To my mother
ACKNOWLEDGMENTS

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Throughout the world people are attempting to use tourism as a tool for economic growth, conservation, and improved quality of life for local residents, but negative environmental impacts and economic leakages are common. Since the impacts of tourism are variable, it is important to understand which businesses are providing conservation and community benefits. Commercial success is often cited as an important determinant of sustainable behavior. However, little research examines the relationship between commercial success and the provision of environmental and social benefits. This study explores the possible link between commercial success and conservation and community benefits. To obtain a diverse sample of tourism entrepreneurs, Costa Rica was chosen as the study area. A questionnaire was designed to answer the following questions: Is commercial success in tourism associated with conservation behavior and the provision of benefits to local communities? If so, what factors are most associated with commercial success? Tour operators (businesses that organize and run tours) and agencies (businesses that sell tours operated by others), offering nature-based tours and travel services in Costa Rica, comprised the population for this study. Researchers identified key tourism hubs, inventoried operators and agencies, and attempted to contact them all. The
final sample size was 167 entrepreneurs out of 194, a response rate of 86.1%. Quantitative data were collected through questionnaires in June and July of 2006. Commercial success was operationalized using indicators such as growth, longevity, number of visitors and employees, and the entrepreneur’s perceptions of success and profitability. Nine conservation behaviors and 13 community benefit variables were examined using Likert scales. Relationships between commercial success and benefit variables were analyzed using Spearman correlations. Results demonstrate that commercially successful entrepreneurs provided environmental education to visitors, supported conservation groups or initiatives, reduced, reused, and/or recycled, used environmentally friendly equipment, and built formal partnerships with community members. However, the frequency with which entrepreneurs educated and employed local people, purchased supplies locally, and patronized local accommodations was not related to commercial success. Overall, the results indicated that a relationship exists between an entrepreneur’s level of commercial success and the provision of conservation benefits, but there is little evidence supporting a relationship between commercial success and community benefits. Nevertheless, it is important to note that tourism businesses are providing benefits to local communities; however, these benefits are not related to a business’s level of commercial success.
CHAPTER 1
INTRODUCTION

Tourism is the number one industry in many countries, the largest international export earner, and one of the world’s most important sources of employment (WTO, 2006a). It represents the largest business sector in the world economy, employing 200 million people, generating $3.6 trillion in economic activity, and accounting for one in every 12, or 8%, of jobs worldwide (TIES, 2007). In 2005, international tourism increased by 5.5% from the previous year, with a total of 808 million arrivals (WTO, 2006b).

As this industry continues to grow, the impacts of tourism are not always positive. Negative environmental impacts of tourism are well documented in the literature (Buckley, 2001; Ceballos-Lascurain, 1996; Sirakaya, 2001; Stonich, 1998; Brohman, 1996; Müllner et al, 2004; Orams, 2000; Duffus, 1996; Backman & Morais, 2001; UNEP, 2006a). Tourism has also been linked to negative social and cultural impacts (Boo, 1990; Brandon, 1996; McLaren, 1998). Additionally, economic leakages commonly occur, thus limiting the benefits to local communities (Backman & Morais, 2001). For example, the United Nations Environmental Program states “of each US $ 100 spent on a vacation tour by a tourist from a developed country, only around US$ 5 actually stays in a developing-country destination’s economy” (UNEP, 2006b, para. 5). Previous research also demonstrates many tourism operations contribute minimally to local development, with local people receiving few benefits from tourism (Stone & Wall, 2004; Jacobson & Robles, 1992; Healy, 1994; Bookbinder et al., 1998; McLaren, 1998). Frequently, the conservation benefits of tourism “come at the cost of the socioeconomic well-being of local residents” (Charnley, 2005, pp. 80).

The question then arises: how to promote tourism development in developing countries that will not deplete or degrade the environment and will contribute to improving the lives of
local people? Ecotourism, defined as “responsible travel to natural areas that conserves the environment and improves the well-being of local people” (TIES, 2006, home pg), seems to offer a potential solution. Ecotourism is often considered a subset of nature-based tourism (Orams, 2001), which is defined as tourism “primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature” (Valentine, 1992, pp.108). Recently, there is an increasing trend towards both ecotourism and nature-based tourism (Lordkipanidze et al, 2005), making these the fastest growing segments of the tourism industry (Wight, 2001; Hawkins & Lamoureux, 2001; McKercher, 2001; Reingold, 1993). In 2004, ecotourism and nature-based tourism globally grew 3 times faster than the tourism industry as a whole (TIES, 2007). However, since no internationally agreed upon standard exists for what constitutes ecotourism (i.e. what is “responsible travel that conserves the environment and improves the well-being of local people”?), much of what is marketed as ecotourism remains so only in name, while contributing minimally to conservation or improving the lives of local people (Charnley, 2005).

Since it is widely acknowledged that entrepreneurs are a key resource in promoting development and economic growth (Lordkipanidze et al, 2005; Volery, 2002; Paktakia, 1998; Kent, 1982), entrepreneurs may be responsible for a significant portion of ecotourism’s growth. Additionally, entrepreneurs could play a significant role in the distribution of benefits to conservation and local communities. This research will investigate whether entrepreneurs and tourism businesses provide conservation and community benefits.

Given that entrepreneurs and businesses exist to make a profit, it stands to reason that tourism businesses are no exception. However, the importance of profitability and commercial success are critical factors often excluded from discussions regarding the goals of ecotourism.
Nevertheless, in order to distribute revenue and provide conservation and social benefits to local communities, it is imperative that businesses are profitable and successful. In fact, ecotourism businesses can only provide benefits to the environment and local communities if they are commercially viable (Tisdell, 1998; McKercher, 2001). Like any business, ecotourism businesses must be able to afford the costs of environmental and social responsibility. Stormer even goes so far as to state that “socially desirable behavior will cease as soon as it becomes uneconomic” (2003, pp. 288). Additionally, ecotourism businesses must be able to compete with other more resource consumptive alternatives (McKercher, 2001; Kiss, 2004). To test this argument, this research will investigate the extent to which commercially successful entrepreneurs are realizing the objectives of ecotourism.

Specifically, this study seeks to answer the following questions: Is commercial success in tourism ventures associated with environmental stewardship and conservation behavior? Is the commercial success of these businesses associated with the provision of benefits to local communities?

- **Hypothesis**: Commercially successful tourism entrepreneurs will be better environmental stewards than unsuccessful entrepreneurs.

- **Hypothesis**: Commercially successful tourism entrepreneurs will provide more benefits to local communities than unsuccessful entrepreneurs.

Additionally, this study aims to identify which factors of conservation behavior and the provision of benefits to local communities are associated with commercial success.
Ecotourism versus Nature-Based Tourism

Ecotourism, defined by The International Ecotourism Society as “responsible travel to natural areas that conserves the environment and improves the well-being of local people” (2006, home pg), is often confused with nature-based tourism. In fact, it can be so difficult to distinguish between the two types of tourism, that even The International Ecotourism Society lumps the two types together when citing ecotourism statistics. Regardless of the two types of tourism often being grouped together, nature-based tourism differs substantially from ecotourism. Nature-based tourism can be “defined as tourism primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature” (Nyaupane, 2004, pp.540; Valentine, 1992) or “any form of tourism that relies primarily on the natural environment for its attractions or settings” (TIES, 2007). Nature-based tourism makes no claims about aiding conservation or improving the well-being of local people. In contrast, ecotourism is based on the concept of benefiting the environment and local people. Using TIES’ commonly used definition, nature-based tourism cannot be considered ecotourism unless those providing the tourism opportunities are helping to ensure responsible travel, conserve the environment, and improve the well-being of local people. Therefore, not all nature-based tourism should be classified as ecotourism.

The unclear distinction between the two terms has led to a significant amount of “greenwashing,” or simply using the ecotourism label for marketing and image building (Honey, 2002). Many businesses, which call themselves “ecotourism” businesses, do not deliver environmental and social benefits that would distinguish them as true ecotourism businesses. These businesses are “ecotourism” only in name. One of the goals of this research is to
investigate the behavior of tourism businesses, to determine if they warrant the ecotourism label, as defined by the International Ecotourism Society, or if these businesses would be more accurately classified as nature-based tourism.

Entrepreneurship, Business Behavior, and Corporate Social Responsibility

In order to establish whether or not tourism businesses are ecotourism operations, business behavior and decision making need to be investigated. Business behavior and business decisions, whether financial or social, are often dictated and carried out by entrepreneurs. An entrepreneur as defined by Merriam-Webster (2005) is “one who organizes, manages, and assumes the risks of a business or enterprise.” Though entrepreneurs are usually thought of as being driven by profit motives, it is now acknowledged that they also “seek to bring about change and new opportunities, both for themselves and for the communities they belong to” (Schaper, 2002, p.27). Therefore, it is possible that ecotourism entrepreneurs can provide benefits to conservation and the local community. However, to do so, these businesses must survive and make a profit. This research investigates this assertion.

In order to examine this assertion, it is necessary to consider business behavior. Since entrepreneurs are often responsible for business decision-making, it follows that business behavior is dictated directly by the entrepreneur or the owner/operator of the business, particularly in the case of small and medium sized enterprises. Therefore, these key individuals, the entrepreneurs, are responsible for formulating and implementing socially responsible policies (Hemingway & Maclagan, 2004). “The literature shows that CSR [Corporate Social Responsibility] can be the result of championing by a few managers” (Jenkins, 2006, pp. 251; Hemingway & Maclagan, 2004). Consequently, entrepreneurs must be the focus of investigation to better understand the role commercial success plays in relation to conservation and community goals. Additionally, entrepreneurs often have personality traits that increase the
likelihood of responsible behavior (Lepoutre & Heene, 2006; Solomossy & Masters, 2002; Teal & Carroll, 1999). Indeed, “idealistic values can be translated into valuable economic assets” (Dixon & Clifford, 2007). This research investigates entrepreneurs and the relationship between responsible behavior and commercial success.

The 1990s saw the advent of the concepts of social entrepreneurs and ecological entrepreneurs, or ecopreneurs (Paktakia, 1998). Social entrepreneurs can be defined as enterprising individuals who seek to address social issues or change society (Swamy, 1990). An ecopreneur is an eco-conscious individual “who seeks to transform a sector of the economy towards sustainability” (Isaak, 2002, p.82) or “entrepreneurs whose business efforts are not only driven by profit, but also by a concern for the environment” (Schuyler, 1998, pp.1). Using these definitions, ecotourism entrepreneurs theoretically should be both social entrepreneurs and ecopreneurs. This research tests this assumption.

There is a considerable amount of research suggesting that, particularly with regard to small and medium enterprises (SME), business behavior can be understood specifically in terms of the values, ethics, and psychological characteristics of their owner/managers or entrepreneurs (Fuller, 2006; Hemingway & Maclagan, 2004; Jenkins, 2006; Kotey & Meredith, 1997). "The literature in this area suggests that owner/managers' personalities, in particular their values and goals, are indistinguishable from the goals of their businesses” (Kotey & Meredith, 1997). Previous research also negates the notion of the profit-maximizing owner-manager as the standard entrepreneur (Spence & Rutherford, 2000; Jenkins, 2006). Fuller notes “the nature of small enterprises cannot be fully understood by reference to market economics. The interaction of the personal and social with the business in family and owner-managed firms is key to understanding responsible behaviour and ethics in SMEs” (2006, pp. 288). Carr argues that in
the case of owner-managed business and entrepreneurship, one’s business and one’s life are inseparable, and therefore, personal ethos and business behavior are inseparable (2003). Furthermore, other research suggests “that the commercial imperative is not the sole driver of CSR decision-making” (Hemingway & Maclagan, 2004). Nevertheless, viability and success might still be important considerations, which allow entrepreneurs to make socially and environmentally responsible business decisions.

