

ABSTRACT

“Just Add Women and Stir Gently”: Gendered Impacts of Tourism Development on Household Livelihood Security and Implications for Local Participation

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Local stakeholder participation is critical for the sustainability of Protected Areas in developing countries. Community members have vested interests in conservation efforts, as their household livelihood depends on the natural environment in which they live. Women are key stakeholders in development projects because of their often unrecognized natural resource management roles. Historically, however, women have been left out of stakeholder meetings, policy making, and project implementation. The Government of Belize is focusing on the ecotourism industry as a development strategy to protect natural resources and to increase the household livelihood security of participants. This research serves as a measure to identify economic and social securities in households from both tourism and non-tourism based communities. The quantitative data show that female-headed households are economically more vulnerable than male-headed households, but are overall more secure than dual-headed households. Further investigation reveals differences in security rates among households in tourism and non-tourism communities.

"Just Add Women and Stir Gently": Gendered Impacts of Tourism Development on Household Livelihood Security and Implications for Local Participation

by

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A Thesis

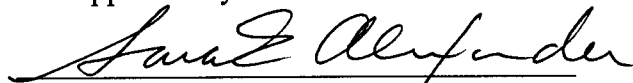
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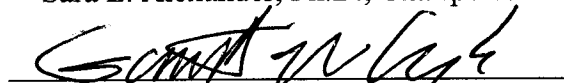
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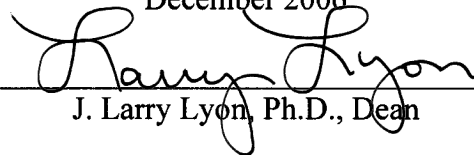


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CHAPTER ONE

The Connection between Household Livelihood Security, Gender Roles, and Natural Resources

*“We allow our ignorance to prevail upon us
And make us think we can survive alone,
Alone in patches,
Alone in groups,
Alone in races,
Even alone in genders.”*

Maya Angelou, American Poet

Purpose of Study

The history of Protected Area establishment is one of natural resource protection oftentimes at the expense of local communities by depriving them of the resources to which they traditionally had access. Because natural resources within Protected Areas have historically been a major source by which households sustain their livelihoods, it is only in the communities' best interest to develop a lifestyle that can sustain their livelihoods and preserve their resources for future generations. The Government of Belize is focusing on the ecotourism industry as a development strategy to protect natural resources and to increase the Household Livelihood Security of participating households. This research will serve as a measure to identify social and economic securities in households from both ecotourism and non-ecotourism based communities, focusing on gender issues and livelihood strategies.

Research Objectives

Belize, with its beautiful scenery, pristine beaches, miles of coral reef, abundant wildlife, and magnificent Maya ruins is a popular destination for visitors from around the world. In the 1990s, the government of Belize put forth a plan to focus on “eco-cultural” tourism that promoted the country’s unique environmental, cultural, and archaeological resources. The National Tourism Development Policy was implemented in 1999 to make *responsible tourism* a common practice by including local stakeholders in all development phases, encouraging environmental conscientiousness and promoting a respectful relationship between visitors and local Belizeans (Blackstone, 1998). The inclusion of local stakeholders in policy development is further strengthened by the government’s recent commitment to gender equality. In 1994, at the Fourth World Conference on Women in Beijing, the government of Belize pledged to focus on gender mainstreaming, women and poverty, and political participation and leadership (un.org, 2000).

The data presented in this thesis were collected between June 2001 and May 2002 as part of a larger research project in Belize and Costa Rica, funded by the National Science Foundation. Because the research was completed shortly after the instigation of the governmental ecotourism strategy in Belize, these data will serve, not only as a tool for implementing development plans, but also as a baseline for future studies.

Specific objectives for this thesis are:

- To identify types of households in the site communities and determine basic demographic information.

- To identify the various ways in which community members (disaggregated by gender) participate in the tourism industry.
- To measure the economic and social network securities of households and compare vulnerability levels relative to household types.
- To develop a set of management recommendations for ecotourism development that is gender inclusive.

Research Questions and Hypotheses

There are three main research questions and hypotheses this thesis aims to address:

Research Question One: Does the level of household economic security differ among household types?

Hypothesis: Female-headed households have higher rates of economic vulnerability than dual-headed households.

Research Question: Does the level of household social network security differ among household types?

Hypothesis: Female-headed households have higher rates of social network vulnerability than dual-headed households.

Thesis Organization

The first major section of this thesis, Chapter Two, discusses community participation in conservation efforts, the tourism industry, and household livelihood security. This section defines local stakeholder participation, ecotourism, and types of households. Also included in the discussion is information regarding women's involvement in conservation management, gender roles within the tourism sector, and definitions of and challenges faced by female-headed households.

Chapter Three presents background information on Belize. A brief section discusses contemporary Belize, followed by a history of the country. An explanation of household types, as defined by Belizean residents, is highlighted, as well as an overview of culturally specific gender roles. A section in this chapter focuses on women of Belize examining the governmental goals to empower women, economic challenges faced by women, and cultural and traditional attitudes that may impede the gender equity process. Finally, ecotourism is discussed including a summary of government strategies for ecotourism development, establishment of protected areas in Belize, and recent tourism trends.

Next, the research design and methods are presented in Chapter Four. This chapter includes a description of the four study sites – San Ignacio, Benque Viejo del Carmen, Placencia, and Independence. The data collection processes is explained, along with a review of research instruments, and field methodologies used in the research. Research constraints are addressed at the end of this chapter.

Chapter Five presents all of the data relevant to the research questions and hypotheses for this thesis. Included in this chapter are the measurements for the household livelihood security indicators and results of the statistical analysis.

Chapter Six presents the results of specific data analyses and offers additional information gathered during key-informant interviews and discussions with local residents.

Chapter Seven offers conclusions related to the questions asked in this research as well as a set of recommendations for further research and development.

CHAPTER TWO

Community Participation and Sustainable Development

Local participation in conservation efforts is essential for the sustainability of Protected Areas in developing countries. Community members have vested interests in conserving resources, as their household livelihood depends on the natural environment in which they live. Specifically, women are key stakeholders in sustainable development projects because of their (often unrecognized) natural resource management roles and traditional knowledge of local soil, water, forests and energy systems (World Bank, 1991).

