemented by analysis of secondary textual sources. Secondary sources such as newspapers and governmental reports are a source of rich contextual information that are often used to supplement primary sources (Bloomberg and Volpe, 2008).

### ***3.2.1 Research Phases***

Research for this dissertation was conducted in two separate phases. Each phase was essential in collecting and analyzing data. The initial phase of research consisted of two scoping studies that took place in the summers of 2008 and 2009. Scoping studies are useful research tools that allow for exploration of how general topics and themes can be

approached for specific research projects (Arksey and O'Malley, 2005). These studies allow the researcher to identify relevant areas of inquiry, identify sources of information and ultimately tailor the research design for the particular study site (Mays et al., 2001).

The scoping studies for this research project were conducted to explore how significant processes of global change identified in the tourism literature manifested in NPI. While the literature provides a broad overview of why these shocks and stressors are important to the tourism industry on a global scale, there was a clear need to identify how these processes of change manifested in my particular research site.

The two scoping studies consisted of interviewing key informants that were cognizant of stressors affecting the tourism industry in NPI. During this phase of research I also attended a two-day conference in NPI that was focused on environmental change and tourism in The Bahamas. This conference was spearheaded by a Caribbean based non-governmental organization in collaboration with the Bahamian government and provided additional insight into manifestations of global environmental change in NPI. This initial research allowed for a focusing of how the broad stressors identified in the literature affected the tourism industry in NPI.

The second phase of research consisted of a prolonged field study in January to July of 2011. This phase consisted of interviews with small hoteliers and other tourism stakeholders. Information needed to develop a series of maps that show some of the spatial characteristics of small tourism enterprises and stressors in NPI was also collected during this time. Secondary sources including newspaper reports, laws and governmental and tourism organization reports related to the stressors being studied were also collected.

### **3.3 Data Collection & Study Participants**

To explore the implications of global processes for small hotels, it was necessary to obtain information from a variety of sources. These sources included owners and managers of both large and small hotels, government officials, members and heads of private organizations associated with tourism and other industry stakeholders. Secondary sources such as governmental reports and newspapers also provided background information on how global processes of change have affected NPI.

#### ***3.3.1 Phase 1***

The first phase of research included semi-structured interviews with key informants. In preparation for these interviews, a list of primary and probing questions was developed based on the literature review of global change stressors and tourism. These questions were focused on gaining perspectives as to whether these stressors affected tourism in The Bahamas and what aspects of these stressors were significant for Bahamian tourism. The questions were very broad by design so that informants could give their own insights into the importance and manifestations of the stressors without guidance from myself. A list of these questions is included in Appendix A and was approved by the Rutgers Institutional Review Board prior to the commencement of these scoping studies.

To gain participants for the scoping studies, I relied on snowball sampling. I initially contacted and met with members of private tourism organizations and government officials related to tourism in NPI. These informants recommended other participants that would provide insight for my study. Participation in the two-day

conference focused on environmental change in NPI also facilitated introduction to key tourism stakeholders and willingness of these stakeholders to participate in this study.

In total, I interviewed 7 key informants during the two scoping studies. 3 informants were from private tourism organizations, 2 were governmental representatives and 2 were owners of small tourism enterprises in NPI.

### **3.2.2 Phase 2**

#### *Small Hoteliers*

The primary source of information for this dissertation was from the owners and managers of small hotels to assess their views on stressors, how they have been affected and their responses. In preparation for semi-structured interviews with small hoteliers, a list of primary questions and probing questions were developed based on insights from the scoping studies and a review of related literature. These questions ensured that the same topics would be covered in all of the interviews. A list of these questions is included in Appendix B. These questions were developed based on my review of the literature as well as from interviews conducted in my scoping studies. This allowed me to identify critical areas of inquiry to explore how these stressors affected small hoteliers. Prior to the commencement of the study The Rutgers Institutional Review Board approved the list of questions.

To gain participants for the study, I attempted to interview all small hoteliers in NPI. I obtained a list of all registered hotels in NPI from the Bahamas Ministry of Tourism. There were 47 hotels on the list and 38 of them had fewer than 75 rooms registered, qualifying them as a small hotel for the purposes of this dissertation. I then sent an email to each of the 30 hotels that had an email address listed. This email was

addressed to the contact person listed and contained details of my study and an invitation to participate in the study. I hand delivered a letter to the 8 small hotels that did not have an email address listed. This initial communication was delivered in January of 2011. From this initial communication, I received a response from 4 hotels. Two weeks after my initial communication, I then hand delivered a letter to the remaining 34 hotels that I did not receive a response from, with the exception of the 8 hotels that had already received a letter. From this round of invitations I received 3 additional responses. Two weeks after this round of invitations, in February 2011, I then called the remaining 30 hotels that I had not heard from to inquire about participating in the study. From this I received responses from 5 additional hotels. This brought the number of participating small hotels to 12 in total giving a response rate of 32%.

Although only 12 small hotels were a part of the study, I was able to interview numerous people from the same hotel. I was often able to interview the owner of the hotel and the head manager. Interviews with multiple people from the same hotel provided a more nuanced understanding since oftentimes an owner would have a different perspective than a manager or a manager would have more detailed information than an owner. In total I interviewed 24 owners and managers from the 12 hotels, an average of two persons per hotel. These additional interviews provided a more nuanced insight into how processes were affecting these hotels.

Although a larger sample size would be ideal, in social science research it is becoming more common to utilize a small number of participants in interview-based studies (Crouch and McKenzie, 2006). A small sample size, whether by design or by low

participation, allows the researcher to conduct a deep analysis of data and explore responses from participants more thoroughly.

Interviews with hoteliers were conducted at the hotels and took between 45-90 minutes. I conducted either one or two interviews per day at one hotel per day. I found that interviewees were not receptive to signing the IRB form agreeing to voice recording of the interviews and so for the majority of interviews I elected to take copious notes in lieu of voice recording. These notes were organized and typed up on the same day as the interview so that essential insights would not be lost. All interviews took place between January and April 2011.

#### *Industry Stakeholders*

To supplement information from small hoteliers, I also met with a number of industry stakeholders and conducted semi-structured interviews. In preparation for these interviews, I revised my question list used for the small hoteliers. The revised questions focused on the views of stakeholders regarding how issues affected the tourism industry in general and then how issues affected small hoteliers in particular. This was necessary since some of the stakeholders did not have a direct relationship with small hotels but were integral to the overall tourism industry. These questions are found in Appendix C.

Stakeholders were chosen using snowball sampling. I first contacted some of the stakeholders that had a direct connection to small hoteliers using email and hand delivered letters. These included representatives from the Bahamas Ministry of Tourism and a few private organizations that directly interact with the accommodation sector. These individuals were identified from my scoping studies and also from interviews with small hoteliers. I initially contacted 15 representatives from the Ministry of Tourism and

5 representatives from private organizations. From this contact, I was able to conduct interviews with 3 Ministry of Tourism representatives and 2 private organization representatives. During these interviews, I asked participants for other stakeholders that they thought would contribute to understanding how stressors affect Bahamian tourism and small hoteliers. From these recommendations I was able to identify and contact other stakeholders that would contribute to a holistic understanding. Overall I interviewed 36 stakeholders from various organizations as detailed in Table 1.

Interviews with stakeholders were conducted at interviewee's place of business and took between 60-120 minutes. I conducted one interview per day so that notes could be transcribed daily.

| <b>Source</b>  | <b>Number of Participants</b> |
|--|-------------------------------|
| Small Hotels   | 24                            |
| Large Hotels   | 3                             |
| Ministry of Tourism  | 5                             |
| Private Banking Institutions   | 2                             |
| Bahamas Hotel Association  | 2                             |
| Nassau & Paradise Island Promotion Board                               | 3                             |
| Ministry of Environment  | 2                             |
| Tourism NGOs   | 3                             |
| National Emergency Management Agency                                   | 2                             |
| Other Small Tourism Enterprises  | 10                            |
| Tourism Governmental Representatives from other Caribbean Destinations | 4                             |

**Table 3.1: Study Participants**

### *Mapping Data*

To supplement semi-structured interviews, I also utilize GIS to visually display the location of small and large hotels in NPI along with their average daily rates. I encountered extreme reluctance to gain access to GIS data from the government of the Bahamas. I contacted three different Ministries that have access to the data and was either denied access outright or never received a response despite repeated inquiries. In order to complete the maps I relied on global databases that included political boundaries and road data.

Other data required for maps was collected by myself. For one map, I required information about the location of hotels and their average price per night. The location of hotels was found by visiting each of the hotels and recording their coordinates using a GPS device. This allowed for accurate placement of the hotels on the map since the information provided by the Ministry of Tourism was often not detailed enough. The average price per night was determined by calling each of the hotels to obtain the most recent and accurate pricing. All calls were made within a two-day span to maintain consistency.

Another component of the dissertation is a map showing beach access points. This information was not readily available and so I collected these points using a GPS device. Beach access points that were clearly marked as public access were included. Some of the beach access points were obscured, in some cases deliberately. These access points were not included on the map but discussion of these points is included in Chapter 4.

*Secondary Sources*

To investigate how global processes affected the tourism industry in NPI, a number of governmental reports were investigated. These reports were available from the Ministry of Tourism and contained information on a variety of issues including hurricane preparation, effects of the 2007 global financial crisis on tourism and the development of hotels in NPI. Reports from private tourism organizations were directly provided to me by members or were obtained from the public websites of these organizations.

To supplement information on how processes of global change have affected New Providence and Paradise Island, a number of national newspapers were consulted. The Nassau Guardian and The Tribune, the two largest newspapers in the country in terms of readership, were used as a resource for information. The online archives of these newspapers provided accounts of how manifestations of the processes of global change under analysis have affected the tourism industry in NPI. For each process of global change, I conducted an online search of each paper's archives using a combination of terms related to the stressor. Articles were then read to extract relevant information regarding implications of the stressor for tourism and for small tourism enterprises in particular. A complete list of search terms used for archival searching is provided in Appendix D. While newspaper articles did provide some insight into recent conditions within the country, online archives were only available for the period 2010 -2012. Thus newspaper articles were largely supplemental to interviews and reports.

### **3.4 Analyzing the Data**

A systematic procedure was used to analyze the interviews from the small hoteliers. This procedure took four major steps and was guided using methodology to assess qualitative data (Bloomberg and Volpe, 2008). In step 1, the major issues were identified. Notes from each interview were typed and organized according to the global process being discussed. These notes were repeatedly read through to determine recurring themes that were raised by interviewees. Themes that were mentioned by two or more interviewees were identified as major issues.

In step 2, categorization of data took place. Each interview was repeatedly read through to determine their stance toward the major themes that were developed in step 1. These stances towards major themes provided different categories that responses could be organized into. This revealed patterns among the data within the same categories. Connections between responses and demographic data were also explored.

In Step 3, connections between categories took place. Connections between responses to different major issues were investigated to explore how responses were related. Finally in step 4, results from my research was compared and contrasted with prior research to determine how this study fits into the broader literature.

This four-step process was then repeated for interviews with industry stakeholders. Major issues did emerge even though stakeholders were from different parts of the public and private sector. Interviews with stakeholders were also analyzed to determine their views on the major issues identified from interviews with hoteliers.

### ***3.4.1 Pathways of Double Exposure***

The three pathways of the double exposure framework guided the research analysis for this dissertation. These three pathways focus on the outcomes, responses and feedbacks of exposure units to multiple process of global change. While previous studies have either not utilized the three pathways (e.g. Silva, 2010; Finley-Brooks et al., 2010) or utilized the three pathways to study the same two stressors (Leichenko et al., 2010), in this study, I use the three pathways to study six processes of global change. Each pathway focuses on the interactions between two processes of global change. Thus it was necessary to pair processes of global change that affect small tourism enterprises in ways that were most conducive to understanding their interactions. The pairing of processes of change was guided by results from the scoping studies and is detailed further in Chapter 4.

The three pathways guided how interactions between stressors were conceptualized and analyzed using information from primary and secondary sources. However, the pathways were used critically, with attention paid to any limitations or areas that could be improved. At the conclusion of the analysis, the effectiveness of the double exposure framework and these pathways are also analyzed.

### ***3.4.2 An Integrated View***

Each of the pathways of double exposure focuses on a particular aspect of the framework and investigates the implications of two processes of change at once. However, to gain an understanding of how all six processes of change interact to affect small tourism enterprises, there is a need to integrate these findings. To accomplish this, I critically assess the findings from each of the three pathways and draw conclusions on

how small tourism enterprises are affected by all of the processes. This can be thought of as an integration of the pathways that focuses not on the contextual environment, outcomes or feedbacks but on the exposure units themselves. In this integrated analysis, I focus on the implications of the three pathways for the viability of small tourism enterprises. This integrated analysis is conducted in the conclusion of the dissertation by addressing the three research questions.

### **3.5 Limitations of the Study**

There are a number of limitations associated with this dissertation. Firstly, the sample size of small hoteliers interviewed is smaller than I would have preferred. Although I did contact all small hotels in NPI to take part in the study, I encountered low levels of participation. Being that this dissertation is a case study of a particular destination, it was not feasible to conduct interviews with small hoteliers from other destinations either within The Bahamas or in the Caribbean. Although a multiple case study of differences between separate destinations would add further insight into how multiple stressors affect small tourism enterprises, this was beyond the scope of this dissertation and was prevented largely due to financial and time limitations. However, this is an avenue that could be explored in future research.

Secondly, it would have been beneficial to interview more representatives of large hotels. Although I was able to interview three managers of large hotels, obtaining viewpoints from additional managers would have aided in the analysis of how processes differentially affect large and small hotels. However, gaining access to speak to managers of large hotels was particularly difficult. While at small hotels the owners and

managers are often part of daily operations and comparatively easy to contact, at large hotels, head managers are located in executive quarters or away from the hotels themselves. Therefore gaining an audience to request their participation in the study proved to be very difficult.

Lastly, it was difficult to obtain GIS data, governmental reports or detailed information regarding tourism from the Ministry of Tourism and other governmental organizations. Although the Ministry of Tourism maintains a website with current information, repeated requests for historical information were ignored. I had planned to conduct a historical analysis of the number and location of small and large hotels in NPI. However, without access to this data, this analysis was unable to occur. The lack of access to GIS data meant that I had to rely on publically available datasets from international sources. While I was able to utilize this data for roads, the data regarding elevation in NPI was at too large of a scale to be useful. I initially planned to produce maps showing how sea level rise would impact NPI but without appropriate elevation data this analysis was unfeasible.

## **Chapter 4**

### **Research Site**

This chapter provides a brief overview of the tourism industry in New Providence and Paradise Island and the results of the scoping studies that were used to guide the second phase of research. Section 4.1 provides an overview of globalization and environmental change related to tourism development in the Caribbean. Section 4.2 explores the significance of tourism and small tourism enterprises in NPI. Section 4.3 details the results of the scoping studies and the three potential pathways of double exposure that were used to guide analysis of how multiple stressors interact to affect small tourism enterprises.

#### **4.1 Globalization, Environmental Change and Caribbean Tourism**

Sandy beaches, turquoise seas and lush palm trees, these are the images that the Caribbean calls to mind for many. Since the early twentieth century, this region has been commodified and portrayed as a tropical getaway to entice visitors to its shores (Pattullo, 2005). Currently, as the most tourism dependent region in the world, the Caribbean has increasingly become reliant on millions of visitors per year as a vehicle for economic development (Grandoit, 2005). However, while the focus of many destinations has been to develop a mature and lucrative tourism industry, reliance on foreign investment, significant environmental changes and the influx of large quantities of tourists that far outnumber national populations has had mixed effects. While providing a major source of foreign exchange and employment opportunities, the tourism industry in mature

Caribbean destinations also results in significant economic leakages outside of the country, a dominance of large-scale, foreign-owned tourism facilities, pronounced environmental degradation and few opportunities for locals to claim a significant share of the millions of dollars of tourist expenditure that flow through the destination (Weaver, 1993; McElroy, 2003; Pattullo, 2005).

For many mature tourism destinations, particularly in the Caribbean, there has been a common pattern of evolution of the industry. The transition from a burgeoning industry with few foreign, upscale visitors to a well developed industry characterized by large numbers of tourists and an increasing reliance on tourism related expenditure has been the focus of a number of conceptual models (Butler, 1980; Albuquerque and McElroy, 1992). While models differ on the number of stages that a destination passes through, the units of analysis that are used to track changes and the focus on various aspects of the industry such as environmental change or host population responses, all models posit that there are definitive and observable changes to destinations as tourism industries develop (Butler, 1980; Albuquerque and McElroy, 1992). Destinations with mature tourism industries, particularly in tropical regions, display a number of common characteristics. These destinations have high numbers of air arrival and cruise ship tourists, heavily built environments and short average stays of visitors (McElroy, 2003, 2006). Mature destinations have significantly higher levels of tourism expenditure, gross domestic products and economic reliance on tourism than destinations with less mature industries.

The development of a mature tourism industry can be understood as a form of globalization – the gradual integration of economies and societies across nations

(Hjalager, 2007). As transportation to destinations improves, numbers of visitors rise and multi-national firms develop resorts and attractions, Caribbean tourism destinations increase economic, political and cultural ties with the rest of the world. The increase in international trade, homogenization of culture and expansion of transportation networks are all processes of globalization that are associated with the development of tourism (Smeral, 1998). The integration of economies that Caribbean tourism development encourages has resulted in significant economic leakages, one of the major detriments of mature tourism. Leakages are the percentage of tourist expenditure that leaves the destination or never reaches the destination at all. For tourism in general, 55% of revenue in lesser-developed countries is estimated to be leaked to more developed countries (Gollub et al., 2002; Meyer, 2006). However in the Caribbean, economic leakages have been estimated at approximately 70% for the region and up to 90% for nations that are particularly dependent on imports (Pattullo, 2005; Meyer, 2006). Leakages increase as economic and political ties with other nations increase. The foreign ownership of travel, accommodations and entertainment results in the bulk of tourism expenditure profiting foreign entities rather than local economies and is a significant problem in the Caribbean (Madley, 1996).

Tourism development in the Caribbean is also associated with detrimental environmental changes. Large resorts accommodate thousands of tourists who on average produce approximately four times as much solid waste per person per day compared to local residents while cruise ships generate tons of solid waste that tourism destinations must take ownership of upon docking. (Grandoit, 2005; Pattullo, 2005; Thomas-Hope and Jardine-Comrie, 2007). For small islands, land resources available for

landfill sites are scarce, causing over-crowding and pollution of the few sites available, resulting in the exposure of adjacent residential and agricultural areas to health hazards (Pattullo, 2005, Davenport and Davenport, 2006). Tourists consume approximately twice as much water per person per day compared to local residents while extensive water use in tourism attractions such as golf courses adds to the need for extensive water supplies. However, for many tropical countries, the high season of tourism coincides with the climatic dry season resulting in excessive extraction of fresh water resources (Grandoit, 2005). This excessive extraction culminates in the contamination of groundwater sources by pollutants and salt-water resulting in permanent loss of these sources for potable water and a resultant decrease in the number of fresh water resources available (Grandoit, 2005, Thomas-Hope and Jardine-Comrie, 2007). These locally scaled environmental changes in destinations throughout the Caribbean have global effects when they are considered cumulatively, contributing to water pollution, soil degradation and biodiversity loss. In addition, these changes often erode natural environmental protection such as mangrove forests and coral reefs thereby increasing exposure to globally scaled environmental change such as sea level rise and increased intensity of extreme events. Resultantly, tourism development in the Caribbean both contributes to global environmental change and is also affected by globally scaled changes.

#### **4.2 New Providence and Paradise Island Tourism**

The Bahamas is an archipelago nation covering over 100,000 square miles in the Atlantic Ocean with the closest island of the country being just 50 miles from Florida, USA (Neeley, 2006). Tourism in The Bahamas began to be developed in the late 1800s

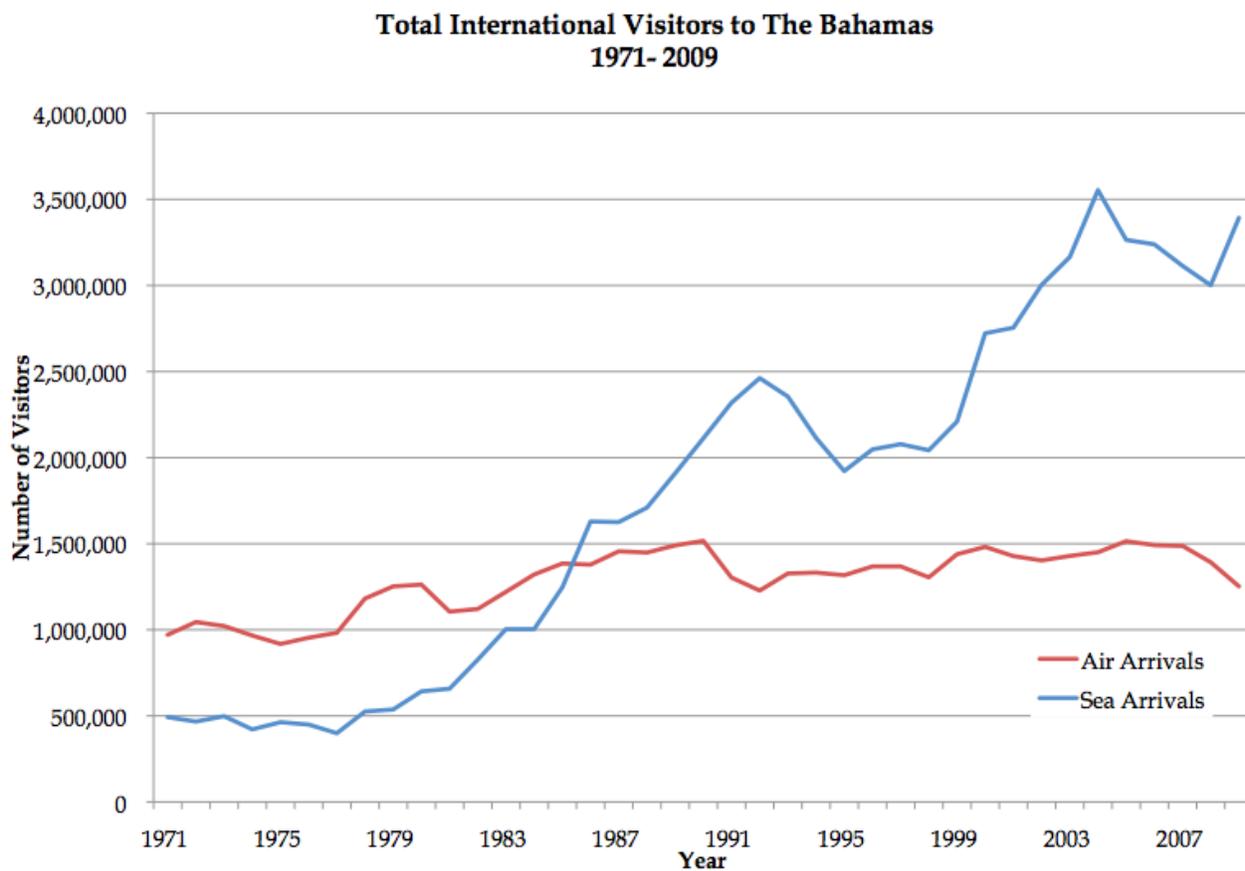
when the island became a destination for wealthy Europeans to escape harsh winters and enjoy the climate that was believed to offer health benefits (Pattullo, 2005). With few natural resources and land that was ill suited for extensive agricultural development, The Bahamas turned to tourism as a vehicle for economic development in the 1950s (BMT, 2009). Due to the nation's proximity to North America and natural features thought to be appealing to tourists, the Bahamian government supported the development of tourism as the main industrial focus for the country (Cleare, 2007).

Since the 1950s, the Bahamian government has invested heavily in the development and promotion of tourism for the nation. The Ministry of Tourism, developed within the government in 1964, plays a central role in the trajectory of the tourism industry for the nation and has been headed by a number of prominent Bahamians including inaugural Prime Minister, Sir Lynden Pindling (Cleare, 2007; BMT, 2009). This governmental focus and support has been critical for the development of the industry. Indeed, "the largest single factor in attracting tourists to The Islands Of The Bahamas has been the promotion undertaken by the tourism arm of The Bahamas Government" (BMT, 2009). As seen in Figure 4.1, The Bahamas has seen significant growth in the industry, from 1.5 million tourists per year in the early 1970s to over 5 million tourists per year by 2009 (BMT, 2011). Currently, tourism is the primary industry for the nation, accounting for more than half of GDP, wages and employment (Sacks, 2006).

While a number of Bahamian islands cater to tourists, New Providence and Paradise Island (NPI) is the primary destination for the nation. The other islands, known as Family Islands, cater to a minority percentage of guests. Visitors to NPI have

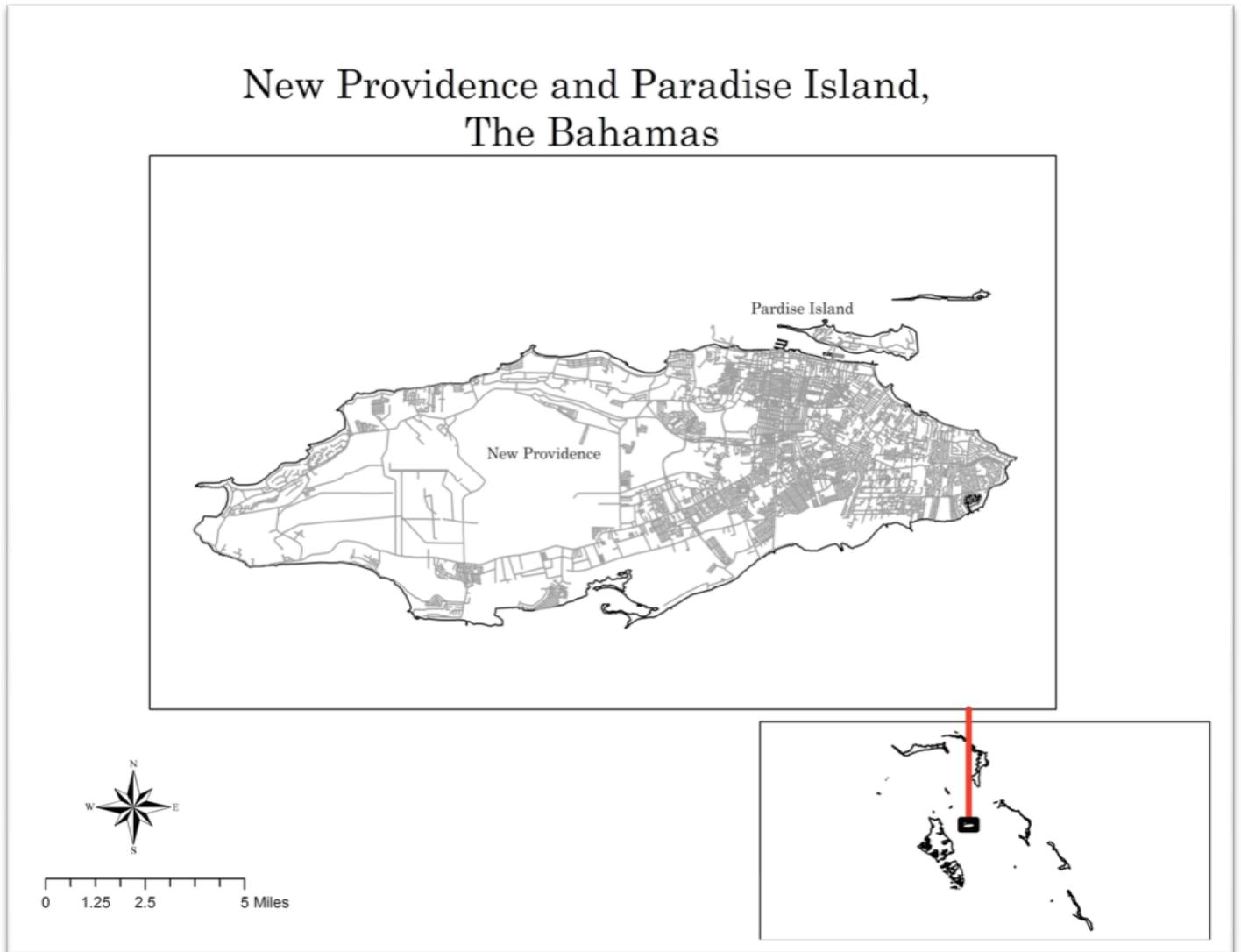
consistently accounted for approximately 60% of tourists to The Bahamas (BMT, 2011). Housing the capital of the archipelago nation and 70% of the population, New Providence is an urban island with a developed tourism industry focused on the coasts of the island (Cleare, 2007; Bahamas Department of Statistics, 2008a). Paradise Island is located directly adjacent to New Providence as shown in Figure 4.2 and is accessed via a bridge or by boats. Paradise Island and New Providence are serviced by the same international airport and are considered to be one destination although they are technically comprised of two islands.

Small enterprises with less than 10 employees make up approximately 90% of all businesses registered in The Bahamas (Thurston, 2012). However, despite the large numbers of small businesses and importance of tourism to the nation, to the best of my knowledge, there are no studies investigating small tourism enterprises either in The Bahamas in general or in NPI in particular. This dissertation aims to address this significant research gap by focusing on small tourism enterprises in NPI.



**Figure 4.1: Total International Visitors to The Bahamas 1971-2009**

Source: BMT, 2010



**Figure 4.2: New Providence and Paradise Island, The Bahamas**  
Source: Adelle Thomas, 2011

### **4.3 Results of Scoping Studies**

The scoping studies undertaken in 2008 and 2009 exposed how processes of global change identified in the literature manifest in NPI. Interviews with key tourism stakeholders explored aspects of the six process of global change that are significant in NPI. In Section 4.2.1, I detail aspects of the six stressors that were found to be significant for tourism in NPI from the scoping studies. In Section 4.2.2, I detail the potential pathways of double exposure that were used to investigate how pairs of processes interact to affect small tourism enterprises.

#### ***4.3.1 Global Change Manifestations in NPI***

##### *Mass Tourism*

Mass tourism was identified as the form of tourism that is prevalent in NPI. In particular, there is a focus on developing large, beachside hotels to accommodate increasing numbers of tourists to NPI. Key informants expressed that small hotels are often unable to compete with large hotels for tourists and that small hotels generally cater to local residents. Informants also stated that there are strained relationships between private tourism organizations, governmental institutions and small hotels.

##### *Land Use Change*

Land use change in NPI associated with tourism is largely focused on the coastal areas of the islands with the majority of large tourism enterprises located in close proximity to the beach. In addition, coastal areas are often the sites of secondary homes for foreigners, spurring additional land use changes. The development of private homes and tourism enterprises along the coast has resulted in high prices for coastal real estate and significant restrictions on beach access for the public.

### *Financial Crises*

The 2007 global financial crisis was identified as a significant stressor for tourism in NPI. During the time of the scoping studies, occupancy rates for hotels and tourist arrivals to NPI were on the decline and the financial crisis was a significant area of concern.

### *Extreme Events*

Hurricanes were identified as the most significant extreme natural events to impact the tourism industry in NPI. Although there had been no significant hurricanes to affect NPI recently, informants had vague recollections of past storm events that did cause damage to tourism infrastructure.

### *Sustainable Tourism*

Informants stated that there was a definite lack of focus on sustainable tourism in NPI. In particular a lack of attention to environmental issues by the government or by tourism enterprises was noted. One sustainable tourism project focused on small tourism enterprises was currently underway during the time of the scoping studies. Informants recommended exploring the results of this project to determine if there was any increased focus on sustainable tourism in NPI.

### *Climate Change*

Key informants did not identify climate change as an issue of current concern for tourism in NPI. While informants were aware of the implications of climate change on a broad scale, they were mostly of the opinion that any effects for NPI would not occur for a long time and that the issue did not need to be addressed currently. Some informants

did state that sea level rise would have implications for the many tourism enterprises that are located near to the coast.

#### **4.3.2 Potential Pathways of Double Exposure**

The results of the scoping studies revealed that the processes of change identified in the literature had varying levels of significance to the tourism industry in NPI. Insights into the manifestations of these stressors allowed for potential pairing of stressors to explore interactions and effects for small tourism enterprises. In the following section, I detail the potential pathways of double exposure that were used to investigate how stressors interact to affect small tourism enterprises in NPI.

