

Ecotourism Development in China: A Case Study of National Huidong Sea Turtle Reserve

by
Sixin (Michelle) Liu



VANCOUVER ISLAND
UNIVERSITY



VANCOUVER ISLAND
UNIVERSITY

Ecotourism Development in China: A Case Study of National Huidong Sea
Turtle Reserve

by
Sixin (Michelle) Liu

*Presented as part of the requirement for the award of MA Degree in Sustainable Leisure
Management within the Department of Recreation and Tourism Management at
Vancouver Island University*

March, 2014





VANCOUVER ISLAND
UNIVERSITY

Ecotourism Development in China: A Case Study of
National Huidong Sea Turtle Reserve

by
Sixin (Michelle) Liu

Supervisory Committee:

Grant Murray, PhD.
Co-Supervisor
Vancouver Island University, Canada

Pete Parker, PhD.
Co-Supervisor
Vancouver Island University, Canada

Geoffrey Godbey, PhD., Professor Emeritus
External Reviewer
Penn State University, USA



DECLARATION

This thesis is a product of my own work and is not the result of anything done in collaboration.

I agree that this thesis may be available for reference and photocopying, at the discretion of the University.

Sixin (Michelle) Liu

ABSTRACT

Although there are already many studies on ecotourism, there is a lack of research focusing on developing ecotourism in coastal nature reserves, especially in China. Ecotourism's rapid growth provides many potential opportunities for the development of China's nature reserves, but potential barriers also exist. The purpose of this research was to evaluate the potential barriers and opportunities (including the motivations of tourists) for ecotourism development at Sea Turtle Bay, Huidong, China. Research methods involved semi-structured interviews and questionnaire surveys. Overall, this study concluded that stakeholders in National Huidong Sea Turtle Reserve (Sea Turtle Bay) perceived many barriers for ecotourism development, but also had opportunities for ecotourism development. This research provided recommended strategies to key stakeholders for sustainable developing ecotourism within Sea Turtle Bay: 1) establish a national ecotourism strategy; 2) increase communication and coordination with stakeholders; 3) provide environmental education for visitors; 4) establish regular visitor behaviour monitoring; 5) invest more tourism revenue into environment protection; 6) explore maximum carrying capacity and adequate entrance fee.

Keywords: Ecotourism, Tourist demand, Opportunities, Barriers, and Strategies

ACKNOWLEDGEMENTS

I would like to express my greatest gratitude the following people who have helped and supported me throughout my thesis.

My deepest gratitude goes first and foremost to my co- supervisor Dr. Grant Murray, for his professional guidance, his massive help, his constant encouragement, and his patience in supervisions. He has walked me through all the stages of this thesis. Without his consistent and illuminating instruction, this thesis would not have reached its present form.

Second, I would like to express my sincere gratitude to Dr. Pete Parker, my co-supervisor, for his thoughtful criticism and continuous encouragement have helped me get to this point.

Third, I would like to express my heartfelt gratitude to Dr. Suosheng Wang, my external co- supervisor, for his enthusiasm, precise criticism, and time.

Fourth, I would like to express my sincere gratitude to Dr. Geoffrey Godbey, my external examiner, for his precise criticism, and time.

Fifth, I would like to express my heartfelt gratitude to Dr. Rita Naeschke, my thesis proofreader, for her enthusiasm and time.

Sixth, I would like to express my special appreciation to SLIM's faculty for their support, encouragement, and useful instructions.

Finally, I would extend my sincere thanks to my parents and my parents-in-law. I especially appreciate to my husband Jie Yao, for his supporting and loving. I real debt is owed to my two lovely daughters Anne and Rebekah, thanks for providing love that kept me going.

Thank you very much for what you have done for me! Thank you to you all!

Contents

| | |
|---|-----|
| DECLARATION | ii |
| ABSTRACT..... | iii |
| ACKNOWLEDGEMENTS | v |
| CHAPTER 1: Introduction | 1 |
| CHAPTER 2: Literature Review | 6 |
| 2.1 Ecotourism Definition..... | 6 |
| 2.2 Ecotourism Potential Opportunities | 7 |
| 2.3 Potential Barriers to Ecotourism..... | 9 |
| 2.4 Review of Examples of Strategies Used to Develop Ecotourism | 12 |
| CHAPTER 3: Methodology..... | 17 |
| 3.1 Purpose and Objectives..... | 17 |
| 3.2 Study Location..... | 17 |
| 3.3 Research Design..... | 21 |
| 3.3.1 Semi-structured Interviews | 21 |
| 3.3.2 Survey | 22 |
| 3.4 Possible Ethics Issues..... | 23 |
| 3.5 Data analysis | 24 |
| CHAPTER 4: Results | 25 |
| 4.0 Introduction..... | 25 |
| 4.1 Interpretations of Ecotourism at Sea Turtle Bay | 25 |
| 4.2 The Current State of the Tourism Industry at Sea Turtle Bay | 26 |
| 4.2.1 Site Description..... | 26 |
| 4.2.2 Perceived Benefits of Tourism at Sea Turtle Bay | 29 |
| 4.2.3 Impacts of Tourism at Sea Turtle Bay | 30 |
| 4.3 Barriers and Opportunities of Ecotourism Development..... | 32 |

| | |
|--|----|
| 4.3.1 Barriers and Constraints..... | 32 |
| 4.3.2 Perceived Opportunities and Potential Positive Impacts..... | 38 |
| 4.4 Tourists Demands of Ecotourism (Survey Findings)..... | 40 |
| 4.5 Recommended Strategies..... | 45 |
| 4.5.1 Recommended Strategies..... | 45 |
| 5.1 Current State of Tourism..... | 48 |
| 5.2 Barriers to Ecotourism Development..... | 49 |
| 5.2.1 Local Definition of Ecotourism | 49 |
| 5.2.2 Management of Ecotourism Barriers at Sea Turtle Bay | 49 |
| 5.2.3 Poor Relationships with Host Community..... | 51 |
| 5.2.4 Lack of Host Community Benefits | 51 |
| 5.2.5 Poor Visitor Behaviours and Attitudes | 52 |
| 5.2.6 Lack of Environmental Protection | 52 |
| 5.3 Opportunities and Potential Positive Impacts for Ecotourism Development..... | 53 |
| 5.4 Tourist Demands for Ecotourism..... | 54 |
| 5.5 Examples of Strategies for Ecotourism Development | 55 |
| CHAPTER 6: Conclusions | 56 |
| 6.1 Key Findings..... | 56 |
| 6.2 Recommended Strategies for Ecotourism Development at Sea Turtle Bay..... | 58 |
| 6.3 Significance of Study | 61 |
| 6.4 Methodological and Practical Contributions..... | 62 |
| 6.4.1 Methodological | 62 |
| 6.4.2 Practical..... | 62 |
| 6.5 Reflection on the Process of Conducting Research in China..... | 62 |
| 6.6 Study's Limitations and Future Research | 63 |
| References List..... | 65 |
| Appendix A: Knowledge Mobilization Plan..... | 69 |

Appendix B: Reflective Paper..... 71

Appendix C: Sea Turtle Bay Manager Interview Questions..... 75

Appendix D: Local Residents and Business Operators Interview Questions 77

Appendix E: Tourist Survey 78

Appendix F: Semi-structured Interview Consent Form 80

Appendix G: Survey Consent Form..... 81

Appendix H: Ethics Review Form 82

List of Figures

Figure 2.4: Recommended Strategies for Ecotourism Development in China’s Nature Reserves.
 (Adopted from Han & Zhuge, 2001) 14

Figure 3.1: Concept Map of Research Purpose and Objectives. S. X. Liu, 2013. 17

Figure 3.2.1: Map of Huidong (Google Maps, 2013). 18

Figure 3.2.2: Map of Sea Turtle Bay. 19

Figure 3.2.3: Sea Turtle Bay, July 28, 2013. S. X. Liu, 2013. 20

Figure 3.2.4: Sea Turtle Museum, July 27, 2013. S. X. Liu, 2013. 20

List of Tables

| | |
|---|----|
| Table1: Interviewees' Interpretations of Ecotourism..... | 26 |
| Table 2: Business Operators and Local Residents' General Feelings about Sea Turtle Bay | 28 |
| Table 3: Business Operators and Local Residents Described Negative Impacts at Sea Turtle Bay Tourism | 31 |
| Table 4: Respondents' Categories of Major Threats at Sea Turtle Bay | 37 |
| Table 5. Socio-demographic Characteristics of Tourists at Sea Turtle Bay (n=350)..... | 41 |
| Table 6. Important Goals of Ecotourism for Tourists When Travelling by Percentage (1= not at all, 5= very much) | 44 |
| Table 7: Tourist Interests in Potential Ecotourism Activities | 45 |

CHAPTER 1: Introduction

Tourism is the world's largest employer and one of the world's fastest growing industries (Hengky, 2011). Over the last few decades, tourism has had numerous positive economic impacts, and many countries are seeking to actively direct its future expansion (Boo, 1990). Tourism can bring many benefits such as foreign exchange, income and employment and can promote local environmental awareness and support for preserving natural resources (Diedrich, 2007). However, tourism can also bring many costs to the environment and socio-cultural aspects especially in coastal areas (Wong, 1998).

Many coastal municipalities cannot provide sufficient services to the ecotourist population during the summer months (Burak *et al.*, 2004). Many coastal resort developers are focusing on profits and ignoring the natural environment; for example, many hotel developments produce negative impacts on the coastal environment such as producing sewage and developing big scale infrastructure (Wong, 1998). Uncontrolled development plans in coastal areas may produce possible hazards to biodiversity conservation (Han, 2009). For example, construction on the beaches has harmful effects on fauna, flora, and endemic species (Burak *et al.*, 2004). Coastal tourism development as well as tourists have caused or aggravated coastal erosion (Wong, 1998). The effects of unplanned and uncontrolled coastal development are increasing ecological footprints on coastal areas (Burak *et al.*, 2004; Wong, 1998).

Therefore, some researchers have noted that it is vital to minimize the environmental impact on coastal areas by controlling the tourist capacity, considering the importance of conservation, limiting resort development, and developing management plans in order to

achieve long-term tourism (Wong, 1998). In coastal areas, the maximum carrying capacity should be controlled for prevention pollution (Burak *et al.*, 2004).

During the last couple of decades, ecotourism has gained much global awareness as a response to the perceived impacts of mass coastal tourism, as well as shifting market demand (Honey, 2008; Orams, 1995). Although ecotourism has gained awareness, there have been considerable arguments over what the term means (Buckley, 2009; Donohoe & Roger, 2006; Orams, 1995). There are six key components of ecotourism: 1) nature-based, 2) conservation, 3) education, 4) sustainability, 5) distribution of benefits, and 6) responsibility (Donohoe & Needham, 2006). Over three-hundred journal articles, and about the same number of books and book chapters, pertaining to ecotourism have been published during the last decade (Weaver & Lawton, 2007). In addition, some non-ecotourism firms package themselves as eco-operators, which means they market themselves as being environmentally-friendly without actually being environmentally conscious (Buckley, 2009; Fennell, 2001b.). For example, many firms want to bring the term 'eco' into their product to help sell their goods, even though they have no connection to nature (Buckley, 2009). Some have argued that ecotourism can offer high quality tourism experiences (Stone, 2002), and it can provide financial justification for the protection of natural resources (Boo, 1990). Successful ecotourism is intended to develop a good relationship between conservation and tourism (Diedrich, 2007). Moreover, ecotourism, similar to various kinds of mass tourism, can induce a range of both positive and negative environmental, socio-cultural, and economic impacts at a destination (Stone, 2002). However, ecotourism has been considered to lessen negative impacts, and enlarge economic benefits for local residents and their natural environment (Nyaupane & Thapa, 2004; Wall, 1997).

In order to develop comprehensive ecotourism plans and strategies, it is vital to understand eco-tourists' needs and attitudes (Tao *et al.*, 2004). For example, measuring tourists' preferences can help guide pricing decisions (Aylward *et al.*, 1996), and it can be a strategy for generating revenue and reducing overcrowding in nature reserves (Chase *et al.*, 1998). Research has shown that eco-tourists are most interested in the wilderness, water areas, mountains, parks, and rural areas, and they are minimally interested in amusement parks, nightlife, big cities, watching sports, shopping, and resort areas (Wight, 2001; Eagles, 1992). Eco-tourists do not require deluxe accommodations or food, and they value local conditions, culture, and food (Eagles, 1992). Eco-tourists constitute 20% of all international tourists (Wright, 1997), are more likely to choose environmentally friendly travel companies, and are willing to pay more for environmentally sensitive services (Moscardo, 2001; Wight, 2001; Wight, 1997). However, most eco-tourists spend a large amount of money on travel to ecotourism areas such as airline tickets and travel arrangements, and spend less money at the ecotourism areas (Wall, 1997). A major proportion of tourists spend little money on ecotourism areas, but they spend more on traveling to the destinations such as airplane ticket (Nyaupane & Thapa, 2004). However, research on tourists' demands or motivations concerning ecotourism is generally limited (Perkins & Grace, 2009; Tao *et al.*, 2004).

Tourism in China is growing rapidly. In 2011, the number of domestic tourists was 2.64 billion, 13.2% more than in 2010, and the tourism revenue was \$313 billion US dollars, which was 23.6% more than in 2010. The inbound number of tourists in 2011 was 135 million, 1.2% more than in 2010, and the tourism revenue was 48 billion US dollars in 2011; it was 5.8% more than in 2010 (National Tourism Administration of China, 2011). China has 2,539 nature reserves, covering 15.1% of its total land area (The Nature Conservancy, 2009). There are 36 wetland nature reserves in China, and Sea Turtle Bay is one of them. Tourism in China's nature reserves is still at the beginning stages, but many problems exist in some

reserves, including landscape degradation, water pollution, waste, litter, species loss, etc (Li & Han, 2001). On the other hand, more than 80% of China's nature reserves had developed some form of a tourism industry by the 1990s, and 15.9% received more than 100,000 tourists annually (Li & Han, 2001). In 1995, about 2.5 million visitors visited China's nature reserves, and the revenue was about USD 63 million for that year (Li & Han, 2001).

Despite the rise of tourism in China, there is a relative lack of research focusing on developing ecotourism in coastal nature reserves.

The purpose of this research was to evaluate the potential barriers and opportunities (including the motivations of tourists) for ecotourism at National Huidong Sea Turtle Reserve (Sea Turtle Bay), China.

In this context, this study had the following specific objectives.

1. What is the current state of the tourism industry at Sea Turtle Bay?
2. What barriers and opportunities exist to developing ecotourism at Sea Turtle Bay?
3. What are tourists' demands for ecotourism development at Sea Turtle Bay?
4. What strategies could be recommended for ecotourism development at Sea Turtle Bay?

In exploring these research questions, this study provides planning directions that could enhance the ability of ecotourism at one coastal area to create benefits for both the local community and the resorts. This study also provides specific recommendations for nature reserves.

This thesis is divided into six chapters. Chapter 1 provides an overall introduction, while Chapter 2 provides a more detailed literature review including an overview of ecotourism's varying definitions, the potential opportunities and barriers to ecotourism,

tourists' demand on ecotourism development, and a review of examples of strategies used to develop ecotourism globally and in China. Chapter 3 discusses the methodology beginning with the purpose statement and research questions, and then it describes the study site location rationale. Chapter 4 presents the results of the study. Chapter 5 discusses the findings. Chapter 6 describes a summary of the research findings and provides several recommended strategies for ecotourism development at Sea Turtle Bay.

CHAPTER 2: Literature Review

The literature review section describes ecotourism's definition, opportunities and barriers, and provides a review of examples of strategies used to develop ecotourism.

2.1 Ecotourism Definition

The term ecotourism is used variably. However, in comparing the definitions of ecotourism, many definitions include variations on four components: nature-based, contribution to conservation, environmental education, and benefits to local residents. In the 1990s for example, many experts were using Ceballos-Lascurain's 1987 definition of ecotourism

'Tourism that consists in travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas. In these terms, nature-oriented tourism implies a scientific, aesthetic or philosophical approach to travel although the ecological tourist need not be a professional scientist, artist or philosopher. The main point is that the person who practices ecotourism has the opportunity of immersing himself/ herself in nature in a manner generally not available in the urban environment.' (Ceballos-Lascurain, as cited in Boo, 1990, p2)

Ceballos-Lascurain's definition suggested the tourists should minimize their environmental impacts on natural areas, and that tourists should study, admire, and enjoy the natural areas' wild plants, animals, and local cultures (Ziffer, 1989).