Governments and organizations pursue many venues for sustainable development. The government of Belize has chosen to focus on the ecotourism industry to promote economic growth, protect the natural environment, and improve the livelihoods of residents. Women are oftentimes most vulnerable to changes in resource management, particularly those who are heads of household without a male counterpart to share financial responsibilities. The household livelihood security assessment is a tool used to identify limitations on people's economic and social welfare.

The following chapter considers the influence of protected areas on local communities, offers a look at gender inclusion in the development process, reviews the concept of ecotourism, and examines household livelihood security and the notion of female-headed households.

Protected Areas and Local Communities

Nearly 12 percent of the total surface of the planet is designated for Protected Areas and millions of people live within these areas and rely on the natural resources for survival (IUCN, 2005). As the percentage of land for preservation increases, so does the concern for its sustainability. These regions are often battlegrounds for disputes between conservationists and local residents. However, the literature shows that local stakeholder participation in conservation ultimately ensures the security of natural areas (Bodmer, 1994; Pearl, 1994; Poffenberger, 1994; Sharpe, 1998).

The *Reserva Comunal Tamshiyacu-Tahuayo* (RCTT) is a community-based reserve in the northeastern Peruvian Amazon (Bodmer, 1994). Long before the establishment of the reserve, local communities recognized the degradation of natural resources and collaborated in an effort to protect the environment. Residents of the area depended on the natural resources of the rainforest to satisfy both their economic and subsistence needs. Threatened by resource depletion, communities created a set of regulations prohibiting the extraction of resources by non-residents. A vigilance system was devised to enforce the restrictions. Ultimately, community representatives solicited help from environmental scientists and the Ministry of Agriculture to have the reserve officially recognized by the Peruvian government.

The RCTT case study is an example of grassroots organization that illustrates the need for local participation in resource management. The following section addresses issues regarding local stakeholder participation in protected area establishment and management, with particular attention given to gender-specific roles.

Local Stakeholder Participation

Traditionally, research and government initiatives focus on rural development projects. More recently the literature suggests a drastic shift from development to sustainable development and conservation through local participation in protected areas, forestry and wildlife management. A multitude of studies have shown that effective preservation includes local community participation or “community-based conservation” (Elliott et al., 2001; Poffenberger, 1994; Sharpe, 1998).¹

There are two core elements of participation: participation as a goal or end in itself and participation as a means of improving social and economic securities. The degree of participation by local residents and community organizations in the decision-making and project implementation processes is a chief variable in stakeholder empowerment to protect their own interests and to build the institutions needed to sustain management of protected areas in the future (Schmink, 1999).

As one example, the Community Baboon Sanctuary (CBS) in Belize is a privately-owned area in which the local residents have pledged to support its conservation to protect black howler monkey habitat (Alexander, 2000). The agreements from landowners are strictly voluntary and are not legally binding. There are specific CBS membership requirements, including the following: leaving a strip of bush along the rivers edge, protecting trees along the fences for an aerial corridor, and preserving food trees for the howlers when any land is cleared. Since the sanctuary was established in

¹For the purpose of this research, community-based conservation is defined as “local, voluntary initiatives involving a minimum of several households in which at least one of the outcomes of local management practices is the maintenance of habitats, the preservation of species, or the conservation of certain critical resources and another outcome is improvement of social and economic welfare” (Little, 1994).

1985, the black howler population in the CBS has grown from approximately 800 to 1200 monkeys.

Alexander (2000) examined residents' attitudes towards the conservation efforts, perceptions of management, and natural resource use. Although residents expressed strong positive feelings about the protection of the area, they identified three key concerns: management capabilities, benefits to the community and individuals, and degree of support for ecotourism efforts.

This study found that the majority of women in the area worked at home as housewives and most men were employed as wage laborers. Several residents maintained the trails during the dry season and there were only three main tour guides, all of whom were from the centrally located community. Typically tour guide positions are held by men and generate the most income because they have direct contact with visitors and receive tips for their services.

Interviews of residents found that significantly more non-members believed that the CBS was created not only for wildlife preservation, but also tourism development. This suggests that from an outsider's perspective the CBS promotes ecotourism. However, once members joined, there were inconsistencies in the marketing of tourism development by the sanctuary managers. Eleven percent of members reported problems created by the CBS, compared to only 2% of non-members. Respondents expressed issues with poor management, uneven distribution of employment opportunities, and lack of member benefits.

Although the sanctuary has successfully protected the habitat of the black howler monkey, the organizational structure of the CBS mirrors a top-down system that creates

disenfranchisement and fails to evenly distribute benefits from tourism activities to all local stakeholders.

In order to avoid outcomes similar to those in the CBS, all stakeholder groups must have the opportunity to participate. In the field of conservation management there is a multitude of stakeholder groups and levels in which they participate with varying degrees of power (Schmink, 1999). Government agencies, non-governmental organizations, community leaders, business owners and heads of household all have distinctive needs, perspectives, and insight. These unique dynamics necessitate negotiation between groups throughout the development process. Gender differences in leadership, power, and level of participation are found at all levels of conservation management.

Women and Conservation Management

It is only recently that gender issues in conservation have been addressed and included in research analysis (Schmink, 1999). Women's roles in agriculture (Kotzé, 2003; Whitehead, 1999), environmental conservation (Warren, 2000), and grassroots organization (such as the 1970's Chipko movement in Uttar Pradesh, India) have been crucial for developing areas of the world. Nevertheless, women are rarely recognized for their key roles in development and conservation and their knowledge is not reflected in policy, development strategies or education (Schmink, 1999; Warren, 2000).

A lack of attention and respect for women in the Pine Eco-region of the Cordillera Central, Dominican Republic has led to high rates of out-migration of locals since the formation of this protected area (McPherson and Schwartz, 2001). It was found that significantly more women than men uproot their households (at times literally

dismantling their homes and bringing the construction pieces with them) to move to urban settings. There are “push” and “pull” factors that affect these migration decisions. It is believed that women are pulled into urban areas more than men because of changes in nontraditional sectors attracting poor female laborers from remote areas into the agro-industrial workforce (e.g., 56% of duty free zone employees are female in the Dominican Republic) (ibid.).