Although the present study is not concerned with identifying why entrepreneurs behave socially and environmentally responsibly, it is important to recognize there are various reasons for businesses behaving in a socially and environmentally responsible manner. Some researchers argue that entrepreneurs value the appearance of a high degree of social concern to help increase profits (Wilson, 1984), or that it is in the best interests of the business to behave ethically and responsibly (Jenkins, 2006). Others argue that businesses are aware of their social responsibilities and operate accordingly (Chrisman & Archer, 1984). Regardless of the rationale or motive behind socially and environmentally responsible behavior, it can be argued that a relationship exists between profit, commercial success, and sustainable behavior. As Drucker states “a company can make a social contribution only if it is highly profitable” (2001, pp. 20). Therefore, the present research explores the relationship between commercial success and responsible behavior.

Previous research investigated the relationship between commercial success and responsible behavior. However, the results have been inconclusive, inconsistent, and conflicting. Results from some studies support a positive relationship between commercial success and responsible behavior (Bowman & Haire, 1975; McGuire, Sundgren, & Schneeweis, 1988; Parket & Eilbirt, 1975; Sturdivant & Ginter, 1977), while others support a negative one (Baron, 2007;
Vance, 1975), and others still report no clear relationship in one direction or the other (Abbott & Monsen, 1979; Arlow & Cannon, 1982; Aupperle, Carroll, & Hatfield, 1985; Cochran & Wood, 1984; Owen & Scherer, 1993; Ullmann, 1985). Although a considerable amount of research examines this relationship across many industries within the context of developed countries, little research investigates this association with regard to tourism businesses in developing countries. Additionally, little research investigates the performance of entrepreneurs in the tourism industry at all (Kirsten & Rogerson, 2002; Learner & Haber, 2001). This study addresses this gap.

Theories of Corporate Social Responsibility (CSR)

Studies dealing with social responsibility have proliferated in both academic and managerial literature for decades. As a result, various theories have been used to try and explain corporate social responsibility, such as neoclassical economic theory and the enlightened self-interest model.

First, neoclassical economic theory has been used to explain Corporate Social Responsibility (CSR). Neoclassical economic theory is based on three general principles; (1) “people have rational preferences among outcomes”, (2) “individuals maximize utility and firms maximize profits”, and (3) “people act independently on the basis of full and relevant information” (Weintraub, 2007, pp.1). Thus, neoclassical economic theory maintains that the greatest good will be achieved when individuals pursue their own self interests (Swanson, 1995). Therefore, neoclassical theory posits that CSR is simply a means of maximizing profits (Stormer, 2003).

Next, the enlightened self-interest model was introduced and used to explain CSR. Alexis de Tocqueville introduced the concept of enlightened self-interest in his book *Democracy in America* (1835), and later it was applied to CSR. This model predicts that businesses that are more socially responsible will be more successful (Besser, 1999; Keim, 1978). Under this
model, similar to neoclassical economic theory, entrepreneurs and business owners only act in responsible ways to further their own interests (Fry, Keim, & Meiners, 1982), or that it is in the best interests of the businesses to behave ethically and responsibly (Jenkins, 2006).

Therefore, according to both neoclassical economic theory and the enlightened self-interest model, responsible behavior is wholly tied to success and profitability (Stormer, 2003). This research examines this relationship between social/environmental responsibility and commercial success.

Additionally, it is important to note that the focus of previous CSR research and theory building has been almost entirely on large companies, and little attention was paid to small and medium sized enterprises (SMEs) (Lepoutre & Heene, 2006; Spence, 1999). There is evidence that “small firms are not little big firms and have a number of specific characteristics” which set them apart from larger companies, particularly with regard to CSR (Lepoutre & Heene, 2006, pp.257). Therefore, recognizing that SMEs encompass a significant portion of businesses operating today, a shift has recently occurred towards investigating CSR within small and medium sized enterprises (Spence, Schmidpeter, & Habisch, 2003). It is now acknowledged that there are many more small firms than large ones (Spence, 1999), and the majority of businesses are in fact small firms (Carr, 2003; Cooper, 1981). This may be particularly true with regard to nature-based tourism businesses. The growing recognition of these facts has led to an increase in research and literature focusing on small business social responsibility (SBSR) (Lepoutre & Heene, 2006). A small business is defined as a business with fewer than 50 employees (Lepoutre & Heene, 2006; Spence, 1999). Despite the new interest in CSR with regard to SMEs, a theoretical framework has yet to be developed (Lepoutre & Heene, 2006). Also, a very limited amount of literature investigates small and medium sized enterprises in developing countries.
Therefore, in an effort to further the understanding of socially responsible behavior with regard to SMEs in developing countries the population for this study includes small and medium sized tourism enterprises in Costa Rica.

**Commercial Success and Performance**

In order to investigate the relationship between commercial success and the provision of benefits to conservation and local communities, one must first operationalize commercial success. Commercial success and business performance are themselves large areas of research. Commercial success or business performance is a complex concept, and is now recognized as being multidimensional (Lerner & Haber, 2001; Lumpkin & Dess, 1996; Reichel & Haber, 2005). Therefore, research investigating only one performance measure, such as profitability, can be misleading (Haber & Reichel, 2005; Lumpkin & Dess, 1996). Instead, to more accurately capture a concept like commercial success, various performance measures should be employed (Cooper, Gimeno-Gascon, & Woo, 1994; Kalleberg & Leicht, 1991; Westhead, Wright, & Ucbasaran, 2001).

The use of both subjective and objective performance data is recommended by various researchers (Brush & Vanderwerf, 1992; Coviello, Winklhofer, & Hamilton, 2006; Haber and Reichel, 2005; Matear, Osborne, Garrett, & Gray, 2002; Sin, Tse, Yau, Lee, & Chow, 2002). However, it is often difficult to obtain objective financial performance data (Cragg & King, 1988; Haber & Reichel, 2005), because small firms are notorious for their unwillingness to share financial information (Coviello, Winklhofer, & Hamilton, 2006; Covin & Slevin, 1989; Sapienza, Smith, & Gannon, 1988). Also, objective data are often found to be inaccurate (Coviello et al., 2006; Dess & Robinson Jr., 1984), and since such data is typically not made available to the public (Coviello et al., 2006; Covin & Slevin, 1989), it can be difficult or impossible to verify the accuracy of the information (Covin & Slevin, 1989; Haber & Reichel,
Therefore, subjective data is frequently used, and a considerable amount of research supports the validity and reliability of subjective business owner reported performance measures (Brush & Vanderwerf, 1992; Coviello et al., 2006; Venkatraman & Ramanujam, 1987). Moreover, subjective data are found to strongly correlate with objective performance measures (Coviello et al., 2006; Dess & Robinson Jr., 1984; Venkatraman & Ramanujam, 1986). Another consideration in measuring commercial success is long-term versus short-term performance. Again, a combination of both long and short-term measures are advocated by past research (Haber & Reichel, 2007; Haber & Reichel, 2005). To obtain reliable and valid measures of business performance and commercial success, this study employed the use of long-term and short-term, subjective and objective, performance measures.

This research selected seven variables to measure performance or commercial success. Longevity, number of visitors, number of employees, growth in the number of visitors, growth in the number of employees, owner-reported profitability, and perceived success were used to operationalize commercial success. These variables were selected in order to gauge both short and long-term performance, using both subjective and objective measures. The first variable, longevity (or business survival), is a long-term, as well as an objective, measure of performance. Survival is identified by some researchers as a significant dimension of success (Lumpkin & Dess, 1996; Van de Ven, Hudson, & Schroeder, 1984). The second and third variables, the number of visitors and the number of employees, are short-term, objective measures of performance that are indicative of size. Since accurate information regarding business revenue is often difficult to obtain, the number of visitors served over a twelve month period was used as a proxy instead. The number of visitors (indicative of revenue) and the number of employees are widely used as measures of size and performance (Brush & Vanderwerf, 1992; Haber and
Reichel, 2005; Haber & Reichel, 2007; Lerner, Brush, & Hisrich, 1997), and are found to be particularly relevant to small businesses (Orser, Hogarth-Scott, & Riding, 2000). The fourth and fifth variables, growth in number of visitors and growth in number of employees, are objective, long-term measures of commercial success. These variables are commonly used to determine the growth of an organization (Brush & Vanderwerf, 1992; Haber & Reichel, 2005; Haber & Reichel, 2007). Finally, the sixth and seventh variables, owner-reported profitability and perceived success compared to similar businesses, are subjective, short-term performance measures previously used by researchers to assess commercial success and performance (Lerner & Haber, 2001; Cooper, Gimeno-Gascon, & Woo, 1994). The matrix in figure 2-1 graphically depicts the short and long-term, subjective and objective measure of performance used in this study.

**Study Objectives**

Based on considerable past research investigating the multidimensional nature of commercial success, this project will examine the variables discussed above, and their relationship to conservation behavior and the provision of benefits to local people. Therefore, this study seeks to answer the following questions: Is commercial success in tourism ventures associated with environmental stewardship and conservation behavior? Is the commercial success of these businesses associated with the provision of benefits to local communities?

**Hypothesis 1:** Commercially successful tourism entrepreneurs will be better environmental stewards than unsuccessful entrepreneurs.

- **Hypothesis 1a:** There will be a positive relationship between the length of time a business has been in operation and environmentally responsible behavior.

- **Hypothesis 1b:** There will be a positive relationship between the number of visitors served and environmentally responsible behavior.
• **Hypothesis 1c:** There will be a positive relationship between the number of employees and environmentally responsible behavior.

• **Hypothesis 1d:** There will be a positive relationship between the growth in number of visitors and environmentally responsible behavior.

• **Hypothesis 1e:** There will be a positive relationship between the growth in the number of employees and environmentally responsible behavior.

• **Hypothesis 1f:** There will be a positive relationship between owner-reported profitability and environmentally responsible behavior.

• **Hypothesis 1g:** There will be a positive relationship between perceived business success as compared to similar businesses and environmentally responsible behavior.

**Hypothesis 2:** Commercially successful tourism entrepreneurs will provide more benefits to local communities than unsuccessful entrepreneurs.

• **Hypothesis 2a:** There will be a positive relationship between the length of time a business has been in operation and socially responsible behavior.

• **Hypothesis 2b:** There will be a positive relationship between the number of visitors served and socially responsible behavior.

• **Hypothesis 2c:** There will be a positive relationship between the number of employees and socially responsible behavior.

• **Hypothesis 2d:** There will be a positive relationship between the growth in number of visitors and socially responsible behavior.

• **Hypothesis 2e:** There will be a positive relationship between the growth in the number of employees and socially responsible behavior.

• **Hypothesis 2f:** There will be a positive relationship between owner-reported profitability and socially responsible behavior.

• **Hypothesis 2g:** There will be a positive relationship between perceived business success as compared to similar businesses and socially responsible behavior.

Additionally, this study aims to identify which factors of conservation behavior (e.g., providing environmental education to visitors, supporting conservation groups and initiatives, reducing, reusing, and/or recycling, using environmentally friendly equipment) and the provision of benefits to local communities (e.g., educating local people, purchasing supplies locally,
patronizing local accommodations, employing local people, making contributions to the
development of local infrastructure) are associated with the various dimensions of commercial success (longevity, the number of visitors, the number of employees, growth in the number of visitors, growth in the number of employees, owner-reported profitability, and perceived success as compared to similar businesses).