'Ecotourism is a form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The ecotourist visits relatively undeveloped areas in the spirit of appreciation, participation, and sensitivity. The ecotourist practices a non-consumptive use of wildlife and natural resources and contributes to the visited area through labour or financial means aimed at directly benefiting the conservation

of the site and the economic well-being of the local residents...'(Ziffer, 1989, p.6)

The Australia Department of Tourism stated that:

'Nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable. This definition recognizes that the natural environment includes cultural components, and that ecologically sustainable involves and appropriate return to local communality and long-term conservation of the resource.' (Australia Department of Tourism, as cited in Diamantis, D., 1999, p98.)

Goodwin (1996) says the difference between the concepts of nature tourism and ecotourism is that ecotourism contains a protection flavour. Goodwin's definition suggests that tourists should minimize their ecological impact as well as provide a contribution to the protection of natural areas and/or local people.

'Low impact nature tourism which contributes to the maintenance of species and habitats either directly through a contribution to conservation and/ or indirectly by providing revenue to the local community sufficient for local people, and therefore protect, their wildlife heritage area as a source of income.' (Goodwin, 1996, p.288)

This study adopted Honey's (2008) approach to ecotourism, which builds on the four components of being nature-based, contributing to conservation, providing environmental education, and benefiting local residents by defining seven characteristics necessary for ecotourism. The seven characteristics essential for ecotourism include: 1) travel to nature destinations; 2) minimize impact; 3) build environmental awareness; 4) provide direct financial benefits for conservation; 5) provide financial benefits and empowerment for local people; 6) respect local culture; 7) support human rights and democratic movements.

2.2 Ecotourism Potential Opportunities

Ecotourism has the potential to promote both local economic development and environmental conservation in various ways (Zhuang *et al.*, 2011; Buckley, 2009; Weaver, 1998). First, ecotourism is a vital way in which funding can be generated to protect the

world's heritage destinations, through income from such things as park admission fees, payments for guiding, accommodation, and interpretation centres. Second, ecotourism can help local residents earn money from travel activities. Third, ecotourism can provide information that raises people's awareness of the importance of conservation and ecological literacy (Goodwin, 1996). Lindberg (2001) said that ecotourism has direct and implicit impacts on the economy, and this mainly shows in three areas: jobs, income, and profit. These benefits are stimulated through infrastructure and service improvements and secondary spending of tourism-related income among local residents and business (Whelan 1996, cited in Lindberg, 2001). Ecotourism has made a contribution to protected areas in economical firms, such as hiring high-quality employees (Lindberg, 2001).

Ecotourism has the potential to conserve biological diversity, cultural-heritage assets, long-term production capacity of ecosystems, and provide wise management of natural resources (Hall, 2006). Ecotourism provides many potential opportunities: ecotourism promotes community participation; the eco-tourist has a small ecological footprint on the natural environment; the eco-tourist provides benefits to the economy and to local residents, and to preservation; ecotourism activities help generate income to contribute to natural areas and wild life habitats (Cidalia Tojeiro, 2010). Ecotourism can provide tourists a high-quality nature experience, generate funds and support for conservation efforts, and it can minimize environmental impact and provide economic and socio-cultural benefits to local residents (Stone, 2002). Also, ecotourism development is creating a valuable information-exchange network such as information being available on the Internet, which can sustain development, (Cidalia Tojeiro, 2010).

Ecotourism provides many potential opportunities for China's nature reserves. Ecotourism has an extensive future in China because of its many unique natural landscapes

and cultural heritage amenities (Wang *et al.*, 2009). Ecotourism is suitable for China's rapid tourism development, for it can meet the rapidly increasing demand of leisure and tourism (Wang *et al.*, 2009). Ecotourism is becoming a new economic opportunity that can generate funds for the maintenance and preservation of China's nature reserves (Han & Zhuge, 2001). Ecotourism can efficiently help strengthen the concept of ecological culture through enhancing people's awareness of the importance of environment protection (Wang *et al.*, 2009). Ecotourism in China's nature reserves can provide opportunities for the local economy and environment protection (Han & Zhuge, 2001).

2.3 Potential Barriers to Ecotourism

Silva and McDill (2004) identifies six types of barriers that limit ecotourism development that have been highlighted in global literature. First are *enterprise barriers* such as insufficiency of management, marketing and lack of knowledge or experience of operators (Weaver *et al.*, 1996). Second are *government agency barriers*, such as a lack of planning and programs supporting ecotourism. In addition, governments can produce barriers through formulating unsuitable regulations, taxes, and there may be a shortage of interagency collaboration and coordination (Weaver *et al.*, 1996). Third are *host community barriers*. For example, many host communities are not ready for ecotourism because of unappealing landscapes and limited infrastructure (Silva & McDill, 2004). Also, local communities are the key stakeholders of ecotourism development, and their perceptions and opinions can significantly influence the development of ecotourism (Liu & Bao, 2004). Fourth are *network barriers*, which involve the relationships among enterprises, agencies, and host communities (Silva & McDill, 2004). These barriers affect stakeholders' communication and partnerships with respect to ecotourism development; for example, they may receive different messages from local agencies (Silva and McDill, 2004). Fifth, *financial barriers and business*

management and marketing skills' shortage are also barriers to ecotourism development (Silva and McDill, 2004; Han, 2001). For example, ecotourism businesses often do not succeed in marketing their products and services (Cidalia Tojeiro, 2010). Sixth, *too many tourists* visiting natural areas can be a barrier to ecotourism development because tourists' improper behaviours will damage natural areas (Silva and McDill, 2004). Also, the environment can be a barrier to limiting ecotourism development because of inaccessible resources or seasonality (Weaver *et al.*, 1996).

Seven additional potential barriers emerged from a review of the literature on ecotourism development in China. These barriers included: 1) lack of funding, 2) a shortage of integrated and authorized planning, 3) weak scientific research for ecotourism development, 4) a shortage of skilled managers and staff for ecotourism development, 5) nature reserves and eco-environment barriers, 6) community benefit barriers, and 7) nature reserve and visitor barriers.

The first identified issue is a lack of funding. For example, in the 1990s, more than 80% of China's nature reserves were involved in the operation of tour businesses (Han & Zhuge, 2001). However these were seldom 'ecotourism', and all of them lacked funding (Li, 2003; Han & Zhuge, 2001; Li & Han, 2001). This caused nature reserve operators to not focus on environmental protection but rather to focus on how to make more profit from tour businesses, sometimes resulting in serious pollution and damage (Chen & Wang, 2001; Han & Zhuge, 2001).

The second identified issue is a shortage of integrated and authorized planning. There is lack of integrated and official planning for ecotourism development (Wang *et al.*, 2009; Han & Zhuge, 2001) and the officially authorized system is not well organized, and the management is not standardized (Chen & Wang, 2001). Many nature reserve operators utilize

the “ecotourism” label for marketing, but they do not pay attention to environmental protection and produce huge negative impacts on the resources (Wang *et al.*, 2009; Liu & Bao, 2004). Discrepancies between the internal management approach and ecotourism development is preventing ecotourism development (Han, 2001). Many government agencies involved in ecotourism development lack good coordination and controlling capacity (Wang *et al.*, 2009).

The third potential barrier is weak scientific research for ecotourism development (Chen & Wang, 2001; Han & Zhuge, 2001; Li & Han, 2001). For example, there is no generally accepted definition of ecotourism in China (Liu & Bao, 2004). There is a lack of understanding of sustainable development ecotourism resulting in a situation where decision-makers and managers of ecotourism often do not pay attention to environment protection (Chen & Wang, 2001). There is no national strategy on nature reserve ecotourism, and it is hard to control tourism extent by actual reserve category system (Han & Zhuge, 2001; Li & Han, 2001). Ecotourism development has lagging policies and regulations (Han & Zhuge, 2001).

Fourth is a shortage of skilled managers and staff for ecotourism development. Wang *et al.*, 2009; Han and Zhuge, 2001 stated that there is a shortage of skilled workers in ecotourism development. Only 16% of China’s nature reserve managers in 1997 had a post secondary education (Li & Han, 2001).

The fifth are nature reserve and eco-environment barriers. For example, in 1997, only 16% of reserves in China had regular monitoring of the environment and 46% had no monitoring (Li & Han, 2001). There was a lack of tourism revenue to pay the costs for environmental protection (Han, 2001).

Sixth are community benefit barriers. Based on the Regulation of the People's Republic of China on Nature Reserves (RPRCNR), any tourism development in reserves has to be approved by reserve operators, so local communities have limited economic benefits from reserve tour businesses since their involvement in ecotourism is restricted (Li & Han, 2001).

Seventh are nature reserve and visitor barriers. For example, reserves seldom monitor visitors in terms of the number of visitor, visitor nights, visitor hours, and visitor days (Li & Han, 2001). Visitors are excessive and overstep the ecological lasting capability of the natural resources (Chen & Wang, 2001; Han & Zhuge, 2001). On the whole, ecotourism development has many potential barriers in China. It is vital to know the barriers to provide recommended strategies for ecotourism development.

In comparing and contrasting the above global and China's ecotourism potential barriers, they have similarities. The similarities are: First is lack of funding. Second is government produces unsuitable regulations and policies. Third is that too many tourists visit nature reserves and produce too many negative effects. Fourth is lack of planning and programs particularly supporting ecotourism.

2.4 Review of Examples of Strategies Used to Develop Ecotourism

In order to become a competitive coastal tourism business, some researchers have argued that there is a need to implement the concept of ecotourism (Hengky, 2011). Many scholars provide management strategies to develop ecotourism. For example, Diedrich (2007) says that participation by local residents is essential for developing support for preservation related to ecotourism (Diedrich, 2007; see also Liu & Bao, 2004). To achieve ecotourism development on sites, Hall (2006) recommends that each site have a conservation plan, a

management plan, or nature conservation agreements. Diedrich (2007) suggests that it is vital for governments to encourage and facilitate local business development, and it is necessary to involve local communities in all stages of ecotourism planning and development (Deidrich, 2007; see also Liu and Bao, 2004). According to Hengky (2011), there are four strategies for developing ecotourism in coastal resorts: First, coastal tourism should contribute to environmental protection. Second, it should have a sustainable aspect. Third, it should control the maximum carrying capacity. Fourth, it should pay attention to reducing negative impacts while expanding coastal tourism. Likewise, Seyed *et al.*, (2010) provide some recommendations for ecotourism improvement: first, paying attention to a site's internal and external marketing can improve ecotourism development; second, measuring the potential capacities and capabilities of the environment before implementing the tourism plan; third, doing more research in ecotourism development to complete managing information systems.

In China, most nature reserve managers do not promote conservation, and they think ecotourism means nature sightseeing (Chen & Wang, 2007; Liu & Bao, 2004; Han & Zhuge, 2001). Han and Zhuge (2001) provide five recommended strategies for ecotourism development in China's nature reserves. First, it is important to learn from successful experiences and lessons from other countries, and avoid repeating their mistakes, and it is beneficial to invite international experts to help the development of ecotourism. Second, it is vital to conduct research that focuses on formulating policy, legislation, principles, and management strategies based on ecotourism concepts. Third, there is a need to provide training and environmental education for all stakeholders, including local people and tourists. Eco-friendly visiting behaviour in protected areas should be greatly promoted, for improper visitor behaviours have been considered as one of main threats to natural areas (Cheung & Fok, 2013). Fourth, it is necessary to build a group of ecotourism demonstration sites because it helps to fill the current gaps in ecotourism in China. Fifth, nature reserves should increase

investment in environmental protection. On the whole, Han & Zhuge (2001) recommend four main strategies for ecotourism development and investment, which are learning, research, development, and investment (Figure 2.4).

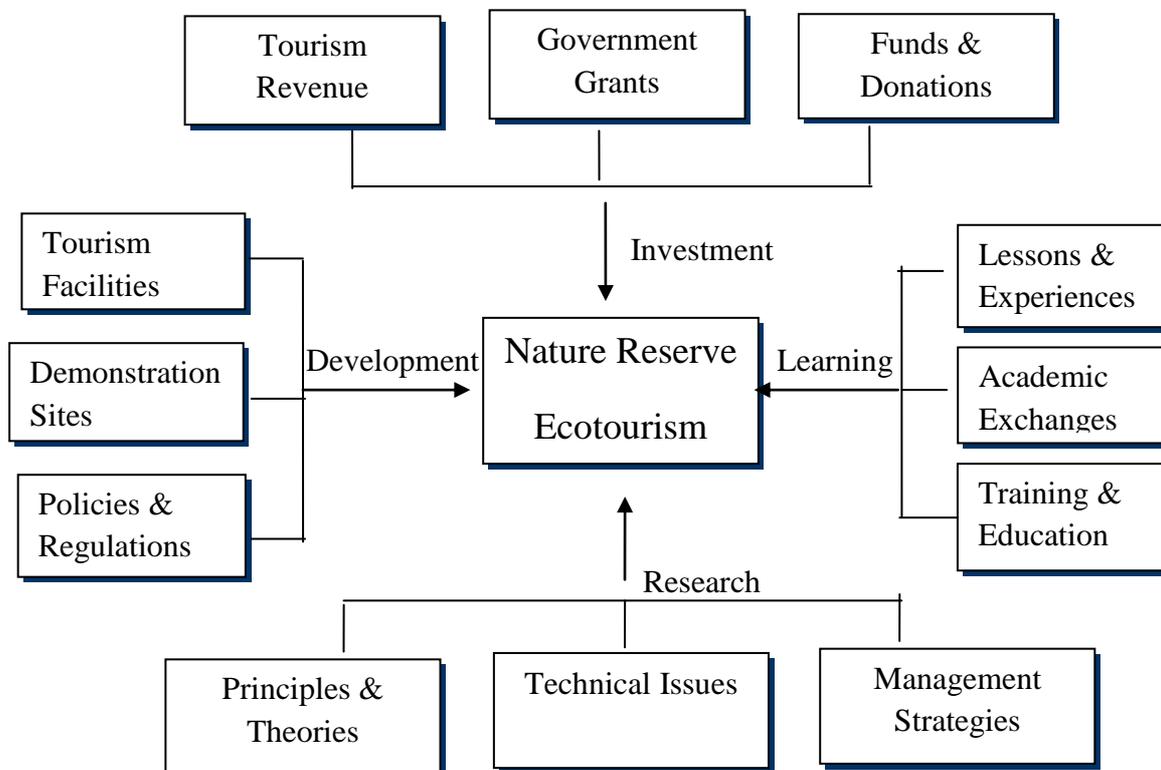


Figure 2.4: Recommended Strategies for Ecotourism Development in China's Nature Reserves. (Adopted from Han & Zhuge, 2001)

In China, it is important to enhance institutional capabilities to support ecotourism. For example, if non-governmental organisations (NGOs) could take a more active part in the ecotourism development process, ecotourism development might be expanded (Zhuang *et al.*, 2011). NGOs could do many things to support ecotourism in China, such as investing in education programmes with local residents and community-based administrations, facilitating cooperation between businesses and communities, communicating directly with businesses, and encouraging collaboration (Zhuang *et al.*, 2011).

Also, government departments, especially the Agriculture, Fisheries and Conservation Department (AFCD), should encourage visitors to accept eco-friendly attitudes when they

visit protected areas (Cheung & Fok, 2013). Cheung & Fok (2013) give four recommendations for the Chinese government to development ecotourism. First is that government departments should provide a set of guidelines and advice for visitors. Secondly, government departments should increase visitor awareness of eco-friendly behaviours by establishing information boards at sites. Third, government departments should increase enforcement and increase penalties for improper visitor behavior. Fourth, government departments should provide environmental education to visitors through a variety of approaches such as promotion in schools and communities. The collaboration of all stakeholders such as NGOs, local people, government departments, and private businesses working together and learning through experience collaboration is vital for the success of developing ecotourism in western China, (Zhuang *et al.*, 2011).

Furthermore, Chen and Wang (2009) provide seven additional main strategies for the sustainable development of China's ecotourism. The first involves refining the relative legal system of ecotourism. This system should combine the domestic reality and foreign experiences to set up relative laws such as "The Law of Ecotourism", and set up the system based on the law (Chen & Wang, 2009). The second is creating a management system of ecotourism that regulates and establishes a comprehensive management organization of ecotourism (Chen & Wang, 2009). The third is setting up a scientific building layout of ecotourism. For example, setting up a general layout of tour areas should have environmental quality, and be developed as ecotourism areas (Chen & Wang, 2009). Fourth is reinforcing ecological awareness and environmental protection education. Fifth is guaranteeing reasonable economic benefits to stakeholders. Sixth is setting up a sustainable culture of ecotourism. For example, creating a new value tour outlook should relate to some local cultural (Chen & Wang, 2009). Seventh is improving the scientific content of sustainable development of ecotourism. For example, taking the concepts of scientific innovation and

performing the strategies of scientific innovation for ecotourism development (Chen & Wang, 2009). Also, Wang et al (2009) provide many suggestions regarding China's ecotourism development: First is enhancing education and promotion of suitable ecotourism. Second is supplying significant support to ecotourism-specialized agencies. Third is considering ecotourism development as a scientific and systematic process. Fourth is placing government in charge of accreditation. Fifth is putting emphasis on community-based ecotourism.