The push factor is caused by the drastic declines in economic opportunities and land-use restrictions in and around the protected areas. Farmers are cut off from zones previously used as communal pasturage. Permits are required to use the land, but are not easily attainable. Traditional female labor (e.g., tending to community subsistence gardens or trading household goods and food items) has significantly diminished in value due to the conversion from subsistence-oriented farming to a more specialized market-oriented production which relies primarily on male laborers.

Although some conservationists may argue that out-migration aids in the protection of the environment because fewer natural resources are used, local communities are frequently key factors in the sustainability of preservation efforts and should not be marginalized or ignored. Women’s responsibility of providing for their families’ subsistence and well-being require them to protect livelihood securities by nurturing the environment on which they depend (IUCN, 2005; Warren, 2000). Therefore, female community members have a vested interest in environmental conservation and should serve as key allies in the fight for sustainable development.

Studies show an evolution of gendered participation in global conservation (Baden et al., 1994; Little, 1994; Schmink, 1999). In eastern India, Chandana is a forest

with community-based management that has shifted from commercial timber exploitation to allowing the public land to be used sparingly by local people for non-timber products (Poffenberger, 1994). There is no scheduled patrolling regimen, but women and children who are in the forest gathering fuel and food act as the warning system for illegal harvesting and poachers. The success of this community-based initiative is due to the “Gujarat Resolution” which requires both male- and female-household heads to be members of the community forest management society and a female participant on management sub-committees (ibid.). Furthermore, they have found that women’s participation has been valuable because oftentimes men leave the area for seasonal employment, while women stay in the area with the family and attend to household duties.

In this example, women play key roles in the management and protection of the natural resources on which they depend. This program’s strategy restricts the use of the forest to local residents for household subsistence. In other locations throughout the world, protected areas are opened for recreational activities as well, that target tourists from outside the community.

The Ecotourism Industry

Traditional tourism practices encourage large groups to travel to distant locations and enjoy the comforts of a vacation with local hospitality. In recent years, there have been significant increases in tourist activities that encourage environmental conservation and preservation of local communities, also known as “ecotourism” (Weinberg et al., 2002). Ecotourism has brought about a change in the methods by which people visit exotic places. Rather than promoting intense visitation rates through mass tourism,

individuals flock to unique destinations to experience small-scale tourist activities that promote environmental education and sustainable resource use.

The Belizean government is focusing their development efforts on the ecotourism industry. This section explores the definition and goals of ecotourism, explains some concerns regarding its sustainability, and offers examples in which ecotourism has negatively and positively impacted local communities. The following discussion is critical for this thesis because it presents the framework needed for ecotourism to improve the household livelihood security of all residents, including women and individuals who are normally excluded.

According to the International Ecotourism Society Executive Director, ecotourism “should: 1) protect and benefit conservation; 2) benefit, respect, and help empower local communities; and 3) educate as well as entertain tourists” (Honey, 2003).

Weaver (2001) argues that ecotourism can be better conceptualized if put on a continuum ranging from ‘hard’ or ‘active’ types to ‘soft’ or ‘passive’ types. The ‘hard’ ecotourist type includes a small number of environmentally conscious individuals who participate in relatively lengthy trips and expect very few services, are physically active, and have non-mediated adventures in nature. On the other end of the spectrum, the soft types tend to enjoy short ecotourism experiences that are part of a larger vacation. These individuals require a higher level of accommodations and services. This range of ecotourist experiences are why there are substantial discrepancies in statistics reported for the ecotourism sector.

In some cases, ecotourism is a collection of ‘nature-based’ adventures that do not necessarily protect the environment or benefit the local communities (Fennell, 1999;

Pfarr, 2001; Weaver, 2001). Residents living near ecotourism areas may economically benefit from the industry, however it is oftentimes at the expense of having fewer resources and experiencing a disruption in their daily lives. Additionally, the positive impacts from the development of tourism are not equally distributed among local individuals.

The motives of sustainability pose a number of challenges for ecotourism development, including: contamination in terms of waste, traffic, and noise (Weinberg et al., 2002) and loss of “ecological integrity” of the area (Obua, 1997). There are four reasons ecotourism has the potential to disrupt the environment: (1) destinations are unusually sensitive places that have limited ability to withstand excessive use (Wall, 1997); (2) travel is likely to occur at critical times (e.g., during mating or breeding season); (3) unknown and unexplored relationships between volumes of use and multi-layered environmental impacts; and (4) "en route impact" from traveling to the site (e.g., consuming resources for planes) contributes to global climate change (Gössling, 1999). Because of these adverse effects of ecotourism, it is imperative that precautions are taken to establish a sustainable ecotourism sector that ensures conservation of local resources and habitat while at the same time offering benefits to local communities.

Another issue is the advertising of ecotourist adventures that either do not fit within the definition offered by the International Ecotourism Society or are inaccurate and misleading based on the language used (Carrier & MacLeod, 2005; Twidale & Bourne, 2003; Weaver, 2001). Ecotourism is now perceived as a positive, commercially valuable industry that increasingly more tourist sites apply to themselves.

Carrier and MacLeod (2005) examined two coastal sites in the Caribbean that are attractive to tourists because of the national parks. In order to develop the areas, entire villages were moved to a new location about a half mile away. It was reported that only some of the residents were compensated for the changes and most community members were treated poorly by the management team. Additionally, they lost access to the beach and fishing areas and now have the option of being in a less attractive, rocky area. The relationship that locals have with their surroundings has been adversely affected. Tourists frequently pass through their village on bikes and horses. Noisy helicopters fly over their homes and boat traffic has dramatically increased.

In one of the research sites about 100 people were displaced from an island they inhabit because new land use and infrastructure restrictions were put in place. The remaining community, fewer than 400 people, has significantly changed their livelihood strategies from agriculture and fishing to tourism services. The result is a political dispute fueled by the fact that user fees go directly to the park's national headquarters rather than remaining local and benefiting the environment and community.

There are, however, examples of ecotourism development that have been successful in environmental conservation with few negative impacts on the local communities. Weinberg et al. (2002) found that the number of visitors to the tropical ecotourist destination of Monteverde Cloud Forest Reserve, in Costa Rica, increased from fewer than 100 in 1972 to nearly 60,000 in 1999. Nevertheless, their study found ecotourism to be sustainable and successful.