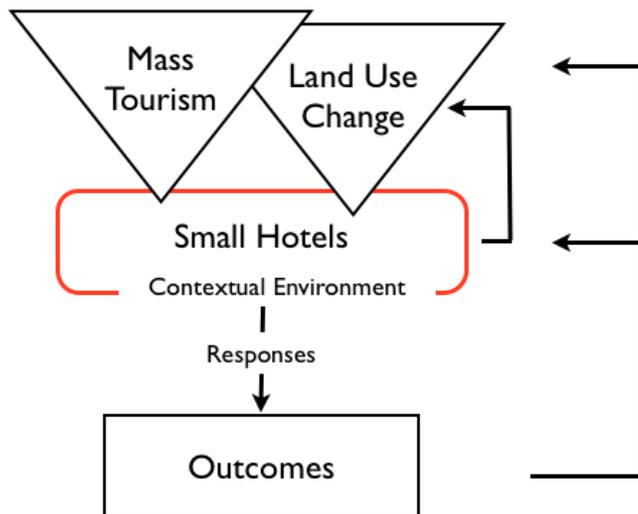
##### *Context Double Exposure*

Context double exposure focuses on how processes of global change affect the contextual environment for small tourism enterprises. For this pathway, it is important to utilize a long-term time scale to explore how stressors affect the context that small tourism enterprises operate in. Stressors chosen to analyze using this pathway must have had time to affect the contextual environment for these businesses.

From the list of global change processes, land use change and mass tourism are the two stressors that have had the longest and most continuous implications for NPI. Mass tourism began to be a strategy of the Bahamian government in the mid 19<sup>th</sup> century and land use change associated with the focus on coastal tourism has had a similar time span (Horsely and Witten, 2002; Cleare, 2007). These processes have had significant implications for the political, biophysical and economic climate of NPI. Investigation of

interactions between these processes and implications for small tourism enterprises using the pathway of context double exposure was deemed as most appropriate for this study.

Insights on the implications of mass tourism and coastal land use change in NPI from the scoping studies along with the literature review suggest that attention should be paid to how these processes affect the political, economic and biophysical aspects of the contextual environment of small hotels. Exploring policies and incentives focused on hotel development, economic factors that affect the ability of hotels to compete and land use changes that affect the type of guest and location of tourism facilities are factors that may affect the contextual environment for small hotels.



**Figure 4.3: Context Double Exposure**

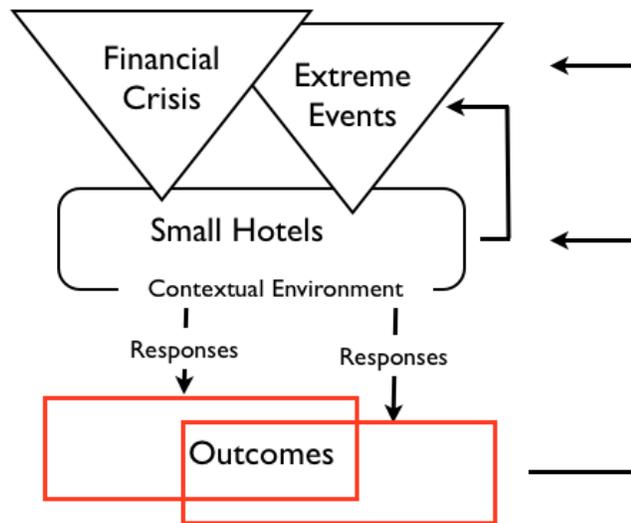
#### *Outcome Double Exposure*

Outcome double exposure focuses on how processes of global change have direct and measurable impacts for small hotels. The processes of global change for this

pathway do not need to be directly related. Indeed, exploring the effects of two seemingly unrelated processes shows how important the contextual environment is in affecting the outcomes of global processes for exposure units (Leichenko and O'Brien, 2008).

Financial crises and extreme natural events are two processes of change that both have direct and measurable impacts and are also not directly related. Financial crises often have measurable impacts for small tourism enterprises including lower levels of revenue and profitability (Okumus and Karamustafa, 2005). Extreme events also have measurable impacts for small enterprises including damages to infrastructure or decreases in revenue due to loss of tourists (Calgaro and Lloyd, 2008). However, while the effects of financial crises and extreme natural events appear to be similar, there are few studies that explore connections between these shocks. Using the pathway of outcome double exposure to explore these connections provides a new perspective on how these stressors are related.

Insights from the scoping studies suggested that research should focus on the effects of the global financial crisis for small hotels and how they coped with changes to their businesses. Although there had been no recent hurricanes that had caused significant damage to NPI, the impacts of any past experiences as well as plans to address future hurricanes would allow for an exploration of how extreme natural events affect small hotels.



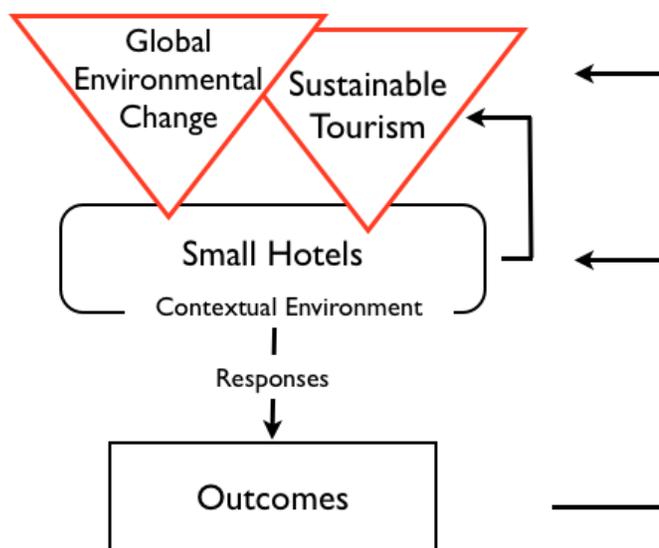
**Figure 4.4: Outcome Double Exposure**

#### *Feedback Double Exposure*

Feedback double exposure focuses on how responses of small tourism enterprises to processes of global change affect the very drivers of these processes. This lens focuses on interactions between responses to each of the processes.

Sustainable tourism and climate change are two processes of change that are closely linked in two major ways. Firstly, both of these processes have significant environmental implications for tourism. Secondly, the responses of tourism enterprises to issues of sustainable tourism affect future climate change while the responses taken in reaction to climate change affect the sustainability of tourism (Scott, 2011). Thus interactions between these two stressors are most suitable to be explored using feedback double exposure.

The lack of importance placed on sustainable tourism and climate change by key informants in the scoping studies suggested that these issues were not of particular concern for the industry in NPI. These insights suggested that research should be focused on small hotelier awareness of these processes of change and to whether or not they had formulated any responses to these stressors.



**Figure 4.5: Feedback Double Exposure**

| <b>Global Change Process</b> | <b>Manifestation in NPI</b>  | <b>Key Questions</b>   | <b>Potential Double Exposure Pathway</b> |
|------------------------------|--|--|--|
| Mass Tourism                 | Dominance of large, multi-national tourism enterprises;<br>Focus on beach mass tourism | Implications of these conditions for type of guest, profitability, financing options | Context Double Exposure                  |
| Land Use Change              | Coastal development; Beach access restrictions   |  |  |
| Financial Crises             | 2007 Global Financial Crisis   | Past and current impacts, coping methods, future plans                               | Outcome Double Exposure                  |
| Extreme Events               | Hurricanes   |  |  |
| Sustainable Tourism          | Sustainable tourism initiatives, environmental impacts of current tourism practices    | Awareness and responses  | Feedback Double Exposure                 |
| Climate Change               | Sea level rise   |  |  |

**Table 4.1: Results of Scoping Studies**

## **Chapter 5**

### **Setting the Context:**

#### **Beach Mass Tourism and Coastal Land Use Change**

Mass tourism and land use change are two processes of global change that have been studied in combination previously. These two stressors often interact to result in a concentrated hub of tourist facilities, loss of agricultural and undeveloped land, significant environmental damage and strain on natural resources (Pearce and Kirk, 1986; Jeans, 1990; Oppermann, 1993; Weaver, 1993, 2001). In addition to tourism facilities, mass tourism often spurs additional land use changes through an increase in secondary-home residential developments that are often located along the coastline resulting in increased prices of real estate and limited access to beaches (Allen et al., 2002; Ayad, 2005; Atasoy, 2010; Cohen-Hattab and Shoval, 2004, Collins and Kearns, 2010). Mass tourism has also been found to result in a proliferation of large multi-national tourism enterprises and a destination dependent on a seasonal supply of large numbers of tourists (Andriotis, 2002; Torres, 2002).

In this chapter, I investigate the implications of mass tourism and land use change for small tourism enterprises in NPI using the pathway of context double exposure. Context double exposure focuses on how processes of global change interact to affect the contextual environment of small tourism enterprises. This pathway investigates how processes of change alter political, economic, biophysical and other conditions to affect the exposure, responses and outcomes of exposure units to global change processes.

This chapter is organized as follows: In Section 5.1 I provide an overview of how mass tourism and land use changes have manifested in NPI. This section focuses on hotel development and coastal land use change. Section 5.2 provides the results of my interviews with small hoteliers and associated tourism stakeholders. Section 5.3 uses the pathway of context double exposure to analyze findings and explore how these stressors interact to affect small hotels. The interactions between mass tourism development and coastal land use change and their effects on the political, biophysical and economic factors of the contextual environment for small hotels are discussed. Finally in Section 5.4, I conclude the chapter with a summary of findings and thoughts on the pathway of context double exposure.

## **5.1: Background on Mass Tourism and Land Use Change in NPI**

### ***5.1.1 Mass Tourism Development***

#### *Hotel Development*

The development of mass tourism in NPI can be illustrated by the development of its accommodation sector, particularly hotels. Hotels are a vital component of the tourism industry in NPI, providing 33% of all jobs in the industry and driving the importation of food and other supplies that account for 65% of government tax revenue from tourism (Sacks, 2003). The growth of hotels in the destination has been used to both attract and accommodate growing numbers of tourists. In this section, I provide a historical account of the growth of hotels in NPI.

Tourism in NPI has a long history and since its very beginnings, there has been a focus on the development of large hotels in the coastal regions of the islands. In the early

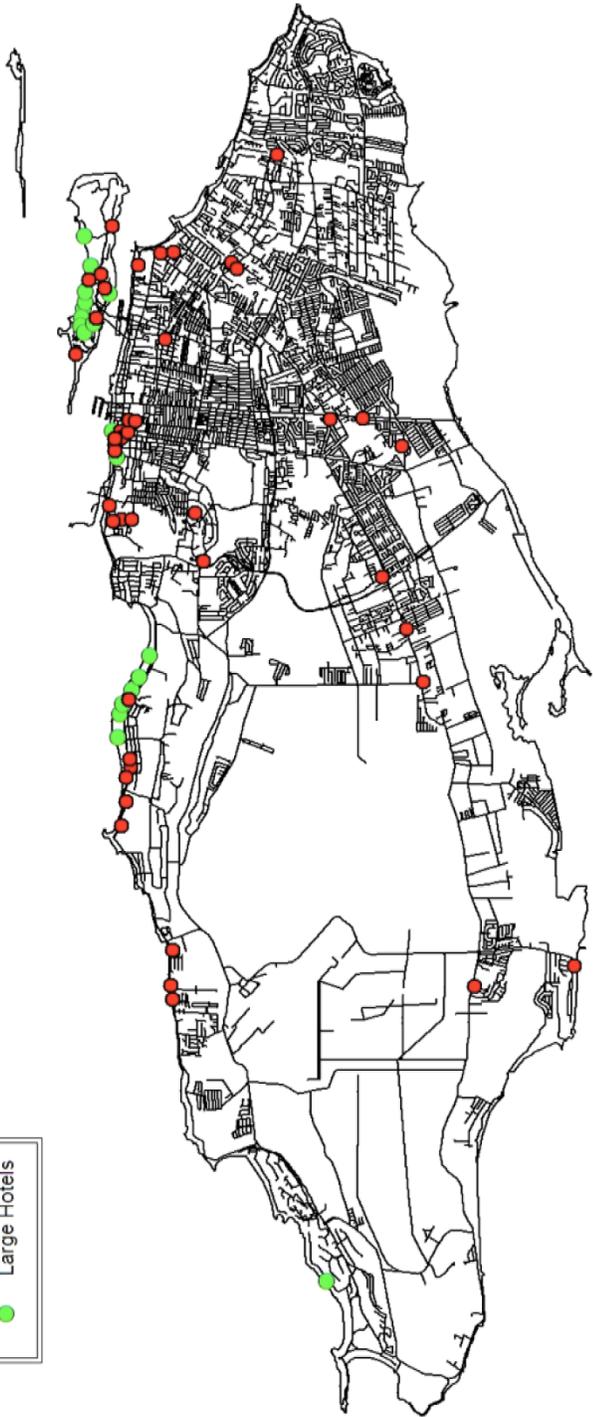
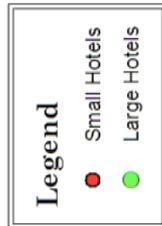
1900s, the first large hotel, the Royal Victoria, was built with a grand view of the harbor (Cleare, 2007). This 200-room luxury hotel was intended to attract wealthy foreigners to the island and was the first in a succession of large, upscale resorts built in subsequent years, all aimed at attracting wealthy clientele. By 1952 there were seven major large hotels, the majority of which were placed on or in close proximity to beaches. Between 1953 and 1959, seven new large hotels were built, all but one of them being located beachside. In the 1950s, the vast majority of land on Paradise Island was sold to a private company followed by intense tourism development on the island in late 1960s to early 1970s (Cleare, 2007; Debbage, 1990). Paradise Island was transformed into an enclave of 6 large hotels, the smallest having 100 rooms and the largest with over 500 rooms. On New Providence, this development was accompanied by the construction of 3 additional large hotels in this time period. In the 1980s, another large tourism project added over 1,600 rooms to New Providence.

In the late 1990s to early 2000s, Atlantis was developed on Paradise Island, acquiring and renovating some of the now older large hotels and constructing new hotels, adding approximately 3,000 rooms (BMT, 2010). The addition of two hotels in 2007 in the Atlantis enclave added a further 1,000 hotel rooms to Paradise Island (BMT, 2011). The focus on continued development of large hotels is still prevalent as another large-scale hotel development is currently under construction in New Providence. Baha Mar, a group of six large hotels located directly on the coastline, is currently underway and projected to add approximately 2,250 rooms to New Providence by 2014 (Baha Mar, 2012).

Information on the history of small hotels in NPI is less available. Until 1956, segregation laws decreed that people of color were not allowed in large hotels besides in a service or entertainment capacity (Cleare, 2007). Thus non-white foreign visitors were not permitted to stay at any of the large hotels on NPI. Small hotels and guesthouses were developed mostly by Bahamians to accommodate foreign visitors of color and local residents. Small hotels built in mid 20<sup>th</sup> century such as the 30-room Lucerne Hotel and the 20-room Allan Hotel were concentrated in the relatively urban downtown area. Following de-segregation, the popularity of some of these older small hotels waned since their non-white clientele now had a range of hotel options to choose from.

Currently, there are over 63 hotels on Nassau and Paradise Island with 19 of them classified as large hotels with at least 75 rooms. However, while large hotels account for 30% of all hotels on NPI, they account for 85% of all hotel rooms. These large hotels are largely international brands such as the Sheraton and Wyndham with an average of 407 rooms per hotel (BMT, 2011). Conversely, small hotels are largely unique establishments with an average of 28 rooms per hotel (BMT, 2011). The historical tendency for large hotels to be located on or near to the beach while smaller hotels are located inland is still seen today. Figure 5.1 shows the location of all hotels on NPI and it is clear that the pattern of large hotels being located near the beach is still prevalent.

# Hotels in New Providence and Paradise Island



**Figure 5.1: Location of all Large and Small hotels on NPI.**  
Source: Adelle Thomas, November, 2011; BMT, 2011

### *Hotels Encouragement Act*

Large hotels have received preferential treatment from the Bahamian government since early development of the industry, with a history of policies and concessions that favored the development of these businesses. *The Manufactories and Hotels Encouragement Act* of 1913 allowed hotels with more than 50 rooms to receive tax exemptions for the erection, furnishing or alterations of their establishments (Bahamas Investment Authority, 2012). This Act was in place until 1954, when it was amended to provide these benefits for hotels with only 20 rooms or more. This amended *Hotels Encouragement Act (1954)* also added a ten-year exemption from property tax and a 20-year exemption for hotel earnings tax. In 1970, the *Hotels Encouragement Act (1970)* made it mandatory to license hotels with 4 rooms or more. This Act required inspections and hotel guest tax of 5% to be paid to the government. This was the first governmental policy affecting hotel regulation, as previously there had been no monitoring of hotel standards (Bahamas Investment Authority, 2012). While this Act required payment of guest taxes by all hotels, property tax, refurbishment and hotel earnings tax exemptions were only applicable for hotels with more than 20 rooms. This Act provided benefits to only some hotels while taxing all hotels. Hotels with less than 20 rooms such as bed and breakfasts or other micro hotels were not eligible for tax concessions. The Act was again amended in 1999 to allow for tax concessions to be made for hotels with only 10 rooms or more in NPI or 4 rooms or more in the Family Islands. This amendment provided a more equitable distribution of tax benefits but also favored micro hotels on the Family Islands and not in NPI.

### *Focus on Beach Tourism*

New Providence and Paradise Island have been marketed as a sun, sand and sea destination for wealthy tourists since the very beginning of development of the industry (Pattullo, 2005; Cleare, 2007). In 1964, The Ministry of Tourism was created and given the flexibility to promote and market The Bahamas as a tourism destination. By 1966, the government was spending approximately \$5 million per year to market The Bahamas, mostly NPI, to tourists (Cleare, 2007). These marketing efforts focused on showcasing beaches and the ocean and establishing NPI as a sun, sand and sea destination.

This focus on sun, sand and sea marketing continues today with marketing by the Ministry of Tourism continuing to highlight beach and marine activities in the majority of advertisements for NPI (Duffy & Partners, 2012). These marketing initiatives have served their purpose with 60% of tourists listing beaches as their primary motivation to visit NPI while 38% are primarily influenced by the climate (BMT, 2010).

### **5.1.2 Coastal Land Use Change**

#### *Coastal Development & Real Estate*

In addition to the development of large beachside hotels, there has been an associated development of private homes located on the coastline. The development of tourism in NPI was associated with an effort to establish the islands as a haven for wealthy foreigners (Cleare, 2007). In tandem with the construction of large, upscale hotels, the sale of property for vacation homes was also used to lure tourists and economic wealth. The sale of property and homes to foreigners was unregulated until *The Immovable Property (Acquisition by Foreign Persons) Act* by the Bahamian

government was enacted in 1983 (Bahamas Department of Immigration, 2012). This Act restricted but did not prohibit the sale of land to foreign persons and even during the decade that the Act was in place, there were hundreds of properties sold to non-Bahamians (Tribune, 2007). In 1994, *The International Persons Landholding Act* went into effect and allowed non-Bahamians to purchase real estate without governmental approval required by the previous Act. This new Act also decreased the amount of taxes that foreigners had to pay when acquiring real estate. Since then, the Bahamian government has passed a law allowing foreign nationals to gain permanent Bahamian residency for themselves and family members with a real estate purchase of at least \$US 250,000 (Bahamas Department of Immigration, 2012). These changes have been made with a particular goal of incentivizing the sale of real estate to foreigners and have aided in the development of properties marketed primarily to foreigners as secondary homes.

In NPI, real estate developments along the coastline have resulted in significant land use change and a resultant increase in coastal real estate prices. Developments such as Lyford Cay, established on the western most tip of the island in the 1950s by a Canadian developer, transformed undeveloped land into an enclave of private homes and restricted a whole area of coastline for private use (Time, 1963). This development is currently a gated enclave of over 300 multi-million dollar homes owned largely by foreign persons (Bahamas MLS, 2012). Currently, coastal development continues with gated communities aimed at attracting wealthy foreigners continuing to be developed. Albany, an oceanfront gated community, is the most recent of these upscale developments with homes being sold in the 5-6 million dollar range (Albany, 2011). Other residential developments along the coast include condominium buildings and large

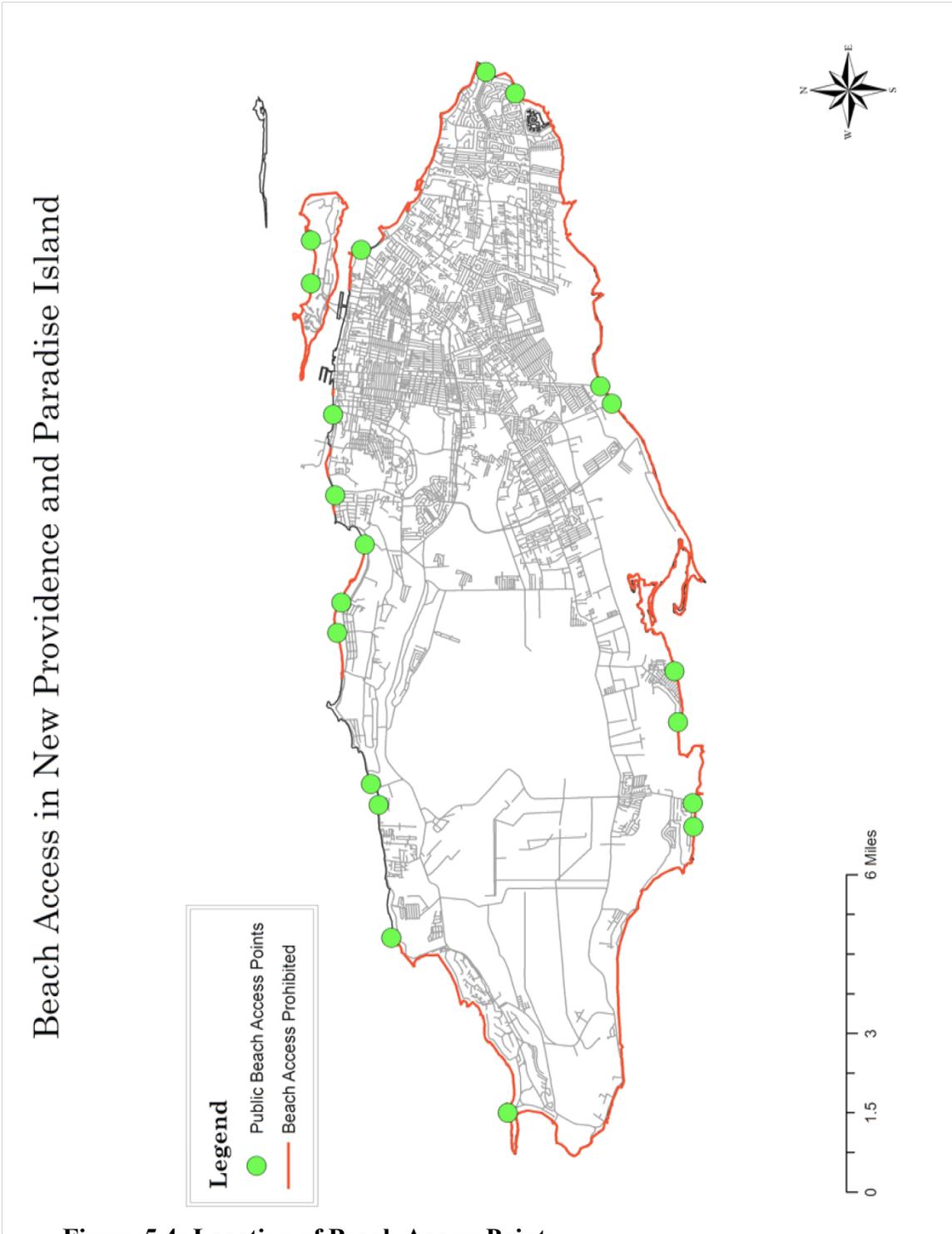
estates with prices in the millions. These homes are internationally marketed and are mostly not occupied by Bahamians, whose average household income is less than \$US 39,000 (Bahamas Department of Statistics, 2008b). Information regarding sales of real estate is not available to be mapped using detailed GIS methodology due to the lack of data provided by governmental agencies.

### *Beach Access*

Residential and tourism related development along the coasts has resulted in restrictions to beach access for the public. Although beaches are legally public property, access to many of the beaches is hard to come by, making some areas of the coast essentially private (Horsley and Witten, 2002). There are no legal requirements for private developments to provide beach access or to construct buildings in such a way so that beach access is not restricted. Although there are some well-marked public access points, others are obscured. In heavily developed areas where there is a high density of expensive homes and tourism developments, there are no beach access points for miles (College of The Bahamas, 2008). The Bahamian government does not regulate these actions that essentially privatize beaches that are legally public areas (Horsely and Witten, 2002). Thus access and use of beaches around beachside hotels and private residences is increasingly restricted.

Lack of beach access has been an issue of concern for the Bahamian public. A survey of Bahamians found that beaches with public access points are those most frequented by locals and that these were the less desirable beaches due to pollution and crowding (College of The Bahamas, 2008). The beaches thought of as most desirable had the clearest waters, cleanest beaches and were located behind private developments

with no public access. Private developments are free to restrict access to beaches and have resulted in limited access points for the public (Robards, 2011). Figure 5.4 exposes the limited availability of public access points along the coast.



**Figure 5.4: Location of Beach Access Points**  
Source: Adelle Thomas, 2011

### ***5.1.3 Summary of Mass Tourism and Land Use Change***

There is an evident relationship between mass tourism and land use change in NPI with coastal land use changes largely stemming from tourism related development and secondary home development. These stressors have resulted in the proliferation of large beachfront hotels, a focus on promoting beach tourism by the Ministry of Tourism, high coastal real estate prices and restricted access to beaches. Both mass tourism development and coastal land use change have resulted in these conditions, exposing the close relationship and interactions between these stressors. In the following section, I present findings from interviews with small hoteliers and industry stakeholders regarding these conditions.

## **5.2 Research Findings**

This section details the results of interviews with small hoteliers and tourism stakeholders regarding the implications of mass tourism and coastal land use change for the tourism industry and for small tourism businesses in particular. As discussed in Chapter 4, scoping study results and literature reviews led to a focus on consideration of how mass tourism and land use change affect the type of guest that small hoteliers cater to, the profitability of small businesses, financing options and their relationship with Ministry of Tourism and private tourism organizations. Table 5.1 presents an overview of main research findings from small hoteliers while each finding is further detailed below.

### 5.2.1 Small Hotelier Perspectives

| Research Finding | Description of Finding  | Percentage of Respondents |
|------------------|---|---------------------------|
| 1                | Small hotels with over 70% of international tourists as clientele                                   | 42%                       |
| 2                | Small hotels where beach is important to their clientele  | 58%                       |
| 3                | Small hoteliers that feel that their business caters to a different type of guest than large hotels | 100%                      |
| 4                | Small hoteliers that desire a high percentage of international guests as clientele                  | 83%                       |
| 5                | Small hoteliers that link the success of large hotels to the success of their businesses            | 92%                       |
| 6                | Small hotels that are members of private tourism organizations                                      | 42%                       |
| 7                | Small hoteliers with a negative view of Ministry of Tourism   | 75%                       |
| 8                | Small hotels that utilized Hotels Encouragement Act   | 58%                       |
| 9                | Small hotels that relied on personal financing for their businesses                                 | 58%                       |

**Table 5.1: Chapter 5 Research Findings**

#### *Large Hotels, Beach Access and Type of Guest*

*Research Finding 1: Fewer than half of small hotels in this study currently have a majority of international tourists as clientele.*

Of the twelve small hotels that took part in the study, five had high percentages of international guests, ranging from 70-95% of their total clientele. These five hotels were located either directly on the beach or across the street from the beach. In contrast, the seven hotels that were located inland from the beach had international tourists that

comprised only 5-50% of their total clientele. The remainder of their clientele consists of local Bahamian residents.

However, this beachside location was not always a factor in determining the percentage of international guests. Four owners of the hotels located inland stated that international tourists once made up the majority of their clientele. These four hotels were some of the older properties in the study with an average length of business operation of 28 years. The owners of these four hotels stated that their loss of international guests could be attributed to their lack of beachside location as tourists became more interested in a beach experience that they could not provide.

*Research Finding 2: Approximately half of small hoteliers stated that the beach is important to their guests.*

Within the group of seven inland hotels, hoteliers from only two of the properties stated that the beach was important to their guests. These were the two hotels with the highest percentages of international guests within this group at 40% and 50% of total clientele. In contrast, all five hotels located on the beach stated that the beach was important to their guests. The hotels located inland that stated that the beach was not important to their guests had very low percentages of international guests between 5-20% of total clientele.

For those hotels located inland that felt that the beach is important to their guests, restrictions on beach access are a concern. Small hoteliers are hesitant to send their guests to easily accessible beaches that often provide a different experience than some of the more privatized beaches as seen in Table 5.2.

|  |
|--|
| <p><i>I don't send my guests down to those beaches. I sent one group down to Montague beach before and they were harassed with the vendors and the jonesers and they just had a horrible time. So I never send any of my tourists there.</i></p>   |
| <p><i>I tell my tourists to go to the beach around the corner at their own risk you know. I tell them it's really not a quiet beach; it's more of the locals and the fish people. If they just want to be quiet and lay out then it's at their own risk going out there. I can't be responsible for what they find and whatever happens.</i></p> |
| <p><i>Oh yes, the beach. I send the tourists over Paradise Island and I tell them to pretend like they're staying at one of the hotels over there. Then they can be on the nice beach and not these around here. You know, I tell them to pretend and just fit in with everyone else. And they have a nice time over there.</i></p>              |
| <p><i>Sure I send them to beach out west. It's not too bad out there in the day and no one will really bother them. So I only send them out west, not to any of the other beaches. Or if they can get past the security over on P.I. [Paradise Island], I tell them to just go over there. It's best for them to go over there.</i></p>          |

**Table 5.2: Excerpts from Small Hotelier Thoughts About Beaches**

*Research Finding 3: All small hoteliers interviewed felt that they catered to a different type of guest than large hotels.*

Regardless of the percentage of international tourists at each hotel, small hoteliers unanimously stated that they cater to a different type of tourist than the type of guests who frequent small hotels. However, the type of guest that small hoteliers felt that they catered to was far from homogenous.

Hoteliers with high percentages of international guests claimed that their clientele is interested in a more quiet vacation experience than the larger hotels provide. These hoteliers declared that their guests are not interested in the “crowds and casinos” that are typical of the large hotel experience and are instead looking for personalized attention while still having a beach-based vacation.

Hoteliers with low percentages of international guests stated that the majority of their guests are local residents that are in need of simple accommodations and do not require the amenities offered by large hotels. International guests at these hotels were characterized by hoteliers as looking for a more authentic Bahamian experience than the larger hotels provide. A number of hoteliers in this group also stated that their international guests are often on business-oriented trips or visiting friends or family that live in NPI.

*Research Finding 4: The majority of small hoteliers desire a high percentage of international guests as clientele.*

Hoteliers from 10 of the 12 small hotels interviewed stated that they would either like to maintain their current high percentages of international tourists or to significantly increase their percentages of international guests. A high percentage of international clientele was desired due mainly to the perceived ability to charge higher rates. Additionally, the international tourism industry is what many of these small hotel owners aimed to be a part of upon developing their businesses.

One interviewee stated that while he was happy for the Bahamian clientele that allowed his business to stay open, he had initially developed his hotel for international tourists and hoped that one day his hotel would return to be mostly frequented by his intended clientele. Another hotelier expressed that she wanted to receive the monetary benefits of the millions of dollars of tourism expenditure and was perturbed that large hotels mostly capitalize upon the international tourist industry within the island. This interviewee felt that international tourism should not just be an industry for large foreign-owned hotels and that Bahamian owners of small hotels should be a part of the major

industry of their own country. These sentiments were also shared by other hoteliers who felt that their businesses have slowly been transformed into local facilities and wish to be a part of the international tourism industry. These hoteliers felt that the focus of the Ministry of Tourism on marketing beach experiences was not beneficial to attracting tourists to their businesses. This inability to offer a beach experience harmed their ability to secure international clientele.

*Research Finding 5: The vast majority of small hoteliers felt that the development of large hotels is helpful to their businesses.*

Hoteliers from 11 of the 12 hotels stated that the success of large hotels is beneficial for their own businesses. Hoteliers with a majority of foreign clientele unanimously agreed that large hotels attract high numbers of tourists to NPI and having these large numbers of tourists on the island in turn exposes small hotels to the international market. Some of these hoteliers stated that many of their guests discovered their businesses while staying at a large hotel but chose to stay at a small hotel upon returning to NPI. In contrast, hoteliers with mostly local clientele stated that many of their customers are dependent in some way on employment generated from the large hotels. Thus the success of large hotels indirectly keeps small hotels in business.

*Relationship with Private Tourism Organizations and Ministry of Tourism*

*Research Finding 6: More than half of small hotels are not members of private tourism organizations.*

There are currently two private tourism organizations in NPI that focus on hotels- The Bahamas Hotel Association and the Nassau and Paradise Island Promotion Board.

Small hotels currently have very limited involvement with these organizations, with less than 20% of all small hotels in NPI members of one or both of these groups. Of the 12 small hotels that were part this study, 3 are members of both organizations, 1 is a member of Bahamas Hotel Association only and 1 is a member of the Promotion Board only.