CHAPTER 3: Methodology

3.1 Purpose and Objectives

The purpose of this research was to evaluate the potential barriers and opportunities for ecotourism at National Huidong Sea Turtle Nature Reserve (Sea Turtle Bay), China. The following research questions were addressed:

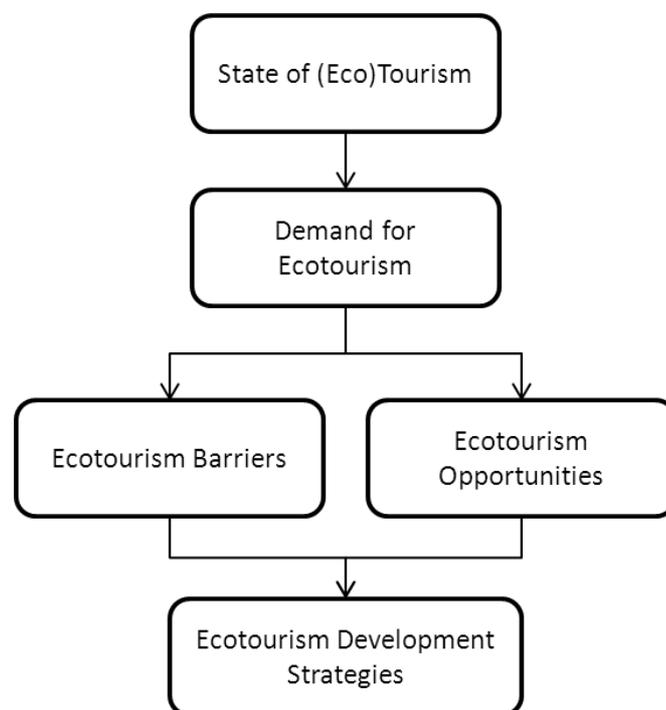


Figure 3.1: Concept Map of Research Purpose and Objectives. S. X. Liu, 2013.

3.2 Study Location

This case study took place in Huidong County, Guangdong Province, China (Figure 3.2.1), which has 218.3 kilometers of coastline, 55 islands, and 18 bays (www.huidong.gov.cn). It is famous for its culture and tourism resources. The population of Huidong is 9.2 million, of which about 85% speak the Hakka dialect. Huidong County has

designated 806 square kilometers (23.7%) of its geographic area as tourism park resources. There are many famous tourist attractions in Huidong such as Sea Turtle Bay, Harbor Bimonthly Bay, Gutian Nature Reserve, Pinghai Ancient Town, Baipenzhu Springs, and Lianghua Forest Park.



Figure 3.2.1: Map of Huidong (Google Maps, 2013).

The most famous tourism attraction in Huidong Country is Sea Turtle Bay (Figure 3.2.2). The total area of the reserve is 18 km², and it includes a beach and adjacent waters (Figure 3.2.3). The beach is 1 km long and 70 m wide, and is surrounded on the shoreside by mountains. It has an excellent sea environment and plenty of sunshine. It is the only sea turtle nature reserve in China, is only 100 km from Hong Kong, and is the only nesting area for migratory green turtles (*Chelonia Mydas*) in China. There were more than 40,000 sea turtles in Sea Turtle Bay in the 1980s, but there are only about 4,000 sea turtles now (National Gangkou Sea Turtle Reserve, n.d.). Sea Turtle Bay established a small sea turtle museum in

1985 (Figure 3.2.4). Since May 2013, the managers of Sea Turtle Bay have not permitted visitors to walk on the beach to protect sea turtles.

Sea Turtle Bay was established as a fishery-protected area by the central government of The People's Republic of China in 1992. The reserve is managed by the Huidong Harbour National Nature Reserve Management Station, a government agency. According to the Regulation of China on Nature Reserves, tourism development has to be allowed in all reserves (Li & Han, 2001), and Sea Turtle Bay has decided that only one tourism company can operate in the reserve, and this is the Turtle Bay Resort Company. According to its website (<http://haiguiwan.cthy.com>), the main stakeholder of this Turtle Bay Resort Company is the same organization as the Sea Turtle Bay Reserve. The floor area of this company is 2 km², and the covered area is more than 6000 m². This company has a three star hotel, which includes 50 suites, and a multifunction conference room, which can hold more than 100 people at a time. This company offers many activities including picnics, barbecues, swimming with turtles, beach volleyball, treasure hunts in the forest, fishing, etc.



Figure 3.2.2: Map of Sea Turtle Bay.



Figure 3.2.3: Sea Turtle Bay, July 28, 2013. S. X. Liu, 2013.



Figure 3.2.4: Sea Turtle Museum, July 27, 2013. S. X. Liu, 2013.

3.3 Research Design

For this research, a case study approach was used to evaluate the potential for ecotourism in Huidong Harbor Sea Turtle National Nature Reserve. The case study research involves studying one or more examples of a case or phenomenon (Veal, 2012). Semi-structured interviews and surveys were used for data collection. Semi-structured interviews focused on all of the objectives in the study, while the survey method was used to measure potential demands among tourists for tourism at Sea Turtle Bay.

3.3.1 Semi-structured Interviews

Nine-structured interviews were conducted with the managers (3) of Huidong Harbour National Nature Reserve Management Station, local residents (4), local business operators (2). These interviewees were selected because they were considered key stakeholders at Sea Turtle Bay. The lengths of semi-structured interviews were between 15 to 60 minutes and included a series of open-ended questions (see Appendices A & B). The researcher tried to interview a manager of Sea Turtle Resource Company and a few local residents at first, but they refused. The researcher then asked her relatives to introduce her to Huidong government officials (not directly associated with the Sea Turtle Bay) to help to set up appointments with some key stakeholders. The key informants included Sea Turtle Bay operators, Turtle Bay Resort Company managers, local residents, and they were approached through appointments by the snowball technique. The researcher interviewed until the point of saturation. For example, the researcher conducted three interviews with managers of Sea Turtle Bay first. Then, based on what the researcher had learned from those interviews' information, the researcher then interviewed a manager of Turtle Bay Resort Company (considered A local business operator) and one local business operator. The interviews were conducted between July 26 and July 31, 2013. This was during the high peak season. Most

tourists visit Sea Turtle Bay during this period and some interviewees said that too many tourists visit Sea Turtle Bay. It is possible that, if interviews were conducted during off peak season, the responses may have been different. For example, interviewees may have focused on more management issues and governance model of protected areas.

For the case study at Sea Turtle Bay, the semi-structured interview had some strengths and weaknesses. It was easy to develop a good relationship with the respondents, and they were willing to share information. It was also easy to observe interviewees' feelings and emotions to the research questions. Most of the respondents gave their contact information, and they agreed to the research and would be willing to answer further questions if the researcher needed.

One of the weaknesses of this method was that the case studies depended on the researcher's knowledge of analysis. If the researcher lacked analysis knowledge, the research findings would be affected. This method was also time consuming. One problem that arose early in the interview process was that a few respondents refused to be interviewed. They might have been afraid of some ethical issues. For example, they might be afraid to say something that the government does not like.

3.3.2 Survey

The survey questionnaire focused on tourist demands of ecotourism development (see Appendix C). The surveys were conducted after the semi-structured interviews were completed. Together with a preliminary analysis of the interviews, the researcher then again reviewed the literature to develop survey questions. Questions were developed in English and translated into Mandarin. They were double-checked by the researcher's bilingual brother. A convenience sampling approach was chosen for data collection at Sea Turtle Bay. From conducting interviews, the researcher realized that it would be very difficult to conduct

surveys by herself, so she asked a manager of Sea Turtle Bay and a manager of Turtle Bay Resort Company to assist in data collection.

The survey was conducted with the tourists who visited Sea Turtle Bay. Approximately 100,000 people visit Sea Turtle Bay annually. This was identified from interviewing the key stakeholders of Sea Turtle Bay. The research assistants conducted 30 pilot surveys between August 16 and August 26, 2013. The results of the pilot surveys confirmed the internal consistency of the measured items and that sentences were well understood. This was also confirmed by the manager of Turtle Bay Resort Company who assisted in pilot survey collection. The only problem with the pilot surveys was that no one would answer the open-ended question, but my supervisor suggested to leave it, so there was no need to change the survey. All surveys were therefore included in the final sample. The questionnaire surveys were handed out near the entrance and by hotel reception. Participants included tourists who stayed in hotels, tourists who were near to the beach, and tourists in Sea Turtle Museum and Education Center. The research assistants conducted 290 surveys between August 29 and September 6, 2013. Another 30 surveys were conducted between September 16 and September 24, 2013 for a total 350 surveys. The timing of the surveys collection was during the high peak season. With both the manager of Sea Turtle Bay and the manager of Turtle Bay Resort Company's help, the response rate of questionnaire was estimated at about 85%. This high response rate helped gain accurate information for this study.

3.4 Possible Ethics Issues

The possible ethical issues with my methods could put interviewees at risk. For example, there was some concern that interviewees might provide information that the Chinese government would dislike. To avoid this ethical issue, the researcher did not use the

interviewees' name in her thesis. Also, the researcher asked for the interviewees' permission to record while she was doing the semi-structured interviews. The researcher also told the interviewees that their participation for the research was totally voluntary, and they could stop any time without any reason. It is necessary for researchers to know the possible ethical issues. In general, most interviewees were appeared comfortable while answering questions. However, during the interview process, both local business operators stopped a few times and asked whether their names would show on any report, and they asked the researcher to make sure to keep their information confidential. Although the researcher told them that all information was confidential, and only the researcher and her supervisors can access the information, both local business operators might be not telling the truth. For example, they might have been hesitated to be critical because they feared that their criticisms would become public and that might hurt them.

3.5 Data analysis

For the semi-structured portion, analysis started with preparation of raw data files. Both notes and audio recordings were transcribed. The second step was close reading of text to identify the themes. The third step was to create categories, derived from each question. This step started with preset categories. At first, there were 19 categories, and many of them had many subcategories. Then, the researcher narrowed them down to the 5 most important categories. The next step identified patterns and connections between categories. Analysis of the survey was conducted in Excel and SPSS.

CHAPTER 4: Results

4.0 Introduction

This chapter presents both the qualitative and quantitative study results and is generally organized by research objectives divided into several sections. Section 4.1, 4.2, and 4.4 show the results of the qualitative semi-structured interviews among the managers of Sea Turtle Bay, local residents, and local business operators. Section 4.3 presents the quantitative results from the survey administered to tourists (n=350). Section 4.1 presents local interpretations and perceived definitions of ecotourism at Sea Turtle Bay. Section 4.2 addresses objective 1: To determine the current state of the tourism industry at Sea Turtle Bay is. It includes three themes: site description, benefits, and impacts. Section 4.3 presents objective 2: To determine barriers and opportunities that exist to developing ecotourism at Sea Turtle Bay. It includes two themes: barriers and opportunities. Section 4.4 presents objective 3: To determine tourists' demands of ecotourism development at Sea Turtle Bay. It includes: tourist respondent profile, tourist awareness of ecotourism, the goals of ecotourism for tourists when traveling, and which potential ecotourism products tourists would be interested in. Section 4.5 presents objective 4: To determine what strategies could be recommended for ecotourism development at Sea Turtle Bay. It describes the recommended strategies for all respondents.

4.1 Interpretations of Ecotourism at Sea Turtle Bay

Because eco-tourism is variably defined, it was important to first determine interviewees' interpretations of ecotourism for Sea Turtle Bay. Respondents were therefore asked to define ecotourism. Different respondents mentioned different aspects that they felt should be part of that definition. These various aspects were identified through thematic identification of the interview results and are summarized in Table 1.

The aspects or components of the definition identified by respondents included: protect the environment, sustainable, develop tourism, nature based tourism, respect local culture. ‘Protect the environment’ meant the tourism industries should protect the environment while they are developing tourism at resorts. ‘Sustainable’ meant tourism industry should be run for a long term. ‘Develop tourism’ meant current tourism industry should be expanded. ‘Nature based tourism’ meant nature sightseeing and visit nature resort. ‘Respect local culture’ meant develop tourism with local cultural aspects.

Based on the interviews there appeared to be consistent agreement that ecotourism involves protecting the environment (6 respondents) and nature based tourism (4 respondents). Only one respondent, a local resident 4, mentioned that ecotourism should also contain the components of sustainability, tourism development, and respecting local culture. This local resident noted: “Ecotourism should include many aspects such as protecting the environment and respecting local culture, which is to develop leisure and fishing tourism.”

Table1: Interviewees’ Interpretations of Ecotourism

| Responses n=9 | Protect environment | Sustainable | Develop tourism | Nature-based tourism | Respect local culture |
|------------------------------------|------------------------|-------------|--------------------|-------------------------|--------------------------|
| Managers (3) | 3 | 1 | 1 | 2 | 0 |
| Local residents (4) | 2 | 0 | 0 | 2 | 1 |
| Local business operators (2) | 1 | 0 | 0 | 0 | 0 |
| Count | 6 | 1 | 1 | 4 | 1 |

4.2 The Current State of the Tourism Industry at Sea Turtle Bay

4.2.1 Site Description

About one hundred thousand tourists visit Sea Turtle Bay annually. Sea Turtle Bay charges entrance fees of 5 USD/ ticket for adults, 2.5 USD/ ticket for groups, and 0.75 USD/ ticket for students. If people stay at Sea Turtle Resort Company’s hotel, they do not need to

pay the entrance fee. Daaos local people do not need to pay the entrance fee, but Xincun local people need to pay 2.5 USD/ ticket, which is the same as the group rate. (Sea Turtle Bay uses a part of Daaos local people's land, and the government has not given compensation for the land to Daaos local people yet).

Sea Turtle Bay has many attractions and a well-built tourism infrastructure, including the Beach of Sea Turtle Bay, Propaganda and Education Center, Sea Turtle Museum, visitor center, and a conference center. Sea Turtle Resort Company is one of the ecotourism amenities and provides summer and winter camp opportunities for students to gain knowledge of sea turtles. One of the managers interviewed stated:

“Sea Turtle Resort Company provides summer and winter camp for students to explore sea turtles. Sea Turtle Bay provides free sea turtles activities. They will invite domestic and international experts and domestic leadership to participate free sea turtles activities. Also, these activities are open to public.”

(Manager 1)

Business operators and local residents are key stakeholders of Sea Turtle Bay, so they were asked to describe their feelings about Sea Turtle Bay's tourism development. Different respondents mentioned different feelings, which were thematically organized into several categories. These categories include: too many restrictions, too many visitors, beautiful environment, decrease in number of sea turtles, seawater pollution, tourism affecting environmental protection. These are summarized in Table 2. ‘Too many restrictions’ refers to business operators wanting to expand their tourism business, but Sea Turtle Bay is a protected area, and it has rules, including restrictions on building additional hotels within Sea Turtle Bay. ‘Too many visitors’ means too many visitors visiting Sea Turtle Bay per day. ‘Beautiful environment’ means Sea Turtle Bay has a beautiful and natural environment. ‘Decrease in number of sea turtles’ means the number of sea turtles is decreasing. ‘Seawater pollution’ means seawater around Sea Turtle Bay has been polluted by many plastic bags.

‘Tourism affects environmental protection’ referrers to tourism development having caused Sea Turtle Bay’s environmental damage, making it difficult to protect the environment.