The "boom" in ecotourism has contributed to positive changes in local communities: increases in jobs; economic growth; ecosystem preservation (Stem et al.,

2003; Walker, 1996); protection of indigenous cultures and peoples (Kerr, 2003); and economic, social, political, and psychological empowerment of the local communities (Scheyvens, 1999). Kerr (2003) found positive impacts resulting from ecotourism in the Amazon rainforest of Ecuador. Visitors hike in the rainforest with members of the Huaorani group and are taught about life in the area. In return (including payment for the guide), they ask that visitors raise awareness at home about the Huaorani's fight to protect their culture and the forestland from the oil industry. Stem et al. (2003) found positive outcomes from ecotourism growth in areas of Costa Rica. Those directly involved in the industry abandoned environmentally destructive practices. Interviewee comments implied that locals were fully employed and therefore, have less free time to hunt or cut trees. Others stated that they deserted their land in the forest cover because they understand its value in tourism.

Although the above example cited inclusion of local people in the ecotourism field, researchers have found that those involved from the community may not be equally benefiting from the development. More specifically, women are less likely to participate in tourism planning and implementation. Subsequently strategies are not tailored to their needs and they do not benefit from the industry. The following section examines the roles gender plays in the tourism industry and the struggles women have had in receiving appropriate compensation.

Gendered Employment in Tourism

Like most industries, the field of tourism has gendered differences in: salary (Cukier, 1996; Levy and Lerch, 1991; Lundgren, 1993; Wilkinson and Pratiwi, 1995), job opportunities (Seager, 2003), level of employment and job security (Cukier, 1996; Levy

and Lerch, 1991). On average, in the ecotourism industry, women need superior qualifications for jobs than men (Cukier, 1996). For example, they found in Bali that 58% of female and only 29% of male hotel workers had university education. Furthermore, women are more often affected by underemployment and unemployment because they are given seasonal and/or part-time jobs in tourism (Jolliffe and Farnsworth, 1996).

Cukier (1996) researched the gendered effects of tourism development and employment in Bali, Indonesia. The overall benefits of tourism included: increases in jobs, opening of new businesses, and self-employment artisan opportunities. Female employee opportunities were restricted by absolutely no access to male jobs (e.g., security guards, drivers, groundskeeping), and the inability to work the *graveyard* shift because of personal safety and childcare duties. Tour guides are well paid, prestigious positions, of which only 7% are women. Cukier concludes that tourism creates jobs, but domestic obligations, religious beliefs, already established cultural beliefs regarding gender roles, ability to travel longer distances for work, and child rearing, make them less accessible to women. Because of this, women supplement income by side jobs (e.g., baking, cleaning) to sustain household livelihood, and rely on social networking for aide in domestic work and childcare or money from relatives living abroad (Levy and Lerch, 1991).

This thesis focuses on the above issues faced by women in the context of ecotourism as it is developing in Belize around protected areas and conservation efforts. In order to explore the current economic and social conditions of a community and its affects on women, it is necessary to conduct individual assessments. The following

section offers an overview of the framework used in this study and commonly in Third World development efforts, to assess people's vulnerabilities, called Household Livelihood Security.

Household Livelihood Security as a Framework for Analysis

Household livelihood security is a framework used to organize development efforts and to identify constraints on people's welfare. It is defined as "a family's or community's ability to maintain and improve its income, assets and social well-being from year to year" (Frankenberger 1996, quoted in Lindenberg, 2002). There are seven security areas within the household livelihood security framework: nutritional, health, food, educational, economic, environmental, and social networks. This thesis focuses on relationships between economic and social network securities and household type, particularly female-headed, and participation in the ecotourism industry. All household livelihood security areas are valuable for development assessment. However, in this thesis, economic and social network securities are examined in isolation of the rest of the data set.

Economic security is defined by "perceived sufficiency of income to allow a household to meet its immediate needs as well as to offer resilience under changing conditions over time" (Alexander and Whitehouse, 2004). Economic security has been selected because it is one of the key elements in the development process. It is an important indicator of health, educational and food securities; an economically secure household is likely to be secure in some of the other livelihood security areas as well, although this is not always the case. Social network security is achieved by being an active, decision-making member of a safe community with access to both personal

network safety nets, and community services (Alexander and Whitehouse, 2004). Social network security is included because it incorporates factors such as participation in the community by measuring time availability, acceptance within the community, and personal safety issues. Additionally, it may reveal socially-embedded gender differences within the community that will influence the development process.

Economic and social network security levels of a household are influenced by a number of factors. One of the variables this thesis addresses is the household composition. The majority of households in the world are headed by one male and one female (with any number of dependents) however; studies have shown an increase in the prevalence of female-headed households. The following section addresses the issue of women being the sole provider for the family and challenges they may face as female-headed households.

Female-Headed Households

The notion of female-headed households is complex (Lahiri-Dutt, 2000) and oftentimes ambiguous (Buvinic and Gupta, 1997). For the purposes of this project, the definition of female-headed households is: "units of residence and domestic consumption comprising of adults and children living together and sharing a kitchen, without a male, able-bodied, earning adult, and which are cared for financially and otherwise by a woman working outside her home as well." (Lahiri-Dutt, 2000).

Around the world, the number of female-headed households is increasing (Buvinic and Gupta, 1997; Seager, 2003). A review of the prevalence and patterns of female-headed households in Latin America since 1970 can be found in Arias and Palloni (1999). Currently, it is believed that 85% of single parent households led by women are

poorer than those headed by men (Seager, 2003). Reasons for such poverty disparities include: income levels (Barros et al., 1997; Bradshaw, 1995); employment opportunities (Akinsola and Popovich, 2002); educational levels of women (Buvinic and Gupta, 1997; Rocha, 1997); lack of access to transportation (Rocha, 1997); status of women in society (Datta and McIlwaine, 2000; Roy and Venema, 2002); urbanization and circumstances in which they become single (Bradshaw, 1995); overall time restrictions due to domestic responsibilities (Handa, 1998). Female-headed households should be considered as a possible criterion for the targeting of vulnerable groups in developing countries (Akinsola and Popovich, 2002; Buvinic and Gupta, 1997), in order to greatly alleviate the widespread amount of poverty, and child malnutrition (Barros et al., 1997; Kennedy and Haddad, 1994). The development of an ecotourism strategy that focuses on the inclusion of women may increase the livelihood security levels of female-headed households.