Hoteliers from the seven hotels that do not participate in these organizations stated that they were not members due largely to the focus of these groups on the needs of large hotels and the lack of attention paid to the needs of small hoteliers. One interviewee relayed that he was a member of the organizations previously but that all of his ideas to increase the number of guests to his hotel had been dismissed. Subsequently, this interviewee chose not to continue membership. Other reasons for not becoming members of these organizations were that the fees charged for membership were cost prohibitive and that these organizations do not market small hotels internationally as aggressively as they market large hotels. With all of these drawbacks, the majority of small hotels interviewed did not perceive membership with these organizations as beneficial for their businesses.

*Research Finding 7: The majority of small hoteliers expressed that the Bahamian government, in particular the Ministry of Tourism, is not concerned with the success of their businesses.*

75% of small hoteliers interviewed expressed that the Ministry of Tourism was not concerned with their needs and did not assist them in any way with their businesses. Hoteliers who felt this way were particularly vocal in their displeasure in the way that they are treated by the government. The other 25% of interviewees did not believe that it

was the responsibility of the government to assist with their particular businesses and so they did not have any expectations for governmental action.

*The government could have done way more to support my hotel and I asked them to treat me the same way that they treat the foreigners...but they didn't. They ignore me. The support that you should get you just can't get.*

*Oh the Ministry of Tourism is a joke. They don't help me and I don't check for them. They don't want to market my hotel and I just don't have time to run behind them to help me. I have to help myself. I can't expect to get the same as the big hotels. I stopped looking for that kind of help and now I just figure out how to help myself.*

*The big hotels and the government do their own marketing and they don't include us hotels that aren't in their group. I don't expect anything from them.*

*In other places, they [government] prize their little places, they highlight their little places. But unfortunately, we don't do the same thing in The Bahamas. You know, if you're a small hotel in The Bahamas now, it's more or less like being a curse. In the Family Islands, it's a little bit different, but even so, they don't care about us.*

**Table 5.3 Excerpts from Small Hoteliers about Government**

*Research Finding 8: Approximately half of small hotels were able to reap benefits from the Hotels Encouragement Act.*

Although the *Hotels Encouragement Act* provides exemption from customs duties for the construction or refurbishment of hotels and a ten-year exemption from property tax, obtaining these benefits has proved to be difficult for many small hotels. Of the 12

small hotels that took part in this study, 7 of them were able to utilize benefits of the act. However, all 7 hotels had difficulty obtaining benefits and only 2 hotels were able to receive all of the benefits promised by the Act. One interviewee stated that he applied for coverage under the Act but did not receive a response for over 5 years. Resultantly he was only to capitalize on reduced duty on some of his furniture shipments since by the time a response was received, the hotel had been completed. 5 of the hotels interviewed stated that they did not bother to apply for coverage under the Act since the process was complicated and bureaucratic and they did not think the benefits would be worth the hassle.

*Research Finding 9: Majority of small hotels financed their businesses without the aid of banks.*

One of the major concerns voiced by small hoteliers was difficulty in obtaining financing from banks to initially begin their businesses or to refurbish their establishments. 7 of the 12 hotels interviewed relied on personal savings, loans from friends and family, partnerships or revenue from other businesses to finance development of their hotels. One hotel took over 15 years to complete construction since the hotelier completely self-financed the business.

### ***5.2.2 Industry Stakeholder Perspectives***

*Research Finding 10: Government officials expressed low opinions of small hotels in NPI.*

Interviews with governmental officials did not paint a positive image of their attention to or regard for small hotels in NPI. Two governmental officials explicitly

expressed that paying attention to small hotels in NPI is a waste of resources. According to these persons, the focus of the Ministry of Tourism is on small hotels in the Family Islands and large hotels in NPI. These officials stated that small hotels in NPI largely cater to local residents, are not a part of the international tourism industry and therefore do not warrant attention by the Ministry of Tourism.

One official in particular was initially excited to hear that my dissertation was focused on small hotels since this was “an area of concern for the Ministry”. However, upon finding out that my study would be focused on small hotels in NPI, the individual remarked, “Oh, well you’re wasting your time. That’s a dead end project, small hotels in Nassau are dead.”

|   |
|---|
| <p>One of the things that's going on with this country is that it's identity is totally tied up with large hotels. If they aren't doing well then the Bahamas isn't doing well. So that's our priority.</p>   |
| <p>When it comes to small hotels in Nassau you might as well forget about it. There's no way that they can compete with what's going on in the marketplace.</p>   |
| <p>No we don't have any programs in particular for the small hotels. They are just not a priority for us. You know they really just cater to the locals, to the Bahamians. We are Ministry of Tourism and you know, we deal with the tourists. So the small hotels in Nassau, they just aren't what we need to worry about now.</p> |
| <p>There's an attitude problem with the small hotels. There's an attitude where they just want the government to put the tourists in their hotels. There's a huge educational problem among the small hotels.... There are so many cultural barriers, structural barriers when you're dealing with the small hotels.</p>            |

**Table 5.4. Excerpts from Governmental Representatives about Small Hotels**

*Research Finding 11: Private tourism organizations and Ministry of Tourism have a close working relationship.*

The Nassau Paradise Island Promotion Board and the Bahamas Hotel Association were initially formed to promote large hotels to international markets and supplement marketing provided by the Ministry of Tourism (Cleare, 2007). Since their inception, these associations have become very involved with the Bahamas Ministry of Tourism and work along with the government to plan and influence the trajectory of tourism for NPI. These organizations have had direct influences on changing policies and practices

deemed to be unfavorable in attracting and retaining tourists at member businesses (BHA, 2009a). These include revisions to gaming regulations in order to increase profitability for large hotels, altering room tax requirements and decreasing the time needed to issue work permits for foreign workers (BHA, 2009a).

Representatives from the Ministry of Tourism stated that they have utilized many of the proposals received from these organizations and that a large share of these proposals clearly benefitted large hotels. While government representatives were not comfortable identifying specific proposals that were initiated by these organizations and subsequently approved by the Ministry of Tourism, they did intimate that private organizations have significant political influence and are involved in developing marketing plans and advocating for policies, legislation and regulations that affect member hotels.

Members of private organizations were more forthcoming in their discussion of their relationship with the government. One interviewee stated that the major ideas regarding marketing and infrastructure development are decided within these private organizations and that they are then presented to the Ministry of Tourism for approval. This interviewee had a low opinion of Ministry of Tourism employees, claiming that they lacked innovation and relied on the expertise and experience of leaders of the large hotels to provide actionable items that would benefit the tourism industry. Other interviewees opined that these organizations were tasked with shaping the trajectory of tourism for the country and that the success of large hotels has been and will continue to form the basis of a successful tourism industry for NPI.

*Research Finding 12: Private tourism organizations largely cater to the needs of large hotels.*

The two private tourism organizations operate on a voting system to address issues and strategies. Voting privileges within these groups is based on the number of hotel rooms of each establishment. With small hotels averaging only 28 rooms per hotel and large hotels averaging 407 rooms per hotel, there is a clear bias in whose opinions have the most weight. Even if all small hotels joined these organizations and voted exactly the same, their collective vote would only count for 14% of the total. This bias is clearly understood by large hotel members of these organizations. In an interview with one member that represented a large hotel with significant voting power, it was stated that any ideas that he presented were sure to be implemented and that it was “only a courtesy” that he presented ideas as a debatable issues.

*Research Finding 13: Large hotels intentionally restrict beach access.*

Interviews with large beachside hotels revealed that they intentionally restrict access to beaches adjacent to their properties. This is done to ensure that mostly guests of the hotel frequent beaches. Ensuring a private beach experience is a benefit so that tourists have an uninterrupted experience and “are not bothered by locals selling worthless souvenirs”. Interviewees expressed that they have taken specific measures to limit access including constructing fences and delineating specific areas of the beach for hotel guests. This is done by setting up amenities such as umbrellas and chairs on the beach and hiring security to ensure that non-hotel guests do not utilize these facilities. These actions ensure that access to the beach is difficult and that only guests of the hotel can make use a particular area of the beach.

*Research Finding 14: Financial institutions have stringent business loan guidelines that are not favorable for small hotels.*

Bank representatives stated that they have a number of requirements in order to approve loans for hotel development or refurbishment. The major requirements are that hotels have at least 100 rooms and an internationally recognized brand. These characteristics are seen to be essential for a hotel to compete with existing resorts in NPI. Small hotels, with fewer than 75 rooms by definition, are largely unique properties without international brand recognition. They are thus unqualified for traditional business loans and have difficulty obtaining financing from banks.

### **5.3 Analysis**

In this section I explore interactions between mass tourism and land use change and implications for the contextual environment of small hotels. Using responses of small hoteliers and industry stakeholders along with analysis of secondary sources, I investigate how interactions between mass tourism and land use change affect the political, biophysical and economic aspects of the contextual environment of small hotels.

#### *Political*

Interactions between mass tourism and land use change have significant implications for the political aspect of the contextual environment of small hotels. The focus on beach tourism coupled with the concentration of small hotels on the interior of the island in combination with a clear political focus on the development of large hotels

has resulted in small hotels having very little political influence with the Bahamian government.

The focus on beach tourism has resulted in the majority of tourists to NPI looking for a beach experience with 60% of tourists listing beaches as their primary motivation to visit (BMT, 2010). However, small hotels are largely concentrated on the interior of the island and with limited beach access through coastal development and the intentional privatization of beaches, are unable to provide guests with this beach experience. Large hotels located on the beachside and with sizeable numbers of rooms thus cater to the majority of international guests that visit NPI.

In addition, large hotels work together in private tourism organizations to develop and advocate marketing campaigns and policies supported by the government that are beneficial for their businesses in particular as discussed in Research Finding 11. This involvement of private organizations in the governance of state regulations and affairs has been noted in the literature on environmental or resource governance. Recent global trends have resulted in “the transference of regulatory and administrative functions from the national state to variously scaled non-state actors” (Himley, 2008, p.433). This restructuring results in new contexts where there is increased interaction between the public and the private and the state has decreased authority. Interviews with members of these private organizations that tout their involvement in governmental affairs and their low regard for governmental employees support this observation. However, in contrast, small hotels are largely unaffiliated with these private organizations and thus do not have an opportunity to affect the actions of these groups or their political ramifications.

Small hotels also have a largely negative attitude towards the Ministry of Tourism and do not individually advocate the government for changes that would benefit their businesses. These negative attitudes as demonstrated in Table 5.3 are similar to a previous study that explored perceptions of the Bahamian government by local residents (Westgate, 1978). In this study, there were similar complaints of lack of assistance by the government and responses that displayed “a lack of faith in the people in control or in a position to offer aid” (Westgate, 1978, pg.258). Although this study focused on government aid following hurricane damage, there do appear to be similarities in the largely negative perception of the government and the ability or willingness of the state to provide assistance. This indicates that the current relationship between small hoteliers and the Ministry of Tourism may not just be a contemporary issue, but rather a deep-seated and historic general disregard for the actions of the state. This historical component may exacerbate current challenges such as difficulties obtaining benefits from the state such as the Hotels Encouragement Act. Thus the negative attitude of small hoteliers regarding the government may be multi-layered and not just a contemporary response that is contingent upon recent, personal experiences with the state.

Large hotels offer a variety of political benefits. The development of a large resort in NPI is a politically significant event with political parties able to tout their involvement with the supply of new jobs and capitalize on these accomplishments in future elections. In interviews with participants in this study, quite a few mentioned that individual politicians have been known to personally benefit financially from facilitating the smooth implementation of new resorts in the form of contracts or other unethical payouts. Extended tax exemptions, land grants, infrastructure development and approval

of significant foreign labor are all concessions that have been made for the development of large hotels in NPI according to various sources in this study. While large hotels enjoy these benefits, small hotels do not have the same political clout and so find it more difficult to obtain politically driven aid. With large hotels having the ability to create and provide significant levels of employment and housing the majority of international guests to the destination, their continuous success is clearly in the best interests of the Bahamian government. Thus the close relationship between large hotels and the government can be understood as an effort to maintain the success of the tourism industry, the backbone of the economy in NPI.

The political focus on large hotel development can also be understood in a broader context of economic globalization. Globalization has been characterized by the openness of national economies to multinational companies and implementation of policies that encourage unhindered movement of capital (Simmons and Elkins, 2004). This global economic liberalization has manifested in the Bahamas by not only opening the tourism industry to foreign capital and investments but also by encouraging and providing incentives for increasing foreign-backed development. As part of the global economy, The Bahamas must compete with other nations to attract capital and international businesses. Thus policies and practices that position The Bahamas as more attractive for international business are implemented, as the nation must compete with other Caribbean destinations that are also able to offer similar sun, sand and sea experiences (Pattullo, 2005).

This focus on obtaining international tourism businesses and maintaining an attractive political and economic environment for these businesses is not also offered to

small, often locally owned, tourism enterprises. Small hotels cater to a minority of international guests, are largely unable to provide the beach experience that NPI is known for and are noticeably absent from private tourism organizations. The success of these hotels is not essential for the tourism industry in NPI that is focused on mass beach tourism. The combination of these conditions has resulted in small hoteliers having very little political influence, either individually or as part of private tourism organizations. This lack of political influence has also resulted in small hoteliers having difficulty obtaining benefits offered by the government to all hoteliers. The responses of small hoteliers regarding their experiences with the Hotels Encouragement Act show that the majority of small hotels have faced difficulties obtaining legally mandated benefits and in many cases were only able to obtain some of the benefits of the Act.

While small hoteliers and governmental representatives in NPI appear to have equally unfavorable opinions about each other, the Ministry of Tourism has developed some programs aimed at assisting small hotels. However, these programs appear to be mostly concentrated on aiding small hotels in the Family Islands. According to interviews with governmental representatives, The Ministry of Tourism has developed a Small Hotels Unit aimed at providing assistance with the development, management and operation of small hotels within The Bahamas. This unit is tasked with offering operations and management training and human resource development for small hotels. However, activities associated with this unit have been focused on small hotels in the Family Islands and not in NPI. Another small hotel operator initiative led by the Ministry of Tourism aimed to connect bank support with small hoteliers but focused attention on the Family Islands (Sturup, 2004). A mobile center was developed to

provide services to hotels on the Family Islands since having a base in NPI was not seen to be beneficial for the hotels that the Small Hotels Unit were tasked with assisting (Bahamas BTB, 2003). None of the small hoteliers interviewed for this dissertation were aware of the Small Hotels Unit or had any prior interactions or assistance from this unit. The actions of the Ministry of Tourism to assist small hotels appears to be focused on the Family Islands with little regard for small hotels in NPI.

Other studies have found that in many nations focused on development of the tourism industry there are governmental incentives, such as tax concessions or land grants, which aim to entice foreign investment and the development of large resorts that will provide considerable quantities of jobs for the local population (Wilkinson, 1989; Andriotis, 2002; Pattullo, 2005). These incentives are often unaccompanied by corresponding policies aimed at encouraging or increasing the development of small tourism enterprises or locally owned developments (Pattullo, 2005; Claver-Cortes et al., 2007). The results of this study affirm these studies, as there is a clear bias towards the development of large hotels in NPI through the *Hotels Encouragement Act* and the political clout of these businesses. There also appears to be little involvement between small hotels and the Ministry of Tourism in NPI with a noticeable lack of encouragement of the development of additional small hotels. The lack of political influence of small hotels has implications for other aspects of the contextual environment as illustrated in the following sections.

### *Biophysical*

High real estate prices in coastal regions of NPI as a result of land use change combined with the lack of financing available to small hotels as well as the historical

focus on mass tourism development has implications for the biophysical component of the contextual environment of small hotels. In particular, these conditions have resulted in the current and continuous concentration of small hotels on the interior of the island.

Biophysical changes associated with coastal mass tourism affect the location of small hotels and also have implications for the type of tourists that these hotels attract. As previously discussed, NPI is heavily marketed as a sun, sand and sea destination and resultantly, the majority of tourists are primarily motivated to visit by the beaches. However, the land use changes associated with large hotel development and secondary vacation homes have resulted in a dominance of large hotels being located beachside and high real estate prices for coastal land. For small hoteliers with difficulty obtaining financing, developing a beachfront hotel is an unlikely endeavor. Thus the coastline remains the domain of large hotels and expensive vacation properties while many small hotels are located on the interior of the island. The most recently constructed hotels that took part in the study were all located on the interior of the island.

This difficulty in obtaining financing is related to the political contextual environment of small hotels in NPI. Interviews with government officials from other tourism destinations in the Caribbean and Latin America revealed that in other mass tourism destinations, specific laws and programs have been enacted to aid in the development of small tourism enterprises. For example, Venezuela's Credit Law for Tourism ensures that banks offer small tourism enterprises special financing conditions including low, fixed interest rates, grace periods to repay interest and flexible repayment periods. This law has been developed to specifically increase the number of small tourism enterprises in the country. These deliberate efforts contribute to helping small enterprises gain

economic benefits in mass tourism destinations. However, in NPI, there are no comparable programs, making it difficult for small hoteliers to obtain financing necessary to develop their properties.

With limited options for financing and high coastal real estate prices, small hotels are unable to afford a beachside location and resultantly are largely located in the interior of the island. Interactions between mass tourism and land use change thus affect the location of small hotels and have implications for the type of guest and average daily rate as shown in the following section.

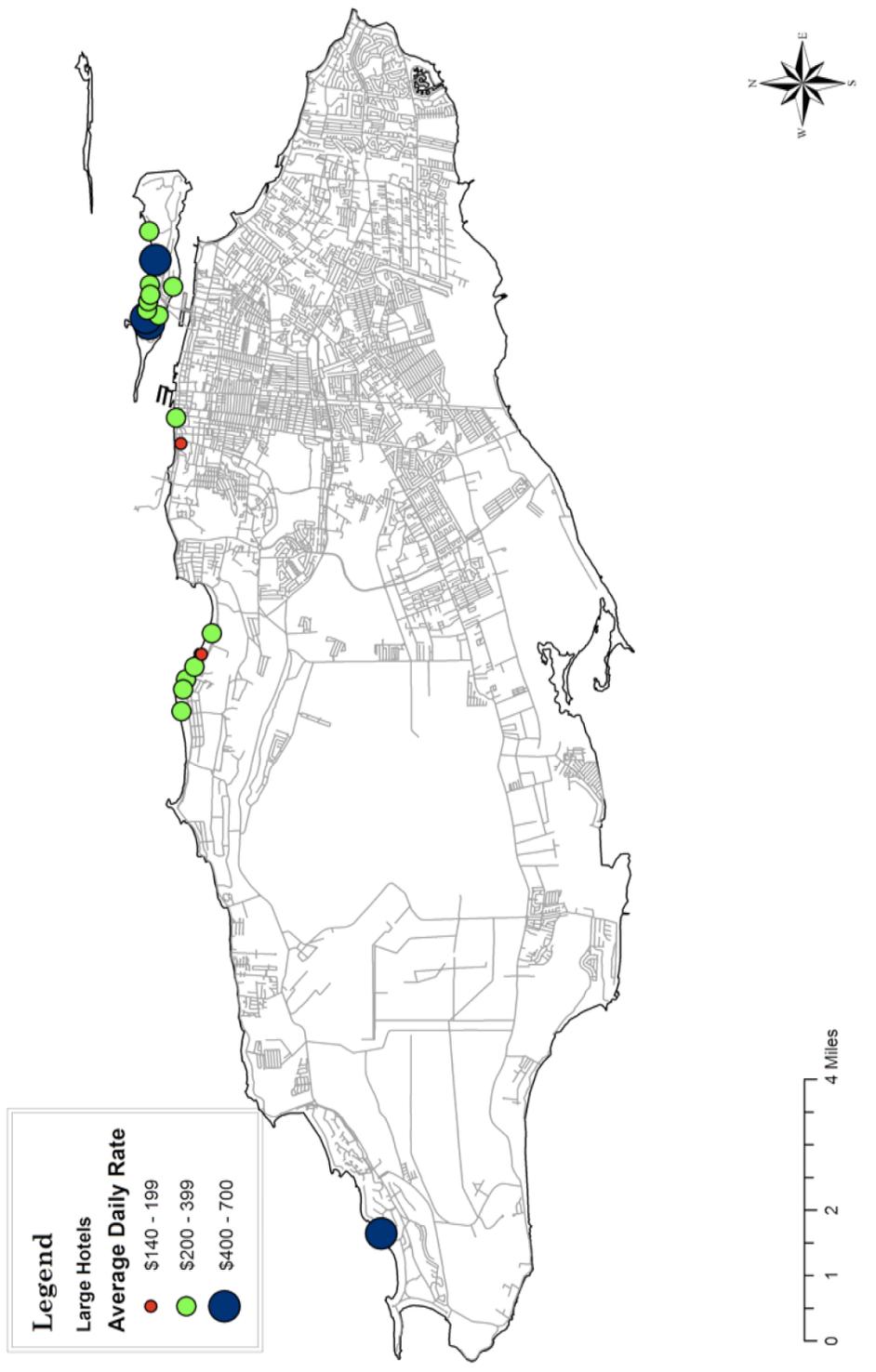
### *Economic*

Interactions between the focus on beach tourism in NPI, lack of public beach access and the majority of small hotels being located inland has a number of implications for the economic aspect of the contextual environment of small hotels.

Firstly, these interactions have resulted in small hotels largely catering to a different type of guest than large hotels as discussed in Research Finding 3. Whether small hoteliers cater mostly to locals or to international guests, all hoteliers claim that they cater to a different type of guest than large hotels. However, for many hoteliers, this different type of guest that they cater to is not ideal for their businesses. Small hoteliers mostly want to increase their share of international guests in order to increase profitability and obtain a greater share of the international tourism industry in NPI. However, interactions between mass tourism development and land use change have resulted in small hotels catering to a minority of international guests and having a limited share of the international tourism market in NPI.

Secondly, location of small hotels seems to be a strong factor affecting average daily rates. With the Ministry of Tourism largely marketing NPI as a sun, sand and sea destination and the majority of tourists visiting NPI primarily for the beach, small hotels located inland are unable to offer this major attraction that tourists expect. Thus inland hotels offer lower rates in order to make up for this missing amenity. Figures 5.5 and 5.6 show the location of hotels and the average daily rate, illustrating the relationship between proximity to the beach and hotel pricing. Even if small hotels are not located directly on the beach, it may seem that they should be able to provide access to the beach, given that both New Providence and Paradise Island are small islands. However, the development of large hotels, tourism facilities and foreign-owned homes along the coast has restricted access to beaches, meaning that it is difficult for guests at inland hotels to obtain a beach experience as detailed in Table 5.3.

# Average Daily Rate for Large Hotels New Providence and Paradise Island



**Figure 5.5 Average Daily Rate for Large Hotels**  
Source: Adelle Thomas, 2011



## 5.4 Conclusion

Although mass tourism and land use change have been studied in combination before, this chapter shows how these processes interact to affect small tourism enterprises in particular. This chapter has shown how interactions between mass tourism and land use change affect the biophysical, political and economic factors of the contextual environment for small hotels. Rather than a level playing field where hotels of all sizes have the same opportunities and options available, there has been a discernable focus on providing concessions for large hotels.

This bias is most apparent politically and can be seen by the history of policies that offer benefits and incentives for the development of large hotels. Other studies have shown that small tourism enterprises are often not considered in tourism policy developments (Baum and Hagen, 1999) and this study confirms these findings. In addition, the close relationships between private organizations and the Ministry of Tourism have resulted in large hotels having significantly more political influence than small hotels. The lack of participation of small hoteliers in private organizations or direct communication with the Ministry of Tourism has played a major role in their exclusion from political dialogues that affect the tourism industry for the destination. Interviews with governmental officials, small hoteliers and a review of programs aimed at small hotels by the government show that small hotels in NPI are not considered to be an integral component of the tourism industry by the government. Programs aimed at providing aid to small hotels are focused on the Family Islands while in NPI small hotels are largely unassisted. All of these factors have led to small hotels being largely

excluded from the political arena of the tourism industry in NPI and unable to take advantage of political benefits available to large hotels.

Interactions between development of mass tourism and land use change have also had implications for the biophysical and economic factors of the contextual environment. A focus on marketing NPI as a sun, sand and sea destination, concentration of large hotels on the beachside, lack of financing options, expensive coastal real estate and restricted beach access all interact to influence the location of small hotels, amenities that they are able to offer guests, room rates and ultimately, the type of guest that small hotels are able to attract. These factors have led to an inability of small hotels to compete for international guests and small hotels increasingly becoming reliant on local residents for clientele.

While other studies have focused on the inability of small hotels to compete with their larger counterparts because of inherent characteristics of hotels themselves, this chapter shows how large-scale processes affect the contextual environment of small hotels that contribute to these characteristics. For example, prior studies have highlighted the financial constraints of small hotels as a reason for their failure (Getz and Carlsen, 2000; Carlsen et al., 2008). However, this chapter has shown that the financial constraints of small hotels are affected by the reluctance of financial institutions to offer loans to small hotels, making them reliant on personal funds or loans from friends and family. This in turn affects the inability of small hotels to be located on expensive beachfront property, to attract international guests and to have higher levels of profitability. The concentration of large hotels on the beachside combined with restrictions on public beach access has resulted in small hotels being unable to provide an

important amenity that many tourists to NPI have come to expect and ultimately affect the profitability of these businesses.

Other studies have highlighted inefficient or non-existent marketing strategies as a factor in the inability of small hotels to compete with large hotels (Moriarty et al, 2008; Hildmann and Stierand, 2010). While marketing is an important component of business success, this chapter exposes how small hotels in NPI start out at a disadvantage compared to large hotels. Government funded marketing that focuses on sun, sand and sea means that the majority of tourists to NPI come to experience a beach vacation, privileging large hotels that can provide this experience while marginalizing small hotels that are largely located inland. While marketing by individual small hotels can attract some clientele, the small-scale marketing that small hotels can afford cannot compete with the overall impression of NPI as a beach destination. Thus small hotels are unable to attract the type of tourist that NPI is largely marketed towards and are increasingly unable to compete with large hotels.

Overall, the contextual environment for small hotels is daunting. Land use change and mass tourism have made it difficult for small hotels to compete for international tourists and increasingly transforms small hotels into destinations for local residents. Exposure to these stressors affects conditions that small hotels operate in which have impacts on future exposure to change and available response options. In the following chapter, I explore how the contextual environment affects the exposure of small hotels to other stressors and influences their ability to respond to change.

*Thoughts on Pathway of Context Double Exposure*

The pathway of context double exposure was a valuable tool in parsing out how mass tourism and land use change interact to affect small tourism enterprises. This pathway allowed for analysis to focus on how interactions between these stressors impact the contextual environment of small hotels. Using this pathway required careful consideration of how the two processes of change interact. Interactions between these two processes were very apparent, perhaps because these stressors are so closely related and prior research has exposed the many connections between them. This close relationship between mass tourism and land use change helped to identify how interactions affected the contextual environment of small hotels.

However, while the pathway does recommend that the contextual environment be thought of as consisting of separate political, economic, biophysical, institutional and other components, I found significant overlap in these categories. It was difficult to separate biophysical characteristics of the contextual environment without considering economic and political components. Indeed I found that political, biophysical and economic components of the contextual environment were very closely related to each other. Although these categories were helpful to think through analysis of how small hotels are affected, for my case study there were far more connections between categories than separate distinctions.

Overall, I found the pathway of context double exposure to be very useful in exploring how mass tourism and land use change affect small hotels. The only area of improvement for the pathway could be to investigate connections among the components of the contextual environment instead of thinking of components as separate.

## Chapter 6

### **Current Crises: Hurricanes and 2007 Global Financial Crisis**

Extreme natural events and financial crises are shocks and stressors that have had significant implications for tourism as destinations have become increasingly connected (Hall, 2010). Although financial crises and extreme events may appear to be two distinct and unrelated stressors, their impacts for destinations and tourism enterprises are similar: changes in patterns of tourist visitation and resultant expenditure (Nothiger and Elsasser, 2004; Li et al., 2010; Ritchie et al., 2010). However, few studies have explored the connections between these stressors and implications for small tourism enterprises in particular.

This chapter utilizes the pathway of outcome double exposure to explore the overlapping impacts of the 2007 global financial crisis and hurricanes on small hotels. Outcome double exposure allows for analysis of interactions between two processes that may not appear to be directly related. This pathway highlights the importance of the contextual environment in shaping outcomes of processes of change and affecting responses to these stressors.

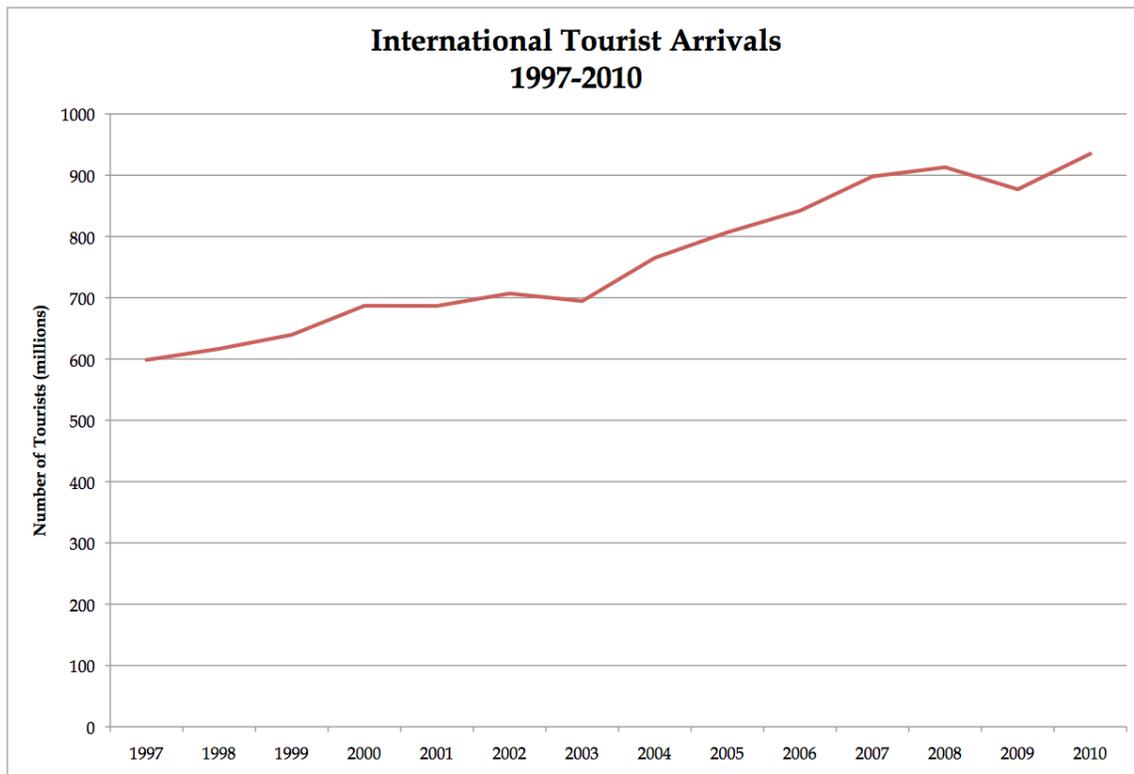
This chapter is organized as follows: Section 6.1 provides an overview of the outcomes of the 2007 economic crisis for NPI and a background on hurricanes in The Bahamas. In Section 6.2, I present the research findings of this study, focusing on effects of the 2007 global financial crisis for small hotels, effects of past hurricanes for small hotels and their approach towards hurricane preparation and management. Section 6.3 utilizes the pathway of outcome double exposure to explore these findings. Finally in

Section 6.4, I summarize the chapter and provide thoughts on the pathway of outcome double exposure.

## **6.1: Background on 2007 Global Financial Crisis and Past Hurricane Outcomes in NPI**

### *2007 Global Financial Crisis and Tourism*

The financial crisis that began in mid 2007 has had severe implications for national economies around the world. This global financial crisis has resulted in the downturn of stock markets, institutional bailouts, decrease of credit availability, prolonged unemployment and instability in housing markets across the world (Bailey and Elliot, 2009; IMF, 2009). The crisis has also had significant implications for the global tourism industry. Compared to a steady growth in international tourist arrivals in the years preceding the start of the global economic downturn, 2008 saw a slowing in growth followed by a sharp drop in arrivals of 4.2% in 2009 as seen in Figure 6.1 (UNWTO, 2011). In 2007, global tourist arrivals were 894.4 million, in 2008 arrivals had a slight decrease to 916 million and by 2009, arrivals had dipped below 2007 numbers to only 881 million. However, by 2010, arrivals began to recover with global arrivals at 940 million for the year. This drop in arrivals has been accompanied by a significant drop in tourism expenditure and has had dire repercussions for regions dependent on the tourism industry (WTO, 2012).