Table 2: Business Operators and Local Residents’ General Feelings about Sea Turtle Bay

| Responses n=6 | Too many restrictions | Too many visitors | Beautiful environment | Decrease in sea turtles | Seawater pollution | Tourism affects environmental protection |
|---------------------------|--------------------------|----------------------|--------------------------|----------------------------|-----------------------|--|
| Business operators (2) | 1 | 0 | 1 | 0 | 0 | 0 |
| Local Residents (4) | 0 | 3 | 1 | 2 | 1 | 1 |
| Count | 1 | 3 | 2 | 2 | 1 | 1 |

Out of six interviews with business operators and local residents, three respondents said that too many visitors visit Sea Turtle Bay, two of them said that sea turtle populations have decreased, and two of them said that Sea Turtle Bay has a beautiful environment. Only one respondent said that Sea Turtle Bay’s seawater has been polluted, one respondent claimed that tourism affects environmental protection, and one noted that Sea Turtle Bay has too many restrictions. One local resident interviewed described:

“Sea turtles are decreasing; there is a need to protect them. Before 2000, many sea turtles came to Sea Turtle Bay to lay eggs, but after 2000, it is hard to see them now. There are many reasons for that. First is tourism was developed after 2000, and too many visitors visit Sea Turtle Bay. Second, seawater has been polluted, and this affects sea turtles.” (Local resident 2)

Another business operator described: “Sea Turtle has a beautiful environment; especially, its beach and air are much better than other tourism attractions” (Business operator 2).

Comparing local residents to business operators, local residents were the only group that mentioned that Sea Turtle Bay had too many tourists visiting per day decreasing the population of sea turtle, increasing seawater pollution, and that tourism affects environmental protection.

4.2.2 Perceived Benefits of Tourism at Sea Turtle Bay

All managers said the tourism industry provides economic benefit to Sea Turtle Bay and/or local residents. One of the managers interviewed described the economic impact on Sea Turtle Bay:

“Sea Turtle Bay’s tourism development provides huge economic benefits for both Sea Turtle Bay and local people. For example, many local people own hotels and restaurants, and tourists will spend money on their accommodation and food when they visit Sea Turtle Bay.” (Manager 2)

Business operators and local residents were asked whether local residents benefit from Sea Turtle Bay tourism as this might inform future expansion of ecotourism development. Two business operators said that local residents benefit from Sea Turtle Bay. One of the business operators interviewed stated:

“Of course, local people get benefits from Sea Turtle Bay tourism. Many local people’s lives have been improved. Whenever tourists come, they can make money through a variety of ways, such as providing accommodations and food for them.” (Business operator 1)

Only one local resident said that local residents benefit from Sea Turtle Bay tourism. Two local residents said that local residents have no benefit from Sea Turtle Bay tourism. One of the local residents interviewed described:

“From my point of view, there is no benefit from Sea Turtle Bay tourism, and it only produces negative impacts for us. For example, Sea Turtle Bay tourism causes rising prices for local goods, and we have to pay much more money for our daily expenses.” (Local resident 3)

The last local resident provided a neutral answer:

“The local residents who run businesses benefit from Sea Turtle Bay tourism. Tourism development helps them to generate revenue through many ways. On the other hand, the local residents who are not engaged in business get no benefit from Sea Turtle Bay tourism.” (Local resident 4)

Comparing business operators and local residents, the business operators thought that tourism in Sea Turtle Bay provided benefits for local residents, but local resident respondents differed as to whether they received benefits from it. For example, local community members are not allowed to run businesses within Sea Turtle Bay. The business operator who runs Turtle Bay Resort Company is not a local resident, and this company is the only tourism business within Sea Turtle Bay. One business operator interviewed described:

“Local communities are not allowed to run businesses in Sea Turtle Bay. Turtle Resort Company is the only business running in Sea Turtle Bay. The main purpose for Turtle Resort Company is to be involved with reception, summer camps, winter camps.” (Business operator 2)

4.2.3 Impacts of Tourism at Sea Turtle Bay

To promote ecotourism development at Sea Turtle Bay, it is important to address the environmental, economic, and socio-cultural impacts from current tourism industries.

Managers were asked to describe the impacts of the current tourism industry at Sea Turtle Bay. Most managers said that the tourism industry causes environmental damage at Sea Turtle Bay. One of the managers interviewed described environmental impacts on Sea Turtle Bay:

“Tourism development has negatively affected the environment and polluted Sea Turtle Bay with household garbage, and plant damage; especially, the beach on the Sea Turtle Bay has seriously been damaged, so the managers of Sea Turtle Bay have closed the beach since May 2013.” (Manager 1)

Two managers said that the tourism industry has socio-cultural effects on Sea Turtle Bay, local residents, and tourists. One of the managers interviewed described socio-cultural impacts on Sea Turtle Bay:

“The main purpose of Sea Turtle Bay tourism development is to provide environmental protection awareness and public education for tourists and not only to think about the economic aspect. For

example, some tourists asked us ‘can I buy sea turtle?’ or ‘can I eat sea turtle? We told them that sea turtles are protected and the reasons why they are protected. Also Sea Turtle Bay has established environmental scholarships for local students who are engaged in environmental protection. The total amount of this scholarship for each year is between ten thousand and twenty thousand RMB.’

(Manager 2)

In brief, the managers agreed that the current tourism industry has negative impacts on the environment of Sea Turtle Bay, but it has positive effects on economic and socio-cultural impacts on Sea Turtle Bay.

The groups of business operators and local residents were asked to describe the negative impacts at Sea Turtle Bay. Different respondents mentioned various negative impacts. They included: environmental damage, beach closure affecting business, rising prices, and fishing closure. These are summarized in Table 3. ‘Environmental damage’ means Sea Turtle Bay’s environment has been damaged. ‘Beach closure affects business’ means business operators think beach-closure causes fewer visitors to visit Sea Turtle Bay, and it affects income. ‘Rising prices’ means tourism development at Sea Turtle Bay causes local prices to go up, including food and accommodations. ‘Do not allow fishing near Sea Turtle Bay affected some local residents’ fishing businesses’ means some rules of Sea Turtle Bay affect local residents’ fishing business.

Table 3: Business Operators and Local Residents Described Negative Impacts at Sea Turtle Bay Tourism

| Responses n=6 Count | Environmental damage | Beach closures affect business | Rising prices | Fishing closure |
|---------------------------|-------------------------|-----------------------------------|---------------|-----------------|
| | 2 | 1 | 1 | 3 |

Most local resident respondents said that fishing closures near Sea Turtle Bay affect some local residents’ fishing business. One local resident described this issue: “ Sea Turtle Bay has a rule, which is no fishing allowed near the Bay. This affects many local residents’

fishing business” (Local resident 3). One business operator said that environmental damage is the biggest negative impact at Sea Turtle Bay: “Sea Turtle Bay’s damaged environment and beach closure are the main negative impacts at Sea Turtle Bay” (Manager 1). Only one local resident said that Sea Turtle Bay tourism causes rising prices and said: “Tourism development at Sea Turtle Bay causes rising prices in the local area” (Local resident 1).

In summary, all interviewees agreed Sea Turtle Bay’s tourism causes environmental damage. To sustain Sea Turtle Bay as a protected area, it is important to protect its environment.

4.3 Barriers and Opportunities of Ecotourism Development

This section addresses objective 2: To determine what barriers and opportunities exist to develop ecotourism at Sea Turtle Bay. Managers were asked whether they wanted to promote ecotourism or not. All of the managers said that they wanted to develop ecotourism at Sea Turtle Bay. For example, one of the managers interviewed said: “Of course, we want to develop ecotourism, and this is our target. However, we do not have any strategic plan for it, and our management should be improved to develop ecotourism” (Manager 2). To promote ecotourism development at Sea Turtle Bay, it is important to find the barriers and potential opportunities to ecotourism.

4.3.1 Barriers and Constraints

4.3.1.1 Management challenges

Many important general management issues affecting Sea Turtle Bay were brought up during interviews with respondents. These management issues included Sea Turtle Bay not having adequate policies and regulations, no maximum carrying capacity, no strategic

planning, no staff education, little investment for conservation or monitoring, and little local community involvement.

The first management issue is that Sea Turtle Bay does not have proper policies and regulations for ecotourism. Policies are often changed through each new leader. One of the managers said:

“There are national nature reserve policies and regulations for the whole of China, but Sea Turtle Bay does not have its own policy and regulation. Imperfect policies are another main constraint. For example, Sea turtle Bay does not have a clear policy. Different leaders’ decision making are different. When the old leader, which was the president of Sea Turtle Bay, left, the new leader’s decisions affected Sea Turtle Bay’s development direction.” (Manager 2)

Second, all of the three groups of respondents said they did not know Sea Turtle Bay’s maximum carrying capacity. They had never measured the maximum carrying capacity at Sea Turtle Bay. One of the managers said: “We have never had this measurement. It is hard to measure the maximum carrying capacity because this has a relationship with tourists’ attitude and behaviour and our management” (Manager 2). Third, Sea Turtle Bay does not have any planning and programs in particular to support ecotourism. All of the managers said they do not currently have any plans for supporting ecotourism development. Fourth, there are no training programs based on ecotourism concepts available to staff. All managers said Sea Turtle Bay does not provide education for staff. One manager interviewed described: “No, we do not have training programs, but during staff meetings, we mention the ecotourism concept” (Manager 3). Fifth, Sea Turtle Bay has little investment for conservation and monitoring activities. All of the managers said there is some investment put towards conservation and monitoring activities. One manager interviewed stated:

“Yes, Sea Turtle Bay has some investments put towards nature and scientific research. For example, there are a few experts from Jinan University who came to Sea Turtle Bay to do ecological restoration

research today. Also, we have an environmental division project and sea turtle GPS tracking project.”

(Manager 1)

Also, one local resident said that Sea Turtle Bay did not provide enough investment towards conservation and monitoring activities. He stated: “Sea Turtle Bay has a lack of research of sea turtles’ breeding and growth rhythms” (Local resident 4). Sixth, the reserve has little local community involvement within Sea Turtle Bay. For example, local communities get involved in tourism businesses such as hotels and restaurants outside of Sea Turtle Bay. Respondents did not explain why no local communities get involved in tourism businesses within Sea Turtle Bay. One of the managers said: “Local residents do not get involved in tourism businesses within Sea Turtle Bay, but they can run hotels and restaurants outside Sea Turtle Bay” (Manager 1).

Moreover, business operators and local residents have little chance to get involved in Sea Turtle Bay’s planning or management. Business Operator 1 said that she had few chances to get involved in planning and/ or management at Sea Turtle Bay, but Business Operator 2 has had no chance. One business operator described: “I have a small chance. Only during summer and winter camp, our company get involved” (Business operator1). On the other hand, a business operator interviewed outside of Sea Turtle Bay described: “No, I don’t have any suggestions. Even if I had suggestions, Sea Turtle Bay would not accept them” (Business operator 2). Most local residents said they had chances to get involved with Sea Turtle Bay’s management, but not often. In brief, Sea Turtle Bay has many management issues that can be considered as barriers to ecotourism development. Local business owners have little chance to get involved in planning and management at Sea Turtle Bay. As one local resident interviewed stated:

“Yes, Sea Turtle Bay arranges one conversation per year with the leader and representative of local residents. However, we don’t know whether our suggestions have been adopted or not. Sea Turtle Bay has not arranged any meeting with us for these two years.” (Local resident 1)

4.3.1.2 Other Constraints

Other constraints to eco-tourism development also exist at Sea Turtle Bay. The groups of managers were asked to describe constraints to developing ecotourism at Sea Turtle Bay. Different respondents mentioned different aspects that they felt acted as constraints, including: land compensation problem, inadequate funding, and environmental damage. The land compensation problem refers to the fact that a big part of Sea Turtle Bay’s land was given by government, but the local people did not get compensation from the government. Inadequate funding means Sea Turtle Bay does not get enough funding from the government. Environmental damage refers to the fact that the tourist industry damages Sea Turtle Bay’s natural environment.

The land compensation problem is one of the biggest constraints for developing ecotourism. One of the managers interviewed described it this way:

“The land compensation problem is the biggest constraint. Sea Turtle Bay was only 4 square kilometers in 2001, but the central government officials asked Daao local residents to give an area of 14 square kilometers to Sea Turtle Bay in 2002, so the total area of Sea Turtle Bay is 18 square kilometers now. Unfortunately, the government has not given any land compensation to the local people of Daao, so they always make trouble for Sea Turtle Bay. For example, they often go to Sea Turtle Bay and block the road to stop tourists from visiting. In order to alleviate this problem, Sea Turtle Bay has to give a part of the tourism revenue as land compensation to Daao local residents every year. This will definitely affect the development of Sea Turtle Bay’s ecotourism.” (Manager 1)

Funding shortages are another major constraint for developing ecotourism. Sea Turtle Bay gets limited funds from the government, and this is seen as insufficient to run this

protected area. One manager interviewed described both inadequate funding and policy constraints:

“Serious funding shortages and imperfect policies are the main constraints for developing ecotourism at Sea Turtle Bay. For example, the funding from the government is only enough to give salaries to 13 staffs. Sea Turtle Bay has to develop tourism to increase revenue for the many expenses such as daily office supplies, overtime pay, sea patrol costs, cleaners’ costs.” (Manager 2)

Environmental damage is seen as another big constraint for developing ecotourism. If the sea turtles do not come back, this site will no longer be a protected area. One of the managers interviewed described the environmental damage: “Sea Turtle Bay’s environment has been damaged. There is a conflict between tourism development and environmental protection” (Manager 3). Another manager interviewed described the environmental damage:

“Many years ago, one leader of the local government (not directly in charge of Sea Turtle Bay) came to Sea Turtle Bay’s beach and shoveled about 200 by 2 meters of the sand from the beach. He used the sand to build his house. This seriously destroyed the beach of Sea Turtle Bay. Sea turtles come to Sea Turtle Bay to lay eggs because of its unique sand. We cannot bring more sand from other beaches, for sea turtles will only come back to lay eggs in this sand, which has a certain humidity, air, and looseness. This is one of the big reasons that caused the number of sea turtles to decrease.” (Manager 1)

In brief, the manager group indicated that the land compensation problem, funding shortage, and environmental damage are the three main constraints for Sea Turtle Bay ecotourism development.

The groups of business operator and local resident respondents were also asked to describe the major constraints at Sea Turtle Bay. Different respondents mentioned different threats. They included: the decreasing of number of sea turtle, rapid tourism development, over fishing, too many visitors, too much garbage, and the fact that visitors and local

residents often lack awareness of environmental protection. These are summarized in Table 4. ‘Fewer Sea Turtles means the number of sea turtles is decreasing. ‘Rapid tourism development causes environment damage’ means that tourism industries have developed too fast at Sea Turtle Bay, and this causes environment damage. ‘Over fishing’ means the fishermen have advanced technology, and this technology means they can catch fish as well as sea turtles more easily. ‘Too many visitors’ means too many visitors visit Sea Turtle Bay per day. ‘Too much garbage’ means visitors leave much garbage within Sea Turtle Bay. ‘Lack of environmental protection awareness among visitors and residents’ means visitors and residents are lack of knowledge of environmental protection or they do not care about the environment.

Table 4: Respondents’ Categories of Major Threats at Sea Turtle Bay

| Response s n=9 | Fewer Sea Turtles | Rapid tourism development causes environmental damage | Over fishing | Too many visitors | Too much garbage | Lack of environmental protection awareness among visitors and residents |
|-------------------|-------------------------|--|-----------------|-------------------------|------------------------|--|
| Count | 5 | 3 | 4 | 2 | 3 | 1 |

5 out of 6 total respondents said that sea turtle population decreasing was the major threat at Sea Turtle Bay. For example, one local resident interviewed stated:

“The number of sea turtles is decreasing. More than 20 years ago, many Daa0 local residents went to dig sea turtle eggs and sold them. Each egg was sold for 0.75 USD. However, this business is no longer happening now because sea turtles have become a protected animal. Rapid development of tourism is another big threat for Sea Turtle Bay. Too many visitors visit Sea Turtle Bay. For example, during the weekends between May and October, too many people visit Sea Turtle Bay per day. Cars, buses, and visitors often block the entrance gate. Too many fishermen are fishing excessively. Most fishermen have advanced fishing boats. They often catch sea turtles. Although they will return those sea turtles to Sea Turtle Bay, the sea turtles could have been hurt by the fishing process.” (Local resident 1)

4 out of 6 respondents said that excessive fishing is another main threat at Sea Turtle Bay. One business operator interviewed stated:

“Fishermen are fishing excessively; they often catch sea turtles. Also, there are too many garbage bags on the beach or in the ocean. Sea Turtles believe these garbage bags are jellyfish, so they might eat them and die. These all cause the sea turtle population decreases. More than 20 years ago, a lot of sea turtles came to Sea Turtle Bay to lay eggs. During that time, sea turtles were not protected yet; many local residents dug sea turtle eggs and ate them. To tell the truth, I have eaten a lot of sea turtle eggs, too, and they are so delicious. However, we cannot do this anymore because sea turtles are protected animals, and we rarely see them coming back to lay eggs in Sea Turtle Bay now.” (Business operator 2)

Half the respondents said that rapid tourism development and too much garbage are also the main threats at the site. Two respondents said too many visitors is one of biggest threats at Sea Turtle Bay. Local respondents mentioned visitors and local residents’ environmental awareness is not enough.