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Objective</th>
<th>Subjective</th>
</tr>
</thead>
</table>
| Short-Term | Objective, short-term measures of success:  
  - Number of visitors  
  - Number of employees | Subjective, short-term measures of success:  
  - Owner-reported profitability  
  - Perceived success as compared to similar businesses |
| Long-Term  | Objective, long-term measures of success:  
  - Longevity  
  - Growth in number of visitors  
  - Growth in number of employees | Subjective, long-term measures of success:  
  - None |

CHAPTER 3
METHODS

Study Site

Because Costa Rica is the best-known nature-based tourism destination in the world (Weaver & Schluter, 2001; Honey, 1999), it was selected as the study site. More than one million tourists visit Costa Rica every year (ICT About Costa Rica, 2007a), mostly for its rich biodiversity and varied natural resources. The country’s well-established system of national parks and protected areas—covering about 25% of its area—offer many nature-based tourism opportunities. Although Costa Rica’s economy has historically been based on agriculture, during the last few years tourism has earned more than any single export crop (ICT Business and Economy, 2007b). International tourists in 2005 generated $1.57 billion in revenue, an increase of 17% from 2004 (ICT Tourism Statistical Yearly Report, 2007c).

The country’s involvement in the tourism industry began in the 1930s when Costa Rica established a national tourism board. In 1955 the board became the Costa Rican Tourism Board (Instituto Costarricense de Turismo, ICT), which remains the leading tourism institution in the nation today. The board’s mission is to “promote a wholesome tourism development, with the purpose of improving Costa Ricans' quality of life, by maintaining a balance between the economic and social boundaries, environmental protection, culture and facilities” (ICT General Framework, 2007d). In an effort to meet its mission, Costa Rica developed one of the most successful sustainable tourism certification programs in the world. The Costa Rican Sustainable Tourism Certification (CST) program began in 1999, attempting to categorize and certify businesses’ level of sustainability. To date, the CST program has certified 61 hotels (CST, 2006). The ICT is currently working on extending the program to other businesses as well. Since no other types of tourism businesses are currently certified by CST, and hence the behavior
of other tourism business has not been investigated, small and medium sized, nature-based tour operators and agencies, offering tours and travel services in Costa Rica, were selected as the population for this study.

Research Design and Sample Selection

This study utilized a cross-sectional research design, and a purposive, cluster sampling approach. Sample study areas (clusters) were selected after preliminary surveys of 36 San Jose operators and agents, and after contacting the Costa Rican Tourism Board (ICT), as well as several other tour associations including Canatur and Costa Rica Tour Operator Association (ACOT). Six major tourism clusters were identified. The remainder of the study’s sample was drawn from these five areas: (1) Central San Jose, (2) Tamarindo, on the north Pacific Coast, (3) La Fortuna, at the base of the Arenal Volcano, (4) Monteverde, with its famous cloud forest reserves, (5) Quepos, the gateway to the popular Manuel Antonio National Park (the only Costa Rican national park on the Pacific Ocean), and (6) Puerto Viejo, a small Caribbean town sandwiched between two national parks on the Caribbean coast. Tour operators (businesses that organize and run tours), as well as agencies (businesses that sell tours operated by others), were inventoried in each of the various locales. All, or almost all, operators were inventoried and surveyed in each tourism cluster with the exception of San Jose. Since there are hundreds of operators and agencies in this metropolitan area, this study focused on operators and agencies located in central San Jose, which represents the most significant tourism area in the city. Quantitative data for this research were collected through surveys conducted in June and July of 2006.

Survey Methodology

The researcher visited the main office of each tourism operator and agency to explain the purpose of the study and obtain consent for participation. In most cases, if participants agreed to
participate, the questionnaire was filled out on the spot while the researcher waited to collect it. Typically this took 15 to 20 minutes. On occasion, the person with the pertinent information necessary to complete the questionnaire was not in the office at the time of the visit. Under these circumstances, the researcher left the questionnaire and returned the next day to pick it up. Most participants followed through and the questionnaire was completed the next day. In a few instances, a third (or even fourth) visit was necessary to collect the completed questionnaire, but if the questionnaire remained incomplete after several attempts, those businesses were counted as ones who declined to participate. The final sample size for the study was 167 surveys out of 194, a response rate of 86.1%.

**Questionnaire Design**

The questionnaire was designed by the researcher and was used to collect quantitative data. The data were grouped into five categories. The first category identified general business information, such as business name, location, owner, manager, and business type. The second category of the survey consisted of commercial success variables, discussed previously in the literature review. The third portion of the survey asked for basic owner demographic information, such as age, nationality, and level of education. The fourth part of the survey used a Likert scale to assess the frequencies with which each business participated in various activities that provide conservation and community benefits. These benefits include providing environmental education to visitors, supporting conservation groups and initiatives, educating local people, and purchasing local supplies. This portion of the survey was designed after consulting the literature and contacting relevant experts in the field of ecotourism, including nature-based tourism entrepreneurs in Florida. Experts were asked to list all the possible ways in which a tourism business could benefit conservation or the local community. All responses were utilized and compiled for use in this part of the survey. The final portion of the survey collected
additional data related to community benefits, and also included two final questions, used for verification purposes, inquiring about how strongly overall the business supports conservation and the community. See Appendix A for a complete version of the survey.

Sample Description

General Business Information

Forty-two percent of businesses surveyed operated out of San Jose, compared to 8.6% in Tamarindo, 16.7% in La Fortuna, 14.2% in Monteverde, 13% in Quepos, and 3.7% in Puerto Viejo (Table 3-1). The large majority of businesses surveyed were corporations, 64%, whereas 21.7% were sole proprietorships, and 9.3% were partnerships (Table 3-2). Eighty-two percent of the sample offered tours and travel services only in Costa Rica, compared to 18% of operators and agencies that offered tours and services in both Costa Rica as well as in other countries (Table 3-3). On average, tourism businesses had been in operation for 9.1 years, had 13.9 employees, and served 6324 customers over the last twelve months (Table 3-4).

Owner Demographic Information

Entrepreneurs were 58% male, 26% female, and 16% were male/female partnerships (Table 3-5). The greatest majority of entrepreneurs were Costa Rican, 56.6%, with U.S. nationals comprising the second largest nationality group at 17.2% (Table 3-6). Joint ownership between Costa Rican and U.S. or European nationals accounted for 4.9% of the sample. Additionally, 4.9% of businesses were owned by South Americans, compared to 9% owned by Europeans. The remaining 7.4% of entrepreneurs reported being Canadian, Central American, Caribbean, or Japanese. The mean age of entrepreneurs was 41.3 years old. Sixty-five percent of business owners were married, compared with 25.6% who were single and 9.4% who were divorced (Table 3-7). Over half of entrepreneurs had either no children (25.7%) or one child (26.7%) (Table 3-8). Close to 35% had 2 or 3 children and less than 13% had 4 or more
children. Entrepreneurs were highly educated. The majority had a university degree (46.5%) (Table 3-9). An additional 12.3% had a graduate degree as well, and 17.5% attended university without completing a degree. This left less than a quarter of entrepreneurs who had a high school education or less. On average this study’s data describe the average Costa Rican tourism entrepreneur to be a highly educated, married, Costa Rican, male in his early 40’s.

Data Exploration

In preparing the data for analysis, the assumption of normality was tested to determine the type of analyses necessary, and whether parametric or non-parametric tests were appropriate for the data set. First, the researcher examined boxplots of the commercial success data (Figures B-8 -12). The boxplots highlighted the outliers that existed within the data set. After checking the raw data, the researcher confirmed the outliers were not errors, and there was no good reason to believe these cases came from a different population. Therefore, it was inappropriate to remove the outliers from the data set.

Next, the researcher checked the histograms to look at the distribution of the commercial success variables. The histograms revealed that some variables were negatively skewed while others were positively skewed (Figures B-1-7). Therefore, transforming the data was not an option, since no one transformation would correct all the problems throughout the data set. Additionally, it appeared as though there was significant kurtosis in several of the variables. To confirm the extent of the skewness and kurtosis, these scores were standardized by converting them to z-scores (Table 3-4). The z-scores demonstrated all data are significantly skewed (p < .05), 6 out of 7 variables were significant at the .01 level, and 5 out of 7 were significant at the .001 level. Also, there is a significant kurtosis for all variables except owner-reported profitability and perceived success (p < .001). See table 3-4 for a summary of the scores.
Finally, the Kolmogorov-Smirnov and Shapiro-Wilk tests were run (Table 3-4). These tests are used to establish if the distributions as a whole differ from comparable normal distributions with the same mean and standard deviation (Field, 2005). Both tests were highly significant ($p < 0.001$) for all success variables, indicating the distributions were not normal. The Kolmogorov-Smirnov test revealed that the length of time a business has been in operation, $D(102) = 0.155$, $p < .001$, the number of visitors served over 12 months, $D(102) = 0.329$, $p < .001$, the number of employees, $D(102) = 0.238$, $p < .001$, the percentage change in visitors, $D(102) = 0.217$, $p < .001$, and employees $D(102) = 0.337$, $p < .001$, the owner-reported level of profitability, $D(102) = 0.281$, $p < .001$, and the perceived level of success $D(102) = 0.251$, $p < .001$, were all significantly non-normal.

Boxplots, histograms of frequency distributions, the skewness statistic, the kurtosis statistic, z-scores, the Kolmogorov-Smirnov statistic, and the Shapiro-Wilk statistic all validate that the data is non-normal. Deviations from normality such as these demonstrate that parametric tests cannot be used, because the assumption of normality is not defensible (Field, 2005).

**Data Analysis**

Since the data for this study violate the assumption of normality, parametric tests cannot be used. Instead, non-parametric tests must be employed. In order to examine the relationship between commercial success and environmentally or socially responsible behavior, Spearman correlations were used. To investigate hypotheses 1 and 2, it was necessary to create an index for conservation behavior, and another index for community involvement. These indices were created by calculating the mean for all nine conservation variables and all 13 community involvement variables. These means could then be correlated with the seven commercial success variables to assess the overall relationship between commercial success and responsible
behavior. Additionally, all nine conservation variables and all 13 community benefit variables were correlated with the seven commercial success variables individually to determine specifically which behaviors were related to commercial success.