Current approaches employed in developing countries to lessen the vulnerability of female-headed households include: social networking and closer access to healthcare (Akinsola and Popovich, 2002; Kennedy and Haddad, 1994); enhancing women's control of resources; increased involvement in political decision-making (Lundgren, 1993); having fewer children (Levy and Lerch, 1991); and poverty alleviation programs (Barros et al., 1997; Buvinic and Gupta, 1997; Lahiri-Dutt, 2000).

Appleton (1996) believes that targeting of female-headed households is not necessary. In Uganda, he found that when based on resource consumption, income, and health indicators female-headed households do not appear to be poorer. However, women do work long hours, have less land, and less education. The most problematic finding was that overall, females in Uganda receive less education than males, and there

are significant differences in children's education in different household types. For example, 23% of children in male-headed households receive no schooling while 56% in female-headed households never attend school. Appleton further speculates the gender difference in child education is attributed to the lower education of the heads of such households.

Despite the discrepancies in research of female-headed households, as seen in the study in Uganda (Appleton, 1996), there is an overall tendency for female-headed households to be more vulnerable than other household types (Akinsola and Popovich, 2002; Buvinic and Gupta, 1997). Female-headed households should be targeted for community programs that aim to alleviate poverty and increase their livelihood security levels. Women play a key role in environmental conservation and must be incorporated into the process of planning and policy making in order for development programs to succeed. The ecotourism industry offers the opportunity for local residents to participate in a sustainable field from which they can benefit now and in the future.

The following chapter begins to explore development issues, gender, and ecotourism in Belize. It is important for this research to look at the history of Belize because it offers insight as to how Belize became the way it is today. Contemporary Belize will be explored in Chapter Three with particular attention to definitions of the Belizean household, women of Belize, and ecotourism development.

CHAPTER THREE

Belize, Central America

Belize was chosen as the country for this study because the nation's development strategy has changed to focus on the growing ecotourism industry. The government of Belize invests in projects that use local natural resources and employs community members to increase their quality of life. The following description provides relevant background information about the country's demographics, social development, and cultural diversity.

Belize, located in Central America along the Caribbean Sea, is roughly the size of New Hampshire; 174 miles long and 68 miles wide (Barry, 1995) (see Figure 3.1). Guatemala is located to the west of Belize, México to the north, and the country of Honduras shares the southern border. It is the least populated Central American nation with approximately 280,000 people (cia.gov). Belize City, the former capital city, is the commercial center and main cruiseship port in the country. A newly remodeled international airport, two luxury hotels and a more extensive city sewer system were developed in the 1990s, facilitated by a \$25 million World Bank loan. However, the city faces major social development problems and has experienced increasing rates of crime, drugs, and unemployment over recent years. Since 1973, the centrally located city of Belmopan has been the capital because of the devastating aftermath of Hurricane Hattie that decimated Belize City and surrounding areas in 1961.



Figure 3.1. A Map of Belize

Although Belize is seen as a tropical paradise through the eyes of international tourists, life is not easy for many of its citizens (Barry, 1995). A large number of Belizeans out-migrate to the United States because of high unemployment rates, escalating costs of living, and the lack of adequate health and education services. It is an ethnically and culturally diverse society, based on its history of immigration. The main ethnic groups include: the Creole, Garifuna, Mestizo, and Maya (Barry, 1995). The

Creoles are descendents of slaves directly from Africa and those born in the British West Indies, mostly Jamaica and Barbados (Bolland, 1986). Garifuna people are descendents of the Caribs of the eastern Caribbean and of escaped slaves originally from Africa.

Mestizos are individuals of Spanish and Maya parentage.

The following sections in this chapter provide an introduction to the history of Belize, examine the family structure of Belizean households, highlight the roles of women in Belizean society, offer current tourism trends, and review ecotourism development strategies.

A Brief History of Belize

In order to understand contemporary Belize, it is necessary to examine the history of the area. Originally, the area that is now Belize was part of the Maya world in the Yucatan (Shoman, 1994). In 1508, the Spanish arrived and made their first contact with the Maya civilization. They introduced exotic plants and animals, as well as diseases that nearly decimated the Maya population. Recent evidence suggests that Maya were taken as slaves by British Pirates to be used in their expeditions around the Caribbean. The mixing of the British and Maya led to the development of the Mestizo race. Initially considered the inferior racial group, after a few generations the Mestizos adopted attitudes of racism towards the Maya that are still in evidence today.

In the mid-17th century, the French and British began invading Central American territories (Shoman, 1994). The British were particularly known for looting cargo from Spanish ships. Logwood, a product frequently found aboard these ships, was highly valued by British woolen industries because it created dyes in a multitude of shades of black, grey, purple, red, blue, and green. Fueled by the increasing desire for this dye-

wood, British took more slaves to cut their own wood and established their first settlement on St. George's Caye. By 1786, Spain allowed the British to branch out and cut mahogany for furniture, which led to the capturing of more slaves for the labor required to move the large trees.

Finally in 1800, the British dominated the land and nearly two centuries after they first settled in the area, Britain declared it a colony named British Honduras (Shoman, 1994). Policemen, soldiers, and civil servants from their other Caribbean colonies were summoned, along with a number of slaves of African descent from Jamaica. It was not long before a large percentage of slaves escaped captivity and revolted against the colonizers. In 1838, the British parliament gave 'full legal freedom' to the slaves. However, it wasn't for a number of years before they were offered low-wage labor. During this era in Belize, the Garifuna population in Belize was formed (descendants of the Caribs and African slaves. Initially the Garifuna resisted the colonization and fought with the British and the French for sovereignty. Eventually they were defeated and relocated to the Bay Islands and gradually migrated through Honduras and Guatemala to the Stann Creek District in southern Belize.

The largest groups of immigrants to Belize in the 19th century were Maya and Mestizos who fled war in the Yucatan and settled in the north (ibid). Later, Maya from the Peten area in Guatemala settled in Cayo District and others from the Vera Paz area of Guatemala fled to the Toledo District to escape heavy taxes and forced labor. Around the same time, a large group of German Mennonites settled in Belize and are now main contributors to the economy.