It is interesting to note that the perspectives of managers are different from those of the business operator and local resident respondents. Managers said that the land compensation problem, funding shortage, imperfect policies, and environmental damage are the four main constraints for developing ecotourism. On the other hand, business operator and local resident respondents said that the decreasing number of sea turtles, excessive fishing, rapid tourism development, too much garbage, and too many visitors are the main threats at Sea Turtle Bay.

4.3.2 Perceived Opportunities and Potential Positive Impacts

Respondents were asked whether they believe there are opportunities for ecotourism development at Sea Turtle Bay. All of the managers said that they believe there are, but they

could not provide any good examples of what the potential opportunities might be for ecotourism. Only one manager interviewed described:

“Sea Turtle Bay has a lot of opportunities for ecotourism development because it has a beautiful and natural environment, and Sea Turtle Bay has protected sea turtles, which is the only nesting area in Asia. We can use sea turtles as a brand to develop the ecotourism concept.” (Manager 1)

Business operators and local residents were also asked to describe the potential positive impacts of ecotourism development for their business or community. All business operators said that ecotourism development would have positive impacts on their business. One business operator interviewed said: “Developing ecotourism at Sea Turtle Bay will create many benefits. Visitors will like it” (Business operator 1). Most local residents said that ecotourism development would have positive impacts on their communities. One local resident interviewed stated: “Developing ecotourism at Sea Turtle Bay will have a good influence on local culture” (Local resident 3). Another local resident said: “Developing ecotourism at Sea Turtle Bay will be good. It can protect Sea Turtle Bay as well as increase people’s environmental awareness” (Local resident 4). Only one respondent said that no positive impacts would happen. He stated:

“More than 20 years ago, there were many sea turtles that came to the beach of Sea Turtle Bay to lay eggs. After Sea Turtle Bay developed tourism, too many visitors visited, so the sea turtles were afraid of them and seldom came back to lay eggs. Also, tourism causes rising prices, and it affects local people’s quality of life. Although some people, who run businesses, benefit from Sea Turtle Bay tourism; more than half of them are not local people. In my opinion, I oppose any tourism development in Sea Turtle Bay, including ecotourism.” (Local resident 2)

Business operators and local residents were also asked to describe the potential opportunities for Sea Turtle Bay’s ecotourism development. Only one operator said that there are many potential opportunities for ecotourism development at Sea Turtle Bay. He stated:

“There are lots of opportunities for Sea Turtle Bay to develop ecotourism. For example, it has a good environment, and the sea turtle is a good brand” (Business operator 2). Some local residents said that there are many opportunities for ecotourism development. One local resident interviewed stated: “There are not many barriers for developing ecotourism. Ecotourism will create more economic benefits” (Local resident 1). Another local resident interviewed stated: “Ecotourism will create more economic benefits such as increasing job opportunities” (Local resident 3).

Compared to these groups, managers all agreed that there are many opportunities for ecotourism development at Sea Turtle Bay, but they did not provide examples of potential opportunities. Most business operators and local residents said that they believe there are many potential opportunities for ecotourism development at Sea Turtle Bay.

4.4 Tourists Demands of Ecotourism (Survey Findings)

This section addresses the objective: *To determine what tourists' demands of ecotourism development at Sea Turtle Bay are.*

4.4.1 Tourist Respondent Profile

Questions relating to visitors' ages, gender, how many times they visit Sea Turtle Bay, tourist awareness of ecotourism, and increasing the length of stay and/or visit by percentage are included in the respondent profile (Table 5). Visitors (26%) was between 51-60 years old. The second highest percentage of visitors' age was 18-30 (23%). The lowest proportions of visitors were between 41-50 years old (14%). More than half of the tourists were male (46% female and 53% male). Most visitors (46%) were visiting Sea Turtle Bay for the first time, 24% had visited two times, and 19% three times, and 11% had visited Sea Turtle Bay more than 9 times. Table 5 also illustrates responses about whether or not tourists would increase their length of stay and/ or visit Sea Turtle Bay more often if it promoted

ecotourism development. More than 89% of visitors said that they would increase the length of stay and /or visit when Sea Turtle Bay promotes ecotourism development. Only 9% of visitors said that they would not increase the length of stay and/or visit when Sea Turtle Bay promotes ecotourism development. Nearly all tourists (97%) said that they had heard of ecotourism.

Table 5. Socio-demographic Characteristics of Tourists at Sea Turtle Bay (n=350)

| Age Group | % | Gender | % |
|--------------------------------|----------|---|----------|
| 18-30 | 23 | Female | 46 |
| 31-40 | 16 | Male | 53 |
| 41-50 | 14 | Other | 1 |
| 51-60 | 26 | Increase the length of stay and/or visit by percentage | |
| Over 60 | 20 | Yes | 89 |
| Times to Sea Turtle Bay | | No | 9 |
| 1 | 46 | Tourist awareness of ecotourism | |
| 2-4 | 24 | Yes | 97 |
| 5-8 | 19 | No | 2 |
| More than 9 times | 11 | | |

4.4.2. Ecotourism Goals for Tourists When Travelling

Results relating to the goals of ecotourism for tourists are illustrated in table 6. It illustrates how important travelling to natural destinations is for tourists. About 70% of respondents said travelling to natural destinations is very important. More than 24 % of respondents said travelling to natural destinations is somewhat important. Only 5% of respondents said travelling to natural destination is neutral. No respondents said travelling to natural destinations is not at all important.

Table 6 illustrates how important travel costs are to tourist. More than 45% of respondents said that travel cost is very important. About 30% of respondents said that travel cost is somewhat important. 22% of respondents said that travel cost is neutral. Only about 2% of respondents said that travel cost is somewhat unimportant or not at all important. The mean was 4.18 and the standard deviation was 0.868.

Table 6 illustrates how important minimizing environmental impact is when travelling. About 60 % of respondents said that minimizing environmental impact is very important when travelling. About 35 % of respondents said that minimizing environmental impact is somewhat important. About 4% of respondents are neutral. Only 1 % of respondents said that it is somewhat unimportant. None of the respondents said that minimizing environmental impact is not at all important. The mean was 4.55 and the standard deviation was 0.602.

Table 6 illustrates how important building environmental awareness is when travelling. About 63% of respondents said that building environmental awareness is very important when traveling. 32% of respondents said building environmental awareness is somewhat important. Only 5% of respondents are neutral. No respondents said it is somewhat unimportant and not at all important. The mean was 4.57 and the standard deviation was 0.600.

Table 6 illustrates how important the quality of accommodations is when travelling. More than 51% of respondents said that the quality of accommodations is very important when traveling. More than 37% of respondents said that the quality of accommodations is somewhat important when traveling. About 11% of respondents are neutral. Only 1% of respondents said that the quality of accommodations is somewhat unimportant and not at all important. The mean was 4.36 and the standard deviation was 0.760.

Table 6 illustrates how important providing benefits for conservation is when travelling. About 61% of respondents said that providing benefits for conservation is very important. About 30% of respondents said that providing benefits for conservation is somewhat important. Less than 1% of respondents are neutral. No respondent said that providing benefits for conservation is somewhat unimportant and not at all important. The mean was 4.52 and the standard deviation was 0.677.

Table 6 illustrates how important recreational opportunities are when travelling. 58% of respondents said that recreational opportunities are very important when traveling. More than 29% of respondents said that recreational opportunities are somewhat important when traveling. About 10% of respondents are neutral. Only 2% of respondents said that recreational opportunities are somewhat unimportant and not at all important. The mean was 4.44 and the standard deviation was 0.785.

Table 6 illustrates how important providing financial benefits and empowerment for local people is when travelling. 56% of respondents said that providing financial benefits and empowerment for local people is very important. 37% of respondents said that providing financial benefits and empowerment for local people is somewhat important. Only 2% of respondents said that providing financial benefits and empowerment for local people is somewhat unimportant and not at all important. The mean was 4.45 and the standard deviation was 0.716.

Table 6 illustrates how important respecting local culture is when travelling. 53% of respondents said that respecting local culture is very important. About 45% of respondents said that respecting local culture is somewhat important. Only 3% of respondents are neutral. No respondents said that respecting local culture is somewhat unimportant and not at all important. The mean was 4.50 and the standard deviation was 0.550.

Table 6 illustrates the percentage of what is important ecotourism goals for tourists by somewhat or very important. 94% of respondents said that travelling to natural destinations is somewhat or very important to them. 75% of respondents said that travel cost is somewhat or very important to them. 85% of respondents said that minimizing environmental impacts is somewhat and very important. 95% of respondents said that building environmental awareness is somewhat and very important. 88% of respondents said that the quality of

accommodations is somewhat and very important. 91% of respondents said that providing benefits for conservation is somewhat and very important. 91% of respondents said that recreational opportunities are somewhat and very important. 87% of respondents said that providing financial benefits and empowerment for local people is somewhat and very important. 98% of respondents said that respecting local culture is somewhat and very important.

Table 6. Important Goals of Ecotourism for Tourists When Travelling by Percentage (1= not at all, 5= very much)

| Importance | Not at all important | Somewhat unimportant | Neutral | Somewhat Important | Very Important | Mean | Std. Deviation |
|---|----------------------|----------------------|---------|--------------------|----------------|------|----------------|
| Traveling to natural destinations | 0 | 0 | 5 | 24 | 70 | 4.65 | .591 |
| Building environmental awareness | 0 | 0 | 5 | 32 | 63 | 4.57 | .600 |
| Minimizing environmental impacts | 0 | 1 | 4 | 35 | 60 | 4.55 | .602 |
| Providing direct financial benefits for conservation | 0 | 0 | 9 | 30 | 61 | 4.52 | .677 |
| Respecting local culture | 0 | 0 | 3 | 45 | 53 | 4.50 | .550 |
| Providing financial benefits and empowerment for local people | 0 | 2 | 6 | 37 | 56 | 4.45 | .716 |
| Recreational opportunities | 1 | 1 | 10 | 29 | 58 | 4.44 | .785 |
| The quality of accommodations | 1 | 0 | 11 | 37 | 51 | 4.36 | .760 |
| The cost of travel | 0 | 2 | 22 | 30 | 45 | 4.18 | .868 |

4.4.3. Tourist Interests in Potential Ecotourism Products

Which potential ecotourism products or services would tourists be interested in are illustrated in table 7. More than 58% of respondents said that they would like to visit Sea Turtle Bay with a nature interpreter. About 42% of respondents said that they want to visit Sea Turtle Bay without an interpreter. More than 62% of respondents said that they are

interested sea turtle observations. About 38% of respondent said that they are not interested in sea turtle observations. More than 74% of respondents said that they are not interested in ecotourism education of sea turtle and environment protection. About 25% respondents said that they are interested in education about sea turtles and environmental protection. More than 76% of respondents said that they are not interested in engaging with local culture. Only 22% of respondents said that they are interested in engaging with local culture such as the Hakkas culture and fishing. The percentages of responding yes on education of sea turtles and environmental protection, and engage with local culture are very low, and these are barriers to ecotourism development at Sea Turtle Bay.

Table 7: Tourist Interests in Potential Ecotourism Activities

| Percentage | % Responding Yes | % Responding No |
|--|-------------------------|------------------------|
| Visit Sea Turtle Bay with an Interpreter | 58 | 42 |
| Sea Turtle Observations | 62 | 38 |
| Education of Sea Turtle and Environment Protection | 25 | 74 |
| Engage with Local Culture | 22 | 76 |

An open-ended question allowed respondents to indicate which potential ecotourism activities they would be interested in. Only 5 individuals (1%) filled in this question. Response included building a beautiful sea turtle museum and increasing recreation activities.

4.5 Recommended Strategies

This section addresses the third objective: To determine what strategies could be recommended for ecotourism development at Sea Turtle Bay.

4.5.1 Recommended Strategies

From the managers' points of view, recommend strategies for developing ecotourism at Sea Turtle Bay vary. First, there should be an increase in tourism revenue being spent towards environmental protection. Second, the government should increase funding for Sea Turtle Bay's ecotourism development. Third, tourists and local residents' environmental

awareness should be increased to develop ecotourism. Fourth, there should be an increase in local residents' participation within Sea Turtle Bay's ecotourism development. Fifth, Sea Turtle Bay's management style should be enhanced to develop ecotourism. Sixth, media publicity of Sea Turtle Bay should be increased. The following statements exemplify manager beliefs:

“About tourism revenue, I think we should use more tourism revenue to protect the sea turtles and environment. Also, government should support us more by providing more funding.” (Manager 1)

“Local people should improve their environmental awareness, and they should get involved with Sea Turtle Bay's activities such as environmental protection. Also, we should enhance our management to develop ecotourism. We should put more effort on media publicity of Sea Turtle Bay's ecotourism development as well.” (Manager 2)

“We should put environmental protection as our main goal; then, we can develop ecotourism.”
(Manager 3)

Business operator and local resident respondents were also asked to provide recommended strategies for ecotourism development at Sea Turtle Bay. Different respondents mentioned different strategies, including: enhancing environmental protection, protecting sea turtles, controlling maximum carrying capacity, increasing government funding, improving facilities, doing more research on sea turtles' breeding and growth, improving environmental awareness, designing a vision for ecotourism, and including design policies and regulations. Enhancing environmental protection means Sea Turtle Bay's environment should be protected while developing tourism. Protecting sea turtles means Sea Turtle Bay, visitors, and local residents should not disturb them. Controlling maximum carrying capacity means Sea Turtle Bay should limit the number of visitors per day. Increasing government funding means government should support Sea Turtle Bay to develop ecotourism, and increase funding. Improving ecotourism facility means Sea Turtle Bay needs

to improve its facility in order to develop ecotourism. Doing more research on sea turtles' breeding and growth rhythms means the staff at Sea Turtle Bay should spend more effort on doing research of sea turtles. Improving environmental awareness means the managers, visitors, and local residents should learn more about the environment. Designing a vision for ecotourism, including design policies and regulations means Sea Turtle Bay does not have ecotourism planning. If it wants to develop ecotourism, there needs to be a strategic plan.

One business operator interviewed described: "Sea Turtle Bay's environment should be improved. Sea turtles are the most important aspect of Sea Turtle Bay; people should protect them" (Business operator 2). One of the local residents stated:

"The government should increase funding for Sea Turtle Bay. Sea Turtle Bay should do more research on sea turtles' breeding and growth rhythms. Also, it should improve its facility. Tourists should increase their environmental awareness. They should get more education on obeying policies and regulations. The last suggestion is that experts should formulate a vision, which is suitable for Sea Turtle Bay to develop ecotourism." (Local resident 4)

Business operators and local residents recommended various strategies for developing ecotourism at Sea Turtle Bay. Many respondents said increasing government funding, improving the facility, and designing a good vision are important strategies. Some respondents said that increasing people's environmental awareness, protecting sea turtle population, and controlling maximum carrying capacity are valuable strategies.

CHAPTER 5: Discussion

Many results from this study are consistent with the findings of previous research related to barriers and opportunities as well as recommended strategies for ecotourism development (Cheung & Fok, 2013; Wang *et al.*, 2009; Hall, 2006; Liu & Bao, 2004; Silva & McDill, 2004; Stone, 2002; Chen & Wang, 2001; Han & Zhuge, 2001; Li & Han, 2001; Han, 2001; Goodwin, 1996; Weaver *et al.*, 1996). This chapter addresses the discussion in five sections: current state of tourism, barriers to ecotourism development, opportunities for ecotourism development, tourist demands, and strategies for ecotourism development.

5.1 Current State of Tourism

Overall, Sea Turtle Bay is not an ecotourism destination yet. It charges an entrance fee, which is one of the main sources of Sea Turtle Bay's revenue. Approximately one hundred thousand tourists visit Sea Turtle Bay annually. It has a few facilities and attractions that could be upgraded to ecotourism facilities or attractions. Sea Turtle Bay perceives negative environmental impacts but positive economic benefits and socio-cultural impacts as a result of tourism. Negative environmental impacts include: sea turtle population decreasing, seawater pollution, and too much garbage from tourists. However, beach closure show that the managers of Sea Turtle Bay are increasing their environmental awareness. Local business owners perceive economic benefits of tourism at Sea Turtle Bay, but local residents perceive no or a few benefits from Sea Turtle Bay tourism. Too many visitors visit Sea Turtle Bay per day, and Sea Turtle Bay has no maximum carrying capacity for tourists.