Figure 3-1. Map of Costa Rica and research sites

Table 3-1. Distribution of tourism businesses by location

<table>
<thead>
<tr>
<th>Business Location</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Jose</td>
<td>42</td>
</tr>
<tr>
<td>Tamarindo</td>
<td>8.6</td>
</tr>
<tr>
<td>La Fortuna</td>
<td>16.7</td>
</tr>
<tr>
<td>Monteverde</td>
<td>14.2</td>
</tr>
<tr>
<td>Quepos</td>
<td>13</td>
</tr>
<tr>
<td>Puerto Viejo</td>
<td>3.7</td>
</tr>
<tr>
<td>Osa Peninsula</td>
<td>1.2</td>
</tr>
<tr>
<td>Tortuguero</td>
<td>0.6</td>
</tr>
</tbody>
</table>
### Table 3-2. Distribution of businesses by type

<table>
<thead>
<tr>
<th>Business Type</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietorship</td>
<td>21.7</td>
</tr>
<tr>
<td>Partnership</td>
<td>9.3</td>
</tr>
<tr>
<td>Corporation</td>
<td>64</td>
</tr>
<tr>
<td>Other Type</td>
<td>5</td>
</tr>
</tbody>
</table>

### Table 3-3. Distribution of businesses by tours and services offered

<table>
<thead>
<tr>
<th>Offers Tours &amp; Services</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only in Costa Rica</td>
<td>82</td>
</tr>
<tr>
<td>Costa Rica and Other Countries</td>
<td>18</td>
</tr>
</tbody>
</table>

### Table 3-4. Means, skewness statistic, kurtosis statistic, z-scores, Kolmogorov-Smirnov statistic, and Shapiro-Wilk statistic for the commercial success variables

<table>
<thead>
<tr>
<th>Commercial Success Variables</th>
<th>Means</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>z-score</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Kolmogorov-Smirnov Statistic</th>
<th>Kolmogorov-Smirnov Sig.</th>
<th>Shapiro-Wilk Statistic</th>
<th>Shapiro-Wilk Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years in business</td>
<td>9.1</td>
<td>2.4</td>
<td>8.6</td>
<td>12.7</td>
<td>22.8</td>
<td></td>
<td>.155</td>
<td>.000</td>
<td>.771</td>
<td>.000</td>
</tr>
<tr>
<td>Number of visitors</td>
<td>6324</td>
<td>5.2</td>
<td>33.8</td>
<td>25.1</td>
<td>82.5</td>
<td></td>
<td>.329</td>
<td>.000</td>
<td>.445</td>
<td>.000</td>
</tr>
<tr>
<td>Number of employees</td>
<td>13.9</td>
<td>3.7</td>
<td>15.9</td>
<td>19.1</td>
<td>42.1</td>
<td></td>
<td>.217</td>
<td>.000</td>
<td>.668</td>
<td>.000</td>
</tr>
<tr>
<td>Percent change in visitors over 5 yrs</td>
<td>18.3</td>
<td>4.1</td>
<td>24.5</td>
<td>18.6</td>
<td>56.7</td>
<td></td>
<td>.238</td>
<td>.000</td>
<td>.630</td>
<td>.000</td>
</tr>
<tr>
<td>Percent change in employees over 5 yrs</td>
<td>45.6</td>
<td>6.3</td>
<td>48.1</td>
<td>30.1</td>
<td>114.8</td>
<td></td>
<td>.337</td>
<td>.000</td>
<td>.377</td>
<td>.000</td>
</tr>
<tr>
<td>Owner-reported level of profitability</td>
<td>3.82</td>
<td>-0.44</td>
<td>0.16</td>
<td>2.2</td>
<td>0.40</td>
<td></td>
<td>.281</td>
<td>.000</td>
<td>.838</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived level of success</td>
<td>3.97</td>
<td>-0.61</td>
<td>0.46</td>
<td>3.1</td>
<td>1.2</td>
<td></td>
<td>.251</td>
<td>.000</td>
<td>.823</td>
<td>.000</td>
</tr>
</tbody>
</table>

### Table 3-5. Distribution of entrepreneurs by sex

<table>
<thead>
<tr>
<th>Owner’s Sex</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>57.6</td>
</tr>
<tr>
<td>Female</td>
<td>26.1</td>
</tr>
<tr>
<td>Male/Female partnership</td>
<td>16.3</td>
</tr>
</tbody>
</table>
Table 3-6. Distribution of entrepreneurs by nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rican</td>
<td>56.6</td>
</tr>
<tr>
<td>USA</td>
<td>17.2</td>
</tr>
<tr>
<td>Costa Rican, USA</td>
<td>3.3</td>
</tr>
<tr>
<td>Costa Rican, European</td>
<td>1.6</td>
</tr>
<tr>
<td>South American</td>
<td>4.9</td>
</tr>
<tr>
<td>Central American/Caribbean</td>
<td>4.1</td>
</tr>
<tr>
<td>European</td>
<td>9</td>
</tr>
<tr>
<td>Canadian</td>
<td>2.5</td>
</tr>
<tr>
<td>Japanese</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Table 3-7. Distribution of entrepreneurs by marital status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>65</td>
</tr>
<tr>
<td>Single</td>
<td>25.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Table 3-8. Distribution of entrepreneurs by number of children

<table>
<thead>
<tr>
<th>Number of Children</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>25.7</td>
</tr>
<tr>
<td>1</td>
<td>26.7</td>
</tr>
<tr>
<td>2</td>
<td>17.8</td>
</tr>
<tr>
<td>3</td>
<td>16.8</td>
</tr>
<tr>
<td>4 or more</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Table 3-9. Distribution of entrepreneurs by level of education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete primary</td>
<td>0.9</td>
</tr>
<tr>
<td>Primary</td>
<td>3.5</td>
</tr>
<tr>
<td>Incomplete secondary</td>
<td>5.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>12.3</td>
</tr>
<tr>
<td>Technical School</td>
<td>1.8</td>
</tr>
<tr>
<td>Incomplete University</td>
<td>17.5</td>
</tr>
<tr>
<td>University Graduate</td>
<td>46.5</td>
</tr>
<tr>
<td>Postgraduate Degree</td>
<td>12.3</td>
</tr>
</tbody>
</table>
CHAPTER 4
RESULTS

Descriptive Statistics

Commercial Success Data

As discussed previously, seven variables were used to measure commercial success: (1) the length of time in business, (2) the number of visitor served over 12 months, (3) the number of employees, (4) the percentage change in visitors over 5 years, (5) the percentage change in employees over 5 years, (6) the owner-reported level of profitability, and (7) the perceived level of success as compared to similar businesses. On average, sampled tourism businesses were in operation for 9.1 years, served 6324 visitors over the past 12 months, and had 13.9 employees. The mean change in number of visitors was 18.3%, and the mean change in the number of employees was 45.6% over a 5 year period (Table 3-4). Few entrepreneurs rated their businesses as either unsuccessful (3.8%) or unprofitable (5.4%) (Tables 4-1 and 4-2). Instead, over 75% of businesses considered themselves successful, while 68% reported making a profit. Just over 20% reported being neither successful nor unsuccessful, and 26.7% reported breaking even financially.

Conservation Behavior

Nine conservation behaviors were examined using Likert scales. These variables included (1) providing environmental education to visitors, (2) supporting conservation groups and initiatives, (3) reducing, reusing, and/or recycling, (4) using environmentally friendly equipment, (5) providing environmental or conservation training for employees, (6) using alternative energy sources, (7) paying fees to use or visit parks or protected areas, (8) building formal partnerships with parks and protected areas, and (9) communicating with parks and protected areas. Over 30% of businesses reported to always provide environmental education to visitors, support
conservation groups and initiatives, reduce, reuse, and/or recycle, and pay fees to use or visit parks or protected areas (Table 4-3). These four conservation behaviors also had the highest means, 3.58, 3.66, 3.66, and 3.75 (5 point Likert scale), along with the use of environmentally friendly equipment, which had a mean of 3.62 (Table 4-3). Building formal partnerships with parks or protected areas and using alternative energy sources had the lowest means, 2.83 and 2.55 respectively, and 30% of businesses never practiced these behaviors.

**Community Benefits/Involvement**

Thirteen community benefit or community involvement variables were measured using Likert scales. These variables included (1) educating local people, (2) purchasing supplies locally, (3) patronizing local accommodations, (4) employing local people, (5) providing cultural education to visitors, (6) making contributions to the development of local infrastructure, (7) providing cultural sensitivity training to employees, building formal partnerships with (8) other local businesses, (9) with local officials, (10) and with community members, communicating with (11) other local businesses, (12) with local officials, and (13) with community members. Of these thirteen behaviors, purchasing local supplies, employing local people, and patronizing local accommodations had the highest means (all above 4); over 50% of businesses reported to always practice these behaviors, and a total of 80% of businesses reported to always or often practice these behaviors (Table 4-4). Additionally, more than 30% of enterprises stated they always communicated with other local businesses, provided cultural education to visitors, and communicated with community members. Less than 20% of companies provided cultural sensitivity training to employees, or built formal partnerships with community members or local officials.
Commercial Success and Conservation Behavior

The following section investigates the relationship between the seven commercial success variables and the nine different conservation behaviors. To better understand how the various dimensions of commercial success are related to the different conservation behaviors, each sub-hypothesis is examined individually using Spearman correlations. Correlation coefficients and relative p values are listed in Table 4-5. Finally, the conservation index is correlated with all seven commercial success variables to gain a more holistic understanding of how commercial success relates to conservation behavior.

**Hypothesis 1a:** There will be a positive relationship between the length of time a business has been in operation and environmentally responsible behavior.

The data do not support this hypothesis. Only one conservation behavior, providing environmental or conservation training to employees, was significantly correlated with the length of time a business had been in operation (Table 4-5). And actually, these variables were negatively correlated with one another (p < .01). The longer a business had been in operation the less environmental and conservation training it provided to its employees. Therefore, the data provide no support for Hypothesis 1a.

**Hypothesis 1b:** There will be a positive relationship between the number of visitors served and environmentally responsible behavior.

Again, the data provide little support for this hypothesis. Only two conservation behaviors were significantly correlated with the number of visitors served over a 12 month period. There was a positive relationship between the number of visitors served and communication with parks and protected areas (p < .05). However, the only other statistically significant relationship was a negative correlation between the number of visitors served and paying fees to use or visit parks and protected areas (p < .05). Therefore, the data do not support
hypothesis 1b. Businesses serving more visitors do not act in more environmentally responsible ways than companies serving fewer visitors.

**Hypothesis 1c:** There will be a positive relationship between the number of employees and environmentally responsible behavior.

The data do provide some support this hypothesis. There is a significant positive relationship between the number of employees and five of the nine conservation behaviors. Reducing, reusing, and recycling, using environmentally friendly equipment, building formal partnerships with parks and protected areas, and using alternative energy sources were all significantly correlated (p < .01) with the number of employees. Supporting conservation groups or initiatives was also found to be significant (p < .05). Therefore, we can reject the null hypothesis and conclude that indeed a positive relationship exists between the number of employees and certain environmentally responsible behaviors.

**Hypothesis 1d:** There will be a positive relationship between the growth in number of visitors and environmentally responsible behavior.

There is some support for this hypothesis. The data demonstrate that four of the nine conservation behaviors correlate with growth in the number of visitors. These behaviors include providing environmental education to visitors, supporting conservation groups and initiatives, reducing, reusing and recycling, and using environmentally friendly equipment. Reducing, reusing, and recycling, and using environmentally friendly equipment were significant at the .01 level, while providing environmental education to visitors and supporting conservation groups and initiatives were significant at the .05 level. Therefore, there appears to be a positive relationship between the growth in the number of visitors and environmentally responsible behavior.

**Hypothesis 1e:** There will be a positive relationship between the growth in the number of employees and environmentally responsible behavior.
There seems to be some support for this hypothesis. Five out of nine conservation behaviors significantly correlate with growth in the number of employees. The same four behaviors that correlated with growth in number of visitors were also correlated with growth in the number of employees. Providing environmental education to visitors ($p < .01$), supporting conservation groups and initiatives ($p < .05$), reducing, reusing, and recycling ($p < .05$), and using environmentally friendly equipment ($p < .05$) were all positively correlated with this success variables, as was building formal partnerships with parks and protected areas ($p < .05$). Therefore, the data show a positive relationship exists between the growth in the number of employees and environmentally responsible behavior.

**Hypothesis 1f:** There will be a positive relationship between owner-reported profitability and environmentally responsible behavior.

The data show absolutely no support for this hypothesis. None of the conservation variables are significantly correlated with owner-reported profitability. In fact, none of the conservation behaviors are even correlated with owner-reported profitability at the .1 level. Therefore, it is safe to conclude that no relationship exists between owner-reported profitability and environmentally responsible behavior.