There was significant inequality between the social groups with regard to economic opportunities and political authority, which was further heightened by the power of the colonizers (Bolland, 1986). This social tension was the root cause of future political and economic stagnation that started in the 1930s. Following several more decades of domestic feuding, Belize was given its new name in 1973, with the anticipation of independence (Barry, 1995).

Most recently, the country has had more Maya and Mestizo immigrants from Mexico, Guatemala, and Honduras and a large number of ex-patriots from the U.S. and Asia (Barry, 1995). In the 1990s, the government of Belize initiated a controversial “economic citizenship” program that encouraged Chinese peoples (mostly from Taiwan and Hong Kong) to establish residency in Belize. These individuals and their families now dominate a portion of the consumer goods sector, which historically had been an industry that provided a large number of jobs to women (ibid.).

Belizean Households

The preceding section in this chapter presented key information about the history of Belize and its path to becoming an ethnically diverse and culturally rich nation. Data for this research were collected at the household level in four Belizean communities. Respondents answered questions concerning their own household in addition to open-ended questions about their community. This following discussion explores the definition of households in Belize and presents basic household demographics.

The government of Belize defines a Belizean family as two partners of the opposite sex who live jointly with children and/or other relatives (NHDAC, 1998). According to the National Human Development Advisory Committee (NHDAC), this

definition is inclusive of relatives who are not living in the same household. Therefore, the status of *households* is a better way of obtaining data than families. The NHDAC defines a household as, “one or more persons living together under one roof, sharing at least one daily meal or sleeping under one roof for most nights of the week” (ibid.).

The household composition is instrumental in assessing livelihood status. It was found that the majority of households in 1991 were headed by individuals between the ages of 20 and 34 who have never married, compared to the mode age group of 35-54 in 1980. The Population Census of 1991 also indicates the prevalence of extended family households. Thirteen percent reported the presence of ‘Other Relatives’ and/or ‘Non Relatives’ in the household. Similar to other Third World countries (Arias and Palloni, 1999; Buvinic and Gupta, 1997; Seager, 2003), data show a rise in female-headed households in Belize (NHDAC, 1998). In 1980, 21% of households were classified as female-headed and in 2000 this figure rose to 24% (41% of which live in Belize City) (CSO, 2000).

These statistical changes in household composition (paired with the notion that female-headed household are more vulnerable than other household types) should be taken into consideration when implementing a development plan. The government of Belize has adapted its framework to account for the importance of gender-inclusive policy and planning. The following section examines the roles of women in Belize and the governmental development strategies that focus on women.

Women of Belize

At the Fourth World Conference on Women in Beijing, in 1994, the government of Belize pledged its commitment to equality, equity and justice of women (un.org,

2000). Five priority areas for action were derived, three of which are critical to this research: gender mainstreaming, women and the economy (including poverty), and women's political participation and leadership. The gender mainstreaming plan "envisions a society where each person is able to realize his or her potential and participate in active, meaningful roles in the development of Belize, and enjoy all benefits thereof." The primary goal is to "create an enabling environment which allows women and men to empower themselves economically, socially, culturally, and politically."

The Belizean government has developed a national Gender Management System headed by the Women's Department that facilitates programs that work towards empowering women. The success of these programs is dependent on smaller community groups and women's organizations to produce change at the local level. There are a number of women's organizations, such as the Belize Rural Women's Association, that work towards empowering women through economic, social, cultural and legal educational programs (belize.gov).

Secondly, women and the economy is a priority area in development programs. In 1996, it was found that 33.1% of the female population in Belize lived in poverty (un.org, 2000). In response, the government has focused on educational programs and skills training for women to alleviate poverty. Also, women historically have not had adequate access to credit, so non-traditional credit agencies with gender policies (e.g., Belize Enterprise for Sustainable Technology, the National Development Foundation of Belize, and the Social Investment Fund) have immensely aided women in establishing credit lines for income-generating projects.

In spite of gender-sensitive development strategies, cultural and traditional attitudes towards women have impeded the progress of gender equity and equality in Belize (un.org, 2000). Through ethnographic research in Belize, McClaurin (1996) learned that a woman's value is determined from the degree to which they follow cultural norms of being a "good wife or mother." According to Belizean women surveyed throughout the 1990s, there are major impediments that hinder progress of gender equality: lack of a man in the household on a regular basis to contribute financially or help raise children, not enough job opportunities, low levels of education, men influencing what women can do, drugs and gangs, and their husband or partner not allowing them to participate in women's groups (ibid.).

Gender inequality in Belizean society impedes the national development process. Small women's organizations in rural areas have empowered participants to make positive changes in their communities. Although there have been some efforts to incorporate women in larger government projects, there needs to be an increase in participation of women within the ecotourism industry, which is the main focus of development for Belize.

Tourism in Belize

Located in the tropics of Central America and known for its natural beauty, abundant wildlife, and archaeological ruins, Belize is a popular destination for visitors from around the world. With the increasing threat of overuse and natural resource depletion, the government of Belize is committed to promote ecotourism in its protected areas. The following section looks at current tourism trends, the development of ecotourism in Belize, and protected area designation.

Current Tourism Trends

In 2004, 1,082,299 people visited Belize, a 25.5% increase from 2003 (BTB, 2004). Table 3.1 shows the increase in tourist arrivals over a seven year period (1998-2004). This upward trend is primarily caused by the increase of cruise ship dockings. There were 406 calls by cruise ships (an increase of 28.9%) and cruise passengers grew by 48 percent. The average length of stay for all visitors is 6.8 nights. The mean age group of visitors is 30-39 years. Seventy percent of tourists stay in hotels, 15% in guesthouses and 10% with friends or relatives. The daily per capita expenditure of visitors was US\$96. However, one out of every four visitors arrived by way of pre-paid arrangements resulting in the leakage of profits to foreign based companies (BTB, 2004). In 2003, three out of every four visitors were in Belize for the first time. Visitor activities reported by the Belize Tourism Board (BTB) in 2004 included: snorkeling (57%), island tours (28%), scuba diving (24%), river trips (24%), and jungle trips (23%).