5.2 Barriers to Ecotourism Development

5.2.1 Local Definition of Ecotourism

One of the results shows that interview respondents, who are Sea Turtle Bay managers, local residents, and local business operators, did not have a clear definition of ecotourism. Most of them referred only to the two components of environmental protection and nature sightseeing. These results are congruent with the following previous research: Han and Zhuge, (2001); Li and Han, (2001); Chen and Wang, (2001); Goodwin (1996). Most people do not have a clear definition of ecotourism, and they often think ecotourism means nature sightseeing. Also, compared to Honey's (2008) seven components, the respondents' interpretations of ecotourism are lacking, and it is a barrier for ecotourism development at Sea Turtle Bay. Sea Turtle Bay needs to adopt the worldwide-accepted ecotourism definition.

5.2.2 Management of Ecotourism Barriers at Sea Turtle Bay

Some of the most pressing issues facing Sea Turtle Bay are related to management barriers. The results of this study found that there are many Sea Turtle Bay management issues including: it does not have policies and regulations, no strategic planning, no maximum carrying capacity, no staff education, and funding shortage.

The results from this study show that Sea Turtle Bay does not have any policies and regulations for ecotourism development. When actions have no base in policies or regulation, it is not easy to reach ecotourism's development goal. Lack of proper policy and regulation is one of the key obstacles for ecotourism development at Sea Turtle Bay. These are consistent with the findings of Han and Zhuge (2001) and Li and Han (2001). Han and Zhuge (2001) who stated that ecotourism development has lagging policies and regulations. The findings of this study are consistent with Weaver *et al.*, (1996) which found that governments can produce barriers through formulating unsuitable regulations, taxes, and there may be a

shortage of interagency collaboration and coordination. This happened at Sea Turtle Bay, too. Sea Turtle Bay's new leader could easily change policies himself.

The results of this study found that Sea Turtle Bay does not have a strategic plan for ecotourism development. Also, Sea Turtle Bay has no national strategy on nature reserve ecotourism. These barriers have led to confusion about the direction of Sea Turtle Bay's development and resource utilization. These results are consistent with Chen & Wang (2001), who stated that one of the barriers to ecotourism development in China was that the officially authorized system is not well organized, and management is not standardized.

Sea Turtle Bay has no maximum carrying capacity, which is similar to other studies that found that many Chinese government agencies involved in ecotourism development lack carrying capacity (Wang *et al.*, 2009). None of the respondents at Sea Turtle Bay knew the maximum capacity of Sea Turtle Bay, and they have never measured for it. If nature reserves do not have a maximum carrying capacity, during Chinese long weekend holidays, too many visitors may visit per day. This can cause serious environmental damage at Sea Turtle Bay. Hengky (2011) suggested ecotourism development should control the maximum carrying capacity. The results from this study also suggest controlling the maximum carrying capacity for developing ecotourism.

This research also found that a shortage of funding is a major barrier for the development of ecotourism in Sea Turtle Bay. This is consistent with Han (2001) as well as Silva and McDill (2004), who found financial barriers to ecotourism development. Without enough funding from the government, Sea Turtle Bay has to increase its revenue by expanding tourism, which will cause many environmental issues. For example, Turtle Bay Resort Company maybe aims to make quick profits while ignoring investment in the environment. These are consistent with the findings of Han and Zhuge (2001), Li and Han (2001), and Li (2003). For example, in the 1990s, more than 80% of China's nature reserves

were involved in the operation of tour businesses, and all of them lacked funding (Han & Zhuge, 2001).

5.2.3 Poor Relationships with Host Community

Another barrier to ecotourism development is Sea Turtle Bay's relationship with the host community. Sea Turtle Bay uses a large part of Daao's local people's land, and the government has not compensated the local people of Daao yet. As a result, Daao's local residents frequently disrupt operations by blocking the main road and gate to stop visitors from entering Sea Turtle Bay. This finding is consistent with Liu and Bao (2004) who found that local communities are the key stakeholders of ecotourism development, and that their perceptions and opinions can significantly influence the development of ecotourism. It also echoes Silva and McDill (2004) who found that many host communities are not ready for ecotourism because they often do not have enough environmental awareness or proper attitudes and behaviours. Therefore, the government in charge of Sea Turtle Bay should compensate Daao's local residents soon, for the government has given a large proportion of their land to Sea Turtle Bay. This would help Sea Turtle Bay to develop ecotourism.

5.2.4 Lack of Host Community Benefits

This study found that local residents received limited economic benefits from Sea Turtle Bay. For example, they are not allowed to do any business within Sea Turtle Bay. This supports Li & Han's (2001) research: Based on the Regulation of the People's Republic of China on Nature Reserves (RPRCNR), if people want to run a business in reserves, they have to get the permission from reserve operators, so local communities receive limited economic benefits from reserves' tour businesses since their involvement in ecotourism is restricted. This has resulted local communities not gaining many benefits from Sea Turtle Bay tourism development while at the same time tourism development affects their quality of life in terms

of environmental damage and higher prices for goods and housing.

5.2.5 Poor Visitor Behaviours and Attitudes

The results from this study found that one of the biggest barriers at Sea Turtle Bay relates to visitor behaviours and attitudes. For example, all three groups of respondents mention that visitors need to improve their behaviour and attitude. This supports the research by Silva & McDill (2004) who found that too many tourists are visiting natural areas, producing potentially negative effects (Silva & McDill, 2004). Similarly, Chen and Wang (2001) and Han and Zhuge (2001) found that visitation is seriously excessive and oversteps the ecological lasting capability of natural areas. Moreover, Li and Han (2001) pointed out that nature reserves seldom have visitor monitoring such as recording the number of visitors, visitor hours, and visitor days. Although Sea Turtle Bay has closed its beach, Sea Turtle Bay does not have a visitor monitoring system. They welcome all visitors every day, with no closed days, based on a belief that they can make more money from those visitors through entrance fees. Visitor behaviour at Sea Turtle Bay should be improved, so they do not touch or catch sea turtles. These findings support research by Cheung and Fok (2013), which found that eco-friendly visitor behaviours in protected areas should be greatly promoted, for improper visitor behaviours have been considered one of the main threats to protected areas.

5.2.6 Lack of Environmental Protection

The results from this study found that there are concerns about the level of environmental protection. This is consistent with Chen and Wang (2001) who found that lack of understanding about the sustainable development of ecotourism results in situations where decision-makers and managers of ecotourism often do not prioritize environmental protection. Most managers defined ecotourism as only protecting the environment and nature sightseeing. This is a little different from some other studies suggesting that most nature

reserve managers do not consider conservation, and they think ecotourism means nature sightseeing (Han & Zhuge, 2001; Liu & Bao, 2004; Chen & Wang, 2007). However, it is good for Sea Turtle Bay's ecotourism development when the managers of Sea Turtle Bay have environmental awareness.

Some researchers have pointed out that nature reserve operators often do not focus on environmental protection but rather on how to make more profit from tourism businesses, sometimes resulting in serious pollution and damage (Chen & Wang, 2001; Han & Zhuge, 2001). Respondents felt that the managers of Sea Turtle Bay did not put in enough effort to protect the environment before May 2013, and as a result the surrounding environment has experienced serious pollution and damage. On the other hand, they made a great decision for its environmental protection in closing the beach after May 2013, so that tourists could not walk on the beach. This affects their tourism business, for tourists want to go to the beach to observe sea turtles, but the managers set up this rule for sustainable tourism. This is a good sign for Sea Turtle Bay's ecotourism development.

There were also some instances where the results of this study related to barriers to ecotourism development differed from previous studies. Zhuang *et al.* (2011) said that NGOs could do many things such as establish an ecotourism vision that fits into ecotourism in China by providing investment in education programmes with local residents and community-based administrations, facilitating cooperation between businesses and communities, communicating directly with businesses, and encouraging collaboration. However, there are no NGOs at Sea Turtle Bay. This suggests a need to set up NGOs to help Sea Turtle Bay to develop ecotourism.

5.3 Opportunities and Potential Positive Impacts for Ecotourism Development

Results from this study do not provide any suggestions for potential opportunity for

ecotourism development. However, respondents pointed out a few positive impacts for ecotourism development at Sea Turtle Bay. For example, some respondents mentioned that ecotourism could increase people's environmental awareness. Goodwin (1996) also found that ecotourism could provide information that raises people's awareness of the importance of conservation and ecological literacy. The results from this study also show that respondents believe ecotourism development would have positive impacts on business, local communities, and could have a positive influence on local culture. These findings support research by Stone (2002), who found that ecotourism can provide tourists with a high-quality nature experience, generate funds and support for conservation efforts, minimize environmental impacts and provides economic and socio-cultural benefits to local residents.

This study shows that many visitors like ecotourism. For example, the survey results show that visitors prioritize many aspects when they decide where to travel, including traveling to nature destinations, minimizing environmental impact, building environmental awareness, providing financial benefits and empowerment for local people, and respecting local culture such as sustaining Hakka, which is the main dialect in Huidong. These support Wang *et al.* (2009)'s research which found that ecotourism is suitable for China's rapid tourism development, for it can meet the quickly increasing demand for leisure and tourism.

5.4 Tourist Demands for Ecotourism

Many of the surveyed tourists were first time visitors, and nearly all had heard of ecotourism. Many visitors stated that they would increase the length of their stay and/ or visit if Sea Turtle Bay promoted ecotourism. Many of the categories of demands surveyed in this study were rated as either somewhat or very important by surveyed tourists. The most important ecotourism demands for tourists surveyed in this study were respecting local culture (98%), followed by building environmental awareness (95%), providing financial

benefits and empowerment for local people (93%), providing benefits to conservation (91%), quality of accommodations (88%), recreational opportunities (87%), and travel costs (75%).

Tourists are most interested in sea turtle observations and visiting Sea Turtle Bay with an interpreter. Tourists are least interested in engaging with local culture, education about sea turtles and environment protection. If Sea Turtle Bay wants to develop ecotourism, it should market itself based on tourist demands for ecotourism.

5.5 Examples of Strategies for Ecotourism Development

The results of this study suggest a need for a completed vision plan for developing ecotourism at Sea Turtle Bay to make it possible for managers to implement and monitor the plan. Hall (2006) found that to achieve ecotourism development, each site should have a conservation plan, management plan, or nature conservation agreements. Also, it is vital to do research focusing on formulating policies, legislation, principles, and management strategies based on ecotourism concepts (Hall, 2006). A well-designed ecotourism development vision could help Sea Turtle Bay to develop ecotourism. The staff of Sea Turtle Bay could easily follow and implement the vision.

Another result of this study suggests a need to increase investment in environmental protection. Han and Zhuge (2001) also found that there should be an increase in investment in environmental protection for the development of ecotourism in nature reserves. If Sea Turtle Bay does not have a good environment, visitors may not go there anymore. This could cause Sea Turtle Bay's tourism revenue to decrease. It is vital to increase investment in environmental protection.

CHAPTER 6: Conclusions

This chapter is divided into 4 sections. Section 6.1 is an overview of the key findings. Section 6.2 describes recommendations. Section 6.3 describes the significance of the study. Section 6.4 describes methodological and practical contributions. Section 6.5 describes this study's limitations and provides suggestions for future research.

6.1 Key Findings

The key findings presented in this section are organized by objectives: 1,2, 3, and 4.

1. *To determine what the current state of the tourism industry at Sea Turtle Bay is.*

The key findings that relate to these objectives are:

- 1) Too many tourists visit Sea Turtle Bay.
- 2) Sea turtle populations are decreasing.
- 3) Sea Turtle Bay's seawater is polluted.
- 4) Current number tourists cause environmental damage at Sea Turtle Bay.
- 5) Local residents do not receive enough benefits. This includes the fact that the ban on fishing affects local residents' fishing business.
- 6) Sea Turtle Bay tourism causes rising price issues for local residents.
- 7) Sea Turtle Bay closing its beach has affected tourism business. Actually, the beach closure and prohibiting fishing near Sea Turtle Bay are good for protecting Sea Turtle Bay's environment and turtles, in particular.

2. *To determine what barriers and opportunities exist to developing ecotourism at Sea Turtle Bay.*

The key findings that relate to barriers are:

- 1) Sea Turtle Bay does not have policies and regulations for ecotourism.
- 2) Sea Turtle Bay does not have maximum carrying capacity control.

- 3) There are no training programs based on ecotourism concepts available to staff.
- 4) Sea Turtle Bay has put little investment towards conservation and monitoring activities.
- 5) There is little local community involvement within Sea Turtle Bay.
- 6) Land compensation is a big constraint for Sea Turtle Bay to develop ecotourism.
- 7) Funding shortages.
- 8) Environmental damage.
- 9) Decreases in number of sea turtles.
- 10) Too many tourists visit Sea Turtle Bay, and visitors and local residents have a lack of environmental protection awareness.
- 11) Too much garbage within Sea Turtle Bay and its ocean.

The key findings that relate to this objective's opportunities and potential positive impacts are:

- 1) Developing ecotourism is good for Sea Turtle Bay's environmental protection.
- 2) Ecotourism development can increase people's environmental awareness.
- 3) Ecotourism can protect sea turtles at the only nesting area of sea turtles in Asia.
- 4) Ecotourism will create more economic benefits

3. To determine what tourists' demands of ecotourism development at Sea Turtle Bay are.

Ecotourism demands for tourists surveyed in this study have shown that most tourists would increase the length of their stay and/ or visit Sea Turtle Bay if it promotes ecotourism. Most tourists surveyed think respecting local culture, building environmental awareness, providing financial benefits and empowerment for local people, providing benefits for conservation, quality of accommodations, and recreational opportunities are important ecotourism goals for them. Sea Turtle Bay should market its tourism based on tourist

demands for ecotourism. Most tourists surveyed are interested in sea turtle observations and visiting Sea Turtle Bay with an interpreter. Sea Turtle Bay should upgrade facilities such as a sea turtle museum. Also, Sea Turtle Bay should increase ecotourism recreation activities.

4. To determine what strategies could be recommended for ecotourism development at Sea Turtle Bay.

The key findings that relate to strategies are:

- 1) Respondents suggest a need for a completed vision plan for developing ecotourism at Sea Turtle Bay to make it possible for managers to implement and monitor the plan.
- 2) Respondents suggest additional training for Sea Turtle Bay's management to develop ecotourism.
- 3) Respondents suggest a need to increase investment in environmental protection.
- 4) Respondents suggest the government increase funding for Sea Turtle Bay's ecotourism development.
- 5) Respondents suggest there be an increase in local residents' participation within Sea Turtle Bay's ecotourism development.
- 6) Respondents suggest visitor behaviour at Sea Turtle Bay be improved.
- 7) Respondents suggest tourists and local residents' environmental awareness be increased.

6.2 Recommended Strategies for Ecotourism Development at Sea Turtle Bay

According to the definition adopted for this study, Sea Turtle Bay cannot be considered an operating ecotourism destination. Based on the results from this study, several recommended strategies for ecotourism development at Sea Turtle Bay are suggested. These build on many of the strategies suggested by the respondents themselves (presented in the results section and in section 6.1(4) above).

1) A national strategy plan should be designed, which should involve a world wide accepted definition of nature reserve ecotourism, management guidelines for ecotourism, and an implementation and monitoring system.

a. Sea Turtle Bay may develop an ecotourism plan named ‘Sea Turtle Bay Ecotourism Plan 2015-2020’. This plan’s contents should contain the following elements: Executive summary, introduction, the outlook, the opportunities, target markets, positioning and branding, industry challenges, vision, ecotourism, goals and objectives, implementation, and monitoring.

2) Increasing communication, coordination and collaboration among managers at Sea Turtle Bay, local business operators, and local communities and governmental officials.

a. Regular and consistent contact among local communities and local business operators’ representative and managers of Sea Turtle Bay.

b. Creating collaboration and working opportunities among local communities and local business operators’ representative and managers of Sea Turtle Bay.

c. Increasing communications and coordination between Sea Turtle Bay’s management departments and Administration of Ocean and Fisheries of Guangdong Province, which is the government directly in charge of Sea Turtle Bay. This will help Sea Turtle Bay solve land compensation and short funding problems.

3) Education training for visitors’ eco-environment behaviour and attitude should be promoted. While not a direct focus of this research, possibilities include:

a. Establishing environmental education, which includes the knowledge of eco-environment behaviour and attitude and the posting of rules when visitors first arrive at Sea Turtle Bay.

b. Establishing environmental education for the tour guides and interpreters.

c. Establishing environmental education programs for children. The Education Bureau of China should establish a well-designed school system of environmental education for elementary and secondary schools. This is essential for not only for nature reserves but also for the whole of China's environment.