**Hypothesis 1g:** There will be a positive relationship between perceived business success as compared to similar businesses and environmentally responsible behavior.

The data support this hypothesis. Five of the nine conservation variables are significantly correlated with perceived business success as compared to similar businesses. Once again, providing environmental education to visitors ($p < .05$), supporting conservation groups and initiatives ($p < .05$), reducing, reusing, and recycling ($p < .01$), and using environmentally friendly equipment ($p < .01$) were all positively correlated with perceived business success. Additionally, the use of alternative energy sources was also positively correlated with perceived success ($p < .05$). Hence, it can be concluded that a positive relationship exists between
perceived business success, as compared to similar businesses, and environmentally responsible behavior.

**Hypothesis 1**: Commercially successful tourism entrepreneurs will be better environmental stewards than unsuccessful entrepreneurs.

Spearman correlations revealed several commercial success variables were significantly correlated with the conservation index (mean of all 9 conservation variables). The number of employees ($p < .01$), the percentage change in visitors ($p < .01$), the percentage change in employees ($p < .01$), and the business’ perceived level of success relative to other similar businesses ($p < .05$) were all positively correlated with environmental stewardship. Only the length of time in business, the number of visitors served over 12 months, and the owner-reported level of profitability were not associated with environmental stewardship. Overall, it appears there is a relationship between commercial success and conservation behavior. Therefore, we can reject the null hypothesis and conclude commercially successful tourism entrepreneurs are better environmental stewards than unsuccessful entrepreneurs.

To conclude, four conservation behaviors, (1) providing environmental education to visitors, (2) supporting conservation groups and initiatives, (3) reducing, reusing and recycling, and (4) using environmentally friendly equipment, were found to be associated with growth (both in visitors and employees) and perceived business success (relative to other similar businesses). Additionally, three of these same conservation behaviors, supporting conservation groups and initiatives, reducing, reusing and recycling, and using environmentally friendly equipment, were also related to the size of a business (measured relative to the number of employees). Therefore, it appears as though these specific conservation behaviors are indeed related to various aspects of commercial success, such as size, growth, and perceived success relative to other businesses. Moreover, these same dimensions of commercial success (the same
success variables) are also significantly correlated with the conservation index, providing further
evidence to conclude that a relationship exists between size, growth, perceived success relative
to other similar businesses, and these conservation behaviors.

Conversely, the five other conservation behaviors seem to be not at all, or much less,
associated with commercial success. Two behaviors, paying fees to use or visit parks and
protected areas, and providing environmental or conservation training for employees, were only
negatively related to any of the commercial success variables. Three conservation behaviors
(using alternative energy sources, building formal partnerships with parks or protected areas, and
communicating with parks and protected areas) were significantly correlated with only one or
two aspects of commercial success. Therefore, it can be concluded that these five conservation
behaviors are not significantly related to commercial success.

**Commercial Success and Community Benefits/Involvement**

The next section reviews the association between the seven commercial success variables
and the 13 community benefits variables. Each of the seven sub-hypotheses are analyzed to gain
a better understanding of how the different dimensions of commercial success are linked to
community involvement. The hypotheses are analyzed using Spearman correlations.
Correlation coefficients and relative p values are listed in Table 4-6. To conclude, the
community benefits/involvement index is correlated with all seven commercial success variables
to gain a more comprehensive understanding of how commercial success relates to community
involvement.

**Hypothesis 2a:** There will be a positive relationship between the length of time a
business has been in operation and socially responsible behavior.

The data provide no support for this hypothesis. None of the community benefit
variables were positively correlated with the length of time a business had been in operation.
However, four community benefit variables were negatively correlated with business longevity. Educating local people ($p < .05$), making contributions to the development of local infrastructure ($p < .05$), building formal partnerships with other local businesses ($p < .01$), and communicating with community members ($p < .05$) were all negatively correlated with business survival (Table 4-6). This means the longer a business had been in operation the less likely it was to practice these behaviors. Therefore, there is no support for this hypothesis, and instead it appears that the opposite is true.

**Hypothesis 2b:** There will be a positive relationship between the number of visitors served and socially responsible behavior.

Again, there is little support for this hypothesis. Only one community involvement variable, building partnerships with community members, was positively correlated with the number of visitors served ($p < .05$). And, a second community involvement variable, providing cultural education to visitors, was negatively correlated with the number of visitors served ($p < .01$). Therefore, there is not a positive relationship between the number of visitors served and socially responsible behavior.

**Hypothesis 2c:** There will be a positive relationship between the number of employees and socially responsible behavior.

The data show there is some support for this hypothesis. The number of employees was positively correlated with both building formal partnerships with local officials and building formal partnerships with community members ($p < .05$). However, there was also a significant negative correlation between the number of employees and the provision of cultural education to visitors ($p < .05$). Therefore, there is inconclusive evidence to support or reject this hypothesis.

**Hypothesis 2d:** There will be a positive relationship between the growth in the number of visitors and socially responsible behavior.
The data provide minimal support for this hypothesis. Only one community involvement variable, building formal partnerships with community members, was significantly correlated with growth in the number of visitors served (p < .05). Thus, there is very limited evidence of a positive relationship between the growth in the number of visitors and socially responsible behavior.

**Hypothesis 2e:** There will be a positive relationship between the growth in the number of employees and socially responsible behavior.

The data provide no support for this hypothesis whatsoever. None of the community involvement variables were significantly correlated with the growth in the number of employees, even at the .1 level. Hence, it can be concluded that there is no relationship between growth in the number of employees and socially responsible behavior.

**Hypothesis 2f:** There will be a positive relationship between owner-reported profitability and socially responsible behavior.

The data do not support this hypothesis. None of the community benefits variables were significantly correlated with owner-reported profitability. Consequently, there is no evidence that any relationship exists between owner-reported profitability and socially responsible behavior.

**Hypothesis 2g:** There will be a positive relationship between perceived business success as compared to similar businesses and socially responsible behavior.

The data do not provide any evidence to support this hypothesis. There were no significant correlations between perceived business success and any of the 13 community involvement variables. Therefore, this hypothesis can be rejected and one can conclude there is no relationship between perceived success relative to other similar businesses and socially responsible behavior.

**Hypothesis 2:** Commercially successful tourism entrepreneurs will provide more benefits to local communities than unsuccessful entrepreneurs.
Spearman correlations showed that only one commercial success variable, the length of time a business had been in operation, was significantly correlated (p < .01) with the index for community benefits/involvement. Furthermore, this variable was actually negatively correlated with the index, which reveals the longer a business is around, the less involved it is in the local community. None of the other six commercial success variables proved to be significantly related to a business's level of involvement with the local community. Therefore, there is no support for hypothesis 2, demonstrating that there is not a positive relationship between commercial success and the provision of benefits to local communities. Commercially successful tourism entrepreneurs do not provide more benefits to local communities than unsuccessful entrepreneurs.

To conclude, six of the 13 community benefit variables were not correlated with any of the seven commercial success variables. These variables included purchasing local supplies, patronizing local accommodations, employing local people, providing cultural sensitivity training to employees, communicating with other local businesses, and communicating with local officials. Another five community involvement variables (educating local people, providing cultural education to visitors, making contributions to the development of local infrastructure, building formal partnerships with other local businesses, and communicating with community members) were only negatively related to the various dimensions of commercial success. That left only two community benefit variables, building formal partnerships with local officials and building formal partnerships with community members, which were positively associated with any of the commercial success variables. This further demonstrates that there is little evidence linking commercial success to the provision of benefits to local communities.
Table 4-1. Mean and distribution of businesses by owner-reported level of profitability

<table>
<thead>
<tr>
<th>Owner-Reported Level of Profitability</th>
<th>Valid %</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Loss (1)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Small Loss (2)</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Break Even (3)</td>
<td>26.7</td>
<td>3.82</td>
</tr>
<tr>
<td>Small Profit (4)</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>A Profit (5)</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-2. Mean and distribution of businesses by perceived level of success as compared to similar businesses

<table>
<thead>
<tr>
<th>Perceived Level of Success</th>
<th>Valid %</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuccessful (1)</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Somewhat Unsuccessful (2)</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Neither (3)</td>
<td>20.6</td>
<td>3.97</td>
</tr>
<tr>
<td>Somewhat Successful (4)</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Successful (5)</td>
<td>26.5</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-3. Means and percent distribution of conservation variables

<table>
<thead>
<tr>
<th>Conservation Variables</th>
<th>Mean</th>
<th>Sample Size</th>
<th>Never (1)</th>
<th>Seldom (2)</th>
<th>Sometimes (3)</th>
<th>Often (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay fees to use or visit parks or protected areas</td>
<td>3.75</td>
<td>159</td>
<td>13.2</td>
<td>11.3</td>
<td>10.1</td>
<td>17.6</td>
<td>47.8</td>
</tr>
<tr>
<td>Support conservation groups and initiatives</td>
<td>3.66</td>
<td>160</td>
<td>6.9</td>
<td>13.8</td>
<td>21.9</td>
<td>21.9</td>
<td>35.6</td>
</tr>
<tr>
<td>Reduce, reuse, and/or recycle</td>
<td>3.66</td>
<td>158</td>
<td>7.6</td>
<td>10.8</td>
<td>21.5</td>
<td>27.8</td>
<td>32.3</td>
</tr>
<tr>
<td>Use environmentally friendly equipment</td>
<td>3.62</td>
<td>153</td>
<td>9.2</td>
<td>8.5</td>
<td>22.9</td>
<td>30.1</td>
<td>29.4</td>
</tr>
<tr>
<td>Provide environmental education to visitors</td>
<td>3.59</td>
<td>159</td>
<td>10.7</td>
<td>9.4</td>
<td>21.4</td>
<td>27</td>
<td>31.4</td>
</tr>
<tr>
<td>Provide environmental or conservation training for employees</td>
<td>3.53</td>
<td>153</td>
<td>7.8</td>
<td>13.1</td>
<td>25.5</td>
<td>25.5</td>
<td>28.1</td>
</tr>
<tr>
<td>Communicate with parks and protected areas</td>
<td>3.42</td>
<td>156</td>
<td>13.5</td>
<td>11.5</td>
<td>20.5</td>
<td>28.2</td>
<td>26.3</td>
</tr>
<tr>
<td>Build formal partnerships with parks and protected areas</td>
<td>2.83</td>
<td>158</td>
<td>26.6</td>
<td>19</td>
<td>15.2</td>
<td>23.4</td>
<td>15.8</td>
</tr>
<tr>
<td>Use alternative energy sources</td>
<td>2.55</td>
<td>149</td>
<td>32.2</td>
<td>17.4</td>
<td>22.8</td>
<td>18.1</td>
<td>9.4</td>
</tr>
</tbody>
</table>
Table 4-4. Means and percent distribution of community benefit/involvement variables