Table 3.1 Number of Tourists by Mode of Arrival (belizetourism.org, 2005)

Mode of Arrival	1998	1999	2000	2001	2002	2003	2004
Air	108,568	115,089	131,683	133,775	129,675	151,978	162,675
Land	56,490	55,859	54,761	53,467	61,645	60,154	60,019
Sea	10,996	9,847	9,321	8,713	8,201	8,442	8,169
Cruiseship	14,183	34,130	58,131	48,116	319,690	575,196	851,436
Total	190,237	214,925	253,896	244,071	519,211	795,770	1,082,299

Ecotourism in Belize

The promotion of ecotourism associated with certain protected areas became the main national development strategy in the early to mid-1990s (CSO, 1997). Finally in 1999, the National Tourism Development Policy, recognizing *responsible tourism* as the main principle for tourism development, was passed by the Belizean government.

Responsible tourism, as defined by Blackstone Corporation et al., (1998), is a proactive approach to develop and manage the tourism sector through environmental preservation, encouragement of eco-cultural tourism activities, local participation (in all development phases), and respect of tourists and residents.

Kangas et al. (1995) studied the economic inputs and outputs of the Possum Point Biological Station, which is located on the Sittee River in central Belize. Tourists are attracted to the area because of the rainforests, estuaries, and the historic sugar mill site. According to the researchers, Possum Point satisfies the economic criteria for ecotourism because approximately 80% of the tourism money from employment and purchases of goods and services is retained by the local community. Also, funds have been generated through voluntary donations from tourists for scholarships to help local students who travel to a larger town for school.

With the rise in mass tourism rates and the increasing depletion of natural resources, community participation within the ecotourism industry will increase the likelihood of sustainability (Scheyvens, 1999; Stem et al., 2003; Weinberg et al., 2002). Both land and marine areas must be federally protected from overuse by tourists and residents. The government of Belize has made valiant efforts to conserve the natural environment by designating protected areas.

Protected Areas in Belize

The coast of Belize is shielded by the second longest coral reef in the world. Further inland, the country is home to the most extensive cave system in Central America. Ninety-three percent of its land is forested. Although Belize has the lowest

population density in Central America (8,867 square miles and 280,000 residents), these natural resources are threatened by development and overuse (PACT, 2005).

In 1961, Belize was hit by Hurricane Hattie and sustained extraordinary damage both socially and ecologically (Reef, 2002). Because of a slow and poorly planned recovery effort, government officials (at the time Belize was still under British rule) recognized the need to protect their abundant natural resources. Since then, roughly 45% of the land has been put in some type of protected status (PACT, 2005).

Most of the funding for protected areas is generated by the Belize Protected Areas Conservation Trust (PACT), created in 1995 (PACT, 2005). PACT's mission is to "promote conservation and sustainable management of natural and cultural resources of Belize, to assure and maintain the quality of life of Belizeans" (ibid.). Initial financial support for PACT came from a USAID project that paid for vehicles, computers, and basic operation expenses. Now viewed as a successful framework for development in the Third World, this initiative is supported by the Belizean government through a conservation tax paid by international tourists upon their departure, protected area entry fees, and cruiseship taxes for docking.

Ecotourists who travel to Belize's protected areas can explore the forested mountains, visit archaeological ruins, and enjoy the sandy beaches. However, the current tourism trends indicate a continuing increase in the number of visitors each year, which is leading to overuse. The government of Belize encourages the growth of the ecotourism industry because it stimulates the local economy while preserving natural resources. Although the country has made great strides by involving local residents in development

programs, women need to be included at all levels particularly increasing their presence during planning and decision making processes.

CHAPTER FOUR

Research Design and Methods

The data used for this thesis are part of a research project funded by the National Science Foundation from June 2001 through May 2002, in Belize and Costa Rica. The objectives of this larger project were to examine the impacts of ecotourism development on household livelihood security and levels of vulnerability in eight communities (four each in Belize and Costa Rica). Two communities in each country were tourism-based and two were non-tourism based.

Using information derived from Key-informant interviews, a Household Survey was designed and administered. Additional interviewing with local business owners and village council was carried out and case studies of a selected group of households were conducted. The first section of this chapter provides general background information about each of the research communities: San Ignacio and Placencia (the two tourism-based communities); Independence and Benque Viejo (the two communities not based on tourism). Secondly, field methods and the research instruments are discussed. Finally, the third section identifies research constraints and their possible effects on the data and results.

Study Sites

San Ignacio

San Ignacio is located approximately 22 miles west of Belmopan and 9 miles east of the Guatemalan border (see Figure 3.1) and is home for over 8,000 people (Mahler,

1999). Located on a series of bluffs alongside the Macal River at the end of the Western Highway, San Ignacio (locally called Cayo) is considered the hub of commerce and tourism in western interior region of Belize. Situated within the Maya Mountains at a higher elevation the climate is less humid and slightly cooler than the coastal plain areas.

Evidence suggests that early Maya civilizations occupied the area in and around Cayo (ibid.). Shifting cultivation was the main subsistence method employed by these settlers; however, there is some evidence of permanent agricultural activity, as well. Today, the community is predominately Creole or Mestizo with some Maya, Garifuna, Lebanese, Chinese, and Mennonite residents. The primary economic activities include tourism, retail, services and cattle ranching.

Since the early 1990s, the ecotourism industry in San Ignacio has flourished. Tourists arrive from all over the world to stay in guesthouses or bed & breakfasts in town and explore surrounding areas during day trips. Main activities and attractions easily accessible include: caving, canoeing, horseback riding, mountain biking, waterfalls, butterfly farms, Maya ruins (e.g., Xunantunich, Cahal Pech), and medicinal trails.

Benque Viejo del Carmen

Situated on the Mopan River, Benque Viejo del Carmen is a small village that borders Guatemala and serves as the western gateway to Belize (see Figure 3.1) (Mahler, 1999). Visitors can take a short bus or taxi ride six miles to San Ignacio. Predominately a Spanish-speaking community, the majority of residents are descended from Maya and Guatemalan immigrants who moved to Belize in order to avoid political persecution and/or improve their household economic situation. Benque is a quiet, non-touristy community that is rich in the Mestizo cultural heritage (the Benque House of Culture is

located at the former police station and promotes local participation in the field of visual arts) (toucantrail.com). Although it is closely located to a number of area attractions, including the ruins of Xunantunich, it has not developed into a “tourism hot-spot.”