**Figure 6.1: International Tourist Arrivals 1997-2010**

Source: UNWTO, 2011

The global financial crisis was a significant stressor for the tourism dependent region of the Caribbean. Arrivals began to decrease within the region in late 2008 with an average of a 4% decrease in arrivals in 2009 (CHTA, 2011). While early analysis of the financial crisis predicted that there would be minimal effects for Caribbean tourism, declining tourist arrivals from the United States and Europe have had significant implications. Hotels throughout the region suffered sharp declines in occupancy from 2007 to 2010. 2007 saw a 2.9% decrease in occupancy compared to 2006, 2008 saw a further 5% and 2009 occupancy rates declined a further 4.5% (CTO, 2011). By 2010, the average occupancy rate was 60.3%, well below the 2007 average of 66.6% (CHTA,

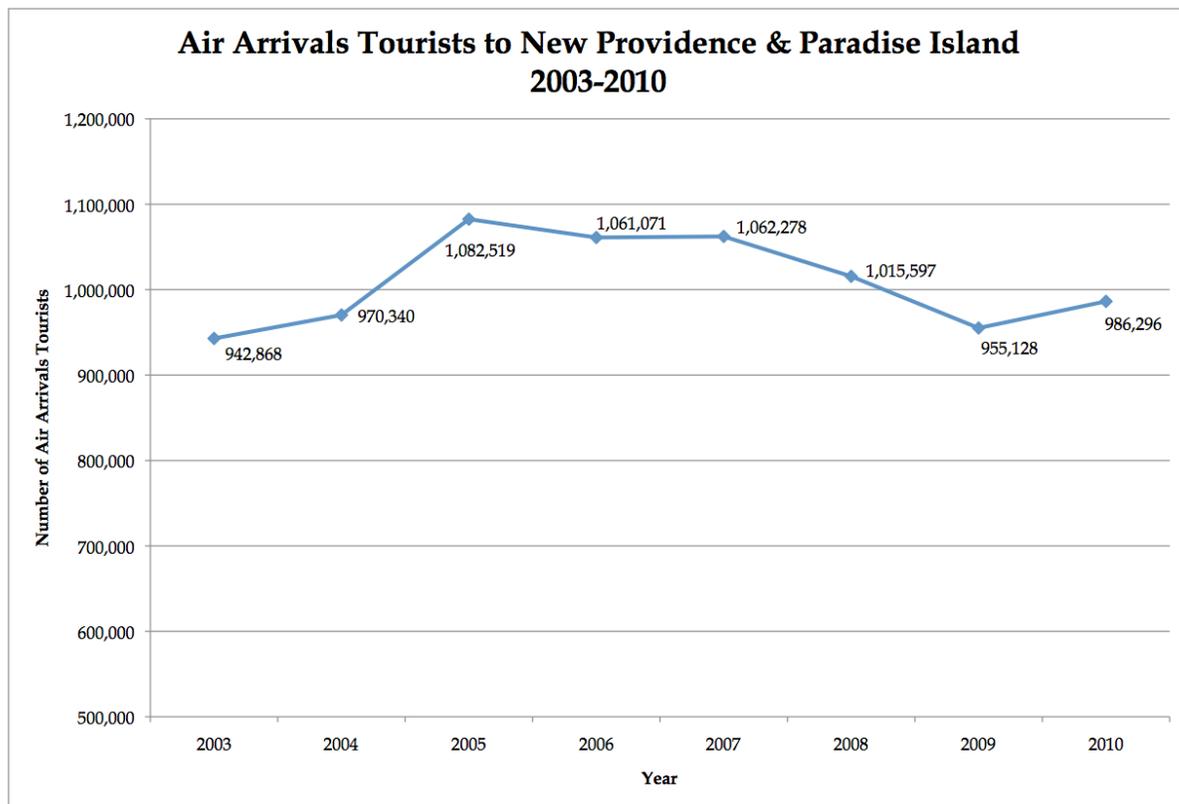
2011). While these changes have most likely had ramifications for tourism enterprises, there are no studies that explore the implications of the crisis for individual tourism enterprises. Available information is only provided at the destination level.

#### *Impacts in The Bahamas and NPI*

For New Providence and Paradise Island in particular, the recession has had significant implications. GDP for the country shrank by 1.5% in 2008 and 5.5% in 2009 and is largely attributed to the decline in tourism (IMF, 2011). Unemployment in The Bahamas increased from 7.9% in 2007 to 14.6% in 2009. After an insignificant growth in air arrivals from 2006 to 2007, arrivals in 2008 and 2009 showed a sharp decline. This trend is partly due to the country of origin of tourists to The Bahamas. While for the rest of the Caribbean tourists from the USA make up approximately 50% of visitors, in The Bahamas, American tourists account for over 80% of visitors as shown in Figure 6.3. With the recession originating in the USA and then spreading globally, the tourist supply that The Bahamas relied on was significantly impacted early on during the recession (IMF, 2009).

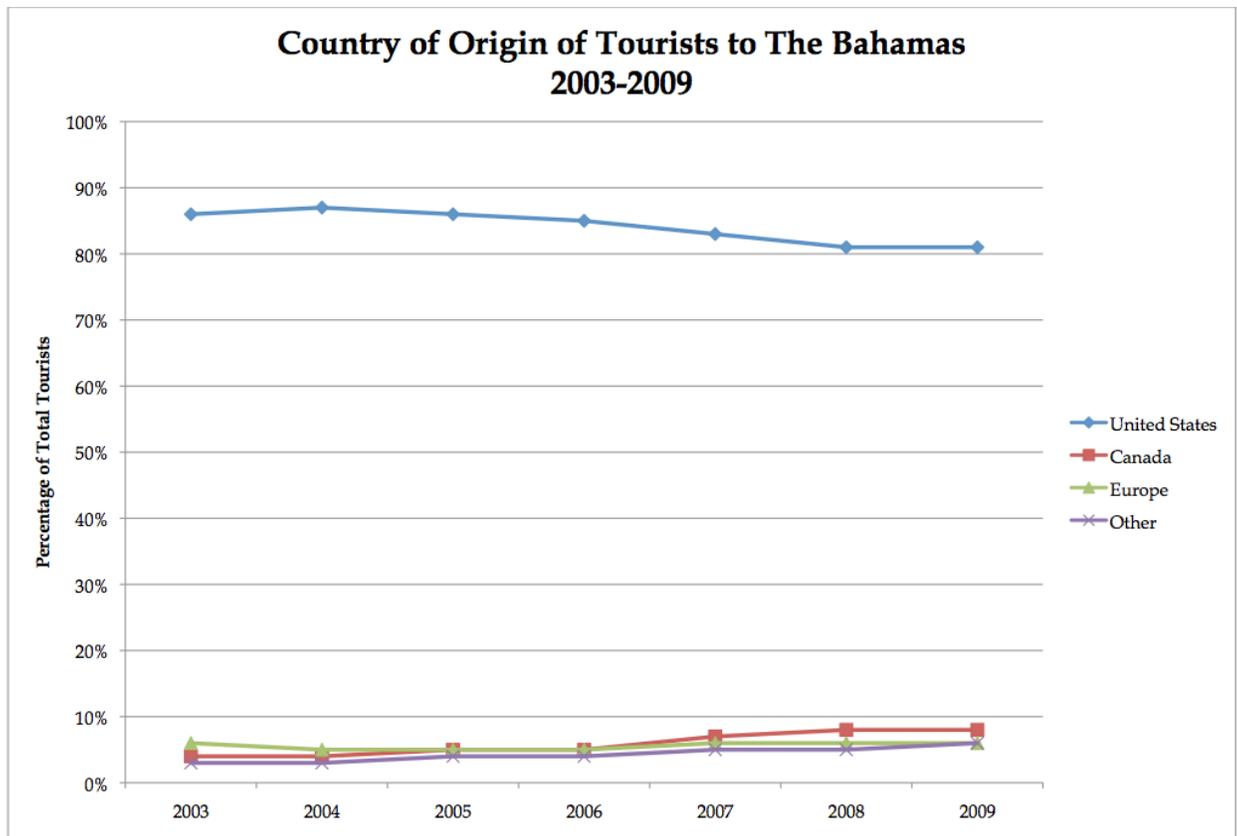
In times of crises, international tourism often decreases while domestic tourism increases (Bonham et al 2006, Li et al, 2010, Papatheodorou et al., 2010; Smeral, 2010). However, in The Bahamas, domestic tourism is an insignificant contributor to the industry and so the decline of international arrivals has had sustained repercussions (BMT, 2011). Hotel occupancy throughout The Bahamas and in NPI was noticeably affected by the decrease in arrivals. An ill-timed addition of over 1,000 hotel rooms on Paradise Island in 2007 combined with declining air arrivals resulted in a sharp decline in occupancy rates in NPI as seen in Figure 6.4 (BMT, 2011). However, while information

is available regarding declines in hotel occupancy in general, there is no exploration of the implications of these effects for individual tourism enterprises. There is a clear need for smaller scaled analysis into the implications of the financial crisis for tourism enterprises in NPI.

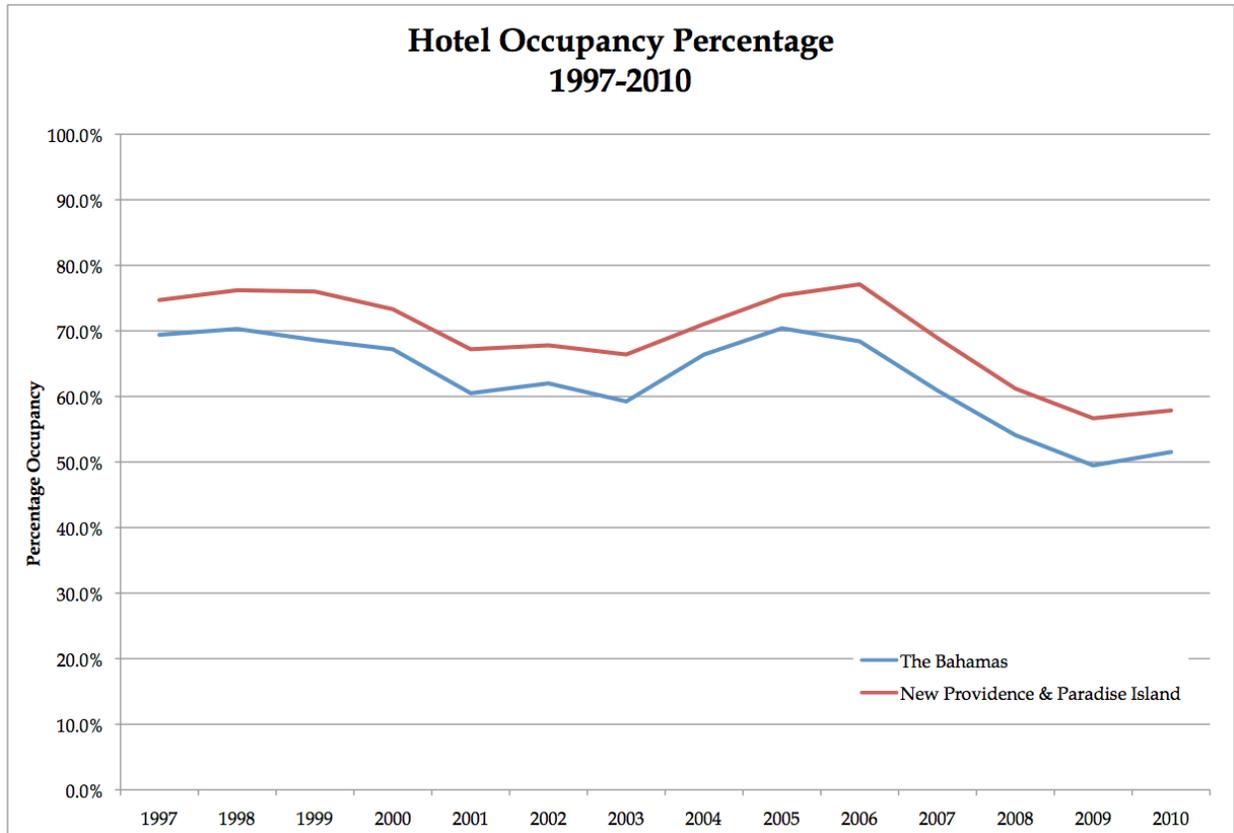


**Figure 6.2: Air Arrivals Tourists to NPI 2003-2010**

Source: BMT, 2011



**Figure 6.3: Country of Origin of Tourists to The Bahamas 2003-2009**  
Source: BMT, 2011



**Figure 6.4: Hotel Occupancy Percentages 1997-2010**

Source: BMT, 2011

### *Hurricanes and the Caribbean*

The Caribbean, a region comprised mostly of small-island states, is susceptible to a number of natural hazards. Tropical storms, intense rainfall, storm surges, flooding and drought all affect the region (Berke and Beatley, 1997). In some Caribbean nations, earthquakes and landslides can also be added to the list. However, hurricanes, tropical storms and tropical depressions are by far the most frequent and destructive natural hazards for the region (Tomblin, 1990). These three types of natural phenomena are characterized by an organized system of thunderstorms and clouds and are differentiated by the intensity of winds (National Weather Service, 2012). Tropical depressions exhibit

winds of less than 38 miles per hour (mph), tropical storms have winds between 39mph and 73 mph while hurricanes display wind speed above 74mph. Hurricanes are further numerically classified as between Category 1 and Category 5 with higher categorization dependent on wind speeds.

Along with their location in the track of Atlantic basin hurricanes, the islands of the Caribbean display other characteristics that increase their vulnerability to natural hazards. The vast majority of Caribbean countries are classified as Small Island Developing States (SIDS) (United Nations, 2009). The intrinsic features of SIDS such as their small land area, insularity and remoteness and limited economies have resulted in intense land use, high environmental exposure to hazards and economies based on highly sensitive natural resources (Pelling and Uitto, 2001; Boruff and Cutter, 2007). These characteristics compound the effects of natural hazards and expose the many vulnerabilities of SIDS. Using a political ecology understanding of vulnerability<sup>2</sup> as a combination of environmental exposure along with economic, political and social conditions that shape mitigation of and response to hazards, SIDS can be viewed as a highly vulnerable group.

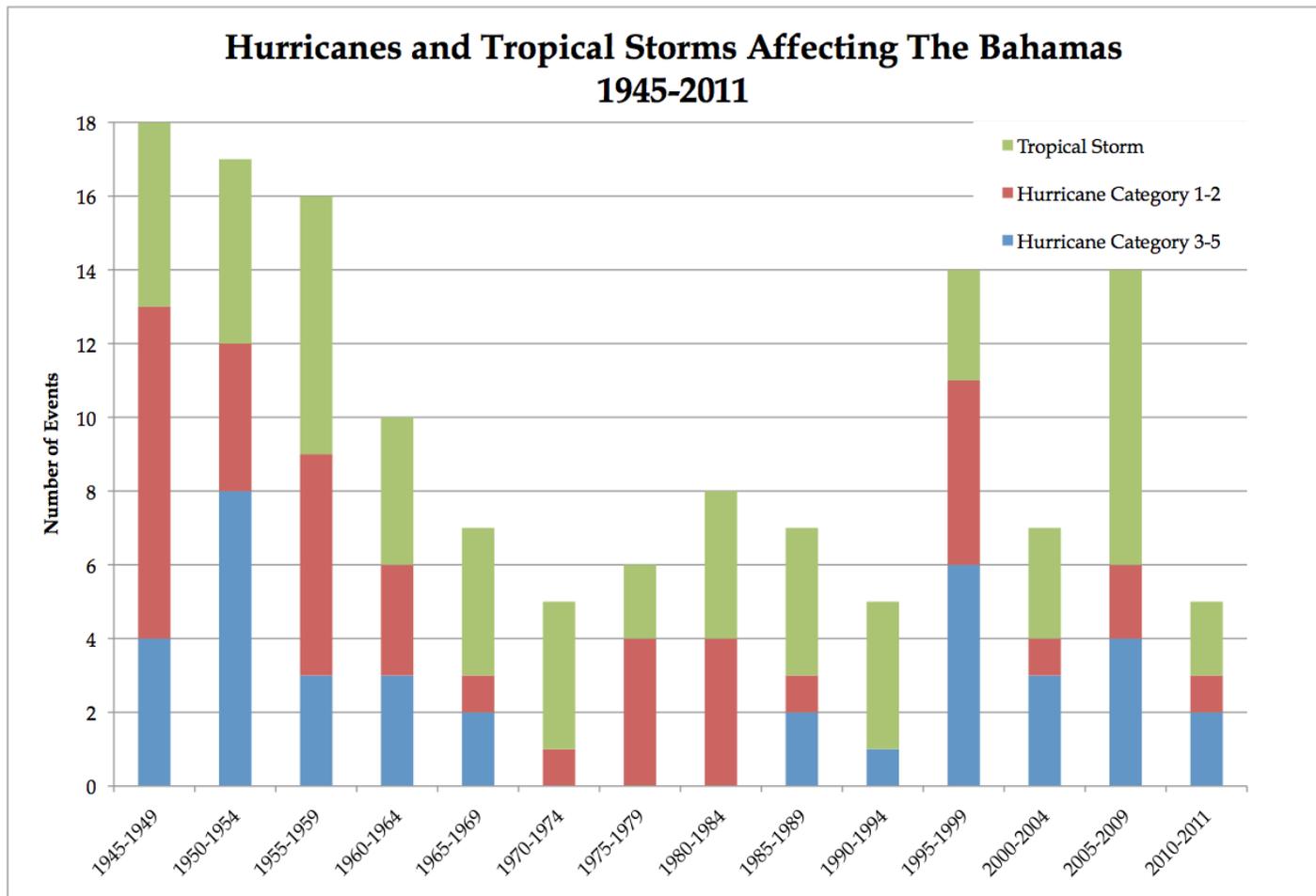
#### *Hurricanes and Tourism in NPI*

The Bahamas is the most northern country in the Caribbean and has historically been seasonally affected by hurricanes, tropical storms and tropical depressions. The islands are particularly flat with elevations close to sea level and prone to flooding during intense rainfall (Neely, 2006). Comprised of over 700 islands and cays and stretching

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<sup>2</sup> The political ecology view of vulnerability while explicitly identifying the need for attention to be paid to economic, political and social conditions that shape exposure and responses to hazards is similar to the understanding of vulnerability used for this study: vulnerability considers a range of biophysical and socio-economic factors that affect the exposure of entities to stressors and their ability to respond as discussed in Chapter 2.

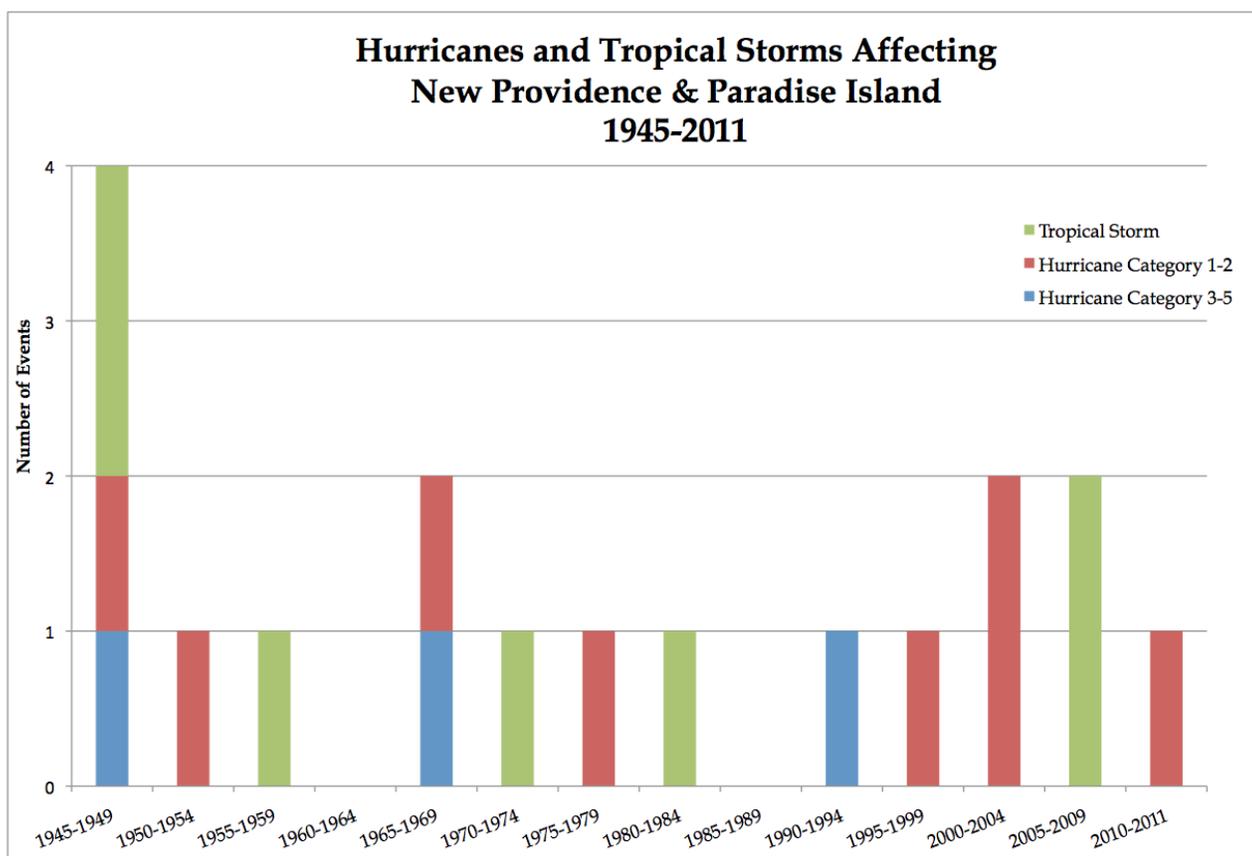
over a length of 760 miles, some areas of The Bahamas can have significant effects from a hurricane while other areas are left unscathed. Figure 6.5 shows hurricanes and tropical storms that have come within 70 miles of a Bahamian island for the period from 1945-2011. On average, an island in The Bahamas is affected in some way by a hurricane once every three years and suffers direct contact every twelve years (Neely, 2006).



**Figure 6.5: Hurricanes and Tropical Storms Affecting The Bahamas 1945-2011**  
Source: Caribbean Hurricane Network, 2012

New Providence and Paradise Island have had been largely spared from any extensive damage from hurricanes and tropical storms for the past few decades. Figure 6.6 shows hurricanes and tropical storms that have come within 70 miles of NPI within

the period 1945-2011. NPI has had significantly less interaction with storms than other islands within the nation. While events such as Hurricane Frances and Hurricane Jeanne in 2004 caused significant devastation including extensive damage to numerous tourism and residential infrastructure in Grand Bahama, NPI has comparatively suffered minimal effects from past storms (Nassau Guardian, 2004; Neely, 2006). Damages are most often in the form of flooding and landscape damage from strong winds.



**Figure 6.6: Hurricanes and Tropical Storms Affecting NPI 1945 - 2011**

Source: Caribbean Hurricane Network, 2012

Recent hurricanes have not directly hit NPI and mostly pass a number of miles away (Neeley, 2006). This lack of direct hits has largely resulted in limited damage to

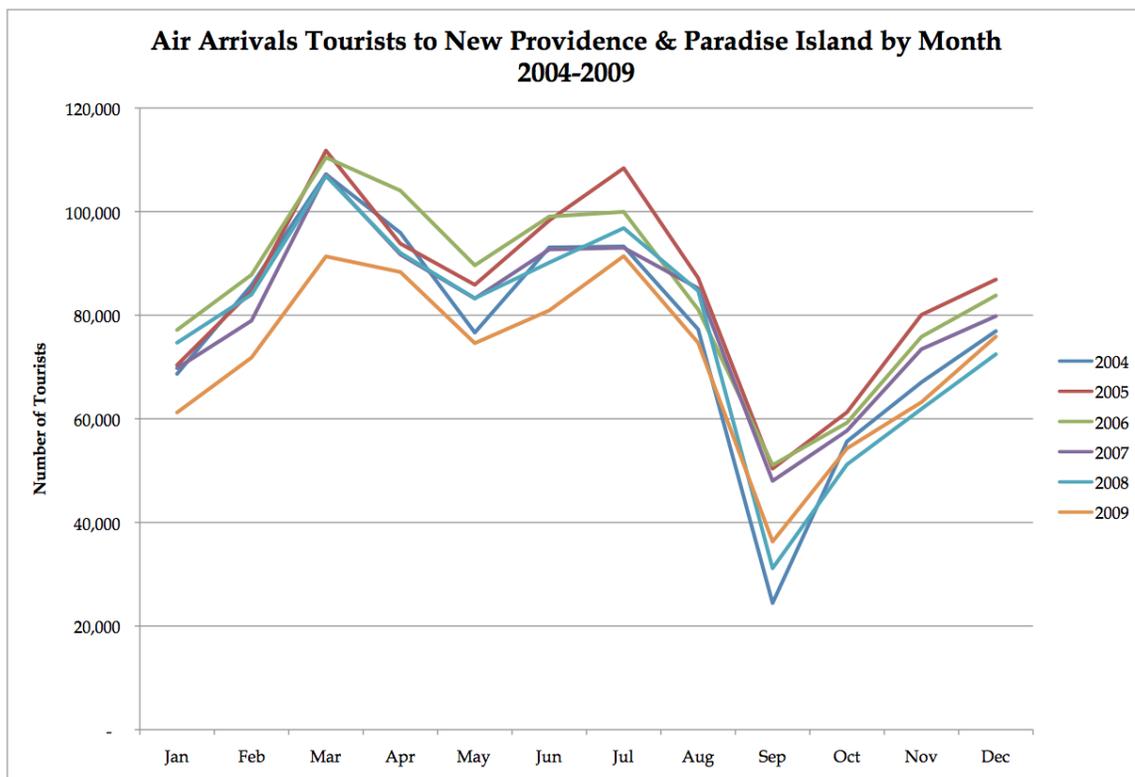
hotels and tourism infrastructure that is often quickly repaired to allow for the continued flow of tourists (Yancey, 2011). The limited impacts of hurricanes are further downplayed by the government that has specific communications plans to minimize negative perceptions of hurricanes for the destination (BMT, 2007). The Ministry of Tourism's Hurricane Preparedness and Response Plan states:

“We consider ourselves as having successfully managed a crisis when things return to normal within hours and days as opposed to weeks or months, when the media no longer carry the story, and when visitors arriving to the islands do not know what you are talking about if the subject is raised.” (BMT, 2007, p. ii)

These efforts combined with the infrequency of major hurricanes to directly impact NPI have resulted in a perception that hurricanes do not have significant implications for tourism in NPI.

Adding to the minimal impact of hurricanes for the tourism industry is that the hurricane season is concurrent with the low tourism season. The high season for tourism has historically ranged from November to March due largely to climatic conditions including mild temperatures and low levels of precipitation. Figure 6.7 shows air arrivals to NPI by month for 2004-2009 and illustrates the seasonality of the tourism industry. While the official hurricane season for the Atlantic basin is from June 1<sup>st</sup> to November 30<sup>th</sup>, historically, hurricanes affecting NPI have occurred in late July to early November (Caribbean Hurricane Network, 2012). September is the month associated with the highest level of storm activity for both the Atlantic basin and NPI and this coincides with the month of the least tourist arrivals (BMT, 2011; Caribbean Hurricane Network, 2012). The concurrence of the hurricane season and the low tourism season along with the minimal impacts of tropical storms and hurricanes in NPI has resulted in hurricanes having little recent effects for tourism for this destination.

However, although past recent hurricanes have had minimal impacts, NPI is not immune to hurricanes. In 1926, a category 5 hurricane had a direct hit with the island and had dire consequences (Neeley, 2006). The port city of Nassau was completely flooded, a number of large marine vessels were unanchored and either drifted off to sea or ran aground atop storm surges causing significant damage to buildings (Nassau Guardian, 1926). Large trees and concrete telegraph poles were uprooted and caused damage to buildings and vehicles as they were propelled by intense winds. A number of large coastal hotels suffered significant flood damages and many residents were left homeless after irreparable damages to their houses (Nassau Guardian, 1926; Neeley, 2006). Although this hurricane and its effects are far from recent, it shows the lack of direct hurricane hits in recent years is a matter of chance and that NPI is indeed exposed to hurricanes.



**Figure 6.7: Air Arrivals to NPI by Month 2004-2009**

Source: BMT, 2011

## 6.2: Research Findings

This section details the results of interviews with small hoteliers and tourism stakeholders regarding the implications of hurricanes and the 2007 financial crisis for the tourism industry and for small tourism businesses in particular. As discussed in Chapter 4, scoping study results and literature reviews led to a focus on consideration of how past hurricanes have impacted small tourism enterprises and exploration of their perception and approach to future storms. Attention was also paid to the impacts of the financial crisis for small tourism enterprises and methods of responding to these impacts. Table 6.1 presents an overview of main research findings from interviews with small hoteliers while each finding is further detailed below.

### 6.2.1 Small Hotelier Perspectives

| Research Finding | Description of Finding   | Percentage of Respondents |
|------------------|--|---------------------------|
| 1                | Small hoteliers that attributed low occupancy rates to 2007 global financial crisis (GFC)    | 96%                       |
| 2                | Small hoteliers that felt increased operational costs contributed to low profitability       | 92%                       |
| 3                | Small hotels that reduced rates or offered value added packages in response to GFC           | 83%                       |
| 4                | Small hotels that reduced staff in response to GFC   | 50%                       |
| 5                | Small hotels that diversified income in response to GFC                                      | 50%                       |
| 6                | Small hotels with past hurricane damage  | 75%                       |
| 7                | Small hotels with current hurricane insurance  | 42%                       |
| 8                | Small hotels with physical means of protection against future hurricanes                     | 100%                      |
| 10               | Small hoteliers that feel that hurricanes are not an important stressor for their businesses | 92%                       |

**Table 6.1: Chapter 6 Research Findings**

#### *2007 Global Financial Crises Effects and Coping Methods*

*Research Finding 1: Nearly all small hoteliers felt that the 2007 global financial crisis (GFC) has had noticeable impacts on their businesses.*

23 of 24 small hoteliers interviewed for this study relayed that the global financial recession has had major impacts on their businesses. In particular, hoteliers noted that occupancy rates have been significantly lower than in previous years. For hoteliers that cater mostly to local residents, the uncertainty of the Bahamian economy and high unemployment rates were attributed as the reasons for low occupancy. For hoteliers

catering to international tourists, similar conditions in tourist supply nations were cited as the cause of an overall decline in international visitors to NPI and a resultant decline in their occupancy rates. For 2 of the 12 hotels, impacts of the financial crisis were so severe that owners were considering closing their businesses permanently.

*Research Finding 2: The majority of hoteliers felt that increased operational expenses have exacerbated the impacts of the GFC.*

In addition to lower occupancy rates, the financial recession has had implications on operating costs for hotels. In particular, the increased costs of electricity by the government owned Bahamas Electricity Corporation was cited by 92% of interviewees as a major financial stressor. One interviewee in particular mentioned that yearly electricity costs had increased from less than \$120,000 in 2009 to over \$180,000 in 2010 with no changes in electricity usage.

Another outcome of the financial crisis that has had significant financial implications for small hoteliers is the increase in governmental tax on rooms. In 2009, the Bahamian government increased taxes from 6% to 10% of the room rate (BMT, 2009). All of the small hotels that were a part of this study expressed that the increase in room taxes was implemented at a particularly difficult time and has made it even more difficult to remain in business.

*Research Finding 3: Majority of small hotels have either reduced rates or offered value added packages to combat declining occupancy rates.*

In response to the financial crisis, hoteliers have taken a number of actions to combat decreasing occupancy rates and rising operating costs. Many small hotels, 8 of 12 or 67%, have reduced their rates in order to continue to attract clientele. One hotelier

has reduced her rates to the point that she breaks even and is not making a profit by renting rooms. Hoteliers that have not reduced rates have offered value added packages such as including meals or activities in the standard room rate. This was the response of 2 of 12 hotels. These responses have been made in response to the trend of declining occupancy in hopes of increasing hotel competitiveness and attracting a larger share of declining clientele.

*Research Finding 4: Half of small hotels have reduced staff in the past two years in response to declining profitability.*

Another response that small hoteliers have taken is to cut back on staff. Half of the small hotels interviewed have decreased their absolute numbers of staff members or have reduced staff hours. This reduction of staff means that owners of hotels are much more involved in daily operations and also that they rely on family members for unpaid or reduced wage labor in order to make ends meet. While this method has allowed small hotels to remain in business, it has also had effects in other areas of their businesses. Many of the owners interviewed stated that they are extremely busy managing the daily operations of their businesses and do not have the time for strategic planning or other business activities that are not deemed as absolutely essential.