<table>
<thead>
<tr>
<th>Community Benefit Variables</th>
<th>Mean</th>
<th>Sample Size</th>
<th>Never (1)</th>
<th>Seldom (2)</th>
<th>Sometimes (3)</th>
<th>Often (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase local supplies</td>
<td>4.48</td>
<td>156</td>
<td>0.6</td>
<td>1.3</td>
<td>7.1</td>
<td>31.4</td>
<td>59.6</td>
</tr>
<tr>
<td>Employ local people</td>
<td>4.35</td>
<td>158</td>
<td>4.4</td>
<td>2.5</td>
<td>5.1</td>
<td>29.7</td>
<td>58.2</td>
</tr>
<tr>
<td>Patronize local accommodations</td>
<td>4.3</td>
<td>159</td>
<td>1.9</td>
<td>3.1</td>
<td>10.1</td>
<td>32.7</td>
<td>52.2</td>
</tr>
<tr>
<td>Communicate with other local businesses</td>
<td>4.11</td>
<td>158</td>
<td>1.9</td>
<td>5.1</td>
<td>12.7</td>
<td>40.5</td>
<td>39.9</td>
</tr>
<tr>
<td>Provide cultural education to visitors</td>
<td>3.82</td>
<td>161</td>
<td>5.6</td>
<td>8.1</td>
<td>22.4</td>
<td>26.7</td>
<td>37.3</td>
</tr>
<tr>
<td>Communicate with community members</td>
<td>3.54</td>
<td>153</td>
<td>9.8</td>
<td>13.7</td>
<td>19</td>
<td>27.5</td>
<td>30.1</td>
</tr>
<tr>
<td>Educate local people</td>
<td>3.51</td>
<td>152</td>
<td>7.9</td>
<td>11.8</td>
<td>24.3</td>
<td>32.9</td>
<td>23</td>
</tr>
<tr>
<td>Make contributions to the development of local infrastructure</td>
<td>3.4</td>
<td>158</td>
<td>10.1</td>
<td>11.4</td>
<td>29.1</td>
<td>27.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Communicate with local officials</td>
<td>3.19</td>
<td>159</td>
<td>15.1</td>
<td>17</td>
<td>23.9</td>
<td>21.4</td>
<td>22.6</td>
</tr>
<tr>
<td>Build formal partnerships with other local businesses</td>
<td>3.18</td>
<td>157</td>
<td>19.7</td>
<td>11.5</td>
<td>23.6</td>
<td>21.7</td>
<td>23.6</td>
</tr>
<tr>
<td>Provide cultural sensitivity training to employees</td>
<td>3.13</td>
<td>156</td>
<td>14.7</td>
<td>12.2</td>
<td>34</td>
<td>23.1</td>
<td>16</td>
</tr>
<tr>
<td>Build formal partnerships with community members</td>
<td>3.02</td>
<td>155</td>
<td>21.9</td>
<td>15.5</td>
<td>20.6</td>
<td>22.6</td>
<td>19.4</td>
</tr>
<tr>
<td>Build formal partnerships with local officials</td>
<td>2.67</td>
<td>159</td>
<td>32.1</td>
<td>18.9</td>
<td>13.8</td>
<td>20.8</td>
<td>14.5</td>
</tr>
</tbody>
</table>
Table 4-5. Correlation coefficients for commercial success and conservation variables

<table>
<thead>
<tr>
<th>Conservation Variables</th>
<th>Years in business</th>
<th>Number of visitors</th>
<th>Number of employees</th>
<th>Percent change in visitors</th>
<th>Percent change in employees</th>
<th>Owner-reported level of profitability</th>
<th>Perceived level of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of all 9 conservation variables</td>
<td>-.098</td>
<td>.141</td>
<td>.272**</td>
<td>.244**</td>
<td>.233**</td>
<td>.120</td>
<td>.195*</td>
</tr>
<tr>
<td>Provide environmental education to visitors</td>
<td>-.082</td>
<td>.062</td>
<td>.132</td>
<td>.230*</td>
<td>.252**</td>
<td>.092</td>
<td>.203*</td>
</tr>
<tr>
<td>Support conservation groups and initiatives</td>
<td>-.076</td>
<td>.114</td>
<td>.186*</td>
<td>.205*</td>
<td>.197*</td>
<td>.047</td>
<td>.210*</td>
</tr>
<tr>
<td>Reduce, Reuse, and/or recycle</td>
<td>.099</td>
<td>.151</td>
<td>.316**</td>
<td>.247**</td>
<td>.228*</td>
<td>.107</td>
<td>.285**</td>
</tr>
<tr>
<td>Use environmentally friendly equipment</td>
<td>-.077</td>
<td>.121</td>
<td>.261**</td>
<td>.321**</td>
<td>.192*</td>
<td>.120</td>
<td>.214**</td>
</tr>
<tr>
<td>Provide environmental or conservation training for employees</td>
<td>-.207*</td>
<td>.030</td>
<td>.084</td>
<td>.161</td>
<td>.069</td>
<td>-.024</td>
<td>-.012</td>
</tr>
<tr>
<td>Use alternative energy sources</td>
<td>-.001</td>
<td>.120</td>
<td>.257**</td>
<td>.092</td>
<td>.010</td>
<td>.049</td>
<td>.179*</td>
</tr>
<tr>
<td>Pay fees to use or visit parks or protected areas</td>
<td>-.043</td>
<td>-.213*</td>
<td>-.145</td>
<td>-.091</td>
<td>.066</td>
<td>.065</td>
<td>-.106</td>
</tr>
<tr>
<td>Build formal partnerships with parks and protected areas</td>
<td>-.148</td>
<td>.159</td>
<td>.224**</td>
<td>.151</td>
<td>.213*</td>
<td>.097</td>
<td>.058</td>
</tr>
<tr>
<td>Communicate with parks and protected areas</td>
<td>-.150</td>
<td>.178*</td>
<td>.067</td>
<td>.067</td>
<td>.053</td>
<td>.125</td>
<td>.035</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Table 4-6. Correlation coefficients for commercial success and community benefit/involvement variables

<table>
<thead>
<tr>
<th>Community Involvement Variables</th>
<th>Years in business</th>
<th>Number of visitors</th>
<th>Number of employees</th>
<th>Percent change in visitors</th>
<th>Percent change in employees</th>
<th>Owner-reported level of profitability</th>
<th>Perceived level of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of all 13 community benefit variables</td>
<td>-.210**</td>
<td>.093</td>
<td>.115</td>
<td>.146</td>
<td>.121</td>
<td>-.006</td>
<td>.089</td>
</tr>
<tr>
<td>Educate local people</td>
<td>-.166*</td>
<td>-.027</td>
<td>.114</td>
<td>.174</td>
<td>.081</td>
<td>-.042</td>
<td>.013</td>
</tr>
<tr>
<td>Purchase local supplies</td>
<td>-.046</td>
<td>-.004</td>
<td>.034</td>
<td>.107</td>
<td>.087</td>
<td>-.001</td>
<td>.088</td>
</tr>
<tr>
<td>Patronize local accommodations</td>
<td>-.071</td>
<td>-.043</td>
<td>.071</td>
<td>.048</td>
<td>.116</td>
<td>-.128</td>
<td>.032</td>
</tr>
<tr>
<td>Employ local people</td>
<td>-.022</td>
<td>.103</td>
<td>.015</td>
<td>-.008</td>
<td>.089</td>
<td>-.008</td>
<td>.068</td>
</tr>
<tr>
<td>Provide cultural education to visitors</td>
<td>-.142</td>
<td>-.259**</td>
<td>-.160*</td>
<td>.101</td>
<td>-.016</td>
<td>-.006</td>
<td>-.038</td>
</tr>
<tr>
<td>Make contributions to the development of local infrastructure</td>
<td>-.169*</td>
<td>.067</td>
<td>.097</td>
<td>-.007</td>
<td>.083</td>
<td>.016</td>
<td>.063</td>
</tr>
<tr>
<td>Provide cultural sensitivity training to employees</td>
<td>-.072</td>
<td>.056</td>
<td>.055</td>
<td>.157</td>
<td>.045</td>
<td>.036</td>
<td>.100</td>
</tr>
<tr>
<td>Build formal partnerships with other local businesses</td>
<td>-.225**</td>
<td>-.003</td>
<td>.054</td>
<td>.141</td>
<td>.117</td>
<td>.022</td>
<td>.039</td>
</tr>
<tr>
<td>Build formal partnerships with local officials</td>
<td>-.138</td>
<td>.143</td>
<td>.168*</td>
<td>.155</td>
<td>.055</td>
<td>.017</td>
<td>.134</td>
</tr>
<tr>
<td>Build formal partnerships with community members</td>
<td>-.158</td>
<td>.174*</td>
<td>.184*</td>
<td>.212*</td>
<td>.097</td>
<td>-.017</td>
<td>.147</td>
</tr>
<tr>
<td>Communicate with other local businesses</td>
<td>-.123</td>
<td>.033</td>
<td>-.086</td>
<td>-.024</td>
<td>.018</td>
<td>.038</td>
<td>.000</td>
</tr>
<tr>
<td>Communicate with local officials</td>
<td>-.056</td>
<td>.097</td>
<td>.077</td>
<td>.069</td>
<td>-.016</td>
<td>.010</td>
<td>.021</td>
</tr>
<tr>
<td>Communicate with community members</td>
<td>-.293**</td>
<td>.108</td>
<td>.020</td>
<td>.079</td>
<td>.038</td>
<td>-.052</td>
<td>.068</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
CHAPTER 5
DISCUSSION AND CONCLUSIONS

This study found that the majority of nature-based tourism businesses in Costa Rica were small corporations, with fewer than 20 employees, which offer tours and services only in Costa Rica (as opposed to, or in addition to, other countries). On average, these businesses had been in operation just over 9 years, had approximately 14 employees, and served about 6300 visitors a year. Most ventures experienced some growth in the number of visitors, and significant growth in the number of employees, over the last five years. The enterprises also reported being somewhat successful and somewhat profitable. The vast majority of entrepreneurs surveyed were university educated, married, Costa Rican males in their thirties or forties, with one or no children.

After investigating the conservation behavior and the provision of benefits to local communities, this research discovered that a quarter of the businesses sampled are in fact ecotourism businesses, according to The International Ecotourism Society’s definition. These businesses reported that they almost always, or often, are involved in the local community, as well as always or often practicing the various conservation behaviors. Therefore, Costa Rica does have some ecotourism businesses, but it is safe to say that the majority of tourism businesses are not actually living up to the ecotourism definition.

**Commercial Success and Conservation Behavior**

When attempting to answer the first research question, is commercial success in tourism ventures associated with environmental stewardship and conservation behavior, the results of this study show that there is a relatively strong relationship between the commercial success variables and conservation behavior. The conservation index was positively associated with the size, the amount of growth, and the perceived relative success of a business as compared to
similar businesses. Also, four commercial success variables, number of employees, growth in number of visitors, growth in the number of employees, and perceived success relative to other similar businesses, were all positively associated with one or more aspects of conservation. Overall, there is a reasonable amount of support demonstrating that commercial success and environmentally responsible behavior are positively related to one another.

The size of a business, measured by the number of employees, was positively associated with more than half of the conservation behaviors. Perhaps this is because businesses with larger staffs have more opportunities to go the extra mile and practice these behaviors. Since it stands to reason that all of the conservation behaviors take a certain amount of time and effort, it makes sense that businesses with more employees may have more human-power to dedicate to these endeavors. Yet, the data also show that businesses with more employees do not necessarily provide environmental education to visitors or environmental or conservation training to employees, or pay fees to visit parks and protected areas, or communicate with these areas. The data also reveal, though, that over half of the sample often or always practices these behaviors, regardless of their level of commercial success. Therefore, perhaps these behaviors are commonplace, regardless of business size or number of employees.