4) Regular monitoring for visitors' behaviour should be established.

a. Hiring local residents to be reserve guards. They should monitor visitors' behaviour. This can increase local communities' economic benefit as well as monitoring visitors' behaviour.

b. When visitors' behaviour is poor, a penalty is needed.

5) More tourism revenue and investments should be put forward to protected environment.

a. Paying at least one third of ticket revenue toward Sea Turtle Bay's environment protection.

b. Putting more effort in advertising sea turtles to increase donations from environmentalists.

6) Doing research on creating a maximum carrying capacity and adequate entrance fee.

a. Doing research on Sea Turtle Bay's maximum carrying capacity, and setting appropriate daily and annual number of tourists. The most efficient and urgent strategy for China nature reserves' sustainable tourism is to control the number of tourists (Gu *et al.*, 2013). Also, excess numbers of visitors reduce tourists' satisfaction, and visitors' satisfaction is important (Gu *et al.*, 2013).

b. Establishing a booking system to help control the number of visitors such as using internet booking to control numbers.

c. Doing research on an adequate entrance fee for Sea Turtle Bay. Because the number of visitors is directly related to the revenue of Sea Turtle Bay, it will be good to increase the entrance fee in order to control the number of tourists. Then Sea Turtle Bay may gain equal revenue from the entrance fee. Sea Turtle Bay could greatly increase the entrance fee in the peak seasons (May to October) and charge less during the off- peak seasons.

d. Research focusing on designing efficient ecotourism policies and regulations should be undertaken and monitored by key stakeholders of protected areas.

6.3 Significance of Study

This study contributes to a better understanding of ecotourism development in nature reserves in China by further expanding our knowledge of the potential barriers and opportunities, and recommended strategies. A manager of Sea Turtle Bay has expressed an interest in receiving a translated summary of the study's results and recommendations. In sharing the results with interested stakeholders, it is wished that this thesis would contribute to ecotourism planning at Sea Turtle Bay.

6.4 Methodological and Practical Contributions

6.4.1 Methodological

This study was based on data collected through semi-structured interviews and tourist surveys at Sea Turtle Bay. These research methods proved to be useful tools for both evaluating potential barriers and opportunities, and the motivations of tourists for ecotourism at Sea Turtle Bay.

6.4.2 Practical

The major practical implications are: 1) this study aims to evaluate the potential barriers and opportunities (including the motivations of tourists) for ecotourism at Sea Turtle Bay. One manager at Sea Turtle Bay has expressed an interest in receiving a translated summary of the study's results and recommendations. In distributing results to interested managers, it is hoped that this thesis will contribute to ecotourism planning at Sea Turtle Bay. 2) This study may inspire other studies on ecotourism development in China nature reserves. 3) This study also may address gaps in the literature.

6.5 Reflection on the Process of Conducting Research in China

From the process of conducting research at Sea Turtle Bay, the researcher found out that semi-structured interviews and focus group interviews seem likely to work better than questionnaire surveys and telephone surveys. Chinese people always value relationships. For example, if researchers know one of key informants, this key informant can introduce other interviewees to the researchers. Those interviewees often will say yes to researchers because interviewees care about the relationship with the introducers. On the other hand, many Chinese do not trust strangers, so they often refuse to participate in surveys.

6.6 Study's Limitations and Future Research

Despite the information generated by this study, some study limitations can be identified. When conducting interviews with most respondents, the interviews were interrupted on several occasions. This could have limited some of the in-depth and useful content. Moreover, there may be limitations to understanding of attitudes as well as the differences between attitudes and behaviours. For example, respondents may say that they will support ecotourism, or that they are interested in some ecotourism products. For example, 89% of surveyed tourists said that they would increase their length of their stay and/or visit if Sea Turtle Bay promoted ecotourism. However, that does not necessarily mean they will actually behave like that. An additional limitation relates to the perceived confidentiality of the interview process, which may have changed what people would say to the researcher because they were afraid of being representative or if information went to the wrong hands.

In addition, this study was limited to conducting interviews with government officials. The researcher found that the managers of Sea Turtle Bay are also government officials. The local government department is not in charge of Sea Turtle Bay. The researcher designed a Government Official Interview Questions form in her thesis proposal. Since the original Government Official Interview Questions overlap with Sea Turtle Bay Manager Interview Questions, the researcher decided to cancel interviewing government officials. However, it would be good to have the head government department at Guangzhou City, which is the Administration of Ocean and Fisheries of Guangdong Province complete the form.

In terms of future research, focusing on adequate entrance fee and maximum carrying capacity at Sea Turtle Bay will be beneficial for its environment as well as gaining more revenue. Research focusing on designing efficient of ecotourism policies and regulations

should be undertaken and monitored by key stakeholders of protected areas. This will contribute important information to the literature on ecotourism in China.

References List

- Aylward, B., Allen, K., Echeverría, J., & Tosi, J. (1996). Sustainable ecotourism in Costa Rica: The Monteverde Cloud Forest Preserve. *Biodiversity and Conservation*, 5(3), 315-343.
- Boo, E., & World Wildlife Fund (U.S.). (1990). *Ecotourism: The potentials and pitfalls*. Washington, D.C: World Wildlife Fund.
- Buckley, R. (2009). *Ecotourism: Principles and practices*. UK, ON: Cambridge University Press.
- Buckley, R. (2001). Environmental Impacts. In Weaver, B., David. (Eds.), *The Encyclopedia of Ecotourism* (p.379). UK,: Biddles Ltd, Guildford and King's Lynn.
- Burak, S., Dogan, E., & Gazioglu, C. (2004). Impact of urbanization and tourism on coastal environment. *Ocean and Coastal Management*, 47(9), 515-527.
- Chase, L. C., Lee, D. R., Schulze, W. D., & Anderson, D. J. (1998). Ecotourism demand and differential pricing of national park access in Costa Rica. *Land Economics*, 74(4), 466-482.
- Chen, W. & Wang, W. (2009). A study on the strategies of the sustainable development of China's ecotourism. *International Journal of Business and Management*, 2(5), 79-83.
- Cheung, L. T. O. & Fok, L., (2013). The motivations and environmental attitudes of nature-based visitors to protected areas in Hong Kong, *International Journal of Sustainable Development & World Ecology*. 37-41.
- Cidalia Tojeiro, M. (2010). The ecotourism sustainable strategy: Engagement and overcoming. *Journal of Coastal Research*, (61), 221.
- Diamantis, D. (1999). The concept of ecotourism: Evolution and trends. *Current Issues in Tourism*, 2(2), 93-122.
- Diamantis, D. & Ladkin, A. (1999). The links between sustainable tourism and ecotourism: a definitional and operational perspective. *The Journal of Tourism Studies*. Vol. 10, No. 2.
- Diedrich, A. (2007). The impacts of tourism on coral reef conservation awareness and support in coastal communities in Belize. *Coral Reefs*, 26(4), 985-996.
- Deferred compensation. (n.d.) *The International Ecotourism Society*. Retrieved Nov. 4, 2012, from <http://www.ecotourism.org/what-is-ecotourism>
- Deferred compensation. (n.d.) *Huidong Government*. Retrieved September 29, 2013, from <http://www.huidong.gov.cn>
- Donohoe H. M. & Needham, R. D. (2006) Ecotourism: The evolving contemporary definition, *Journal of Ecotourism*, 5:3, 192-210.
- Eagles, P. F. J. (1992). The travel motivations of Canadian ecotourists. *Journal of Travel Research*, 31(2), 3-7.

- Eagles, P., F., J., (2001). Ecotourism Impacts. In Weaver, B., David. (Eds.), *The Encyclopedia of Ecotourism* (p.359). UK, : Biddles Ltd, Guildford and King's Lynn.
- Fennell, D.A. (2001b) A content analysis of ecotourism definitions. *Current Issues in Tourism* 4(5), 403–421.
- Goodwin, H. (1996) In Pursuit of ecotourism. *Biodiversity and Conservation* 5 (3), 277-291.
- Gu, M., & Wong, P. P. (2008). Coastal zone management focusing on coastal tourism in a transitional period of China. *Ocean and Coastal Management*, 51(1), 1-24.
- Gu et al., (2013). Challenges for sustainable tourism at the Jiuzhaigou World Natural Heritage site in western China. *Natural Resources Forum*, 37(2013) 103-112.
- Hall, C. M. (2006). Policy, planning and governance in ecotourism. (pp. 193-206). Wallingford, UK: CABI.
- Han, N., Y., & Zhuge, R. (2001). Ecotourism in china's nature reserves: Opportunities and challenges. *Journal of Sustainable Tourism*, 9(3), 228-242.
- Hengky S., H. (2011). Improving coastal tourism business competitiveness: Using ecotourism's concept to explore to potential of coastal tourism business Pandeglang and Serang districts. Banten. West-java. Indonesia: 1. *International Journal of Business and Social Science*, 2(11)
- Honey, M. (2008). *Ecotourism and sustainable development: Who owns paradise?*. Washington, D.C: Island Press.
- Li, W., & Han, N. (2001). Ecotourism management in China's nature reserves. *Ambio*, 30(1), 62-63.
- Li, Wenjun (2003). Environmental management indicators for ecotourism in China's nature reserves: a case study in Tianmushan Nature Reserve. *Tourism Management*, 25 (2004), pp. 559–564
- Lindberg, K., Enriquez, J., & Sproule, K. (1996). Ecotourism questioned. *Annals of Tourism Research*, 23(3), 543-562.
- Lindberg, K., (2001). Economic Impacts. In Weaver, B., David. (Eds.), *The Encyclopedia of Ecotourism* (p.364). UK, Biddles Ltd, Guildford and King's Lynn.
- Liu, X., & Bao, J. (2004). Unraveling ecotourism practice: Problem analysis based on stakeholders. *Chinese Geographical Science*, 14(1), 82-89.
- Moscardo, G., Pearce, P., Green, D., & O'Leary, J. T. (2001). Understanding coastal and marine tourism demand from three European markets: Implications for the future of ecotourism. *Journal of Sustainable Tourism*, 9(3), 212-227.
- National Gangkou Sea Turtle Reserve, (n.d.) *Sea Turtle*. Retrieved March 27, 2013, from <http://www.seaturtle.cn/en>
- National Tourism Administration of China (CNTA), The People Republic of China National Tourism Industry Statistics Official Gazette, Available at (2011) <http://www.cnta.gov.cn/html/2012-10/2012-10-25-9-0-71726.html>
- Nyaupane G. P. & Thapa, B. (2004). Evaluation of ecotourism: A comparative assessment in the Annapurna. Conservation Area Project, Nepal, *Journal of Ecotourism*, 3:1, 20-45.

- Orams, M. B. (1995). Towards a more desirable form of ecotourism. *Tourism Management*, 16(1), 3-8.
- Perkins, E., H. & Brown, R., P. (2012). Environmental values and the so-called true ecotourist. (2012). *Journal of Travel Research*, 51(6), 793-803.
- Perkins, H., & Grace, D. A. (2009). Ecotourism: Supply of nature or tourist demand? *Journal of Ecotourism*, 8(3), 223-236.
- Seyed, A. J., Pooyaneh, A., Maryam, K. P., & Narges, Z. (2010). Presentation of strategic management plan in ecotourism development through SWOT: Case study of Qeshm Island. *Journal of Food*. 358-362.
- Silva, G. & McDill, M. E. (2004). Barriers to ecotourism supplier success: A comparison of agency and business perspectives. *Journal of Sustainable Tourism*, 12(4), 289-305.
- Sociological Research Skills, (n.d.). *Semi-structured interviews*. Retrieved from <http://www.sociology.org.uk/methfi.pdf>
- Stone, M. (2002). Ecotourism & community development case studies from Hainan, China. *Environmental Management*. Vol. 33, No. 1, pp. 12-24.
- Tao, C., Eagles, P., & Smith, S. (2004). Profiling Taiwanese ecotourists using a self-definition approach. *Journal of Sustainable Tourism*, 12(2), 149-168.
- The International Ecotourism Society. (2012). TIES Overview. Retrieved from <http://www.ecotourism.org/ties-overview>
- The Nature Conservancy. (2009). Protection Field. Retrieved on June, 18, 2013 from <http://www.tnc.org.cn/baohu/baohu/baohuqu/default.aspx>
- Veal, A.J. (2012). *Research Methods For Leisure and Tourism: A practical guide*. Fourth ed. Pearson Education Limited. Harlow: England.
- Walker, S. L. (1996). Ecotourism impact awareness. *Annals of Tourism Research*, 23(4), 944-945.
- Wall, G. (1997). Is ecotourism sustainable? *Environmental Management* 21, 484-491.
- Wang, S., Heo, J., Yamada, N., & Hwang, S. (2009). Comparison of ecotourism policies and implications for china's ecotourism development. *Journal of China Tourism Research*, 5(3), 259-272.
- Wearing, S., & Larsen, L. (1996). Assessing and managing the sociocultural impacts of ecotourism: revisiting the Santa Elena rainforest project. *The Environmentalist* 16, p132.
- Weaver, D., Glenn, C., & Rounds, R. (1996). Private Ecotourism Operations in Manitoba, Canada. *Journal of Sustainable Tourism*. Vol.4, No.3.135-146.
- Weaver, D. (1998). *Ecotourism in the Less Developed World*. Wallingford: CAB International.
- Weaver, D. B., & Lawton, L. J. (2007). Twenty years on: The state of contemporary ecotourism research. *Tourism Management*, 28(5), 1168-1179.
- Wight, P. A. (2001). Ecotourist: Not a homogeneous market segment. In D. B. Weaver (E.d.). *The Encyclopedia of Ecotourism* (pp.37-62). Oxon, OX: CAB International.

- Wight, P. A. (1997). Ecotourism accommodation spectrum: Does supply match the demand? *Tourism Management*, 18(4), 209-220.
- Wong, P. P. (1998). Coastal tourism development in Southeast Asia. *Ocean and Coastal Management*, 38(2), 89-109.
- Yu, H. (2011). Developing China's Hainan into an international tourism destination: How far can this go? *East Asia*, 28(2), 85-113.
- Zhuang, H., Lassoie, J. P., & Wolf, S. A. (2011). Ecotourism development in china: Prospects for expanded roles for non-governmental organizations. *Journal of Ecotourism*, 10(1), 46-63.
- Ziffer, K (1998). Ecotourism: The uneasy alliance. *Conservational International*, Ernst & Young.

Appendix A: Knowledge Mobilization Plan

Due to the extremely limited literature on ecotourism development on coastal areas, especially in China, no coastal ecotourism research exists yet, it is very important to share this research with others, who are engaging leisure studies or environmental conservation. The final thesis or article of this research will be submitted to The International Ecotourism Society (TIES). TIES's members can submit articles to TIES, and those articles may be published through TIES. "TIES currently has members in more than 120 countries, representing various professional fields and industry segments including: academics, consultants, conservation professionals and organizations, governments, architects, tour operator, lodge owners and managers, general development experts, and ecotourists" (TIES). Though mobilizing this knowledge with TIES' members, it is hoped that literature on coastal ecotourism development in China will be started to catch up.

This knowledge will also be shared with the participants, including resort operators, local residents, local business, and government officials. In order to help those participants understanding the preliminary results, I will write a Chinese report for them. This report may help them gain more knowledge of ecotourism development and awareness of environmental protection.

This research also will be written in the standard academic journal article format, which will include an abstract, introduction, literature review, methods, findings, discussion, conclusion, and recommendations for future studies. It will be focus of the publication. The article will be submitted to *Chinese Geographical Science*. It is an international journal published in China from 1991. It pays close attention to many fields such as resources, environment, and regional development. There is no deadline for submitting the article with this press, so I will have enough time to refine my article before submit it.

This article will be translated into Chinese in order to be submitted to *Tropical Geography* as well as *Tourism Forum*. These two are magazines are famous in China. Through mobilizing this knowledge with Chinese can educate their environmental awareness and influence their attitude and behaviours, especially, it may help developing ecotourism on Chinese nature resources.