*Research Finding 5: The majority of small hotels have recently focused on ways of diversifying their income to increase profitability.*

Half of the hotels interviewed have attempted to increase their profits by diversifying their sources of income. Rather than relying solely on overnight guests to provide revenue, some hotels are attempting to increase income by making other aspects of their businesses more profitable. In particular, these hoteliers are focusing on

expanding their attached restaurants. While many of these restaurants were initially conceived as an amenity for hotel guests, hoteliers are now focusing on marketing restaurants as destinations for local residents. Increasing local advertising, offering additional meals, increasing seating capacities and opening on more days have resulted in an increase in profitability from these businesses. Some of these hotels have added social activities such as happy hours, karaoke nights and themed parties to attract more business. All of the hotels that have incorporated these measures have seen an increase in profitability for their businesses.

A minority of small hotels, 4 of 12, has responded to the financial crisis by transforming some rooms into long-term rentals. These hotels have the highest levels of local resident clientele and have allocated up to 50% of their rooms as long-term rentals. Renting hotel rooms monthly instead of daily decreases the room rate but increases occupancy. These hoteliers have capitalized on the unstable housing market in NPI and note that many of their long-term rentals are to individuals that have lost their homes as a result of unemployment related to the financial crisis.

|  |
|--|
| <i>We don't have anything anymore. We used all our savings. If this restaurant doesn't work out, I don't know how long we can survive.</i>   |
| <i>Oh yes we do a lot now to make up for low occupancy. We have the restaurant now, it's doing much better. We have the theme nights you know, the salsa and the singing. And they love it, the people love it. They come out and that's how we're staying afloat.</i>                 |
| <i>Well we used to just have the café open for dinner for the guests on the weekends. But we started out opening it for lunch and now we're open five days a week for lunch and dinner. We have to sell a lot of pasta to keep this place open.</i>                                    |
| <i>I'd say about half our rooms are long term now. They were just sitting empty and the people were needing rooms for a long time at a cheaper rate. So we just put some mini fridges in there and now they are all rented out. The long-term renters are really our backbone now.</i> |

**Table 6.2 Excerpts from Small Hoteliers about Diversifying Sources of Income**

*Past Effects of Hurricanes and Future Plans*

*Research Finding 6: The majority of small hotels have sustained damages from hurricanes in the past.*

Although hurricanes have had minimal effects on the tourism industry in general for NPI, for some small hotels, there have been significant impacts from past storms. 75% of small hotels interviewed have sustained damages from hurricanes previously with half of these hotels sustaining significant damages. These significant damages included loss of roofs and extensive structural damage. Those hotels that sustained significant damages in the past have had to close their hotels while repairing damages. The length of hotel closure varied from a few weeks to over a year while hoteliers sourced money and materials to repair damages.

*Research Finding 7: Less than half of small hotels are currently covered under hurricane insurance.*

Less than half of small hotels interviewed have some type of hurricane insurance coverage. A number of hoteliers have recently cancelled their hurricane insurance since decreased occupancy and increased operating costs have decreased available funds for insurance payments. One interviewee stated that he had to choose between paying his staff and paying for hurricane insurance. Another factor affecting the lack of hurricane insurance adoption by small hoteliers is the increased cost of insurance itself. One interviewee stated that his hurricane insurance premium increased from \$8,000 per year in 2008 to over \$24,000 per year in 2009. This significant increase in price led the hotelier to cancel insurance coverage.

*Insurance is insanely expensive. Rates here are ridiculous and as a result businesses just can't afford it.*

*Do I have hurricane insurance? No way I don't have insurance; I can't afford it. Jesus is my insurance. Jesus is my plan.*

*We don't really have to worry about hurricanes here. You know the other islands, they protect us here in Nassau. So we don't get any effects from the hurricanes; we don't have to worry about that. So I don't need insurance. We just don't have any need for that. And I don't have the money for that even if we did need it. I need my money for my light bill, my water bill, my tax bill. I can't take on any more bills. So no insurance here. No insurance bill.*

**Table 6.3 Excerpts from small hoteliers about hurricane insurance**

*Research Finding 8: All small hoteliers have invested in physical means of protection against hurricanes.*

While insurance is an unaffordable expense for the majority of small hotels, all of the hotels did have some form of physical protection planned in the event of a hurricane. This protection was largely in the form of hurricane shutters that provide protection for windows from flying debris. Hurricane shutters were mentioned by all of the hoteliers as their primary means of protecting their property against hurricane damage.

*Research Finding 9: The majority of small hoteliers do not feel that preparing for hurricanes is important.*

Despite past damages from storms, the majority of hoteliers, 22 of 24, stated that preparing for hurricanes was not a priority or a significant concern. Hoteliers largely opined that preparing and planning for hurricanes was unnecessary and that hurricanes could be dealt with if and when they arise. Beyond installing hurricane shutters in the event of a storm or relying on insurance coverage, there is very little attention paid to reducing hurricane vulnerability.

18 of the 24 hoteliers interviewed felt that hurricanes were not a concern for NPI. These hoteliers expressed that hurricanes do not directly hit the island, that NPI is “protected from hurricanes by the other islands”. It was a wide spread belief that hurricanes are not a hazard that NPI is particularly vulnerable to.

### ***6.2.2 Stakeholder Perspectives***

*Research Finding 10: Private tourism organizations developed a group response to the GFC that was aided with government funds*

After the trend of declining tourists spurred by the financial crisis, the Nassau Paradise Island Promotion Board developed a program to increase tourist arrivals to NPI. The Companion Fly Free Program offered up to \$400 in airfare credits for tourists to fly to The Bahamas and stay at select hotels for a minimum of 4 nights. Not surprisingly the select hotels were hotels that were members of the Nassau Paradise Island Promotion Board. The Promotion Board and the Ministry of Tourism jointly funded this program aimed at increasing occupancy rates for member hotels. Interviews with Ministry of Tourism officials revealed that this widely advertised program has been successful for those hotels that participated, with occupancy rates for stays of four or more nights increasing dramatically. However, for hotels that were not a part of the program, there were no increases in occupancy. Of the 12 hotels that participated in this dissertation, only one hotel that was a member of the Nassau Paradise Island Promotion Board participated in the program. Hoteliers from the other 11 hotels had never even heard of the program and were unaware of the benefits that it provided.

*Research Finding 11: Large hotels actively manage hurricane vulnerability.*

Managers of all large hotels interviewed stated that they are currently and have always been covered under hurricane insurance and that they rely on this insurance to facilitate fast recoveries from any hurricane damages. While these large hotels had not sustained major damages to their businesses from past hurricanes, some damage to landscaping and infrastructure closest to the beach had been experienced in the past. These damages were quickly repaired so that the businesses could remain in operation and expenses of repair were reimbursed by insurance coverage.

All large hotels also had formal plans for measures to be taken in the result of an impending hurricane including measures for physical protection against damages, shifting of guests to secure areas and if necessary, extensive evacuation plans. Managers did opine that while hurricanes have not been an issue in the past, they remain prepared for extreme events and train and drill their staff to effectively manage extreme events.

### **6.3: Analysis**

The pathway of outcome double exposure allows for exploration of how responses and outcomes of global change processes may be affected by interactions between two seemingly unrelated stressors. Outcome double exposure highlights how small hotels are simultaneously affected by the global financial crisis and the threat of extreme events and how responses to these stressors may be related. This pathway also allows for exploration of the importance of the contextual environment in shaping outcomes and responses to processes of change.

In this section, I explore how responses to hurricanes are affected by the global financial crisis and conversely whether or not responses to the financial crisis have been affected by past experience with extreme events. I then investigate the importance of the contextual environment in shaping responses and outcomes to these processes. Finally, I consider how responses and outcomes affect the contextual environment.

#### ***6.3.1 Responses, Outcomes and Interactions***

##### *Hurricanes*

The overwhelming response of small hoteliers is that hurricanes are not an issue of concern for their businesses. Although the majority of hotels have sustained damage from hurricanes in the past, in some cases extensive damages that have resulted in

business closure, hurricanes are not viewed as a significant threat. This low perception of hurricanes has resulted in largely passive responses to decreasing hurricane vulnerability such as reliance on storm shutters or plans to repair damages if and when they happen.

This lack of planning for hazards despite living in hazard-prone locations has been seen in small tourism enterprises in Australia, where owners felt that planning for an event would make no difference in impacts in the event of an actual disaster (Cioccio and Michael, 2007). This appears to also be the case in NPI, where past experience with hurricanes has made small hoteliers feel as if they can handle any impacts from future storms. Meheux and Parker (2006) study the perception of natural hazards held by owners of tourism firms. They find that while owners have accurate perceptions of hazards, this does not compel action in disaster mitigation and preparedness. This finding also appears to be true for NPI, where hoteliers in this study were aware of hurricanes, have had past negative experiences with hurricanes but yet still did not feel the need to prepare in advance for future hurricanes.

This lack of preparation and planning can be attributed to the small size of these establishments as other studies have suggested. For example Drabeck (1995) finds that the size of the tourism enterprise is a significant factor in determining the extent of planning for hazards. Larger firms are more likely to have formalized plans including policies and procedures for staff members to execute. At the other end of the spectrum, small enterprises often have no hazard plans or informal verbal plans. Cioccio and Michael (2007) also find that the approach towards hazards planning by small firms is markedly different than that found in the hazard management literature, which mostly applies to larger firms with available time and resources. Smaller tourism firms often

lack the personnel or resources to invest in hazard planning and resultantly find it more practical to try and cope with the effects of disaster as they come rather than trying to mitigate hazards in advance. This study does support these conclusions, as all large hoteliers interviewed had insurance coverage along with extensive hurricane plans while conversely, small hotels were largely uncovered by insurance and did not pay much attention to the need to prepare for future extreme events as detailed in Table 6.3.

However, while the size of these small tourism enterprises may be a factor in their lack of preparation for hurricanes, this study reveals that the financial crisis has affected the perception of hoteliers towards hurricanes and their approaches towards planning for these events. For small hoteliers, current financial concerns are a far more serious issue than considering methods of reducing vulnerability to hurricanes. With reductions in staff as a result of lower profitability, small hotel owners are more concerned with daily operations than with planning for an extreme event that may or may not happen. Small hoteliers are so focused on keeping their businesses afloat that they have either cancelled or chosen not to take out hurricane insurance due to high prices, have limited time and resources to devote to hurricane preparation and largely adopt a wait and see approach to future hurricanes.

Other studies have found that the minutiae of operating a small hotel are extensive and time consuming meaning that small hoteliers are only focused on issues that they feel are most important (Cioccio and Michael, 2007). However in NPI, the strains of the financial crisis have exacerbated these conditions associated with operating small hotels and resulted in even less time and resources available to devote to hurricane preparation. Mitchell (2006) posits “the decisions humans make during non-emergency times have a

major impact on the likelihood that disasters will occur in the future”. For small hoteliers in NPI, this ‘non-emergency time’ is plagued by decreasing occupancy rates and the need to reduce operating costs as much as possible. Decisions made to devote less time and finances to hurricane preparation may have dire impacts in the event of an extreme event. Thus it appears that the financial crisis is indeed increasing the vulnerability of small hotels to hurricanes.

Other studies have suggested a need to increase awareness of the importance of formal disaster mitigation and preparedness to increase hazard preparation in small businesses (Meheux and Parker, 2006). However, these recommendations fail to consider other factors that may impact the lack of formal plans and preparation. This study exposes that financial constraints associated with other stressors has significant implications for how small hoteliers perceive and prepare for extreme events and ultimately affect their vulnerability to hazards.

### *Financial Crises*

The responses of small hoteliers to the global financial crisis have largely been to keep business open using any available means. In order to increase profitability during extended periods of low occupancy, hoteliers have developed a number of responses, ranging from reducing staff to diversifying their sources of income. These findings are similar to other studies that have focused on financial crises and small tourism enterprises. For example, in a study of responses to financial crisis among small hoteliers in Turkey, Okumus and Karamustafa (2005) find that hoteliers’ main responses were to reduce expenditures wherever possible and to decrease staff. However, contrary to some studies that find that managers of smaller tourism enterprises are ill-prepared for financial

crises and often do not have effective responses, resulting in significant profit losses (Henderson, 1999; Hildmann, 2010), small hoteliers in this study seem to be very aware of the effects of the financial crisis and have developed effective strategies such as diversifying their sources of income in order to remain profitable.

However, responses of small hoteliers to the financial crisis seem to be unrelated to past experiences with hurricanes. Small hoteliers appear to not take hurricanes into consideration at all when developing strategies to respond to the impacts of the financial crisis on their businesses. However, the responses of small hoteliers to the financial crisis do appear to be shaped by their contextual environment and their responses are in turn affecting their contextual environment. This dynamic is explored in the following section.

### ***6.3.2 Contextual Environment***

The pathway of outcome double exposure highlights the importance of the contextual environment in shaping the responses and outcomes of two seemingly unrelated processes of global change. This section explores how responses and outcomes of small hotels to the global financial crisis and to hurricanes are shaped by and have resultant effects on the contextual environment.

As discussed in chapter 4, the political component of small hotel contextual environment is characterized by a lack of political influence and involvement. Through lack of participation in private organizations that advocate for member hotels and absence of direct dialogue with the Ministry of Tourism, small hotels are largely removed from affecting the trajectory of the tourism industry in NPI. This exclusion has resulted in the

exclusion of small hotels in the Partner Fly Free program. By not participating in the private organizations that advocate for hotels, small hotels are unable to participate in this program aimed at increasing occupancy rates and decreasing the economic impacts of the financial crisis. Lack of direct influence with the government has also meant that there have been no other programs aimed at increasing occupancy in small hotels. Rather, small hotels have had to implement their own individual responses that are not aided by government funds as detailed in Research Findings 3, 4 and 5.

The Partner Fly Free program exemplifies the organization and political influence of private tourism organizations in NPI. However, these organizations have also attempted to affect other financial stressors during this time of crisis. An excerpt from the Bahamas Hotel Association's 2010 annual report shows their response to increases in room taxes and operating costs:

“Immediately following the announcement in May of the budget increases in room tax and departure tax, a discussion paper was prepared by BHA and shared with the Minister of Tourism who arranged a meeting with the Prime Minister to consider industry's recommendations for addressing our ongoing concerns of high cost, business erosion, and stimulus options.” (BHA, 2010, p.4)

In comparison to small hoteliers who individually lament increasing operating costs, but feel as if they have no recourse to address these changes, large hotels band together to develop responses aimed at changing these conditions. As evident by the above quotation, their concerns are politically significant and are carried up to the head of the country to be addressed.

The lack of involvement with private tourism organizations also has implications for hurricane preparedness. The Bahamas Hotel Association provides a number of resources to members to decrease hurricane vulnerability and impacts including hurricane

preparedness plans (BHA, 2011) and are highly involved with the government to prepare for extreme events:

“Anticipating an active season, BHA and the Ministry of Tourism maintained a state of readiness to coordinate industry preparedness and response, should storms threaten. The Ministry chairs a national tourism coordination task force, which BHA supports, as part of the National Emergency Management Agency’s overall disaster readiness and response activities. Readiness meetings were held with all stakeholders on the task force.” (BHA, 2010, p.10)

This level of attention to hurricanes by members of private tourism organizations is at the opposite end of the spectrum from small hoteliers who individually develop their own strategies or lack thereof for future hurricanes.

The economic aspect of the contextual environment also has had implications for both responses and outcomes to hurricane vulnerability. The limited financial backing for small hotels has resulted in a need for small hoteliers to finance construction and improvements using their own funds or borrowing from friends and family. The inability of small hotels to secure bank financing has been a major factor in hotels needing to remain closed for significant lengths of time following hurricane damages. Hoteliers have had to finance repairs using their own funds or have had to wait for insurance payouts that have often not covered the total cost of repairs. This lack of financing to quickly repair damages and keep businesses open results in further economic hardships. Remaining closed means that there is no revenue from guests and that the property is not generating income. Thus damages from hurricanes are doubly expensive: high costs of repairs and lost room revenue. For properties with insurance, most insurance plans do not cover income losses due to low occupancy or interruptions in business (Cioccio and Michael, 2007). Thus, the money lost from a closed hotel while time is spent repairing damages is not recouped and further adds to the precarious

financial status of small hotels. While the insurance coverage of large hotels may also not cover business interruption, these businesses have access to financing that can facilitate swift repairs without the need for business closure.

Responses and outcomes of small hotels are not only shaped by the contextual environment, but also have resultant effects on the contextual environment. While prior to the crisis, small hotels competed with large beachfront hotels by offering lower room rates, the financial crisis has resulted in a narrowing of the gap between rates at large hotels and small hotels. Small hotels have responded to the financial crisis by lowering room rates. However, large hotels have also adopted this strategy during this time of financial crises. Some of the larger hotels have significantly reduced their rates or have offered value added packages. According to small hotels, this has had significant impacts for their businesses. With room rates at former high priced large hotels now significantly lower and much closer to room rates for small hotels, both international and local clientele are choosing to stay at large hotels. Hotel rooms that were once over \$300 per night at large hotels have been offered at \$99 per night, making it difficult for small hotels to compete in rate wars. The percentage discount that small hotels can offer cannot compare to the discounts offered by large hotels that can take advantage of economies of scale.

As large beach side hotels offer dramatically reduced rates combined with savings from the Companion Fly Free Program, small hotels are even less able to attract international visitors. Thus their response has been to diversify their incomes and focus on attracting local clientele through long-term rentals and expanding hotel restaurants. These hoteliers have been pleased with the profitability that these responses have spurred.

However, while these responses are increasing profitability, it is having perhaps a counterproductive impact on the stated goals of many of these hoteliers. As discussed in Chapter 5, most of the small hotels are happy to cater to locals but lament the loss of international tourists and state that they would like to have a greater percentage of international guests and a larger share of the international tourism industry. However, these responses of creating social spaces that are mostly frequented by locals are not contributing to their goals of attracting international tourists. By focusing on short-term solutions that are increasing immediate profitability but not positioning themselves as destinations for the international visitor, these hotels are placing themselves more firmly outside of the international tourism industry. Focusing marketing efforts locally and providing activities that appeal to the local market is a response to the outcomes of the financial crisis that are affecting their contextual environment in a way that hoteliers have stated that they are ultimately averse to.

The precarious economic status of small hotels that the financial crisis has spurred also affects their political contextual environment. A number of hoteliers mentioned that they would be unable to afford membership in private organizations even if they felt that these organizations would benefit them. Diminishing returns spurred by the crisis has meant that expenses are kept to a minimum. Thus even when hoteliers were informed of the Companion Fly Free program, they were still averse to joining any private organizations stating that it would be an unnecessary expense. This focus on short-term profitability at the expense of becoming more involved in the organizations that shape the industry may allow small hotels to remain in business but is ultimately excluding them

from significant benefits and exposure to international guests, again placing them more firmly outside of the international tourism industry.

#### **6.4 Conclusion**

This chapter has explored outcomes of past hurricanes and the 2007 financial crisis on small hotels in NPI. It has also investigated how these processes interact with each other to affect the responses of small hoteliers to these stressors.

Findings show that the financial crisis has had noticeable impacts on the way that hoteliers both perceive hurricanes and develop their responses to hurricanes. The financial crisis has resulted in small hoteliers focusing on ways to keep their businesses open during extended periods of low occupancy. Thus time and financial capital are spent on activities that are seen as absolutely necessary. Although the majority of small hotels have sustained damages from hurricanes in the past, small hoteliers largely feel that spending time or resources to prepare for future hurricanes is unnecessary. Constraints on financial resources have meant that some small hoteliers have had to cancel hurricane insurance. Decreasing staff has resulted in owners and managers having less time or interest in developing plans for hurricane preparation.

However, there is no noticeable effect of hurricanes having a similar impact on the way that small hoteliers respond to the financial crisis. Small hoteliers are mostly concerned with developing strategies to increase profitability such as diversifying sources of income or lowering rates in an effort to increase occupancy. While these responses are consistent with other studies, there does not seem to be a relation between responses to financial crisis and hurricane preparation.

However, there is a noticeable relationship with the contextual environment in shaping responses and outcomes of both the financial crisis and hurricanes. The lack of political influence has resulted in small hotels being excluded from programs and political dialogues that could relieve some of their financial pressures. Rather than banding together as large hotels have done, small hotels have developed individual responses to address their financial concerns. In addition, the contextual environment has implications for the perception and response of small hoteliers to hurricanes. While private tourism organizations are deeply involved in hurricane planning and preparation and pass on these benefits to their members, small hotels develop their own responses to hurricanes and largely rely on only physical protection and the attitude that they will address any impacts of hurricanes if and when they occur.

These responses to both hurricanes and the financial crisis have implications for the contextual environment of small hotels. Methods of diversifying income are contributing to small hotels increasingly becoming reliant on local residents rather than increasing their market share of international tourism. Failure to prepare for hurricanes means that in the event of hurricane damages, small hotels are ill equipped to recover given their current financial conditions and lack of access to external financing. Strained financial resources also means that small hotels are averse to paying dues to become members of private organizations, even when informed of the benefits of membership.

This chapter has explored connections between the global financial crisis and hurricanes and how small hotels are affected by interactions between these stressors. It appears that the financial crisis is a significant stressor that has implications for hurricane perception and preparation but is not in turn affected by threat of hurricanes. The

contextual environment of small hotels has been found to be a significant factor in shaping the responses and outcomes of small hoteliers to the financial crisis and hurricanes and the contextual environment is in turn affected by these responses.

### *Thoughts on Outcome Double Exposure*

The pathway of outcome double exposure was used to guide analysis in this chapter. While this pathway does allow for analysis of how two seemingly unrelated processes of change do have implications for each other, I did not find this to be completely the case in my study. It was apparent that the global financial crisis has had implications for how small hoteliers perceive and respond to hurricanes. However, it did not appear that responses to the global financial crisis were in any way affected by hurricane exposure.

This chapter did highlight the importance of the contextual environment in shaping responses and outcomes to the two stressors under analysis. It was also made evident that the responses of hoteliers to hurricanes and the financial crisis have significant implications for their contextual environment. While the pathway of double exposure as detailed by Leichenko and O'Brien (2008) does discuss the importance of the contextual environment for this pathway, my study has shown that the contextual environment may be much more integral in this pathway than the framework suggests. It appears that the relationship between the contextual environment and responses and outcomes are very closely connected and dynamic. Interactions between the contextual environment and responses and outcomes are a significant factor in understanding how multiple processes affect entities. Thus, it may be beneficial to highlight these

interactions in a different manner than the pathway of outcome double exposure. Rather than focusing on outcomes, a focus on responses could better capture the dynamic relationship between outcomes, responses and the contextual environment. Instead of the current pathway of outcome double exposure, a new pathway of response double exposure could allow for exploration of the dynamic connections between the contextual environment and the outcomes of processes of change. This proposed new response double exposure is further discussed in Chapter 8 where I detail improvements that can be made to the double exposure framework.

## Chapter 7

### **Future Implications: Sustainable Tourism and Climate Change**

Climate change has been identified as one of the most significant issues facing the tourism industry in the twenty-first century (Bigano et al., 2006; Scott et al., 2008). Affecting international tourism patterns, destination attractiveness and the transportation industry, climate change is projected to have significant implications for destinations worldwide. Sustainable tourism has evolved as a major influence within the tourism industry, inciting the need to minimize the negative implications often associated with mass tourism such as economic leakages, environmental degradation and loss of indigenous cultural practices (Butler, 1999; Liu, 2003; Saarinen, 2006). Sustainable tourism has spurred the implementation of responsible tourism practices worldwide at scales ranging from geographical regions to individual enterprises. These two processes of change have significant implications for the future of tourism, with particular ramifications for the environmental resources that tourism depends on (Scott, 2011).

In this chapter I utilize the pathway of feedback double exposure to explore the implications of climate change and sustainable tourism for small tourism enterprises in NPI. Feedback double exposure focuses on how responses to processes of change affect the very drivers of these processes. In this chapter, I explore how the responses of small hotels to sustainable tourism initiatives affect the drivers of climate change and future vulnerability to this global change process. Conversely, I also explore how the awareness and responses of small hoteliers to climate change affects the drivers of sustainable tourism. Although both climate change and sustainable tourism have complex outcomes

for tourism destinations, in this chapter I focus on the environmental and economic implications of these processes.

This chapter is organized as follows: Section 7.1 provides a background on the importance of sustainable tourism and climate change for the tourism industry in NPI. This section focuses on the need for attention to paid to sustainable tourism, current sustainable tourism policies and practices, and potential impacts of climate change for The Bahamas. Section 7.2 details research findings from interviews with small hoteliers and industry stakeholders. These research findings focus on the awareness and responses of both small hoteliers and the government to climate change and sustainable tourism. Section 7.3 uses the pathway of feedback double exposure to explore feedbacks between climate change and sustainable tourism and future implications for small hotels in NPI. Section 7.4 concludes the chapter with a summary and thoughts on the usefulness of the feedback double exposure pathway.

## **7.1: Background on Sustainable Tourism and Climate Change in NPI**

### ***7.1.1 Climate Change and The Bahamas***

The Bahamian tourism industry is largely based on the three S's: sun, sand and sea, to attract millions of visitors per year. However, in an era of climate change, the environmental characteristics that The Bahamas is dependent upon may be significantly altered. The Bahamas, as part of the Caribbean, is located in one of the most vulnerable regions in the world to the impacts of climate change (IPCC, 2007). The projected environmental effects of climate change most significant for tourism include sea level rise, shifting precipitation patterns, hotter atmospheric and oceanic temperatures and

more intense hurricanes (Scott et al., 2008). These climatic changes add a new dimension of uncertainty to the tourism industry that economically supports the nation and is highly dependent upon its 'tropical paradise' image.

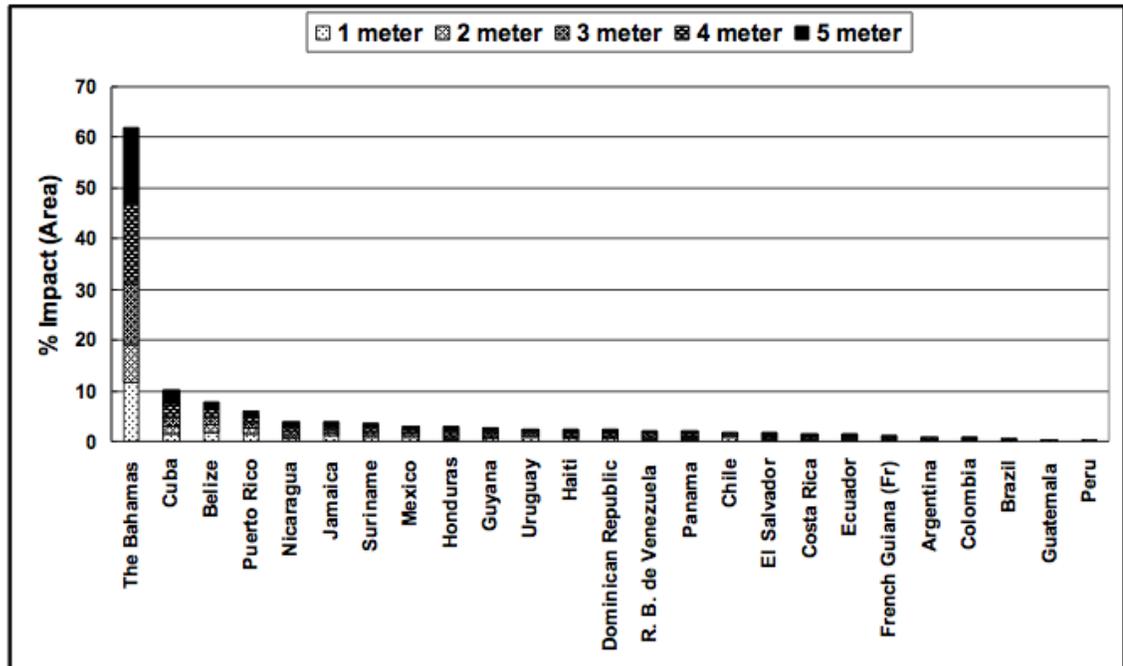
The islands of The Bahamas, including NPI, are flat with the majority of land located at sea level elevation (BEST, 2005). With the majority of land being in close proximity to the coast, sea level rise associated with climate change is an issue of dire concern for the nation. The projected rise of sea levels due to climate change is seen to be the main threat to coastal regions (IPCC 2007; Nicholls and Cazanave, 2010). Figure 7.1 shows that The Bahamas is far more vulnerable to sea level rise than other countries within the Caribbean and Latin American region with greater percentages of land being affected by sea level rise. With projections of future sea level rise ranging from 35 centimeters to 1 meter by 2100, it is apparent that sea level rise will have significant ramifications for the nation (Horten et al., 2008; Rahmstorf, 2010).

As shown in Chapter 4, the majority of hotels in NPI are located near to the coast while the beach itself is a major attraction for tourists. Sea level rise will have negative impacts on hotels located near the coast due to inundation as well as altering the wide, sandy beaches that the island's tourism industry has capitalized upon. In addition, with a high percentage of the population located near the coast and likely to be affected by sea level rise, the workers that the industry relies on are also vulnerable (McGranahan et al., 2007). Critical infrastructure such as transportation routes and electricity, water and sewage lines which tourism enterprises depend upon are all vulnerable to sea level rise (Scott, 2011). Other implications of sea level rise for the Bahamas are the pollution of potable ground water sources due to salt-water inundation, a particularly dire

vulnerability for NPI where ground water sources are already used to their full capacity (BEST, 2005).

Studies utilizing the tourism climatic index (TCI) for the Bahamas have found that future scenarios of climatic conditions will result in much less attractive climates for tourists. The current high season for tourism, from December to April, coincides with current TCI scores of 80 or above (Lewis-Bynoe et al., 2009). However, using projected changes in climatic conditions, the TCI scores for The Bahamas may drop by as much as 20 points, greatly reducing the climatically attractive season to December and January and making hotter summer months particularly unattractive.

Higher ocean temperatures result in bleaching of coral, a major attraction for tourists to The Bahamas interested in scuba diving and snorkeling. There have already been reports of bleaching of coral within the Caribbean region and The Bahamas is no exception (Eakin et al., 2010). In some of the southern islands of the nation, there have been reports of mass bleaching of coral reefs resulting in loss of the vibrant colors that attract divers (Baker et al., 2008). Continued warming of ocean temperatures as projected by scenarios of climate change will result in mass bleaching of corals, slow future growth patterns of coral and affect biodiversity of marine animals (Crabbe, 2008).



**Figure 7.1: Percentage of Land Impacted by Future Sea Level Rise in the Caribbean and South America**

Source: Dasgupta et al., 2007

### **7.1.2 Sustainable Tourism and The Bahamas**

The form of tourism currently prevalent in NPI espouses the very traits that sustainable tourism aims to prevent. As discussed in Chapter 5, NPI has developed as a coastal mass tourism destination, which has had significant implications for the biophysical, economic and political components of the contextual environment of small hotels. In this section I further explore the environmental effects of tourism in NPI to highlight the need for attention to be paid to the concept of sustainable tourism.

One area where the environmental impacts of tourism in NPI have been extensive is in water consumption. NPI is home to the majority of the nation's population on a relatively small island with limited natural potable water supplies. The population of NPI along with the hundreds of thousands of visitors that utilize between 2-5 times more

water per person than local residents has resulted in the demand for water far exceeding the available supply of ground water from the islands' aquifers (Horsely and Witten, 2002). As a result of this high demand, the government owned public water supply system ships in water from other islands and also utilizes reverse osmosis processes to generate potable water. Both of these processes are significantly more expensive than utilizing groundwater, costing between 6-8 times as much as sourcing water from aquifers (Horsely and Witten, 2002). This expensive and unsustainable process has resulted in higher costs of water for local residents, high probabilities that ground water may be contaminated due to overuse and a potential permanent loss of potable water sources for the island.

Another environmental area of concern is the destruction of mangrove forests due to coastal development. Although there are some Acts that govern specific coastal sectors, there is no unification of these laws resulting in a lack of efficiency in preventing dense coastal development (Horsely and Witten, 2002). The concentration of tourism facilities along the coast in concert with pollution and runoff from construction of these facilities has led to a sharp decline of mangrove forests in NPI. These coastal wetlands are essential since they prevent coastal erosion, avert degradation of coral reefs, are important in development of marine biodiversity and prevent the loss of groundwater into the ocean. In addition, mangrove forests reduce vulnerability to storm surges associated with hurricanes and other tropical storms (Davenport and Davenport, 2006). There have already been reports of extensive beach erosion in the western region of NPI with hotels only addressing the issue to increase attractiveness for tourists (Buchan, 2000; Jones,

2012). However, with no Bahamian laws to prevent the destruction of mangroves, these important wetlands are being destroyed.