There is considerable overlap between the conservation behaviors that correlate with both growth in the number of visitors and growth in the number of employees. Four out of nine of the conservation behaviors were associated with both aspects of growth. These include providing environmental education to visitors, supporting conservation groups or initiatives, reducing, reusing, and recycling, and using environmentally friendly equipment. Since both these commercial success variables were used to gauge the overall growth of a business, the similarities seem appropriate. As a consequence, it is safe to say that there is relationship
between growth, as a dimension of commercial success, and environmental stewardship, particularly with regard to these specific behaviors. The only difference between the two commercial success variables (growth in visitors versus growth in employees) was that a relationship exists between the growth in the number of employees and the building of formal partnerships with parks and protected areas. This might be explained because as a business adds new employees there is potentially more time for managers and owners to dedicate to tasks they might not have had time to address previously. Since the building of partnerships most likely takes a considerable time commitment, it may be necessary for business owners to have enough employees to take care of other business aspects before time can be freed up for building these relationships.

Furthermore, there is considerable overlap between the conservation behaviors that are related to growth and those that are related to perceived success relative to other similar businesses. Again, the same four variables, providing environmental education to visitors, supporting conservation groups or initiatives, reducing, reusing, and recycling, and using environmentally friendly equipment are all linked to perceived success, along with a fifth behavior, using alternative energy sources. It appears as though these four conservation behaviors are most notably related to the various distinct aspects of commercial success.

Additionally, none of the conservation variables were found to be significantly associated with owner-reported profitability. There could be several explanations for these findings. Perhaps profitability is completely unrelated to the provision of conservation benefits. Or, maybe there are problems inherent in measuring profitability. Many researchers warn against the use of profitability as a single determinant of success because it can be misleading (Haber & Reichel, 2005; Lumpkin & Dess, 1996), and often data are difficult to obtain (Cragg & King;
Haber & Reichel, 2005). This study used an owner-reported, Likert scale to assess profitability, because past research noted small firms are notoriously unwilling to share financial information (Coviello et al., 2006; Covin & Slevin, 1989; Sapienza et al., 1988), and such data are often found to be inaccurate (Coviello et al., 2006; Dess & Robinson Jr., 1984), and are difficult or impossible to verify (Covin & Slevin, 1989; Haber & Reichel, 2005). However, it is possible that using an owner-reported, Likert scale to measure profitability did not effectively circumvent the pitfalls of assessing profitability. Whatever the reason, the results of this study are clear. There is no relationship between owner-reported, profitability and environmentally responsible behavior.

Finally, this study demonstrates that two commercial success variables, length of time in business and number of visitors served, were actually negatively associated with certain conservation behaviors. There are several possible explanations for the negative relationship between these two commercial success variables and various conservation behaviors. The results show the longer a business had been in operation the less environmental and conservation training it provided to its employees. Perhaps this is because older businesses require fewer new employees overall, or have long-standing employees who have already received such training, and therefore this training is unnecessary. The other significant negative association between commercial success and conservation behavior was found between the number of visitors served and the paying of fees to use or visit parks and protected areas. This may be explained because larger companies might have privately owned lands where they take their visitors for tours. Also, it stands to reason that smaller businesses, serving fewer customers, may not have land holdings large enough to suffice for running tours. Instead, these smaller companies might need to depend more on paying fees to use or visit the parks and protected areas. Just as there was a
negative association between the number of visitors served and paying fees to parks and
protected areas, at the same time there was a significant positive relationship between the
number of visitors served and communication with parks and protected areas. In some ways,
these two significant correlations do seem to be in contradiction with one another. Larger
businesses do not appear to pay fees to parks and protected areas, yet they do communicate with
managers of these areas. Perhaps these larger businesses communicate with the parks and
protected areas in order to corral visitors from these areas to their own private lands for tours, or
vice versa. This relationship warrants further investigation.

In summary, there is sufficient evidence to conclude that there is an association between
commercial success and environmentally responsible behavior. Overall, the businesses that
reported behaving in an environmentally responsible manner were larger (having more
employees), enjoyed more growth, and perceived themselves as being more successful than their
comparable counterparts. Although the results of this study do not determine if commercial
success causes environmentally responsible behavior or vice versa, there does seem to be a clear
relationship between these aspects of commercial success and environmentally responsible
behavior. Also, it is important to note that four conservation behaviors were consistently found
to be related to various dimensions of commercial success. Providing environmental education
to visitors, supporting conservation groups or initiatives, reducing, reusing, and recycling, and
using environmentally friendly equipment were significantly associated with growth (both in
number of visitors and number of employees) and perceived success as compared to similar
businesses. Moreover, three of these behaviors (supporting conservation groups and initiatives,
reducing, reusing, and recycling, and using environmentally friendly equipment) were also
significantly related to the size of a business (number of employees). Therefore, this study
demonstrates that there is a clear relationship between the size, growth, and perceived relative success of a business, and certain conservation behaviors.

**Commercial Success and Community Benefits/Involvement**

Next, this study sought to answer the question, is the commercial success of tourism businesses associated with the provision of benefits to local communities? The results of this study reveal that commercial success is not clearly associated with providing benefits to, or being involved with, local communities. When examining the relationship between the community involvement/benefit index and the various commercial success variables, it became apparent that there really was no relationship between commercial success and community involvement. Only one commercial success variable, the length of time in business, was related to the community index, and this variable was negatively associated with the level of community involvement. There are several possible explanations for the negative relationship between longevity and community involvement. First, it stands to reason that newer businesses might make the extra effort to reach out to the community to garner support necessary for survival. Since business survival is dependent on building a customer base, the local community may prove to be an excellent resource to help achieve this objective. As businesses age, they may feel less pressure to make the extra effort to reach out to the community. They may be more set in their ways, have a stable customer base, have well established relationships with suppliers, etc. These already-established relationships may result in fewer opportunities, or less of a need, to reach out to the community.

This study provides further evidence that commercial success is not clearly related to the provision of benefits to, or involvement with, local communities. Of the 13 community involvement variables, only seven were related to any aspect of commercial success, and more than half of these associations were negative relationships. Also, typically the community
benefit variables that were related to commercial success were related to only one or two aspects of commercial success, rather than being related to the majority of them. This demonstrates that the relationship between commercial success and socially responsible behavior is tenuous at best.

Rather than supporting a positive relationship between commercial success and socially responsible behavior, the data from this study illustrate that perhaps there is a negative association between the two concepts. About half of the commercial success variables (i.e. length of time in business, number of visitors served, and number of employees), were negatively correlated to one or more of the community benefit variables. For instance, the length of time a business had been in operation was negatively correlated with four community involvement variables. The enlightened self-interest model can be used to explain this finding. Using this framework, “it is a possibility that socially responsible behavior will directly enhance a firm’s public image and prestige” (Besser, 1999, pp. 17). Since older firms probably already have a well established public image, maybe these businesses do not see the benefits of acting in a socially responsible manner. However, younger businesses, struggling to get established in the communities to which they belong, may have more motivation to practice these behaviors. It may be that acting in a socially responsible manner brings more benefits to younger businesses.

The size of a business, measured by both the number of visitors and the number of employees, was also found to be negatively related to the provision of cultural education to visitors. The results of this study show that the bigger the business, the less likely it is to provide cultural education to visitors. Since size is not positively correlated with providing environmental education to visitors either, perhaps once a business reaches a certain size, it becomes busy and does not dedicate the time to educating visitors. However, since providing environmental education to visitors is not negatively correlated with the number of visitors
served or number of employees, there may be some distinction between the type of education provided to visitors. Using the enlightened self-interest model as an explanation, businesses may receive more benefits from providing environmental education to visitors than they do from providing cultural education to visitors. Visitors and the tourism market in Costa Rica might expect and demand environmental education as a component of a nature-based tour, but perhaps cultural education is not an anticipated part of the tourism experience.

Of the 98 possible associations between the various aspects of commercial success and community involvement, only four proved to be significant and positively related, providing little support for the hypothesis that commercially successful tourism entrepreneurs provide more benefits to local communities than unsuccessful entrepreneurs. Additionally, all four of these associations involved the building of formal partnerships of some kind, which most likely resulted in a reciprocal relationship; meaning the entrepreneurs may have received something in return for their involvement with the local communities. For instance, the relationship between growth in the number of visitors and the building of partnerships with community members could be explained because building partnerships might lead to more visitors. A partnership between a tour operator and a hotel, for example, might involve a referral agreement, which could definitely result in growth in the number of visitors. Therefore, these four positive and significant relationships actually provide additional support for the enlightened self-interest model (Besser, 1999).

Furthermore, half of the positive associations between commercial success and community involvement were found with relation to the number of employees a business has and the building of formal partnerships with local officials or community members. As previously noted, there was also a positive relationship between number of employees and the building of
formal partnership with parks and protected areas. This provides more evidence to demonstrate that perhaps having more employees frees up time for business owners/entrepreneurs, which allows them to build formal partnerships that they wouldn’t have had the opportunity to do otherwise. From these data it seems likely that the number of man-hours a business has available to direct towards building relationships has a large impact on partnership building.

In summary, there is little to no evidence positively linking commercial success to socially responsible behavior. Instead, there is some indication that there may actually be a negative relationship between longevity and socially responsible behavior. Size may also be negatively related to socially responsible behavior. The data also show owner-reported profitability and perceived success relative to other similar businesses were not at all related to socially responsible behavior. The only indication that there is any positive relationship at all between commercial success and socially responsible behavior is in reference to the building of partnerships with local officials and community members. This provides support for both neoclassical economic theory and the enlightened self-interest model which both state that businesses will only act responsibly if it is in their best interests, in other words, if it will maximize profits (Stormer, 2003).

**Factors of Environmental and Social Responsibility Most Related to Commercial Success**

Finally, this study aimed to identify which factors of conservation behavior and the provision of benefits to local communities are associated with commercial success. The results indicate that providing environmental education to visitors, supporting conservation groups and initiatives, reducing, reusing, and recycling, using environmentally friendly equipment, and building formal partnerships with community members are the factors most related to commercial success.
**Overall Findings**

This study shows that a relationship exists between commercial success and conservation behavior, but little evidence supports a positive link between commercial success and the provision of community benefits. The data from this study establish a clear link between environmental stewardship and the size, growth, and perceived relative level of success as compared to similar businesses. However, this research illustrates that there is actually a negative relationship between longevity, business size (both number of visitors and number of employees), and one or more community benefits. In fact, the only positive association between commercial success and community involvement entailed the building of formal partnerships. Most of these positive relationships point to a link between size and the building of partnerships. As mentioned previously, this could confirm that having more employees enables entrepreneurs to establish partnerships they wouldn’t have had time to do otherwise.

The data from this study support the idea that commercial success is indeed a multidimensional concept, as the literature suggests. The concept of commercial success cannot be fully understood by measuring a single dimension, such as profitability. As noted by previous research, and reiterated by this study, using profitability as a single determinant of commercial success can be problematic. Instead, it is important to examine various dimensions of this concept to better understand the role it plays with regard to the provision of benefits to both conservation and the local community. It is also important to note that just as commercial success cannot be considered in terms of a single dimension, neither can the concepts of benefits to conservation and the community. The data from this study demonstrate the importance of looking at the different dimensions of these three ideas, to better understand the various ways they converge and conflict with one another. This study contributes to this overall understanding.
Finally, it is important to note that although this study did not find a relationship between commercial success and the provision of benefits to local communities, this study did determine that the vast majority of tourism businesses surveyed provide benefits to local communities regardless of their relative level of commercial success. In the case of certain community involvement variables, such as purchasing local supplies, employing local people, patronizing local accommodations, and communicating with other local businesses, the percentage of businesses that often or always practices these behaviors exceeds 80%. For the remaining 13 community benefit variables, at least 35% of entrepreneurs reported to often or always practice these behaviors. Therefore, although this study did not find a link between community involvement and commercial success, this study found that overall tourism businesses are providing these benefits.