KMB Outputs and Timeline

- Report sent to participants (July, 2014)
- Research article submit to TIES (December, 2014)
- Research article submit to *Chinese Geographical Science* (December, 2014)
- Chinese research article submit to *Tropical Geography* and *Tourism Forum* (March, 2015)

Thesis Timeline

| | July 2013 | Aug. 2013 | Sept. 2013 | Oct. 2013 | Nov. 2013 | Dec. 2013 | Jan. 2014 | Feb. 2014 | Mar. 2014 |
|-----------------------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Conduct Interview | | | | | | | | | |
| Refine Survey | | | | | | | | | |
| Pilot of survey | | | | | | | | | |
| Conduct Survey | | | | | | | | | |
| Analysis and Thesis Writing | | | | | | | | | |
| Final Thesis Draft | | | | | | | | | |
| Thesis Defense | | | | | | | | | |

Appendix B: Reflective Paper

Major Findings

The major findings of the research are summarize as follow:

Objective1. *To determine what the current state of the tourism industry at Sea Turtle Bay is.*

The key findings that relate to objective1 are: 1) Too many visitors visit Sea Turtle Bay. Sea turtle populations are decreasing. 2) Sea Turtle Bay's seawater has been polluted. 3) Current numbers tourists of tourism cause Sea Turtle Bay's environmental damage. 4) Local residents do not receive enough benefits, including running tourism businesses, from Sea Turtle Bay tourism development. 5) This includes the fact that the ban on fishing affects local residents' fishing business. 6) Sea Turtle Bay tourism causes rising price issues for local residents. 7) Sea Turtle Bay closing its beach has affected tourism business. 8) Actually, the beach closure and prohibiting fishing near Sea Turtle Bay are good for protecting Sea Turtle Bay's environment and turtles in particular.

Objective 2. *To determine what barriers and opportunities exist to developing ecotourism at Sea Turtle Bay.*

The key findings that relate to barriers are: 1) Sea Turtle Bay does not have policies and regulations for ecotourism. 2) Sea Turtle Bay does not have maximum carrying capacity control. 3) There are no training programs based on ecotourism concept available to staff. 4) Sea Turtle Bay has put little investment towards conservation and monitoring activities. 5) There is little local community involvement within Sea Turtle Bay. 6) Land compensation is a big constraint for Sea Turtle Bay to develop ecotourism. 7) Funding shortages. 8) Environmental damage. 9) Decreases in number of sea turtles. 10) Too many visitors visit

Sea Turtle Bay, and visitors and local residents have a lack of environmental protection awareness. 1) Too much garbage within Sea Turtle Bay and its ocean.

The key findings that relate to this objective's opportunities and potential positive impacts are: 1) Developing ecotourism is good for Sea Turtle Bay's environmental protection. 2) Ecotourism development can increase people's environmental awareness. 3) Ecotourism can protect sea turtles at the only nesting area of sea turtles in Asia. 4) Ecotourism will create more economic benefits

Objective 3. To determine what tourists' demands of ecotourism development at Sea Turtle Bay are.

Ecotourism demands for tourists surveyed in this study have shown that most tourists would increase the length of their stay and/ or visit Sea Turtle Bay if it promotes ecotourism. Most tourists surveyed think respecting local culture, building environmental awareness, providing financial benefits and empowerment for local people, providing benefits conservation, quality of accommodations, and recreational opportunities are important ecotourism goals for them when travelling. Sea Turtle Bay should market its tourism based on tourist demands for ecotourism. Most tourists surveyed are interested in sea turtle observations and visiting Sea Turtle Bay with an interpreter. Sea Turtle Bay should upgrade facilities such as the Sea Turtle Museum. Also, Sea Turtle Bay should increase ecotourism recreation activities.

Objective 4. To determine what strategies could be recommended for ecotourism development at Sea Turtle Bay.

The key findings that relate to strategies are:

- 1) Respondents suggest a need for a completed vision plan for developing ecotourism at Sea Turtle Bay to make it possible for managers to implement and monitor the plan. 2)

Respondents suggest additional training for Sea Turtle Bay's management to develop ecotourism. 3) Respondents suggest a need to increase investment in environmental protection. 4) Respondents suggest the government should increase funding for Sea Turtle Bay's ecotourism development. 5) Respondents suggest there should be an increase in local residents' participation within Sea Turtle Bay's ecotourism development. 6) Respondents suggest visitor behaviour at Sea Turtle Bay should be improved. 7) Respondents suggest tourists and local residents' environmental awareness should be increased.

Major Practical Implications

The major practical implications are: 1) this study aims to evaluate the potential barriers and opportunities (including the motivations of tourists) for ecotourism at Sea Turtle Bay. It may help Sea Turtle Bay to develop ecotourism development. 2) This study may inspire other studies on ecotourism development in China nature reserves. 3) This study also may address the gaps in the literature.

Reflect on the Research Process

During the first stage of research process, I learned how to choose a topic and how to narrow down the research topic. I realized that I have to choose a topic, which I am interested most; otherwise, I may get trouble and change the topic later. One of great things for SLM program is that teaches us every step that we need to know when we are writing thesis. I know nothing about literature review, research methods, ethics issues, and analysis skills before I enroll in SLM program. I am glad that I know them better now. If I could redo the data collection, I will try to interview the head government department at Guangzhou City, which is the Administration of Ocean and Fisheries of Guangdong Province. This may help this study has results on designing efficiency of policies and regulations of ecotourism, which

should implement and monitor by key stakeholders of protect areas, would contribute important information to the literature on ecotourism in China.

A Change in the Research

The researcher found that the managers of Sea Turtle Bay are also government officials. The local government department are not in charge of Sea Turtle Bay. Researcher designed a Government Official Interview Questions form in her thesis proposal. Since the original Government Official Interview Questions are overlap with Sea Turtle Bay Manager Interview Questions, so the researcher decided to cancel the with government officials.

Challenge and Pride

There were two challenges in this research. First, I was pregnancy throughout most of the research process. I had to take the airplane to go back China to collect the data, which is not good during the early stages of pregnancy. Also, I needed to work harder than usual because I did not get enough sleep during the night. Second, I had to take care of a newborn baby while working on my thesis.

I was proud that I completed this research with the help from my supervisors. I am proud of myself because I finished this thesis during my pregnancy time as well as I took great care of my newborn baby. This is very special.

Impact of the Research

It is significant to mobilize this research with other academics and students of leisure studies. First, I will submit a report to participants. Second, I will submit a research article to The International Ecotourism Society. Third, I will submit it to *Chinese Geographical Science and Tropical Geography* and *Tourism Forum*.

Appendix C: Sea Turtle Bay Manager Interview Questions

Current state of the Tourism Industry (objective 1)

1. Can you calculate approximately the number of tourist and tourism revenue received annually? Monthly?
2. What attractions and infrastructure exists at Sea Turtle Bay?
 - a. Are entrance fees charged? If yes, how much?
3. What are the environmental, economic, and socio-cultural impacts of the current industry?

Ecotourism Opportunities and Barriers (Objective 2)

4. How do you define ecotourism?
5. Do you want to promote ecotourism for your resort?
 - a. If yes, do you have a management strategy for develop ecotourism?
6. Do you believe there are opportunities for the development of ecotourism at Sea Turtle Bay? If so, what are they?
 - a. What 'ecotourism amenities' exist?
 - b. What tourist demand for these products exists?
7. What are the biggest constraints for Sea Turtle Bay in terms of developing ecotourism (time, funding, etc.)?
 - c. Does Turtle Bay Resort Company provides direct financial benefits for reserve conservation? Why or why not?
 - d. Does ecotourism development policy and regulation exist at Sea Turtle Bay? Why?
 - e. What do you feel is the maximum carrying capacity? And how strong is the enforcement capacity?
 - f. Do local communities get involve in tourism business? If no, why?

- g. Do you have any planning and programs particularly supporting ecotourism? If yes, what are they?
- h. Are investments put towards conservation or monitoring activities?
- i. Are there tourist guidelines, or principles?
- j. Are there training programs based on the ecotourism concept available to staff?

Strategies that could be used to develop ecotourism (Objective 3)

- 8. What strategies would you recommend for the development of ecotourism at Sea Turtle Bay? Please explain.
- 9. Are there other services or anything else about the Sea Turtle Bay and/ or Turtle Bay Resort Company you would like to tell me?

Appendix D: Local Residents and Business Operators Interview Questions

1. Can you describe your business and/or your relationship to Sea Turtle Bay?
2. What are your feelings about Sea Turtle Bay in general?
3. Do you believe that local residents benefit from Sea Turtle Bay tourism? Why or why not? How so?
 - a. Are community members allowed to run tourism businesses in Sea Turtle Bay?
 - b. Are local residents allowed to visit the Sea Turtle Bay?
4. What are the major threats to Sea Turtle Bay?
 - a. What are your feelings on the appropriate capacity of Sea Turtle Bay?
5. Do you and your community/ company experience any negative impacts Sea Turtle Bay?
If yes, how so?
6. Have you and your community/company been involved in planning and/ or management at Sea Turtle Bay?
7. What is your definition of ecotourism?
8. Do you think ecotourism development at Sea Turtle Bay would have positive impacts on your business/community? Why or why not?
9. What barriers and opportunities do you see for the development of ecotourism at Sea Turtle Bay?
10. Do you have any suggestions for developing ecotourism management strategies for this Sea Turtle Bay and/ or Turtle Bay Resort Company you would like to tell me?

Appendix E: Tourist Survey

1. Gender:

_____ Female

_____ Male

2. Age:

A 18 – 30

B 31- 40

C 41- 50

D 51 – 60

E over 60

3. How many times have you visited Sea Turtle Bay in the last 3 years?

A 1

B 2 - 4

C 5- 8

D more than 9 times

4. Have you heard of ‘ecotourism’?

YES/ NO

5. Using the scale provided, please indicate how important the following are to you when traveling:

| | Not at all important | Somewhat unimportant | Neutral | Somewhat Important | Very Important |
|-----------------------------------|----------------------|----------------------|---------|--------------------|----------------|
| Traveling to natural destinations | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| The cost of travel | | | | | |
| Minimizing environmental impacts | 1 | 2 | 3 | 4 | 5 |
| Building environmental awareness | 1 | 2 | 3 | 4 | 5 |
| The quality of accommodations | | | | | |
| Providing direct financial benefits for conservation | 1 | 2 | 3 | 4 | 5 |
| Recreational opportunities | | | | | |
| Providing financial benefits and empowerment for local people | 1 | 2 | 3 | 4 | 5 |
| Respecting local culture | 1 | 2 | 3 | 4 | 5 |

6. If Turtle Bay Resort Company promoted ecotourism development, would you increase the length of stay and/or visit more often?

Yes/No/Unsure

7. Of the following, which potential ecotourism products would you be interested in? (Circle all that apply)

- A) Visit Sea Turtle Bay with interpreter
- B) Sea turtle observations
- C) Education of Sea turtle and environment protection
- D) Engage with local culture
- F) Other _____.

THANK YOU VERY MUCH FOR YOU TIME

Appendix F: Semi-structured Interview Consent Form

| | |
|-----------------------------|----------------------------------|
| Sixin (Michelle) Liu, | Grant Murray, Ph. D., Supervisor |
| MASLM Student, | Institute for Coastal Research |
| Vancouver Island University | Vancouver Island University |
| Michelle_liu83@yahoo.com | (250) 740 6549 |

Hello. My name is Liu sixin (Michelle). I am a graduate student from the Vancouver Island University in Canada. I am conducting a research on coastal ecotourism at Sea Turtle Bay. In specific, I am interested in evaluating the potential for ecotourism at Sea Turtle Bay. As a stakeholder, your opinions are valuable to this research.

During this study, you will be asked to complete a number of brief questions concerning your personal experiences with factors such as Sea Turtle Bay current states, ecotourism potential opportunities, ecotourism potential barriers, and ecotourism strategies. Your participation will require approximately 30 to 60 minutes of your time. There are no known harms associated with your participation in this research. The potential benefit is that the research findings may help Sea Turtle Bay organization to develop ecotourism.

All records of participation will be kept strictly confidential, such as only my supervisor and I will have access to the information. Data will be stored in a locked filing cabinet within my home. Typed copies (digital) of the field notes will be kept on a secure hard-drive and in printed form with the journals. Digital audio files and transcribed notes will be kept on a password protected hard-drive at my home until deleted. I will store all electronic files (typed field notes), digital audio files, and research journals on the research hard-drive and my password protected computer for two years then destroy. They will be permanently erased from my computers and the research hard-drive before September 2015.

The results will be mobilized in a number of ways including a report to the Harbour National Nature Reserve Management Station, local community, and local business owners (field report). An oral report of the results from this study will be presented during a class presentation. Some results may also be submitted to an appropriate academic journal. Information about the project will not be made public in any way that identifies individual participants.

Your participation is completely voluntary. You may withdraw at any time for any reason without explanation and without penalty. You may choose not to answer any question for any reason. If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics Officer, by telephone at 250-753-3245 (ext, 2665) or by email at reb@viu.ca. If you have any questions about this research project, or would like more information, please feel free to contact me at the e-mail address above.

(Consent) I have read the above form, understand the information read, and understand that I can ask questions or withdraw at any time. I consent to participate in today's research study.

Participant's Signature:

Date:

Appendix G: Survey Consent Form

| | |
|-----------------------------|----------------------------------|
| Sixin (Michelle) Liu, | Grant Murray, Ph. D., Supervisor |
| MASLM Student, | Institute for Coastal Research |
| Vancouver Island University | Vancouver Island University |
| Michelle_liu83@yahoo.com | (250) 740 6549 |

Hello. My name is Liu Sixin (Michelle). I am a graduate student from the Vancouver Island University in Canada. I am conducting a research on coastal ecotourism at Sea Turtle Bay. In specific, I am interested in evaluating the potential for ecotourism at Sea Turtle Bay. As a tourist, your opinions are valuable to this research.

During this study, you will be asked to complete 7 brief questions concerning your personal experiences with factors such as tourists' demand of ecotourism. Your participation will require approximately 5 minutes of your time. There are no known harms associated with your participation in this research. The potential benefit is that the research findings may help Sea Turtle Bay organization to develop ecotourism.

All records of participation will be kept strictly confidential, such as only my supervisor and I will have access to the information. Data will be stored in a locked filing cabinet within my home and will be permanently erased from my computers and the research hard-drive before September 2015.

The results will be mobilized in a number of ways including a report to the Harbour National Nature Reserve Management Station, local community, and local business owners (field report). An oral report of the results from this study will be presented during a class presentation. Some results may also be submitted to an appropriate academic journal. Information about the project will not be made public in any way that identifies individual participants.

Your participation is completely voluntary. You may withdraw at any time for any reason without explanation and without penalty. You may choose not to answer any question for any reason. If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics Officer, by telephone at 250-753-3245 (ext, 2665) or by email at reb@viu.ca. If you have any questions about this research project, or would like more information, please feel free to contact me at the e-mail address above.

(Consent) The return of your completed survey indicates your consent to participate in this research and for the information you provide to be used in study results.

Appendix H: Ethics Review Form



May 31, 2013

Sixin (Michelle) Liu
 Recreation and Tourism
 Vancouver Island University
 900 Fifth Street
 Nanaimo, British Columbia V9R 5S5

Dear Ms. Liu:

The Vancouver Island University Research Ethics Board is pleased to grant approval for the project entitled "Ecotourism Development in China: A case study in Huidong Harbour Sea Turtle National nature reserve (Sea Turtle Bay)," originally submitted for review on April 30, 2013 and as revised and resubmitted May 31, 2013.

Please be aware of your obligation to carry out the research as stated in the revised proposal and to comply with guidelines as posted on the website at <http://www.viu.ca/reb/guidelines.asp>.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ruth Kirson".

Ruth Kirson, Chair
 Vancouver Island University Research Ethics Board (VIU REB)

VIU REB Reference No. 2013-038-VIUS-LIU
 Date of Approval May 31, 2013
 Date of Expiry May 30, 2014

Please sign the acknowledgement below, retain a copy for your records, and return the original to:

Research Ethics Officer
 Bldg. 305 – Rm. 452
 Vancouver Island University
 Nanaimo, British Columbia V9R 5S5

As researcher(s) I (we) hereby agree to carry out the research in an ethical manner as outlined in the approved proposal submission. If I (we) need to make changes to the methodology and/or recruitment and consent procedures, I (we) will request an amendment from the VIU REB. If the project runs longer than one (1) year, I (we) will submit a request for continuing review (renewal) to the Ethics Officer one (1) month prior to the expiry date indicated above. At the end of the project, I (we) will notify the Ethics Officer to close the study.

Sixin (Michelle) Liu, VIU Recreation and Tourism

May 31, 2013



Centre of Excellence

world leisure organization
at vancouver island university

The Master of Arts in Sustainable Leisure Management
is an initiative of the World Leisure Centre of Excellence
in Sustainability and Innovation at Vancouver Island University.