Another area of environmental concern for NPI is coastal water quality. Tourism developments located along the coast such as hotels, golf courses, marinas and cruise ship ports lead to coastal erosion and degrade the quality of oceans (Davenport and Davenport, 2006). Although there have been no formal published reports, initial analysis of coastal water quality has revealed that waste from marinas and cruise ship ports are negatively affecting water quality (Horsely and Witten, 2002). Beach side tourism facilities such as hotels and golf courses have been attributed as the source of declining ocean water quality on Paradise Island where there have been a number of observations of eutrophication – a signal that there is pollution of waters due to untreated sewage or runoff from fertilized land.

The sole sustainable tourism related initiative that has occurred in recent years in NPI is the Sustainable Tourism Entrepreneurial Management Movement (STEMM). STEMM was a project that took place between 2007 and 2009 and was spearheaded by the Bahamas Hotel Association in collaboration with the Ministry of Tourism. STEMMs approach to promoting sustainable tourism was to provide business operational training for struggling small hoteliers (BHA, 2009a; Bahamas Press, 2007). Rather than conceiving of sustainable tourism as minimizing negative economic, environmental and cultural impacts of tourism, the program focused on improving operational practices of small hotels. The program consisted of a series of lectures focused on staff customer service training, updating booking and payment methods, revitalizing rooms and grounds and providing a space for small hoteliers to convene and discuss their business problems.

Although STEMM provided resources and services to small tourism enterprises, the focus of the project had little to do with the actual ideals of sustainable tourism and had a definite lack of focus on environmental issues.

The environmental effects associated with the development of coastal mass tourism on NPI highlight that current tourism practices have detrimental effects on natural resources. However, despite indications of these detrimental environmental effects, there is little attention paid to addressing these issues within the tourism industry. The continued lack of attention paid to how tourism related development affects natural resources and ways to address these concerns may result in permanent environmental damage, ultimately affecting the very resources that the tourism industry is reliant upon.

## **7.2: Research Findings**

This section details the results of interviews with small hoteliers and tourism stakeholders regarding sustainable tourism and climate change. As discussed in Chapter 4, scoping study results and literature reviews led to a focus on the perception and awareness of interviewees about sustainable tourism, environmental issues associated with tourism and climate change. Attention was also paid to the experience of small hoteliers with the STEMM project and whether they had implemented any environmental initiatives or practices of their own. Table 7.1 presents an overview of main research findings from interviews with small hoteliers while each finding is further detailed below.

### 7.2.1 Small Hotelier Perspectives

| Research Finding | Description of Finding   | Percentage of Respondents |
|------------------|--|---------------------------|
| 1                | Small hoteliers that consider environmental implications of their businesses                               | 8%                        |
| 2                | Small hotels that implement environmental initiatives or practices   | 8%                        |
| 3                | Small hoteliers that state high cost of environmental practices is a major factor affecting implementation | 96%                       |
| 4                | Small hoteliers that state that government should incentivize environmental initiatives                    | 96%                       |
| 5                | Of small hotels that took part in STEMM, those that found the program to be positive                       | 50%                       |
| 6                | Small hoteliers that are completely unaware of climate change  | 54%                       |
| 7                | Small hoteliers that think climate change may have implications for their business                         | 8%                        |

**Table 7.1: Research Findings for Chapter 7**

#### *Awareness and Responses to Sustainable Tourism*

*Research Finding 1: The majority of small hoteliers do not consider their impacts on or use of natural resources.*

Among the small hoteliers that took part in this study, the vast majority, 22 of 24, had not previously thought about their impacts on and use of natural resources. Interviews revealed that small hoteliers did not give much thought to any environmental impacts that their businesses may have. Small hoteliers also did not state any awareness of environmental impacts spurred by large hotels or other tourism facilities. The only

environmental related concern that 5 of the 24 hoteliers interviewed mentioned was cleanliness of public facilities. These hoteliers felt that public spaces frequented by tourists such as the downtown area were not clean and therefore not attractive to tourists. These hoteliers felt that the government should clean up the debris and trash in these public spaces so that tourists would not find these spaces to be unattractive. One hotelier mentioned that he is embarrassed to take his international guests into the downtown area or other public spaces since he finds them to be “eyesores”. Beyond this concern, there were no other environmental related issues that interviewees made mention of.

*Research Finding 2: The majority of small hotels do not participate in any environmental initiatives or practices.*

Due in part to this lack of consideration of environmental issues, the majority of hoteliers does not participate in any formal environmental initiatives or specific practices aimed at reducing environmental impacts. Results from the interviews revealed that 11 of the 12 hotels, 92%, do not participate in any formal environmental initiatives, implement any specific environmentally friendly practices or have plans to assess or improve their environmental impacts. Thus, sustainable tourism programs or certifications, often focused on reducing environmental impacts, is an area of tourism that the majority of hoteliers are not aware of or concerned with.

For many of the hoteliers, the concept of sustainable tourism, or even considering environmental issues concerning their business, is an academic question. Faced with mounting operating costs and declining occupancy rates, all of the hoteliers interviewed stated that keeping their businesses open is their primary concern. Most interviewees

expressed that they did not have the time, finances or frankly the interest in considering sustainable tourism initiatives.

However, while the majority of hoteliers are currently unconcerned with sustainable tourism, there were a few hoteliers in this study that expressed interest in developing more sustainable practices in the future. Two hotel owners voiced that they were interested in transforming their businesses to attract environmentally conscious tourists interested in an “authentic” Bahamian experience and not the sun, sand and sea tourism that NPI is known for. These hoteliers do not currently take part in any environmental initiatives nor market themselves as cultural, environmentally friendly establishments. However, they saw this as a future goal that would allow them to shift from being largely dependent on local residents to attracting a larger share of international tourists.

*Research Finding 3: Cost is a major factor that small hoteliers consider in their decisions about implementing environmental practices.*

For the vast majority of small hoteliers interviewed, implementing any environmental initiatives would be contingent upon the cost and future financial benefits that could be offered to the business. These hoteliers were not interested in taking part in any formalized sustainable tourism programs but rather in investing in energy efficient technology and practices that would offer operating cost savings. However, hoteliers found the immediate financial requirements needed to implement environmentally friendly practices to be a major barrier. While some hoteliers had considered installing solar panels and water heaters, energy-efficient appliances, and changing landscaping to reduce sun exposure and cooling costs, these actions were seen to be too expensive.

*Research Finding 4: Small hoteliers felt that the government should take the lead in incentivizing sustainable tourism initiatives.*

The majority of small hoteliers stated that the government should take the lead with implementing sustainable tourism initiatives or by providing tax concessions for hotels to invest in environmentally friendly technology. Currently the only concession allowed for tax breaks is the *Hotel Encouragement Act* discussed in Chapter 5. This Act requires that improvements being made to the property encompass 25% of the total value of the property in order to receive import tax concessions. Without this Act, any equipment based improvements, which would have to be imported, would be subject to between 45-65% tax, which in addition to shipping costs almost doubles the retail price of these items. While installing solar panels, solar water heaters, high efficiency appliances or other environmentally friendly technology would be a significant investment, it would not entail 25% of the value of most hotel properties. In addition, finding funding from banks or private sources for 25% of the value of their property is seen as a daunting task for many of the hoteliers and not something that they would be interested in during these precarious financial times. Thus updating property and technology is currently not an option for most of the small hoteliers interviewed.

*Research Finding 5: Small hoteliers had mixed responses regarding the usefulness of the STEMM project.*

Hoteliers from half of the small hotels in this study took part in the STEMM project. Half of the hoteliers that took part opined that the program was unproductive while the other half found the project to be extremely helpful. The hoteliers that found STEMM to be unproductive were those with business backgrounds and experience with

managing different hotels. To these hoteliers, the topics covered in the program were things that they already knew about and had already been implementing effectively. As one hotelier frankly stated, “I knew more about running hotels than the organizers and presenters did”. Conversely, the hoteliers that found STEMM to be useful were those with little business experience beyond the management of their current establishments and hoteliers that expressed the highest levels of financial difficulties. For these hoteliers, the project was a “lifeboat” that provided them with business operational methods that improved their organization and management skills.

#### *Awareness and Responses to Climate Change*

*Research Finding 6: Approximately half of small hoteliers are completely unaware of the issue of climate change*

13 of the 24 hoteliers interviewed stated that they were unaware of the entire issue of climate change. These hoteliers had no knowledge about projected changes to the climate such as sea level rise or increased intensity of extreme events. The remainder of small hoteliers had heard of climate change and had varying levels of knowledge about the issue. These levels ranged from vague ideas about temperatures warming to a few hoteliers that were aware of the particular impacts of climate change for The Bahamas.

*Research Finding 7: Very few hoteliers think that climate change will have implications in the future for their businesses.*

Given that more than half of hoteliers were unaware of climate change at all, it is unsurprising that the majority, 22 out of 24, did not view climate change as an issue that would have implications for their businesses. Only 2 small hoteliers felt that climate

change would affect them in the form of sea level rise. These interviewees were from hotels that were located beachside and were currently experiencing issues with coastal erosion.

*Climate change? No I haven't heard about that. What do you mean by that?.....No that has nothing to do with me. That's not something I need to think about. That's why we need smart people like you; you tell us if there's something we need to do.*

*Climate change, oh like global warming? Yeah I heard about that before. But I don't think that has anything to do with my hotel. That's for the States to worry about, not me, not my hotel.*

*Yes I know about climate change, sea rising and hurricanes and all of that. But that will only matter for the hotels right by the water. I'm in the inside of the island so that won't matter for me. There's no sea up here for me to worry about.*

**Table 7.2 Excerpts from small hoteliers about climate change impacts on their businesses**

### **7.2.2 Stakeholder Perspectives**

*Research Finding 8: Large hotels implement environmental programs on a strictly voluntary basis.*

One of the large hoteliers interviewed stated that they do implement environmental focused activities in their businesses. These activities were mostly focused on decreasing operational expenses and ranged from upgrading to energy efficient equipment to laundering linen less frequently to installing LED lighting in hotel rooms. These activities were initiated by the large hotels to increase profitability and were not made in response to any legal requirements.

*Research Finding 9: Large hoteliers did not think that their businesses had any environmental impacts.*

Large hoteliers interviewed did not feel that their businesses had an impact on any environmental issues and they were not the source of any type of pollution. When asked about any potential pollution or damages to the environment, all large hoteliers vehemently denied that their businesses had any environmental impacts whatsoever.

*Research Finding 10: Ministry of Tourism has very little involvement with implementing sustainable tourism initiatives in hotels.*

The sustainable tourism department of the Ministry of Tourism is tasked with guiding the sustainability of tourism for the nation. Interviews with representatives of this department expose that this department pays little attention to environmental concerns associated with coastal mass tourism. Most of this department's environmental focus is concentrated on reactive concerns. A major program that the department heads is beach cleanups, where local volunteers and company sponsorships come together to clean up debris from beaches around the island. These cleanup efforts have been concentrated on public access beaches where solid waste pollution is more prevalent than the beaches where access is restricted. Another major program of this department focuses on raising awareness of landscape cleanliness in the general population to keep public places clean and attractive for both locals and tourists.

Interviews with representatives revealed that the sustainable tourism department has no involvement with hotels and no sustainable development initiatives that hotels can engage with. The only activity mentioned in response to sustainability issues with the accommodation sector was a sustainable tourism act that was proposed in the mid 1990s.

However, representatives stated there has been little if any action on this proposed act. Obtaining a copy of this document was denied since there is only one physical copy and no electronic copies available. It appears that this act is not on the forefront of tourism development for the country at this time.

When asked about addressing sustainability issues regarding the new resort development, Baha Mar, governmental representatives declined to comment. Any questions regarding Baha Mar, including inquiries about environmental impacts and whether any attention had been paid to sustainability of the project, were met with a “no comment” response.

*Research Finding 11: Lack of education on climate change impacts for The Bahamas or for tourism industry in particular by the government.*

During my research period, I participated in two separate conferences focused on tourism in The Bahamas and the wider Caribbean. Non-governmental associations in collaboration with the Bahamian government spearheaded these conferences. While these conferences were open to the public, the majority of attendees were governmental officials with very low participation from the wider public and no participation from any of the hotels. Seminars and discussion groups at these conferences focused on the need to educate the public and tourism stakeholders about the impacts of climate change. However, since the first conference in 2009 that I participated in, there have been no public education programs focused on climate change. Follow-up interviews with officials designated to spearhead public education programs revealed that plans for public and tourism stakeholder education have not progressed much beyond initial discussions at these conferences.

*Research Finding 12: Climate change not an issue of concern for large hotels.*

Interviews with large hoteliers show that they are aware of the issue of climate change. All of these interviewees had heard of climate change previously. However, these hoteliers did not feel that climate change was an issue that they needed to be concerned with. This lack of concern was mostly attributed to the long time frame of perceived impacts or to beliefs that there may not be any impacts at all.

### **7.3 Analysis**

Feedback double exposure shows how global processes are connected in how responses to processes affect drivers. In this section, I look at how responses to sustainable tourism affect climate change and conversely, how responses to climate change affect sustainable tourism.

*Sustainable Tourism Feedbacks to Climate Change Drivers*

The overwhelming finding of this research study is that there is an alarming lack of attention paid to the environmental implications of tourism in NPI by both small and large hoteliers and the government. Participants in this study did not exhibit an awareness of any environmental effects that their own businesses or other businesses may have. Environmental issues were simply not an area of concern for the majority of interviewees.

The lack of attention paid to sustainable tourism and environmental issues by the government is related to the current dominance of coastal mass tourism with only voluntary concessions made to address environmental impacts. Without legal requirements to assess and address environmental impacts, tourism enterprises are free to

operate their businesses as they choose, despite any environmental implications. The lack of formal studies on environmental impacts of tourism enterprises and activities allows businesses to deny that their practices have any consequences whatsoever. Although there is a clearly documented water supply issue and anecdotal accounts of coastal water pollution and loss of coastal wetlands, there have been no formalized plans to assess and address these issues. Thus business continues as usual, hoteliers claim to be unaware of any environmental consequences of their businesses and implement environmental practices based on operational cost savings.

The sole sustainable tourism initiative in NPI, STEMM, had very little if any, effect on increasing environmental awareness among hoteliers or assisting hoteliers with ways to implement and capitalize on the goals of sustainable tourism. Although STEMM claimed to be a sustainable tourism initiative, it was largely a business operational program that did little to further the goals of sustainable tourism among small hoteliers. Although the STEMM project was beneficial for struggling small hoteliers, it did little to advance the environmental tenants of sustainable tourism. The program had very little focus on environmental issues and only one of the hoteliers interviewed could recall any environmentally focused discussions that took place during the program.

For small hoteliers in particular, the lack of attention to environmentalism and sustainable tourism is pronounced, with the majority of interviewees having never considered their relationship with natural resources. This lack of attention to environmental issues has been seen in other studies focused on small hoteliers. In a study of small tourism enterprises in the UK, Berry and Ladkin (1997) found that small hoteliers are often unaware of their environmental impacts and feel as if they do not

contribute negatively. Other studies have found small hoteliers to be largely apathetic towards environmentalism and sustainable tourism to the point of ignoring any strategies or programs focused on environmental issues (Hjalager, 1998; Dewhurst and Thomas, 2003). However, while other studies attributed this lack of attention to their small size this study exposes other considerations.

Small hoteliers in this study repeatedly stated that they are mostly focused on keeping their businesses afloat and do not feel that they have the time or resources to address issues that are not essential to the success of their businesses. While Chapter 6 showed how the financial crisis has had implications for hurricane preparation, it appears that the financial crisis also has implications for sustainable tourism. The focus of small hoteliers on the financial aspects of their businesses also affects how hoteliers consider any future environmental initiatives. Given that tourism facilities are operated in a profit driven industry, it is not surprising that increasing facility profits takes precedence over implementing practices with external benefits such as conserving natural resources. Small hoteliers were not open to implementing any environmental initiatives that did not have immediate and significant economic benefits or that were perceived to be too expensive to implement.

This finding is corroborated by Butler (2008) who posits that small hoteliers find implementing environmental initiatives to be expensive with little return on investment. Other studies on small hoteliers have also found that maintaining profits takes precedence over environmentalism (Bramwell and Alletorp, 2001; Choi and Sirakaya, 2006) and that the economic benefits of sustainable tourism practices are often the most important to hoteliers (Ayuso, 2006).

However, this focus on immediate expenditure and lack of attention to other benefits of practices associated with sustainable tourism means that small hoteliers are missing ways that they can increase the long-term efficiency and profitability of their businesses. In addition to reducing their own environmental impacts, implementing some of the concepts of sustainable tourism can be financially lucrative. Research has shown that adopting sustainable tourism concepts is seen to increase the competitiveness of hotels (Ayuso, 2006; Dolnicar and Leisch, 2008). Selective marketing to tourists that are concerned with sustainable tourism issues increases the competitiveness of enterprises and attracts additional guests (Dolnicar and Leisch, 2008). Hotels that market themselves as environmentally friendly or socially conscious are seen as more attractive to consumers and can demand higher rates (Andereck, 2009). In some circumstances, tourists may not be willing to pay more for a sustainable hotel but are more likely to return or to recommend the hotel to others (Lee et al., 2010). A survey of English tourists indicated that over 80% indicated that they would more likely choose a 'green' hotel over a regular hotel if price and other considerations were similar (Green Hotelier, 2003).

Another benefit of implementing sustainable tourism practices is to promote a positive public image of the facility. Maintaining positive public images is needed to increase business and avoid in-depth scrutiny by the public and regulatory agencies (Kasim, 2007). Thus, implementing environmental initiatives improves the image of the hotel to both locals and tourists (Ayuso, 2007). However, the majority of small hoteliers in this study did not consider other benefits of implementing environmentally friendly practices such as improving public image, positioning themselves as 'green' hotels and provide a niche product or long-term reductions in operating costs.

Nevertheless, there were a few hoteliers with ideas for how the concept of sustainable tourism could be capitalized upon by developing 'green' hotels. These hoteliers seemed to be aware of the increasing demand from visitors for more environmentally conscious facilities. Tourists are becoming increasingly aware of the impacts of tourism on destinations (Andereck, 2009). This awareness combined with the growth of green consumerism in general is making visitors more discerning about where they choose to stay (Bramwell and Alletorp, 2001). Younger tourists are increasingly aware of the need for environmental friendliness and take into consideration the actions of the enterprises that they choose to support (Andereck, 2009). This is a fruition of the 'new tourist' idea described by Krippendorf (1986) who theorized that tourists would gradually place increasing importance on the social, environmental and economic activities of where they choose to visit.

However, translating vague ideas on ways to capitalize on green tourism into feasible changes is a difficult task for cash-strapped hotel owners with little business experience beyond running their current establishments. To implement these significant changes to their businesses, these hoteliers stated that they would need to save for years in order to finance upgrades to rooms, implement energy efficient technology throughout their establishments and market themselves internationally. These sentiments are similar to small hoteliers in the UK with thoughts about capitalizing on sustainable tourism ideologies but with little plans or actions on how to implement their ideas (Berry and Ladkin, 1997). The contextual environment of these hotels also affects their ability to implement any ideas regarding sustainable tourism. Limited financial capital, isolation from tourism organizations that can advocate for the need for small green hotels and lack

of dialogue with the government to adjust prohibitive tax rates means that small hoteliers have little recourse to move from vague ideas to reality.

Butler's (1980) Tourism Area Life Cycle asserts that destinations undergo six different stages as their tourism industry grows. Ultimately, destinations relying on mass tourism will most likely end up in the decline stage where visitor numbers will decrease, the quality of tourist facilities will decline and the destination will no longer be regarded as a major tourist haven. A shift from beach mass tourism to more sustainable practices including the incorporation of small sustainable hotels may be an avenue for tourism in NPI to avoid eventual stagnation and decline and revitalize the industry. Thus small hotels may play an important role in the resilience of the tourism industry. However, without attention to these issues of environmentalism and sustainability, these insights and opportunities are overlooked.

This passive response to sustainable tourism also has implications for climate change. With no incentives or programs in place by the Bahamian government to encourage the adoption of environmentally friendly technology or practices, environmental damages are at the discretion of hotels. As has already been seen, this failure to provide incentives or requirements means that very few hoteliers opt to voluntarily improve their environmental practices. With an island already unable to support the water demands of existing tourists and residents, reports of coastal water quality degradation and limited space to host increasing quantities of solid waste, the failure to address environmental concerns associated with tourism is extraordinarily shortsighted. These environmental concerns may also lead to increased vulnerability to climate change. With degraded mangrove forests and coral reefs, the islands will be

increasingly exposed to the impacts of extreme storm events, storm surges and coastal erosion (Scott et al., 2008).

By continuing the trend of focusing on coastal mass tourism, the Bahamian tourism industry is also contributing to the very drivers of climate change. The dependence on large numbers of long-haul air travelers contributes greatly to greenhouse gas emissions (Scott et al., 2008). With the development of the Baha Mar project, NPI is expected to double its intake of international guests, increasing emissions associated with travel and increasing the number of environmentally intensive mass tourists. The lack of response by both the accommodation sector and the government to address the tenants of sustainable tourism thus have significant implications for the drivers of climate change and the continued success of the industry.

#### *Climate Change Feedbacks to Sustainable Tourism Drivers*

Similar to the lack of attention to environmental issues, small hoteliers are overwhelmingly unaware of or unconcerned with the implications of climate change for tourism in general or for their businesses in particular as seen in Table 7.2. As such, hoteliers have not considered how they may be impacted by climate change much less formulated any responses to climate change impacts. In Fiji, studies have shown a similar low awareness of climate change and its implications for tourism and have called for better education of public on this important issue (Becken, 2005). However, within the Caribbean region that is particularly vulnerable to climate change, the unawareness of Bahamian hoteliers is in contrast to hoteliers from other nations. In Barbados, another coastal mass tourism destination, studies have shown both a high awareness of climate

change and its particular implications for the tourism industry among tourism enterprise owners (Belle and Bramwell, 2005).

A factor that may affect the lack of awareness of climate change among hoteliers is the absence of public education on the subject. This lack of public education on important issues associated with the tourism industry has also been seen in other issues not associated with climate change. The Bahamian government has historically not been open or inclusive of the public in issues regarding tourism development such as the environmental impacts of developments (Horsely and Witten, 2002). However, public outreach and education is an essential component of increasing awareness of climate change and reducing vulnerability to its impacts (Belle and Bramwell, 2005). For small hoteliers, the lack of public education programs in concert with their disassociation from any private tourism organizations where they may be exposed to the issue of climate change means that small hoteliers are left to learn about climate change on their own. As yet, climate change, which has been identified as a major issue facing the tourism industry in the 21<sup>st</sup> century with particularly severe impacts on Caribbean tourism, is not seen as a concern for the vast majority of small hoteliers.

Although there is little attention paid publically to climate change within the industry, the Bahamian government does exhibit awareness of the issue. The Prime Minister commented on the dire consequences of climate change for The Bahamas noting that over 80% of the nation's territory would be submerged with a 2 meter rise in sea levels. (Bahamas BTB, 2010). The Bahamian government has also formed the Bahamas Environment, Science and Technology Commission (BEST) that has developed a climate change adaptation plan for the country. This plan details the specific vulnerabilities of

the nation to climate change including exposure to sea level rise, coastal erosion and increased intensity of tropical storms (BEST, 2005). In addition, the plan states:

The Government of The Bahamas therefore recognizes that Global Climate Change is an environmental phenomenon with serious implications for the country, and indeed for all countries and especially for Small Island Developing States. Government also recognizes that although The Bahamas, and other Small Island Developing States, contribute only a very small amount of total greenhouse gas emissions, they face an overwhelmingly disproportionate level of risk from the impacts, due to their inherent vulnerability. (BEST, 2005, p. 4).

While this statement shows awareness of the problem, it also reveals that the government takes little ownership of greenhouse gas emissions or other drivers of climate change and focuses instead on vulnerability to impacts. Throughout the adaptation plan, there is a focus on the need to adapt to impacts of climate change and not to mitigate any behavior that may contribute to climate change. This focus on impacts and vulnerability to climate change masks the contribution of coastal mass tourism to the drivers of climate change. The continued reliance on long-haul travelers as well as coastal mass tourism that is environmentally intensive are also contributors to global environmental change, meaning that the tourism industry in NPI is not just an innocent victim of climate change impacts.

For the tourism industry in particular, the BEST plan recommends consideration of climate change effects in future developments (BEST, 2005). However, there has been little if any follow through on this recommendation. As referenced previously, the Baha Mar project is a \$2Billion development being built directly on the coastline. This project is being built with no apparent attention to future sea level rise, a costly decision when sea levels rise and place the entire development at risk to flood. Existing large beachside hotels also show a similar low awareness of climate change impacts with no plans to

address vulnerability or consider impacts in future expansion plans. While the government is aware of the implications of climate change, this is not translating into action to prevent significant financial investments from being exposed to climate change impacts. It appears that business is continuing as usual with unrestricted coastal development and use of natural resources.

However, climate change may have implications beyond environmental changes. As consumers become aware of climate change, they are likely to change their behavior in many life decisions, including vacation choices; with green consumers more likely to visit smaller, less environmentally invasive hotels (Scott et al., 2008). Other issues that climate change may incite are taxes on air travel. Studies have already explored the impacts of existing air travel policies aimed at making travelers pay for their emissions such as the UK's recent Air Passenger Duty and have found that remote destinations and destinations reliant on long-haul travelers are particularly affected by these policies (Mayor and Tol, 2007; Tol, 2007; Akter et al., 2009). Although European tourists make up a minority of visitors to NPI, future policies for American tourists may have similar outcomes. These changes in tourism patterns in concert with environmental changes means that the future tourism industry in NPI may change dramatically and coastal mass tourism may not be a viable industry for the destination.

The lack of response by the Bahamian government to climate change affects the response of hoteliers to this issue. The ignorance of both large and small hoteliers about climate change means that they are not considering implications for their businesses and resultantly have initiated no responses to these issues.

This lack of response by the accommodation sector and the government to climate

change issues also has major implications for the sustainability of tourism in NPI. Continuing with business as usual mass tourism development without considering implications of climate change or contributions to the drivers of climate change results in continued reliance on an unsustainable industry. Not responding to issues that have significant implications for the industry may result in future catastrophic effects of climate change for the tourism industry with declining numbers of tourists, expensive damages to tourism infrastructure and permanently degraded natural resources. This is the very opposite of sustainable tourism goals, exposing that lack of response to climate change has significant implications for the sustainability of tourism.

For small hoteliers in particular, lack of attention and response to climate change directly affects their viability. The development of small, sustainable hotels is one way to counter the contributions of tourism to climate change. By changing their focus from international mass tourists to attracting green tourists, small hotels can take a proactive approach to the issues of climate change and establish themselves as part of the solution to climate change instead of being seen as part of the problem. This is a way for small hotels to increase their market share of international tourism in NPI, a goal that the majority of hoteliers have voiced. Instead of increasing reliance on local residents, small hotels have a unique opportunity to position themselves as destinations of choice for international guests. However, ignorance of climate change means that small hoteliers are unaware of the unique benefits that they offer if the tourism industry shifts away from environmentally intensive coastal mass tourism.

## 7.4 Conclusion

This chapter explores how responses of small hoteliers and the Bahamian government to sustainable tourism have implications for the drivers of climate change and conversely how responses to climate change have implications for sustainable tourism. The main finding of this chapter is that there is an alarming lack of attention paid to either issue by both small hoteliers and the government. This lack of attention has contributed to environmental degradation, lack of implementation of environmental initiatives by small hotels and a focus on short-term profitability over increasing long-term efficiency and competitiveness. This has dire implications for future vulnerability to climate change and the sustainability of the current form of tourism prevalent in NPI.

This chapter exposes the feedbacks between climate change and sustainable tourism. While these issues have largely been studied in separation from each other, it is clear that responses to these processes by both small hoteliers and the government affect the drivers of these very processes. This chapter also highlighted interactions with other processes of change. It appears that manifestations of the global financial crisis have dominated the attention of small hoteliers, making distant environmental changes an issue of little significance as these businesses face declining profitability.

### *Thoughts on Feedback Double Exposure*

The pathway of feedback double exposure was a valuable framework to explore how responses to climate change and sustainable tourism affect the drivers of these processes. Utilizing this pathway allowed for attention to be paid to how responses to

these individual stressors have far-reaching impacts. While climate change and sustainable tourism both have strong environmental components, they have largely been studied separately. However, utilizing the pathway of feedback double exposure highlights interactions between the two and how responses to each process affect the other.

This pathway of feedback exposure is perhaps the most successful of the pathways as it allows for exploration into the dynamic relationship between processes of change and responses. Other frameworks, particularly step-wise iterative frameworks (Schroter et al., 2005; Menzie et al., 2007) do not consider how processes are themselves affected by the responses of entities. This pathway of feedback exposure is thus a valuable tool that provides a new dimension of understanding the dynamic relationship between global change stressors and smaller scaled entities.

## **Chapter 8**

### **Conclusion: An Integrated View**

The purpose of this dissertation was to investigate how multiple stressors interact to affect the viability of small tourism enterprises. This was accomplished through a case study of small hotels in New Providence and Paradise Island, The Bahamas. Semi-structured interviews with 24 owners and managers of 12 small hotels combined with input from 36 tourism stakeholders as well as a range of secondary sources provided information that was analyzed using the double exposure framework.

Each of the three main chapters of this dissertation investigated interactions between two processes of global change and implications for small tourism enterprises. Chapter 5 explored how land use change and mass tourism interact to affect the contextual environment of small hotels. Chapter 6 investigated connections between hurricanes and the 2007 global financial crisis and outcomes for small hotels. Chapter 7 detailed feedbacks between responses to climate change and sustainable tourism and implications for small hotels. In this chapter, I take an integrated view of these three chapters to draw conclusions about the impacts of multiple stressors for small tourism enterprises by answering the three research questions.

## 8.1 Research Questions

*Research Question 1: What large-scale processes of change interact to affect the tourism industry?*

The literature review of global change stressors conducted in Chapter 2 revealed six significant stressors that have been found to have significant implications for tourism on a global scale. These stressors were identified as climate change, extreme natural events, land use change, financial crises, mass tourism and sustainable tourism. However, the literature review exposed that while each of these six stressors have significant effects for tourism industries, they have largely been studied separately. This dissertation aimed to address this research gap by investigating how these stressors interact in NPI.

From my research, it was apparent that there were a number of connections between these stressors. Land use change and mass tourism was perhaps the most closely connected pair, with each of these processes being influenced by the other as discussed in Chapter 5. Chapter 6 exposed that financial crisis does have effects on extreme event preparation and perception by decreasing time and finances available to devote to extreme events. However, there did not seem to be a reciprocal relationship between extreme event preparation and the financial crisis. That is, responses and outcomes of small hoteliers to the financial crisis did not appear to be affected by consideration of hurricanes. Chapter 7 revealed that responses to both climate change and sustainable tourism have significant implications for the drivers of the other process.

However, while each of these chapters focused on two processes of change at a time, it was apparent that there were also connections between stressors that were not

paired together. For instance, the financial crisis has had implications on responses to sustainable tourism and climate change. Small hoteliers expressed that sustainable tourism initiatives were too expensive to implement because of financial constraints due to the crisis. Climate change was not on the radar of the majority of small hoteliers due in part to ignorance about the issue but also because hoteliers were focused on direct threats to their businesses and not on conditions that were not seen to be immediately relevant. Connections also existed between land use change, mass tourism and the other four stressors. The contextual environment of small hotels was seen to be heavily impacted by land use change and mass tourism. This contextual environment was a significant factor in the responses of small hotels to both the financial crisis and hurricanes.

These insights show that all six processes of change interact with each other in varying ways to affect tourism and small tourism enterprises in particular. Thus climate change, extreme natural events, land use change, financial crises, mass tourism and sustainable tourism are all significant stressors that affect tourism. However, while it was apparent that all of these stressors were important for tourism, this list of six stressors is by no means exhaustive. During my research, I found that there are other stressors that will also have significant implications for small tourism enterprises, particularly as the industry evolves due to new tourism developments both within the destination and the broader Caribbean region. These emerging stressors are further discussed in Section 8.2 where I identify other important stressors that have implications for tourism.

While the framework of double exposure was useful in exploring connections between pairs of stressors, it is apparent that there are also connections between unpaired

processes of change. There is a need for the framework to be modified to allow the researcher to consider how multiple processes of change interact to affect entities under analysis. While this was achieved through consideration of this particular research question, the framework does need to be modified to allow for an integration of interactions between multiple processes of change. This proposed 'integrated double exposure' is further discussed in Section 6.4.