To conclude, one might ask, why is there a relationship between commercial success and conservation behavior, but not between commercial success and socially responsible behavior? Perhaps commercial success and behaving in an environmentally responsible manner are related because visitors expect, maybe even demand, nature-based tourism enterprises in Costa Rica provide benefits to conservation. The most frequently significant conservation behaviors seem to be actions that are both the most visible, or obvious to customers, and the simplest to perform. In the end, it may come down to what is in the best interest of the business. Therefore, perhaps we have not moved beyond neoclassical economic theory and the enlightened self-interest model just yet. Perhaps, we can only hope that businesses will “do well by doing good.”

**Management Implications**

Since this study shows that commercial success is not related to the provision of community benefits, or in some cases is actually negatively related to community involvement, the question then arises: how to promote the provision of these benefits? The study’s data
demonstrate that in most instances businesses are already purchasing local supplies, employing local people, patronizing local accommodations, and communicating with other local businesses (more than 80% of the sample reported always or often practicing these behaviors), regardless of their relative level of commercial success. Therefore, in order to increase businesses’ level of community involvement, policy should focus on the behaviors that are being practiced less frequently by businesses. These behaviors include building formal partnerships and providing cultural sensitivity training to employees. Policy, therefore, should be aimed at increasing the frequency of these behaviors across the entire population of nature-based tourism businesses.

Additionally, this study revealed that older businesses are less likely than their younger counterparts to practice certain behaviors, such as educating local people, making contributions to the development of local infrastructure, building formal partnerships with other local businesses, and communicating with community members. Therefore, policy aimed at increasing businesses’ level of community involvement should also focus on older businesses. Using neoclassical economic theory and the enlightened self-interest model, it stands to reason that older businesses are not practicing these behaviors because they are no longer receiving benefits from these behaviors. Consequently, policy should provide incentives for older businesses to continue practicing these behaviors even after market benefits cease to exist. The Costa Rica Sustainable Tourism Certification program may be one possible way in which to accomplish this task. Tourists may recognize certified businesses, and therefore patronize them more so than businesses which lack the certification. If certification requires businesses to practice these behaviors regardless of age, then certification can help to provide market benefits to businesses even after they cease to exist on their own. Based on this research, overall, policy should be aimed at increasing incentives for behaviors that are not, or are no longer, being
supported by the market, but that will provide valuable benefits to conservation and the local community.

**Study Limitations**

This study has several important limitations. First, the sample selected was not a random sample. Due to the large number of tour operators and agents dispersed throughout the country, and various problems identifying all of these businesses, taking a truly random sample proved extremely difficult. Given the budget and time constraints of this study, a purposive, cluster sampling approach was used instead. However, this might not have been the best approach, and a random sample may have yielded results that could be more generalizable to the population as a whole.

Another important limitation of this study relates to the measurement of profitability and revenue. As a result of the difficulties noted by past research in obtaining accurate data regarding revenue and profitability, for this study the researchers elected to use number of visitors as a proxy for revenue, and measure profitability on a five point, owner-reported, Likert scale. However, there could be problems inherent in these choices, particularly since owner-reported profitability was the only dimension of commercial success not found to be significantly related to any of the nine conservation, or 13 community benefit variables.

Finally, the most significant limitation of this study is that the data gathered represents only information self-reported by the entrepreneurs. No attempt was made to verify or triangulate this information with other sources. This study could be improved by the use of additional methods to verify the information provided by the entrepreneurs. These methods might include participant observation, visitor, or community surveys.
Directions for Future Research

This study illuminated several interesting factors that warrant future study. First, there was a negative association between business size and paying fees to use or visit parks and protected areas. This may indicate that larger tourism businesses also own land. This relationship, the concepts of land tenure and land ownership, and how these concepts relate to commercial success, and the provision of benefits to conservation and local communities, merits future research.

Second, there appears to be a link between both educating visitors and building formal partnerships, and commercial success, which might suggest that communication and collaboration play an important role in successful entrepreneurship. Recently, collaboration and participatory decision making have been touted as superior means to achieve management objectives (Stringer, Dougill, Fraser, Hubacek, Prell, & Reed, 2006). Therefore, it follows that collaboration might also be beneficial for entrepreneurs and local communities as well, in addition to being helpful for achieving conservation goals. Consequently, the role of communication and collaboration is also worthy of future research.

Third, since this research provides support for the enlightened self-interest model, and demonstrates entrepreneurs are likely to behave in a socially and environmentally responsible manner when it benefits their businesses, future research is needed to more specifically investigate which business behaviors provide valuable benefits to conservation and the community, but are not supported by the marketplace. Future research is also warranted to identify incentives that might encourage entrepreneurs to practice behaviors beneficial to conservation and the community, even when these behaviors do not result in remuneration in the marketplace.
Fourth, although entrepreneurial characteristics and the various factors that contribute to success are large areas of research, there has been little research investigating which factors might contribute to the overall commercial success of nature-based tourism enterprises. Also, few studies explore the challenges that entrepreneurs might face in establishing and operating their businesses. These topics also merit future research because better understanding both the factors that contribute to commercial success and the challenges entrepreneurs face may help empower local people and inform policy decisions.

Finally, examining how entrepreneurs define success, as well as the various ways they can and do provide benefits to conservation and local communities is worthy of future research. Although this research does contribute to answering these questions, more research could explore these topics using different research methods such as free listing and weighting factors related to success, conservation, and community benefits.
COSTA RICAN ENTREPRENEURSHIP
AND
TOURISM STUDY

A study endorsed by the University of Florida, The Tropical Conservation and Development Program, The School of Natural Resources and Environment, and The School of Forest Resources and Conservation
Business Information

1. Business Name: ________________________________________________________

2. Do you own this business?
   [ ] No        [ ] Yes

   If “NO,” who owns the business? __________________________________________

3. What type of business is this?
   [ ] Sole proprietorship
   [ ] Partnership
   [ ] Corporation
   [ ] Other ____________________________

4. Do you run/manage this business?
   [ ] No        [ ] Yes

   If “NO” who runs/manages this business? _________________________________

   If “Yes,” please check the option that best describes your position
   [ ] Sole Manager
   [ ] Primary Manager
   [ ] Shared Management

5. How long has this business been in operation? _______ years _______ months

6. For all the services this business provides, please estimate the (average) number of visitors this business served over the last 12 months:
   _____________________________________________________________

7. How has the number of visitors changed over the last 5 years?
   ____________________% Decrease  ____________________% Increase

8. Please estimate the number of employees: _______________________

9. How has the number of employees changed over the last 5 years?
   ____________________ % Decrease  ____________________ % Increase

10. This business offers tours and travel services:
11. Please indicate the origin of the capital invested in this business:

________________ % Costa Rican
________________ % United States
________________ % Other Countries, please list: _______________________________

12. Please rate this business’s level of profitability:

1  2  3  4  5
A Loss  Break Even  A Profit

13. Overall, comparing this business to other similar businesses, please rate the business’s level of success:

1  2  3  4  5
Unsuccessful  Successful

Owner’s Demographic Information

14. Date of birth: _______________________

15. Nationality: ____________________________

16. Length of time living in Costa Rica? ________ years ________ months

17. Marital status:

[ ] Married  [ ] Divorced
[ ] Single  [ ] Widowed

18. Number of children: _____ males _____ females

19. Highest level of education completed:

[ ] Eighth grade or less  [ ] University Graduate
[ ] Some High School  [ ] Some Graduate School
[ ] High School Graduate or GED  [ ] Graduate Degree or beyond
[ ] Some University
20. To better understand how this business operates, we’d like to know how often this business conducts certain activities.

Please indicate how often this business does each activity listed below.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide environmental education to visitors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Support conservation groups and initiatives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Reduce, Reuse, and/or recycle</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use environmentally friendly equipment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Educate local people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Purchase local supplies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Patronize local accommodations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Employ local people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide environmental or conservation training for employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use alternative energy sources</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Pay fees to use or visit parks or protected areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide cultural education to visitors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Make contributions to the development of local infrastructure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide cultural sensitivity training to your employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Build formal partnerships with other local businesses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Build formal partnerships with parks and protected areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Build formal partnerships with local officials</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Build formal partnerships with community members</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communicate with other local businesses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communicate with parks and protected areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communicate with local officials</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communicate with community members</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use passenger cars as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use trucks as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use SUVs as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use buses as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use motor boats as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use trains as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use animals as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use bicycles as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Question 20, continued

<table>
<thead>
<tr>
<th>Activities</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use airplanes or helicopters as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use boats as transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use other forms of transportation,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Please specify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. Please estimate the proportion of employees who are:

___________% Community Members  _____________% Costa Ricans

___________% Non-Costa Ricans

22. Overall, no matter the position, how does the wage paid to community members and Costa Ricans differ from the wages paid to non-local employees?

1  2  3  4  5
Less  No Difference  More

23. Please estimate the proportion of business supplies that are provided by local suppliers:

___________%

24. Please estimate the proportion of business income that remains in the local community:

___________%

25. Overall, comparing this business to similar businesses, how strongly does this business support conservation?

1  2  3  4  5
Do Not Support  Moderately Supports  Strongly Supports

26. Overall, comparing this business to similar businesses, how strongly does this business support the local community?

1  2  3  4  5
Do Not Support  Moderately Supports  Strongly Supports
If you have any questions or comments, please write them in the space below.

Thank you for your help with this study
APPENDIX B
HISTOGRAMS AND BOXPLOTS OF COMMERCIAL SUCCESS DATA

Figure B-1. Histogram showing frequency distribution of business longevity

Figure B-2. Histogram showing frequency distribution of number of visitors served over 12 months
Figure B-3. Histogram showing frequency distribution of number of employees

Figure B-4. Histogram showing frequency distribution of percent change in number of visitors over 5 years
How has the number of employees changed over the last 5 years?

Figure B-5. Histogram showing frequency distribution of percent change in employees over 5 years

Please rate this business's level of profitability

Figure B-6. Histogram showing frequency distribution of owner-reported level of profitability
Figure B-7. Histogram of frequency distribution of businesses’ perceived level of success

Figure B-8. Boxplot showing distribution of data and outliers for business longevity
Figure B-9. Boxplot showing distribution of data and outliers for the number of visitors served over 12 months

Figure B-10. Boxplot showing distribution of data and outliers for the number of employees
Figure B-11. Boxplot showing distribution of data and outliers for the percent change in number of visitors over 5 years

Figure B-12. Boxplot showing distribution of data and outliers for the percent change in number of employees over 5 years
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Lisa Seales was born in 1976, in Miami, Florida. Her family moved to Eugene, Oregon, when she was very young. There, she attended a Henry D. Sheldon International High School and participated in a Spanish immersion program. Half of her primary and secondary education was in Spanish, which introduced her to Latin American cultures and perspectives. She graduated in 1994 and went to both the University of Arizona and the University of Oregon where she earned a bachelor’s degree in geography and environmental studies in 1998. Upon graduation, she did an internship in Ecuador and traveled extensively throughout the U.S., Europe, Latin America, and the Caribbean. During this time, she also worked for the Bureau of Land Management as an interpretive specialist creating, implementing, and publicizing natural resource education programs. After years in that position, she took a job as a program director for a nonprofit organization, where she continued to develop and teach natural resource education programming. Her career as an environmental educator and her travel experiences led her to the University of Florida to pursue a degree in interdisciplinary ecology with a focus in tropical conservation and development. Upon completion of her master’s degree, she will pursue a doctoral degree and continue her research in promoting conservation and sustainable development.