*Research Question 2: How do interactions between processes of global change affect small tourism enterprises?*

Interactions between processes of global change have had a number of effects for small tourism enterprises. Chapter 5 shows how the contextual environment of small hotels has been altered by mass tourism and land use change. Interactions between these processes have resulted in small hotels having little political influence, catering to a different type of guest than large hotels, being located largely on the interior of the island and ultimately having a low market share of the international tourism industry in NPI. Chapter 6 reveals that interactions between the global financial crisis and hurricanes have resulted in increased vulnerability to future hurricanes and an increased reliance on local residents to remain in business. Chapter 7 reveals that the lack of responses by both small hoteliers and the government to sustainable tourism and climate change may result in significant future impacts from climate change and a deteriorating tourism industry in NPI.

It is apparent that these processes of global change have significant impacts for small tourism enterprises, affecting their businesses both currently and in the future. Small hotels largely operate on the outskirts of the international tourism industry in NPI

and have a decreasing share of the market. These small businesses have largely been working individually and formulating responses to stressors as they come along. While coping with the impacts of the financial crisis is currently the main focus of concern for small hotels, it is apparent that the decreasing market share of these businesses is also a serious effect of interactions between multiple stressors.

Addressing this research question also contributes to the literature on vulnerability. It is clear that connections and interactions between stressors affected the vulnerability of small tourism enterprises to processes of change. It would be difficult to assess the vulnerability of small hotels to the financial crisis without understanding how they are simultaneously affected by land use change and mass tourism that have direct implications on their exposure to changing financial conditions as well as on their available response options. Similarly, considering vulnerability only to climate change would not take into account how the other stressors contribute to the perception of climate change by small hoteliers and why there has been no engagement with this issue. This dissertation shows that interactions between stressors affect the vulnerability of small hotels to different processes of change and also affect their ability to respond to change. This exploration of interactions between stressors makes a strong case for the need to consider how multiple processes of change affect entities of any kind.

*Research Question 3: What are implications of these processes for the viability of small tourism enterprises?*

The viability of small tourism enterprises is significantly affected by interactions between these six processes of change. Interactions between these processes of change have current and future ramifications for the market share of international tourism for

small hotels. This study has shown that small hotels are vulnerable to processes of change but that they are also important for the resilience of the tourism industry in NPI.

In Chapter 5, I explored how small hotels are unable to compete with large hotels for international tourists, largely because they are unable to provide the beach experience that the majority of tourists to NPI seek. This loss of market share was an unwelcome outcome for the majority of small hoteliers that desired to have high rates of international tourists as clientele.

In Chapter 6, I discussed how the responses of small hotels to the financial crisis and hurricanes actually increased their reliance on local residents. By diversifying their sources of income to attract local residents to hotel restaurants or renting rooms on a long-term basis, these small hotels are removing themselves further from the international tourism market. In addition, financial constraints are an impediment to small hotels choosing to become members of private tourism organizations that can help to relieve some of their financial concerns and incorporate small hotels into the international tourism market.

In Chapter 7, I investigated how the passive responses of small hoteliers to climate change and sustainable tourism ultimately affect their future. Failure to position themselves as green alternatives to environmentally intensive large hotels means that small hotels are not differentiating their services and are not capitalizing on emerging green tourism. While small hotels are in a unique position to capitalize on the burgeoning environmental consciousness of tourists, these businesses are stagnating while citing financial and time constraints as the reason for inaction.

An integrated view of how these six stressors interact to affect the viability of small hotels shows that the future of small hotels is in a precarious position. Each of these processes of change has significant implications for tourism either currently or at a later time. It appears that small tourism enterprises need to facilitate action in order to gain a greater market share and prevent continuous or increased reliance on local residents. Recommendations for action are further discussed in Section 8.3.

## **8.2 Emerging Stressors and Future of Tourism**

While this study has engaged with six large-scale processes of change that were seen to be significant in the literature on stressors and tourism, during my study it became apparent that there are other stressors that will have effects on tourism in NPI. These emerging stressors may not be significant at the global scale but will very likely have substantial implications for tourism within The Bahamas and the broader Caribbean region.

Firstly, the Baha Mar development will have implications for the flow of tourists to The Bahamas and the distribution of tourists throughout existing hotels. Both large and small hotels are likely to have some effects from this new mega-resort that may attract more tourists to the destination, claim a large percentage of existing tourists, or perhaps be “an empty white elephant” as one interviewee expressed. The addition of this resort will be a significant addition to the context of tourism in The Bahamas.

Secondly, there has been increasing speculation that new markets within the Caribbean will have implications for the flow of tourists to the region. In particular, Cuba may soon be more open to tourists from the USA, which will have significant

ramifications for the flow of American tourists to the Caribbean. The Bahamas, reliant on a large percentage of American tourists, may be particularly affected by the return of Cuba to the Caribbean tourism industry.

In thinking about the future of tourism in NPI, there is a clear need for a restructuring of tourism away from its historical focus on sun, sand and sea and towards more sustainable forms of tourism, particularly in light of impending environmental and climatic changes. As discussed in Chapter 7, small hotels while currently vulnerable to a number of stressors may play an important role in the resilience of the industry to change. The development of niche or specialty tourism may be one way to gradually diversify the tourism product within NPI, support existing small tourism enterprises and create opportunities for sustainable businesses (Robinson and Novelli, 2005). Promoting niche tourism that focuses on the strengths of small hotels such as their opportunity to provide more authentic cultural experiences and connections with locals may be one avenue towards a restructuring of the sun, sand and sea focus. The use of internet marketing and social networks are methods of promoting these new tourism products that may be able to counter the prevalent perception that NPI is solely a beach destination (Lew, 2008). While these efforts may not replace the economic contributions and employment opportunities that the large hotels provide, they are important steps in diversifying tourism in NPI, providing support for small tourism enterprises and improving resilience of the industry.

### **8.3 Policy Implications**

This dissertation has focused on exploring how multiple processes of change interact to affect small tourism enterprises. The major findings of this study have shown

that stressors interact to negatively affect the viability of small tourism enterprises in NPI and that small tourism enterprises have an increasingly limited share of the international tourism market. However, findings have also shown that small tourism enterprises, in particular small hotels, may be important to the resilience of the tourism industry in NPI in an era of climate change and increased environmental awareness among tourists. Arising from these results are a number of areas where policy intervention can improve the viability of small tourism enterprises in NPI.

#### *Small Tourism Enterprises Organization*

Significant improvements need to be made to the relationship between small tourism enterprises, private tourism organizations and the Ministry of Tourism. Chapters 5, 6 and 7 have all shown how multiple stressors interact to affect tourism and how important private tourism organizations are in advocating for large hotels and helping to reduce the impacts of stressors for their members. However, small hotels are largely absent from these organizations, primarily because of financial limitations but also because small hoteliers feel that these organizations are not concerned with their success. Indeed, interviews with members of these organizations do reveal their bias towards large hotels and their relative unconcern for the involvement of small tourism enterprises.

To counter this, an organization for small tourism enterprises can be developed. This organization would allow for small businesses to pool their resources and develop collective responses to challenges that they face. Interviews with small hoteliers revealed that they are similarly affected by stressors and have similar responses. However, instead of working together, small hoteliers largely remain in isolation. An organization focused on the particular needs of small tourism enterprises can ensure that these businesses have

a forum to express their needs and develop responses that are collectively beneficial. An organization focused on small enterprises also allows these small businesses to have an impact on the organization rather than their ideas and suggestions being ignored because of their small size and lack of voting power, as has been the case in existing private organizations.

It is essential that this organization become a political advocate for small tourism enterprises. The lack of political influence of small hotels has effects both on their exposure to processes of change and on their ability to respond to stressors. Thus the organization will need to partner with the Ministry of Tourism to assert the desire of small tourism enterprises to increase their market share along with ways that the government can help facilitate this shift.

#### *Sustainable Tourism Policies*

The results of chapters 5 and 7 expose the environmental implications of tourism in NPI. These results show the need for increased attention to be paid to environmental issues associated with tourism and identification of ways that small tourism enterprises can capitalize on sustainable tourism. Although the government has developed the Bahamas Environment, Science and Technology Commission (BEST) and the Sustainable Tourism Department within the Ministry of Tourism, there has been little action to decrease negative environmental impacts of future tourism development or to address existing issues. In addition, there seems to be very little consideration of climate change in future tourism developments such as the Baha Mar project.

Policies focused on addressing the environmental impacts of tourism in NPI are thus an area in dire need of attention. These policies can serve multiple purposes by both

reducing environmental degradation, decreasing vulnerability of the industry to climate change and promoting the development of sustainable green tourism enterprises. However, a shift into sustainable tourism is easier said than done, requiring public-private cooperation and a change in attitudes towards the industry (Mycoo, 2006). A starting step would be significant improvements to public education on environmental issues and climate change impacts for NPI. This would aid in increasing attention and awareness of these important issues for both the tourism industry and the general public. Future steps would be to develop an in-depth study on avenues of incorporating sustainable tourism practices in general in NPI and for small tourism enterprises in particular.

#### **8.4 Reflections on Double Exposure Framework and Directions for Further Development**

The double exposure framework provided an essential guide to parsing out interactions between multiple stressors and implications for small tourism enterprises. While the framework has been mostly used to study the implications of only two stressors at a time, this dissertation has shown that it is possible to utilize the framework to explore connections between multiple processes of change. The framework allowed for an in-depth analysis of how processes of globalization and global environmental change interact to affect small tourism enterprises. However, while the framework was a useful tool, there are two potential modifications that can improve the framework.

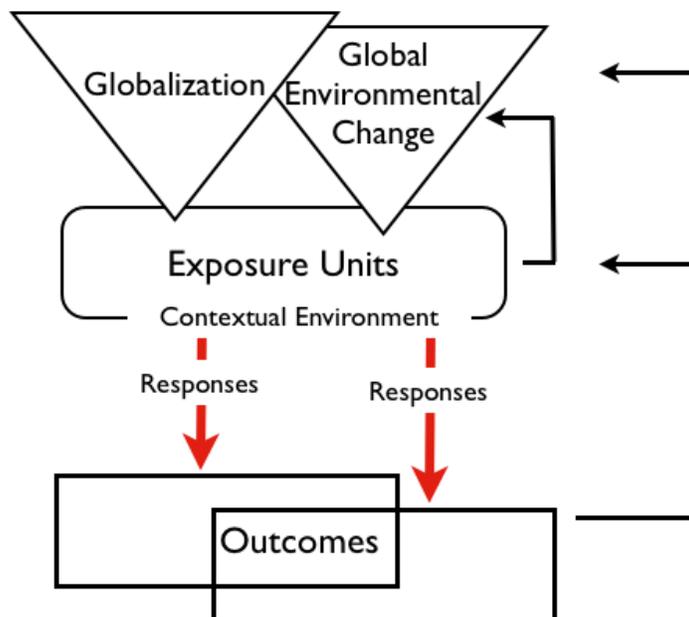
Firstly, the pathway of outcome double exposure fails to take into account the dynamics between responses and outcomes to processes of change and the contextual environment of exposure units. As discussed in Chapter 6, I found that altering this

pathway to focus on responses would better reflect the connections between the contextual environment and outcomes of processes of change. This new ‘response double exposure’ is illustrated in Figure 8.1 and shows how this pathway exposes the dynamic relationship between contextual environment, responses and outcomes.

Responses are the link between the contextual environment and outcomes. By focusing on the responses of entities to process of change, this pathway of response double exposure highlights how the contextual environment shapes responses and ultimately outcomes. Focusing on the links between the contextual environment and outcomes also allows for exploration on how outcomes also conversely affect the contextual environment. That is, how do outcomes in turn change the contextual environment of exposure units?

These connections were illustrated in Chapter 6 where the political aspect of the contextual environment of small hotels meant that these businesses were not a part of the Partner Fly Free Program. Thus their responses to the financial crisis were to lower rates and diversify sources of income by attracting local residents to other aspects of their businesses. The outcomes of these responses were increases in profitability but also an increased reliance on local residents, and a lower share of the international tourism market. This shows how the contextual environment played a significant role in the responses of small hoteliers and resultant outcomes. However, the outcomes also affect the contextual environment. Increased reliance on local residents, and a lower share of international guests affects the contextual environment of small tourism enterprises. These businesses are seen as not a part of the international tourism industry by private tourism organizations and the government, which contributes to their lack of political

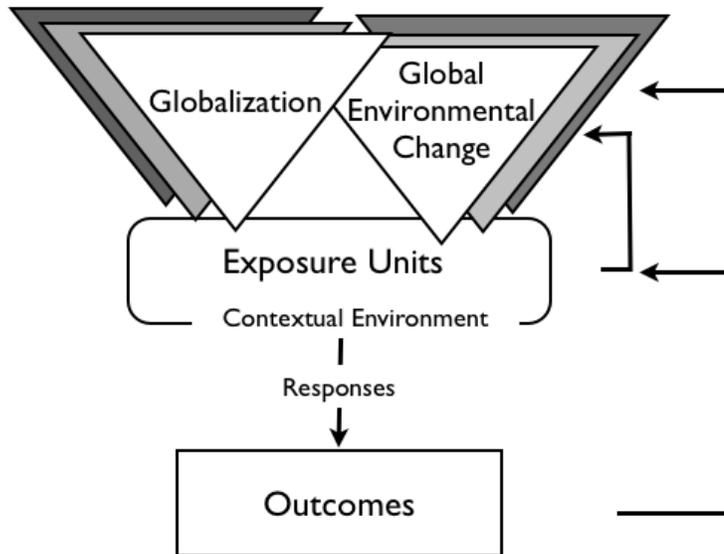
influence. Thus the responses and outcomes of small tourism enterprises affect the contextual environment. This proposed pathway of response double exposure allows for exploration of dynamic relationships between the contextual environment, responses and outcomes.



**Figure 8.1: Response Double Exposure**

Secondly, this study was a novel application of the framework, in that I investigated how three different pairs of global change processes affected the same exposure unit. This allowed for investigation of interactions and effects of multiple stressors, instead of a focus on only two processes of change. However, it is essential to obtain an integrated view of how these pairs of processes of change interact with each other. Rather than only focusing on separate pairs of stressors, there is a need to consider how all processes interact with each other.

This study accomplished this integration through addressing the research questions. By considering how all processes of change interacted to affect small tourism enterprises through the research questions, I was able to move beyond the framework of paired processes to an integrated understanding of all of the processes. The existing framework does facilitate consideration of interactions between multiple processes by taking into account the contextual environment in each of the three pathways of double exposure. As seen in Chapters 5, 6 and 7, as well as the proposed response double exposure pathway, the contextual environment, which is shaped by processes of change and also affected by responses and outcomes of change, is a set of dynamic conditions that exposes interactions between stressors. Thus the double exposure framework does allow for consideration of how multiple stressors affect entities while only focusing on the direct implications of two processes at a time. However, an explicit, focused analysis of how stressors interact with each other is necessary after utilizing the three pathways of the framework. This integrated double exposure allows the researcher to reflect on how all processes of change interact with each other and the implications of these interactions for the exposure unit. This ‘integrated double exposure’ is illustrated in Figure 8.2.



**Figure 8.2: Integrated Double Exposure**

These suggestions for further development to the double exposure framework provide a method of considering how multiple processes interact to affect entities and move the framework beyond consideration of only two pairs of stressors at a time. As this study has shown, entities are exposed to and affected by a host of stressors simultaneously and thus there is a need to consider how multiple stressors interact to affect entities under analysis. While other frameworks developed to investigate multiple stressors are highly complex and require extensive project teams and funding (e.g. Luers, 2003a; Schroter, 2005), the double exposure framework is beneficial for a sole researcher to investigate how multiple processes of change interact to affect entities and to identify specific avenues for further research and policy development. With the suggested areas of development, the double exposure framework can move beyond consideration of pairs of processes to a framework that allows for exploration of interactions between multiple stressors.

### **8.5 Other Avenues for Future Research**

This dissertation has explored how multiple processes of change interact to affect small tourism enterprises. It exposes connections between stressors and how these interactions affect small tourism enterprises in a number of ways. This is a new approach to studying the implications of stressors for small tourism enterprises since prior studies have largely focused on single stressors. However, this study only considered how multiple processes interact to affect small tourism enterprises in New Providence and Paradise Island. Studies into how multiple stressors interact to affect small tourism enterprises in other tourism destinations would allow for comparisons to be made and for theories on important connections between multiple stressors for tourism to be developed. Expanding research into other destinations may also aid in the identification of best practices for small tourism enterprises to respond to multiple processes of change.

Another avenue of research that this dissertation exposes is the need for additional research in NPI in particular. This dissertation exposed that beach access and rising coastal real estate prices have significant effects for small tourism enterprises. These issues also have implications for local residents that are increasingly unable to utilize the coastal areas of the island. However, there is a dearth of studies that investigate these issues in NPI. I had to personally collect the majority of data myself. There is a clear need for further investigation of these conditions and investigation of how they affect local residents. This lack of beach access and high coastal real estate prices has also been identified as a major issue in other Caribbean islands (Baldwin, 2000). Research into these issues in NPI and other Caribbean nations is thus an area of study in need of attention.

## **Appendix A**

### **Scoping Study Questions**

#### Background

1. What is your involvement with tourism in NPI?
2. How long have you been involved in the industry?

#### Mass Tourism & Land Use Change

1. What are some of the major challenges affecting tourism currently? For small tourism enterprises in particular?
2. What has been the importance of government in addressing these concerns?
3. How has the focus on mass tourism in NPI affected the industry? Impacts for small tourism enterprises in particular?
4. What amenities do you think tourists are most interested in?
5. Have you noticed any trends in land use change associated with tourism development in NPI?

#### Extreme Events & Financial Crises

1. Has the recent financial crisis affected tourism in NPI? For small tourism enterprises in particular?
2. Have any extreme natural events had implications for tourism in NPI?

#### Sustainable Tourism & Climate Change

1. Have you heard of sustainable tourism?
2. What is your understanding of what it means?
3. Is sustainable tourism a focus in NPI?

4. Do you think climate change will have an impact on Bahamian tourism? For small tourism enterprises in particular?

## Appendix B

### Interview Questions for Small Hotel Owners

#### Demographics

1. How long have you been in business?
2. At same location?
3. How many hotel rooms?
4. What is ADR?
5. Are you in operation year round?
6. What percentage of your business is from tourists? Majority, half, minority? Has this always been the case?

#### Mass Tourism & Land Use Change

1. What are some of the major challenges affecting your business now? In the past?
2. Have you obtained any assistance from the government in addressing these concerns?
3. Did you apply for benefits from the *Hotels Encouragement Act*?
4. Are you a member of Bahamas Hotel Association or Promotion Board?
5. Has the development of large hotels had any impact on your business?
6. What amenities are your guests most interested in?
7. Is the beach important to your clientele?
8. Have you noticed any issues with beach access? How has this affected your business?

#### Extreme Events & Financial Crises

1. Has the recent financial crisis affected your business?

2. What did you do to respond to those impacts?
3. How has the government helped small hotels to respond to the financial crisis?  
[How should they?]
4. Are you aware of the Companion Fly Free program? Has it had any impact on your business?
5. What has been the impact of hurricanes or tropical storms on your business? [Less business? Damages?]
6. What did you do to respond to those impacts? [Repair damages, contact tourists, cut back on staff?]
7. How have you prepared for future hurricanes? [insurance, hurricane emergency plan?]
8. How does the government help small hotels to prepare for or respond to hurricanes? [How should they?]

#### Sustainable Tourism & Climate Change

1. Have you heard of sustainable tourism?
2. What is your understanding of what it means?
3. Is sustainable tourism something that your business is involved in? [In what ways?]
  - a. Did you take part in STEMM through the Bahamas Hotel Association and Ministry of Tourism? [What activities? Were they beneficial? What changes did you make to your business?]
4. Is your business environmentally certified through any company?
5. Is sustainable tourism something that small hotels should be involved in?

6. Do you think your business has any environmental related impacts?
7. What are your views on climate change?
8. Do you think climate change will have an impact on Bahamian tourism?
9. On your business in particular?
10. Have you made any plans to address climate change for your business?

#### Additional Thoughts

1. Are there any particular challenges you face as a small hotel owner that we haven't covered?
2. How do you respond to these challenges?
3. What else do you feel could be done to help respond to these challenges?

## Appendix C

### Tourism Stakeholder Questions

#### Background

1. What is your involvement with tourism in NPI?
2. How long have you been involved in the industry?

#### Mass Tourism & Land Use Change

1. What are some of the major challenges affecting tourism currently? For small tourism enterprises in particular?
2. What has been the importance of government in addressing these concerns?
3. Has the development of large hotels had an influence on tourism in NPI? For small tourism enterprises in particular?
4. What amenities do you think tourists are most interested in?
5. Have you noticed any issues with beach access? How has this affected tourism in NPI? For small tourism enterprises in particular?

#### Extreme Events & Financial Crises

1. Has the recent financial crisis affected tourism in NPI? For small tourism enterprises in particular?
2. How has the government helped to alleviate these effects? [How should they?]
3. Are you aware of the Companion Fly Free program? Has it had any impact on tourism in NPI?
4. What has been the impact of hurricanes or tropical storms on tourism in NPI?  
[Less business? Damages?]

### Sustainable Tourism & Climate Change

1. Have you heard of sustainable tourism?
2. What is your understanding of what it means?
3. Is sustainable tourism something that should be a focus in NPI?
4. Do you think tourism has any environmental related impacts?
5. What are your views on climate change?
6. Do you think climate change will have an impact on Bahamian tourism? For small tourism enterprises in particular?

## Appendix D

### Newspaper Search Terms

| <b>Stressor</b>     | <b>Search Terms</b>  |
|---------------------|--|
| Climate Change      | Climate change, sea level rise, global warming                     |
| Extreme Events      | Hurricane + tourism  |
| Land Use Change     | Beach access, coastal development, secondary homes, vacation homes |
| Financial Crises    | Financial crisis, recession  |
| Mass tourism        | Mass tourism, hotel, Atlantis, Baha Mar                            |
| Sustainable tourism | Sustainable tourism, environment + tourism                         |

**Table D.1: Newspaper Search Terms**

## Bibliography

- Aaby, N. E., and Slater, S. F. 1989. Management influences on export performance: A review of the empirical literature 1978–1998. *International Marketing Review* 6: 7–22.
- Adger, N. 2006. Vulnerability. *Global Environmental Change* 16(3): 268-281.
- Agarwal, S. 2002. Restructuring seaside tourism. The resort lifecycle. *Annals of Tourism Research* 29(1): 25-55.
- Agnew, M. and Palutikof, J. 2006. Impacts of short-term climate variability in the UK on demand for domestic and international tourism. *Climate Research* 31: 109-120.
- Akis, A. 2011. The effects of mass tourism: A case study from Manauagat. *Procedia Social and Behavioral Sciences* 19: 289-296.
- Akter, S., Brouwer, R., Brander, L., and van Beukering, P. 2009. Respondent uncertainty in a contingent market for carbon offsets. *Ecological Economics* 68(6): 1856-1863.
- Albany. 2011. *The Resort Villa Collection*. Nassau: Albany.
- Albuquerque, K. and McElroy, J. 1992. Caribbean small-island tourism styles and sustainable strategies. *Environmental Management* 16(5): 619-632.
- Allen, J., Lu, K., and Potts, T. 2002. A GIS-based analysis and prediction of land-use change in a coastal tourism destination area. In Proceedings of the 1999 International Symposium on Coastal and Marine Tourism: Balancing Tourism and Conservation, edited by Miller, M., Auyong J, and Hadley N.
- Amelung, B. and Viner, D. 2006. Mediterranean tourism: Exploring the future with the tourism climatic index. *Journal of Sustainable Tourism* 14(4): 349-366.
- Amelung, B., Nicholls, S. and Viner, D. 2007. Implications of global climate change for tourism flows and seasonality. *Journal of Travel Research* 45(3): 285-296.
- Andereck, K. 2009. Tourists' perceptions of environmentally responsible innovations at tourism businesses. *Journal of Sustainable Tourism* 17(4): 489-499.
- Andriotis, K. 2002. Scale of hospitality firms and local economic development- evidence from Crete. *Tourism Management* 2002: 333-341.
- Arksey, H. and O'Malley, L. 2005. Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology* 8(1): 19-32.
- Atasoy, M. 2010. Monitoring land use changes in tourism centers with GIS: Uzungol case study. *Scientific Research and Essays* 5(8): 790-798.
- Atlejevic, I. and Doorne, S. 2000. Staying within the fence: Lifestyle entrepreneurship in tourism. *Journal of Sustainable Tourism* 8(5): 378–92.
- \_\_\_\_\_. 2004. Diseconomies of scale: A study of development constraints in small tourism firms in Central New Zealand. *Tourism and Hospitality Research* 5(1): 5-12
- Ayad, Y. 2005. Remote sensing and GIS in modeling visual landscape change: A case study of the northwestern arid coast of Egypt. *Landscape and Urban Planning* 73: 307-325.
- Ayres, R. 2000. Tourism as a passport to development in small states: reflections on Cyprus. *International Journal of Social Economics* 27(2): 114-133.

- Ayuso, S. 2007. Comparing voluntary policy instruments for sustainable tourism: the experience of the Spanish hotel sector. *Journal of Sustainable Tourism* 15(2): 144-159.
- Baha Mar. 2012. *Development of Baha Mar: Key Figures*. Nassau: Baha Mar.
- Bahamas BTB. 2003. Small hoteliers to benefit from technical assistance. *Bahamas BTB*. January 4.
- \_\_\_\_\_. 2010. Bahamas Vulnerable to Rising Sea Levels. *Bahamas BTB*. October 5.
- Bahamas Department of Immigration. 2012. *History of Immovable Property Act*. Nassau: Bahamas Department of Immigration.
- Bahamas Department of Statistics. 2008a. *The 2000 Census of Population and Housing. All Bahamas*. Nassau: Bahamas Department of Statistics.
- \_\_\_\_\_. 2008b. Number of Households and Household Income: All Bahamas, New Providence and Grand Bahama: 2005. Nassau: Bahamas Department of Statistics.
- Bahamas Environment, Science and Technology Commission (BEST). 2005. *National Policy for the Adaptation to Climate Change*. Nassau: BEST Commission.
- Bahamas Hotel Association (BHA). 2009a. *The Bahamas Hotel Association's 2009 Annual Report*. Nassau: Bahamas Hotel Association.
- \_\_\_\_\_. 2010. *The Bahamas Hotel Association's 2010 Annual Report*. Nassau: Bahamas Hotel Association.
- \_\_\_\_\_. 2011. *Crisis Management and Hurricane Readiness and Response*. Nassau: Bahamas Hotel Association.
- Bahamas Investment Authority. 2012. *Hotels Encouragement Act*. Nassau: Bahamas Investment Authority.
- Bahamas Ministry of Tourism (BMT). 2007. *Hurricane Preparedness & Response*. Nassau: Ministry of Tourism & Aviation.
- \_\_\_\_\_. 2009. *History of Tourism in the Bahamas*. Nassau: Ministry of Tourism & Aviation.
- \_\_\_\_\_. 2010. *Demographics 1996 to 2009*. Nassau: Ministry of Tourism & Aviation.
- \_\_\_\_\_. 2011. *The Islands of the Bahamas Hotels Directory and Demographics*. Nassau: Ministry of Tourism & Aviation.
- Bahamas MLS, 2012. New Providence Property Listings. Accessed May 22, 2012. <http://www.thebahamasmls.com/>
- Bahamas Press. 2007. Sustainable tourism project to focus on improving customer service. *Bahamas Press* October 12.
- Bailey, I. 2009. Book review: Environmental change and globalization: Double exposures. *The Geographical Journal*. 175(3): 243.
- Baily, M.N., and Elliott, D.J. 2009. *The US financial crisis: where does it stand and where do we go from here?* Washington: Initiative on Business and Public Policy at Brookings.
- Baker, A., Glynn, P. and Riegl, B. 2008. Climate change and coral reef bleaching: An ecological assessment of long-term impacts, recovery trends and future outlook. *Estuarine, Coastal and Shelf Science* 80(4): 435-471.
- Baldwin, J. 2000. Tourism development, wetland degradation and beach erosion in Antigua, West Indies. *Tourism Geographies* 2(2): 193-218.

- Bastakis, C., Buhalis, D., and Butler, R. 2004. The perception of small and medium sized tourism accommodation providers on the impacts of the tour operators' power in Eastern Mediterranean. *Tourism Management* 25(2): 151-170.
- Baum, T. and Hagen, L. 1999. Responses to seasonality: the experiences of peripheral destinations. *International Journal of Tourism Research* 1(5): 299-312.
- Becken, S. 2005. Harmonising climate change adaptation and mitigation: The case of tourist resorts in Fiji. *Global Environmental Change* 15(4): 381-93.
- \_\_\_\_\_. 2010. *Tourism and Environment*. Economics and Management of Tourism. Cheltenham: Edward Elgar.
- Bell, J. 2005. *Doing Your Research Project. A Guide for First-Time Researchers in Education, Health and Social Sciences*. New York: Open University Press.
- Belle, N. and Bramwell, B. 2005. Climate change and small island tourism: Policy maker and industry perspectives in Barbados. *Journal of Travel Research* 44: 32-41.
- Belliveau, S., Smit, B., and Bradshaw, B. 2006. Multiple exposures and dynamic vulnerability: Evidence from the grape industry in the Okanagan Valley, Canada. *Global Environmental Change* 16: 364-378.
- Beniston, M. 2003. Climate change in mountain regions: A review of possible impacts. *Climatic Change* 59: 5-31.
- Berke, P. and Beatley, T. 1997. *After the Hurricane: Linking Recovery to Sustainable Development in the Caribbean*. Baltimore: The Johns Hopkins University Press.
- Berrittella, M., Bigano, A., Roson, R., and Tol, R. 2006. A general equilibrium analysis of climate change impacts on tourism. *Tourism Management* 27(5): 913-924.
- Berry, S. and Ladkin, A. 1997. Sustainable tourism: A regional perspective. *Tourism Management* 18(7): 433-440.
- Bigano, A., Hamilton, J. and Tol, R. 2006. *The impact of climate change on domestic and international tourism: A simulation study*. Working Paper No. 2006.86. Hamburg: Hamburg University Research Unit Sustainability and Global Change.
- Blanke, J., and Chiesa, T. 2011. *The Travel & Tourism Competitiveness Index 2011: Assessing Industry Drivers in the Wake of the Crisis*. New York: World Economic Forum.
- Bloomberg, L. and Volpe, M. 2008. *Completing Your Qualitative Dissertation: A Roadmap from Beginning to End*. Los Angeles: Sage Publications.
- Bonham, C., Edmonds, C. and Mak, J. 2006. The impacts of 9/11 and other terrible global events on tourism in the United States and Hawaii. *Journal of Travel Research* 45: 99-110.
- Boruff, B. and Cutter, S. 2007. The environmental vulnerability of Caribbean island nations. *Geographical Review* 97(1): 24-45
- Bramwell, B. and Alletorp, L. 2001. Attitudes in the Danish tourism industry to the roles of business and government in sustainable tourism. *International Journal of Tourism Research* 3(2): 91-103.
- Bronner, F. and Hoog, R. 2011. Economizing behavior during travel: Strategies and information sources used. *Journal of Vacation Marketing* 17(3): 185-195.
- Buchan, K. 2000. The Bahamas. *Marine Pollution Bulletin* 41(1-6): 94-111.
- Burak, S., Dogan, E., Gazioglu, C. 2004. Impact of urbanization and tourism on coastal environment. *Ocean and Coastal Management* 47: 515-527.

- Burki, R., Elsasser, H. and Abegg, B. 2003. Climate Change Impacts on the Tourism Industry in Mountain Areas. Paper presented at First International Conference on Climate Change and Tourism, Djerba, Tunisia, April 9–11.
- Butler, J. 2008. The compelling “hard case” for “green” hotel development. *Cornell Hospitality Quarterly* 49(3), 234–244.
- Butler, R. 1980. The concept of a tourist area cycle of evolution: Implications for management of resources *Canadian Geographer* 24(1): 5-12.
- \_\_\_\_\_. 1999. Sustainable tourism: A state-of-the-art review. *Tourism Geographies* 1(1): 7-25.
- Calgaro, E., and Lloyd, K. 2008. Sun, sea, sand and tsunami: examining disaster vulnerability in the tourism community of Khao Lak, Thailand. *Singapore Journal of Tropical Geography* 29(3): 288-306.
- Cannon, T. 2008. *Reducing People’s Vulnerability to Natural Hazards: Communities and Resilience*. Research Paper No. 2008/34. Helsinki: United Nations University.
- Caribbean Hotel & Tourism Association (CHTA). 2011. *Travel & Tourism’s Economic Impact*. London: World Travel and Tourism Council.
- Caribbean Hurricane Network. 2012. *Hurricanes in The Bahamas: A Historical Perspective*. Kingston: Caribbean Hurricane Network.
- Caribbean Tourism Organization (CTO). 2011. *Latest Statistics 2010*. Bridgetown: Caribbean Tourism Organization.
- Carlsen, J., Morrison, A., and Weber, P. 2008. Lifestyle oriented small tourism firms, *Tourism Recreation Research* 13(3): 255–63.
- Chacko, H. and Marcell, M. 2008. Repositioning a tourism destination: The case of New Orleans after Hurricane Katrina. *Journal of Travel & Tourism Marketing* 23(2-4): 223-235.
- Charlier, R., and Bologna, A. 2003. Coastal zone under siege- is there realistic relief available? *Journal of Coastal Research* 19(4): 884-889.
- Choi, H., and Sirakaya, E. 2006. Sustainability indicators for managing community tourism. *Tourism Management* 27(6): 1274-1289.
- Cioccio, L. and Michael, E. 2007. Hazard or disaster. Tourism management for the inevitable in Northeast Victoria. *Tourism Management* 28: 1-11.
- Claver-Cortes, E., Molina-Azorin, J. and Periera-Moliner, J. 2007. Competitiveness in mass tourism. *Annals of Tourism Research* 34(3): 727-745.
- Cleare, A. 2007. *History of Tourism in The Bahamas: A Global Perspective*. New York: Xlibris Corporation.
- Cohen-Hattab, K. and Shoval, N. 2004. The decline of Israel’s Mediterranean resorts: Life cycle change versus national tourism master planning. *Tourism Geographies* 6(1): 59-79.
- College of The Bahamas. 2008. *Research Edge: Beach Access*. Nassau: College of The Bahamas.
- Collins, D. and Kearns, R. 2010. ‘Pulling up the tent pegs?’ The significance and changing status of coastal campgrounds in New Zealand. *Tourism Geographies* 12(1): 53-76.
- Colmenares, N. and Escobar, J. 2002. Ocean and coastal issues and policy responses in the Caribbean. *Ocean and Coastal Management* 45: 905-924.

- Cooper, C., Fletcher, J., Gilbert, D., Shepard, R. and Wanhill, S. 1998. *Tourism Principles and Practice, 2nd Edition*. London: Prentice Hall.
- Crabbe, M. 2008. Climate change, global warming and coral reefs: Modeling the effects of temperature. *Computational Biology and Chemistry* 32: 311-314.
- Crang, M. 2003. Qualitative methods : touchy, feely, look-see ? *Progress in Human Geography*. 27(4): 494-504.
- Dasgupta, S., Laplante, B., Meisner, C., Wheeler, D. and Yan, J. 2007. *The Impact of Sea Level Rise on Developing Countries: A Comparative Analysis*. World Bank Policy Research Working Paper 4136. Washington, DC: World Bank.
- Davenport, J., and Davenport, J. 2006. The impact of tourism and personal leisure transport on coastal environments: a review. *Estuarine, Coastal and Shelf Science* 67: 280-292.
- Debbage, K. 1990. Oligopoly and the resort cycle in the Bahamas. *Annals of Tourism Research* 19(2): 355-359.
- Dewhurst, H. and Thomas, R. 2003. Encouraging sustainable business practices in a non-regulatory environment: A case study of small tourism firms in a UK national park. *Journal of Sustainable Tourism* 11(5): 383-403.
- Diamantis, D. 1999. The importance of environmental auditing and environmental indicators in islands. *Eco-Management and Auditing* 6: 18-25.
- Dolcinar, S. and Leisch, F. 2008. An investigation of tourists' patterns of obligation to protect the environment. *Journal of Travel Research* 46(4): 381-391.
- Dolfman, M., Wasser, S. and Bergman, B. 2007. The effects of Hurricane Katrina on the New Orleans economy. *Monthly Labor Review* 130: 3-18.
- Drabek, T. 1995. Disaster responses within the tourist industry. *International Journal of Mass Emergencies and Disasters* 13(1): 7-23.
- Drimmie, S. and Casale, M. 2008. Multiple stressors in Southern Africa: the link between HIV/AIDS, food insecurity, poverty and children's vulnerability now and in the future. *AIDS Care* 21(S1): 28-33.
- Duffy & Partners. 2012. *Creating a Branded Experience: The Bahamas*. Minneapolis: Duffy & Partners.
- Dunbar-Hall, P. 2001. Culture, tourism and cultural tourism: Boundaries and frontiers in performances of Balinese music and dance. *Journal of Intercultural Studies* 22(2): 173-187.
- Eakin, H., and Luers, A. 2006. Assessing the vulnerability of social-environmental systems. *Annual Review of Environment and Resources*. 31: 365-394.
- Eakin, H., Tucker, C., and Castellanos, E. 2006. Responding to the coffee crisis: a pilot study of farmers' adaptations in Mexico, Guatemala and Honduras. *The Geographical Journal*. 172(2): 156-171.
- Eakin, C.M., Morgan, J.A., Heron, S.F., Smith, T.B., Liu, G. 2010. Caribbean corals in crisis: Record thermal stress, bleaching, and mortality in 2005. *PLoS ONE* 5(11): 1-9.
- Esbah, H., Kara, B., Deniz, B. and Kesgin, B. 2010. Changing land cover characteristics of a developing coastal town: A case study of Didem, Turkey. *Journal of Coastal Research* 26(2): 274-282.
- European Travel Commission (ETC). 2010. *European Tourism 2009: Trends and Prospects*. Brussels: European Travel Commission.

- Farrell, B. and Twining-Ward, L. 2005. Seven steps towards sustainability: Tourism in the context of new knowledge. *Journal of Sustainable Tourism* 13(2): 109-122
- Faulkner, B. 2001. Towards a framework for tourism disaster management. *Tourism Management* 22(2): 135-147.
- Faulkner, B. and Vikulov, S. 2001. Katherine, washed out one day, back on track the next: a post-mortem of a tourism disaster. *Tourism Management* 22: 331-344.
- Finley-Brook, M., Haeffner, M., Heslop-Thomas, C., Montana, E., and Sprain, L. 2010. *Climate change and globalization in the Americas: Case studies of mitigation and adaptation*. Panama City: Pasi Institute.
- Font, X. 2002. Environmental certification in tourism and hospitality: progress, process and prospects. *Tourism Management* 23: 197-205.
- Font, X & Harris, C. 2004. Rethinking standards from green to sustainable. *Annals of Tourism Research* 31(4): 986-1007.
- Freitas, C. 2003. Tourism climatology: evaluating environmental information for decision making and business planning in the recreation and tourism sector. *International Journal of Biometeorology* 48: 45-54.
- Fussler 2007. Vulnerability: A generally applicable conceptual framework for climate change research. *Global Environmental Change* 17(2): 155-167.
- Gaillard, J. 2010. Vulnerability, capacity and resilience. Perspectives for climate and development policy. *Journal of International Development* 22: 218-232.
- Gallopín, G. 2006. Linkages between vulnerability, resilience and adaptive capacity. *Global Environmental Change* 16: 293-303.
- Gertisser, R. 2010. Eyjafjallajökull volcano causes widespread disruption to European air traffic. *Geology Today* 26(3): 94-95.
- Getz, D., and Carlsen, J. 2000. Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism Management* 21(6): 547-560.
- Gollub, J., Hosier, A. and Woo, G. *Using Cluster-Based Economic Strategy To Minimize Tourism Leakages*. Barcelona: World Tourism Organization.
- Goodrich, J.N. 2002. September 11, 2001 attack on America: A record of the immediate impacts and reactions in the USA travel and tourism industry. *Tourism Management* 23: 573-580.
- Gossling, S. 2002. Global environmental consequences of tourism. *Global Environmental Change* 12(4): 283-302.
- Gossling, S. and Hall, M. 2006. Uncertainties in predicting tourist flows under scenarios of climate change. *Climatic Change* 79: 163-173.
- Grandoit, J. 2005. Tourism as a development tool in the Caribbean and environmental by-products, *Journal of Development and Social Transformation* 2: 89-97.
- Granvorka, C. and Strobl, E. 2010. The Impact of Hurricane Strikes on Tourism in the Caribbean. Paper presented at Turmoil and Turbulence in Small Developing States: Going beyond Survival. University of West Indies. March 24-26.
- Green Hotelier. 2003. *Your Environmental Programme: Getting Started*. London: International Hotels Environment Initiative.
- Hall, C. M. 2001. Trends in ocean and coastal tourism: the end of last frontier. *Ocean and Coastal Management* 44(9-10): 601-618.

- \_\_\_\_\_. 2010. Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism* 13(5): 401-17.
- Hamilton, J., Maddison, D. and Tol, R. 2005. Effects of climate change on international tourism. *Climate Research* 29: 245-254.
- Harrison, S. 2002. Culture, tourism and local community – the heritage identity of the Isle of Man. *The Journal of Brand Management* 9(4): 355-371.
- Henderson, J. 1999. Managing the Asian financial crisis: Tourist attractions in Singapore. *Journal of Travel Research* 38: 177-81.
- Hildmann, D. and Stierand, M. 2010. Stuck in the Past or Just the Recession? A Dutch Hotel Case Study. Paper presented at EuroCHRISTIE Conference. Amsterdam. October 25-27.
- Himley, M. 2008. Geographies of environmental governance: The nexus of nature and neoliberalism. *Geography Compass* 2(2): 433-451.
- Hjalager, A. 1998. Environmental regulation of tourism: Impact on business innovation. *Progress in Tourism and Hospitality Research* 4: 17-30.
- \_\_\_\_\_. 2007. Stages in the economic globalization of tourism. *Annals of Tourism Research* 34(2): 437-457.
- Hoegh-Guldner, O., Mumby, P., Hooten, A., Steneck, R., Greenfield, P., Gomez, E. 2007. Coral reefs under rapid climate change and ocean acidification. *Science* 318: 1737-1742.
- Horsely, S and Witten, S. 2002. *Integrated Coastal Zone Management for The Bahamas*. Newport: Horsely Witten Group.
- Horten, R., Herweijer, C., Rosenzweig, C., Liu, J., Gornitz, V., and Ruane, A. 2008. Sea level rise projections for current generation CGCMs based on the semi-empirical method. *Geophysical Research Letters* 35(L02715): 1-5.
- Huan, J. and Min, J. 2002. Earthquake devastation and recovery in tourism: the Taiwan case. *Tourism Management* 23(3): 145-154.
- Hughey, K., Ward, C., Crawford, K., McConnell, L., Phillips, J., Washbourne, R. 2004. A classification framework and management approach for the sustainable use of natural assets used for tourism. *International Journal of Tourism Research* 6: 349-363.
- Hystad, P., and Keller, P. 2008. Towards a destination tourism disaster management framework: Long-term lessons from a forest fire. *Tourism Management* 29(1): 151-162.
- International Monetary Fund (IMF). 2009. *World Economic Outlook. Crisis and Recovery*. Washington, DC: International Monetary Fund.
- \_\_\_\_\_. 2011. *The Bahamas. 2011 Article IV Consultation. IMF Country Report No. 11/338*. Washington, DC: International Monetary Fund.
- Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Cambridge: Cambridge University Press.
- Janssen, M. and Ostrom, E. 2006. Resilience, vulnerability and adaptation: A cross-cutting theme of the international human dimensions programme on global environmental change. *Global Environmental Change* 16(3): 237-239.
- Jean, D.N. 1990. Beach resort morphology in England and Australia: a review and extension. In: *Recreational Uses of Coastal Areas*, edited by P. Fabbri Kluwer, Dordrecht, 277-85. London: Springer.

- Jones, R. 2012. Baha Mar embarking on beach restoration project. *The Nassau Guardian*. March 27.
- Kasim, A. 2007. Towards a wider adoption of environmental responsibility in the hotel sector. *International Journal of Hospitality & Tourism* 8(2): 25-49.
- Khan, H., Toh, R., and Fathima, K. 2001. Asian contagion: impact on Singapore tourism. *Annals of Tourism Research* 28(1): 224-226.
- Klint, L., Jiang, M., Law, A., Delacy, T., Filep, S., Calgaro, E., Dominey-Howes, D. and Harrison, D. 2012 Dive tourism in Luganville, Vanuatu: Shocks, stressors and vulnerability to climate change. *Tourism in Marine Environments* 8(1-2): 91-109.
- Ko, J. 2001 Assessing progress of tourism sustainability. *Annals of Tourism Research* 28(3): 817-820.
- Krippendorf, J. 1986. The new tourist- turning point for leisure and travel. *Tourism Management* 7(2): 131-135.
- Kuo, H., Chen, C., Tseng, W., Ju, L., and Huang, B. 2008. Assessing the impacts of SARS and avian flu on international tourism demand to Asia. *Tourism Management* 29: 917-28.
- Lee, K. 2001. Sustainable tourism destinations: the importance of cleaner production. *Journal of Cleaner Production* 9(4): 313-323.
- Lee, J., Hsu, L., Han, H., and Kim, Y. 2010. Understanding how consumers view green hotels: How a hotel's green image can influence behavioral intentions. *Journal of Sustainable Tourism* 18(7): 901-914.
- Leichenko and O'Brien. 2008. *Environmental Change and Globalization: Double Exposures*. New York: Oxford University Press.
- Leichenko, R., O'Brien, K., and Solecki, W. 2010. Climate change and the global financial crisis: A case of double exposure. *Annals of the Association of American Geographers* 100(4): 963-972.
- Lerner, M. and Haber, S. 2001. Performance factors of small tourism ventures: The interface of tourism, entrepreneurship and the environment *Journal of Business Venturing* 16(1): 77-100.
- Lew, A. 2008. Long tail tourism: New geographies for marketing niche tourism products. *Journal of Travel & Tourism Marketing* 25(3-4): 409-419.
- Lewis-Bynoe, D., Howard, S., and Moore, W. 2009. *Climate Change and Tourism Features in the Caribbean*. Munich: Munich Personal RePEc Archive.
- Li, S., Blake, A. and Cooper, C. 2010. China's tourism in a global financial crisis: A computable general equilibrium approach. *Current Issues in Tourism* 13(5): 435-53.
- Lin, T. and Matzarakis, A. 2008. Tourism climate and thermal comfort in Sun Moon Lake, Taiwan. *International Journal of Biometeorology* 52: 281-290.
- Lise, W., and Tol, R. 2002. Impact of climate on tourist demand *Climatic Change* 55(4): 429-449.
- Liu, Z. 2003. Sustainable tourism development: A critique. *Journal of Sustainable Tourism* 11(6): 459-475.
- Maddison, D. 2001. In search of warmer climates? The impact of climate change on British tourists. *Climatic Change* 49(1-2): 193-208.
- Madeley, J. 1996. *Foreign Exploits: Trans-nationals and Tourism*. London: Catholic Institute for International Relations.

- Marshall, C. and Rossman, G. 2006. *Designing Qualitative Research*. Thousands Oaks: Sage Publication
- Mayor, K. and Tol, R. 2007. *The Impact of the UK Aviation Tax on Carbon Dioxide Emissions and Visitor Numbers*. Hamburg: Hamburg University Research Unit Sustainability and Global Change.
- Mays, N., Roberts, E. and Popay, J. 2001. Synthesising research evidence. In *Studying the Organisation and Delivery of Health Services: Research Methods*, edited by N. Fulop, P. Allen, A. Clarke and N. Black. London: Routledge.
- Mazzocchi, M. and Montini, A. 2001. Earthquake effects on tourism in central Italy. *Annals of Tourism Research* 28(4): 1031-1046.
- McElroy, J. 2003. Tourism development in small islands across the world *Geografiska Annaler, Series B Human Geography* 85(4): 231-242.
- \_\_\_\_\_. 2006. Small island tourist economies across the life cycle. *Asia Pacific Viewpoint* 47(1): 61-77.
- McGranahan, G., Balk, D. and Anderson, B. 2007. The rising ride: Assessing the risks of climate change and human settlements in low elevation coastal zones. *Environment and Urbanization* 19: 17-37.
- McLaughlin, P. & Dietz, T. 2008. Structure, agency and environment: Toward an integrated perspective on vulnerability. *Global Environmental Change* 18(1): 99-111.
- McNamara, K. & Gibson, C. 2008. Environmental sustainability in practice? A macro-scale profile of tourist accommodation facilities in Australia's coastal zone. *Journal of Sustainable Tourism* 16(1): 85-100.
- Meheux, K. and Parker, E. 2006. Tourist sector perceptions of natural hazards in Vanuatu and the implications for a small island developing state. *Tourism Management* 27 (1): 69-85.
- Menzie, C., MacDonell, M. and Mumtaz, M. 2007. A phased approach for assessing combined effects from multiple stressors. *Environmental Health Perspectives* 115(5): 807-816.
- Metzger, M., and Schroter, D. 2006. Towards a spatially explicit and quantitative vulnerability assessment of environmental change in Europe. *Regional Environmental Change* 6: 201-216.
- Meyer, D. 2006. *Caribbean tourism, local sourcing and enterprise development: Review of the literature*. Working Paper 18. London: Pro-Poor Tourism Partnership.
- Mieczkowski, Z. 1985. The tourism climatic index. A method of evaluating world climates for tourism. *Canadian Geographer* 29(3): 220-233.
- Milne, S. and Ateljevic, I. 2001. Tourism, economic development and the global-local nexus: Theory embracing complexity. *Tourism Geographies* 3(4): 369-393.
- Mistilis, N. & Sheldon, P. 2005. *Knowledge Management for Tourism Crises and Disasters*, Paper presented at the BEST Education Network Think Tank V—Managing Risk and Crisis for Sustainable Tourism: Research and Innovation, Kingston: University of West Indies June 16-19.
- Mitchell, J. K. 2006. Empowering knowledge: a modest proposal for a broader social science research agenda in the wake of Katrina. *Perspectives from the Social Sciences* Brooklyn: Social Science Research Council.

- Moen, J. and Fredman, P. 2007. Effects of climate change on Alpine skiing in Sweden. *Journal of Sustainable Tourism* 15(4): 418-437.
- Moriarty, J., Jones, R., Rowley, J., and Teahan, K. 2008. Marketing in small hotels: a qualitative study. *Marketing Intelligence & Planning* 26(3): 293-315.
- Morrison, A. 1998. Small firm statistics: A hotel sector focus. *The Services Industries Journal* 18(1): 132-142.
- Morrison, A. and Andrew, Rick and Baum, T.G. 2001. The lifestyle economics of small tourism businesses. *Journal of Travel and Tourism Research* 1(1-2): 16-25.
- Morrison, A. 2004. Small business performance: a UK tourism sector focus. *Journal of Small Business and Enterprise Development* 11(2): 166-173.
- Mycoo, M. 2006. Sustainable tourism using regulations, market mechanisms and green certification: A case study of Barbados. *Journal of Sustainable Tourism* 14(5): 489-511.
- Nassau Guardian. 1926. The Nassau Hurricane, July 25–26, 1926. *The Nassau Guardian* July 28.
- Nassau Guardian. 2004. Frances and Jeanne: The great equalizers. *The Nassau Guardian* October 4.
- National Weather Service. 2012. *Tropical Cyclone Climatology*. Miami: The National Weather Service.
- Neely, W. 2006. *The Major Hurricanes to Affect The Bahamas*. Bloomington: Author House.
- Nicholls, R.J. and Cazanave, A. 2010 Sea-level rise and its impact on coastal zones. *Science* 328(328):1517-1520.
- Nothingner, C., and Elasser, H. 2004. Natural hazards and tourism: New findings on the European Alps. *Mountain research and Development* 24(1): 24-27.
- O'Brien, K., and Leichenko, R. 2000. Double exposure: assessing the impacts of climate change within the context of economic globalization. *Global Environmental Change* 10(3): 221-232.
- O'Brien, K., Eriksen, S., Schjolden, S., and Nygaard, L. 2004a. *What's in a word? Conflicting interpretations of vulnerability in climate change research*. Oslo: Center for International Climate and Environmental Research.
- O'Brien, K., Sygna, L., and Haugen, J. 2004b. Vulnerable or resilient? A multi-scale assessment of climate impacts and vulnerability in Norway. *Climatic Change* 64: 193-225.
- O'Brien, L., Leichenko, R., Kelkar, U., Venema, H., Aandahl, G., Tompkins, H. 2004c. Mapping vulnerability to multiple stressors: climate change and globalization in India. *Global Environmental Change* 14(4): 303-313.
- O'Brien, K., Quinlan, T., and Ziervogel, G. 2009. Vulnerability interventions in the context of multiple stressors: Lessons from the southern Africa Vulnerability Initiative (SAVI). *Environmental Science & Policy* 12(1): 23-32.
- Okumus, F. and Karamustafa, K. 2005. Impact of an economic crisis: Evidence from Turkey. *Annals of Tourism Research* 32(4): 942-961.
- Okumus, F., Altinay, M. and Arasali, H. 2005. The impact of Turkey's economic crisis of February 2001 on the tourism industry in Northern Cyprus. *Tourism Management* 26: 95-104.

- Oppermann, M. (1993). Tourism space in developing countries. *Annals of Tourism Research* 20(3): 535-60.
- Papatheodorou, A., Rossello, J. and Xiao, H. 2010. Global economic crisis and tourism: Consequences and Perspectives. *Journal of Travel Research* 49(1): 39-45.
- Pattullo, P. 2005. *Last Resorts: The Cost of Tourism in the Caribbean*. Kingston: Ian Randle Publishers.
- Pearce, D., and Kirk, R. 1986. Carrying capacities for coastal tourism. *Industry and Environment* 9(1): 3-7.
- Pelling, M. and Uitoo, J. 2001. Small island developing states: natural disaster vulnerability and global change. *Environmental Hazards* 3:49-62
- Pigram, J. 1980. Environmental implications of tourism development. *Annals of Tourism Research* 7(4): 554-583.
- Pollard, J. 2003. Small firm finance and economic geography. *Journal of Economic Geography* 3(4): 429-452.
- Polsky, C., Neff, R. and Yarnal, B. 2007. Building comparable global change vulnerability assessments: The vulnerability scoping diagram. *Global Environmental Change* 17(3-4): 472-485
- Prideaux, B. 1999. Tourism perspectives of the Asian financial crisis: Lessons for the future. *Current Issues in Tourism* 2(4): 279-93.
- Rahmstorf, S. 2010. A new view on sea level rise. *Nature Reports Climate Change* 44-45.
- Reaser, J., Pomerance, R. and Tjomas, P. 2000. Coral bleaching and global climate change: Scientific findings and policy recommendations *Conservation Biology* 14(5): 1500-1511.
- Ritchie, J.R. and Zins, M. 1978. Culture as determinant of the attractiveness of a tourism region. *Annals of Tourism Research* 5(2): 252-267.
- Ritchie, B., Amaya, C., and Fetchline, D. 2010. Impact of the economic crisis on global tourism. Foundations of the Crisis: A North American Perspective. *Journal of Travel Research* 49(1): 5-15.
- Ritchie, B. 2004. Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry *Tourism Management* 25: 669-683.
- Robards, C. 2011. Residents blocking access to private road next to Sandals. *The Nassau Guardian*. April 6.
- Robinson, M. and Novelli, M. (2005) Niche Tourism: An introduction In: Niche Tourism: contemporary issues, trends and cases. Butterworth-Heinemann Ltd., Oxford, UK
- Saarinen, J. 2006 Traditions of sustainability in tourism studies. *Annals of Tourism Research* 33(4): 1121-1140.
- Sacks, A. 2003. *The Bahamas Tourism Satellite Account 2003*. Lexington: Global Insight.
- \_\_\_\_\_. 2006. *The Bahamas Total Tourism Economic Impact*. Lexington: Global Insight.
- Schianetz, K., Kavanagh, L., and Lockington, D. 2007. Concepts and tools for comprehensive sustainability assessments for tourism destinations: A comparative review. *Journal of Sustainable Tourism* 15(4): 369-389.
- Schmitz, H. 2004. *Local Enterprises in the Global Economy: Issues of Governance and Upgrading*. Massachusetts: Edward Elgar Publishing.

- Schrank, A. and Kurtz, M. 2005. Credit where credit is due: Open economy industrial policy and export diversification in Latin America and the Caribbean. *Politics and Society* 33(4): 671-702.
- Schroter, D., Polsky, C., and Patt, A. 2005. Assessing vulnerabilities to the effects of global change: An eight step approach. *Mitigation and Adaptation Strategies for Global Change* 10(4): 573-595.
- Scott, D. and McBoyle, G. 2001. Using a 'tourism climate index' to examine the implications of climate change for climate as a tourism resource. Paper presented at First International Workshop on Climate, Tourism and Recreation. International Society of Biometeorology. Halkidik, Greece. October 5-10.
- Scott, D., McBoyle, G. and Schwartzentruber, M. 2004. Climate change and the distribution of climatic resources for tourism in North America. *Climate Research* 27: 105-117.
- Scott, D., McBoyle, G., Minogue, A. and Mills, B. 2006. Climate change and the sustainability of ski-based tourism in Eastern North America: A Reassessment. *Journal of Sustainable Tourism* 14(4): 376-398.
- Scott, D., Amelung, B., Becken, S., Ceron, J., Dubois, G., Gossling, S., Peeters, P., and Simpson, M. 2008. *Climate Change and Tourism: Responding to Global Challenges*. Madrid: UNWTO.
- Scott, D., Dawson, J. and Jones, B. 2008a. Climate change vulnerability of the US Northeast winter recreation-tourism sector. *Mitigation and Adaptation Strategies for Global Change* 13(5-6): 577-596.
- Scott, D. 2011. Why sustainable tourism must address climate change. *Journal of Sustainable Tourism* 19(1): 17-34.
- Sharpley, R. 2005. The tsunami and tourism: A comment. *Current Issues in Tourism* 8(4): 344-349.
- Sheldon, P. and Dwyer, L. 2010. The global financial crisis and tourism: perspectives of the academy. *Journal of Travel Research* 44: 467-473.
- Silva, J., Eriksen, S., and Ombe, Z. 2010. Double exposure in Mozambique's Limpopo River Basin. *The Geographical Journal* 176(1): 6-24.
- Simmons, Beth A., and Zachary Elkins. 2004. The globalization of liberalization: policy diffusion in the international political economy. *American Political Science Review* 98(1): 171-189.
- Simpson, M., Gossling, S., Scott, D., Hall, C. and Gladin, E. 2008. *Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices*. Paris: UNEP University of Oxford, UNWTO, WMO.
- Smeral, E. 1998. The impact of globalization on small and medium enterprises: new challenges for tourism policies in European countries. *Tourism Management* 19(4): 371-380.
- \_\_\_\_\_. 2009. The impact of the financial and economic crisis on European tourism. *Journal of Travel Research* 48(1): 3-13.
- \_\_\_\_\_. 2010. Impacts of the world recession and economic crisis on tourism: Forecasts and potential risks *Journal of Travel Research* 49(1): 31-38.
- Smith, D., Pozueta, B., Banton, J., and Warner, P. 2005. *Assessing hurricane hazards and Vulnerabilities: A Caribbean Perspective*. Kingston: Smith Warner International Ltd.

- Song, H., and Lin, S. 2010. Impacts of the financial and economic crisis on tourism in Asia. *Journal of Travel Research* 49(1): 16-30.
- Strizzi, N. and Meis, S. 2001. Challenges facing tourism markets in Latin America and the Caribbean region in the new millennium *Journal of Travel Research* 40:183-192.
- Sturup, F. 2004. Government pledge to small hotel owners. *The Bahamas Journal*. July 18.
- Thomas-Hope, E. & Jardine-Comrie, A. 2007. Valuation of environmental resources for tourism in small island developing states. *International Development Planning Review* 29(1): 93-112.
- Thompson, K. 2006. *An Eye for the Tropics: Tourism, Photography, and Framing the Caribbean*. North Carolina: Duke University Press.
- Thurston, G. 2012. IDB helps in SME development. *The Freeport News*. March 29.
- Time. 1963. Travel: Carib Song. *Time Magazine*. February 1.
- Tol, R. 2007. The impact of a carbon tax on international tourism. *Transportation Research Part D: Transport and Environment* 12(2): 129-142.
- Tomblin, J. 1990. Natural Disasters in the Caribbean: A Review of Hazards and Vulnerability, Paper presented at Caribbean Disaster Preparedness Seminar, Saint Lucia. June 3-8.
- Torres, R. 2002. Cancun's tourism development from a Fordist spectrum of analysis. *Tourists Studies* 2(1): 87-116.
- Tribune. 2007. Property booms. *The Nassau Tribune*. May 3.
- Tsai, C. and Chen, C. 2010. An earthquake disaster management mechanism based on risk assessment information for the tourism industry- a case study from the island of Taiwan. *Tourism Management* 31(4): 470-481.
- Turner, B. L., Kasperson, R., Matson, P., McCarthy, J., Corell, R., Christensen, L., Eckley, N., Kasperson, J., Luers, A., Martello, M., Polsky, C., Pulsipher, A. and Schiller, A. 2003a. A framework for vulnerability analysis in sustainability science *Proceedings of the National Academy of Sciences of the United States of America* 100(14): 8074-8079.
- Turner, B. L., Matson, P., McCarthy, J., Corell, R., Christensen, L., Eckley, N., Hovelsrud-Broda, G., Kasperson, J., Kasperson, R. Luers, A., Martello, M., Mathiesen, S., Naylor, R., Polsky, C., Pulsipher, A., Schiller, A., Selin, H., and Tyler, N. 2003b. Illustrating the coupled human-environment system for vulnerability analysis: Three case studies. *Proceedings of the National Academy of Sciences of the United States of America* 100(14): 8080-8085.
- United Nations. 2009. Partnerships for Sustainable Development. New York: United Nations.
- United Nations Economic and Social Council. 2004. *Major Issues in Transport, Tourism and Infrastructure Development: Enhancing the Role of Tourism in Social and Economic Development and Major Initiatives of ESCAP*. Bangkok: United Nations: Bangkok.
- United Nations World Tourism Organization (UNWTO). 2005. *Tourism and The World Economy*. Madrid: United Nations World Tourism Organization
- \_\_\_\_\_. 2010. *UNWTO Tourism Highlights. 2010 Edition*. Madrid: United Nations World Tourism Organization.

- \_\_\_\_\_. 2011. *UNWTO World Tourism Barometer Advanced Release*. Madrid: United Nations World Tourism Organization.
- \_\_\_\_\_. 2012. *UNWTO World Tourism Barometer. Volume 10*. Madrid: United Nations World Tourism Organization.
- Wanhill, S. 2000. Small and medium tourism enterprises. *Annals of Tourism Research* 27(1): 132-147.
- Weaver, D. 1993. Model of urban tourism for small Caribbean islands *Geographical Review* 83(2): 134-140.
- \_\_\_\_\_. 2001. Mass tourism and alternative tourism in the Caribbean. In *Tourism and the Less Developed World: Issues and Case Studies*, edited by D. Harrison. Oxon: CABI Publishing.
- \_\_\_\_\_. 2011. Can sustainable tourism survive climate change? *Journal of Sustainable Tourism* 19(1): 5-15.
- Wei, X., and Zeng, B. 2008. An analysis and judgement of China's tourism industry after Wenchuan earthquake. *Tourism Tribune* 2008:08
- Wenger, M., Ondrackova, M., Macahala, M., Neca, J., Hyrsil, P., Simlova, A., Jurajda, P., von der Phe, P., and Segner, H. 2010. Assessing relationships between chemical exposure, parasite infection, fish health and fish ecological statuses: A case study using chub in the Bilina River, Czech Republic. *Environmental Toxicology and Chemistry* 29(2): 453-466.
- Westerhoff, L., and Smit, B. 2009 The rains are disappointing us: dynamic vulnerability and adaptation to multiple stressors in the Afram Plains, Ghana. *Mitigation and Adaptation Strategies for Global Change* 14(4): 317-337.
- Westgate, K. 1978. Hurricane response and hurricane perception in the Commonwealth of the Bahamas. *Mass Emergencies* 3: 251-265.
- White, G., Kates, R. and Burton, I. 2001. Knowing better and losing even more: the use of knowledge in hazards management. *Global environmental Change Part B: Environmental Hazards* 3(3-4): 81-92.
- Wilkinson, P. F. 1989. Strategies for tourism in island microstates. *Annals of Tourism Research* 16(2): 153-177.
- World Tourism Organisation (WTO). 1999. *Marketing tourism destinations on-line*. Geneva: World Tourism Organization.
- \_\_\_\_\_. 2012. *World Tourism Barometer. Volume 10*. Geneva: World Tourism Organization.
- Yancey, K. 2011. Post-hurricane tourism update from the Bahamas. *USA Today*. August 27.
- Zeng, B., Carter, R., and Lacy, T. 2005. Short term perturbations and tourism effects: The case of SARS in China. *Current Issues in Tourism* 8(4): 306-322.
- Ziervogel, G., Bharwani, S., and Downing, T. 2006. Adapting to climate variability: Pumpkins, people and policy. *Natural Resources Forum* 30(4): 294-305.