Placencia

Placencia Village is located at the tip of an 11-mile long peninsula by the Caribbean Sea in the southern district of Stann Creek (see Figure 3.1). Known as one of Belize’s oldest continuously inhabited communities, Placencia was initially home to Maya fishers before English buccaneers took over in the early 1600s (Mahler, 1999). Currently, the community consists of primarily Creole families whose ancestors were Garifuna, freed African slaves from the Caribbean, or European pirates.

Placencia has been a popular tourist destination for years. Visitors are attracted to the long pristine beaches, relaxed atmosphere, and warm hospitality. Restaurants, bars, and accommodations are found on the Main “Street” which is a concrete sidewalk stretching about a mile through the village. Tourists enjoy safe swimming areas, biking, snorkeling, scuba diving, and day trips to notable Cayes (e.g., Laughingbird Caye, Sapodilla Cayes, and Glovers Reef Marine Reserve). A short water-taxi ride will take visitors across Placencia Lagoon in order to explore the mainland.

Independence

Independence Village is located on the Southern highway directly across the lagoon from Placencia (as shown in Figure 3.1) (Mahler, 1999). The area was predominately pine forest, however in the 1940s British loggers settled and clear-cutted the area. Banana plantations were developed and the industry comprises approximately

15 growers who own 400-700 acres each. Consequently, the Independence area is now a major export center for southern Belize.

The local population is Creole, Mestizo, and Garifuna with a large immigrant community from Honduras and El Salvador. Unfortunately, there are limited job opportunities and Independence has struggled to benefit from Belize's boom in the tourism industry. In fact, the village only has a few services to offer tourists (e.g., some tourists arrive to Independence to take the 30 minute water-taxi to Placencia), but it provides essential services and resources, such as health care, education, electricity, and artesian well water to Placencia. However, there are some reports that Independence will soon increase in population because the government would like to move the district capital from Dangriga to Independence to capitalize on the deep water port facility which could easily be adapted for cruiseship businesses.

Research Design

The data for this project were collected using both qualitative and quantitative methodologies: interviews with local residents, community leaders, and owners/managers of tourism businesses; participant observation; household surveys; and, gathering of local and national statistics. In each community, a sample of households was taken. For the sampling process, the researchers developed maps of the villages and towns, notating physical structures and roads on graph paper. Buildings were identified as houses or other and all houses were then verified to be occupied or vacant. In accordance with sampling procedures outlined in Salkind (2000), all households were represented by a number and participants were randomly selected using a Random Numbers Table.

A household survey was administered with heads of households in both Parts I and II. The Household Survey was originally drafted in English and then translated to Spanish with the help of a local bilingual speaker for Spanish speaking households. Appendix A is the English Household Survey used in Part I and Appendix B is the English Survey from Part II. These surveys collected data for household livelihood security levels, helped to identify problem areas and constraints people feel they face in their lives, and generated ideas of community needs.

More specifically, Part I of the Household Survey gathered data regarding: household composition, demographics, anthropometrics of children under 5 years, and history of residency. This process was for many households the first opportunity they had to work with the researchers. Therefore, this Survey served not only as a tool to gather preliminary data, but also as a method for research assistants to build rapport with local community members.

The second Household Survey was administered in January-April 2002. Structured interviews were comprised of a core set of open-ended and close-ended questions. The survey gathered information on household composition, nutritional security, health security, education, tourism, economics, environmental issues, and social concerns.

Research Constraints

This research project had a number of limiting factors that may have affected the data and results. First, the overall reliability of the surveys was a possible research constraint. There are a variety of factors that influence responses to survey questions including the participant's education level, their current disposition, the amount of time they have for the research, their comfort level with the researcher, and whether there were others present during the survey. Second, interviews with key-informants in the villages

were used to derive the indicators for the household livelihood securities. It is possible that some participants were reluctant to disclose information during the survey for fear of retribution from political leaders or other community members. Finally, extreme climatic events are oftentimes unpredictable. Days after the completion of Part I of the research, Hurricane Iris directly hit the village of Placencia and to a lesser extent impacted Independence Village. At the discretion of the Primary Investigators and with support from village members, Part II of the research was carried out as planned. However, data were collected only 3 months after the hurricane. Rates of household vulnerability increase after a natural disaster and therefore, the Part II results for Placencia and Independence were affected (Alexander and Whitehouse, in press).

CHAPTER FIVE

Data Presentation: Economic and Social Network Securities

The Government of Belize strives to improve the household livelihood security of its citizens through ecotourism development in communities. In order to focus efforts on strategies that empower community members who are typically disenfranchised, researchers must identify vulnerable groups and encourage their participation in the development process. Data regarding these issues were obtained through household surveys and key informant interviews.

The following section explores the two components of the household livelihood security framework used in this thesis and evaluates the role gender plays in household headship and vulnerability. The data were analyzed using SAS (Statistical Analysis System). Responses of “don’t know” or “not applicable” as well as missing data were eliminated from the variables. Chi-squares and Fisher’s Exact tests were performed to compare data between household types. An α value of 0.05 was used and p values <0.05 show a significant difference in variables. (Due to the sample size, it is important to note that several variables did not have expected counts of ≥ 5 and therefore, the chi-square was not a valid test).

Please also note that Part Two was conducted in Placencia only three months after Hurricane Iris directly hit this community. Given that the community did not have a “high tourist season” as planned in the research design, the survey was adjusted to ask about the high season the previous year and questions were added about coping strategies used during crisis situations. Independence, located inland from Placencia, was also affected by the

hurricane, but to a lesser extent. The Part Two survey for Placencia was also administered in Independence. An in-depth discussion of the economic and social impacts of Hurricane Iris can be found in Alexander and Whitehouse (in press).

Household Surveys

Household heads were surveyed in the four research sites in Part I and Part II of the project. The total number of household surveys is shown in Table 5.1 below.

Table 5.1 Number of Households Surveyed by Community

Community	Part I	Part II
San Ignacio	188	163
Placencia	68	57
Benque Viejo	137	122
Independence	115	101
Total N	508	443

Of the households surveyed in Part II, 88% were dual-headed, 7% were female-headed, and 5% were male-headed. Table 5.2 shows the frequency of household types by community. Sixty-eight percent of the female-headed households in this study live in the tourism-based communities.

Table 5.2 Household Types by Community

Community	Female-headed		Male-headed		Dual-headed	
San Ignacio	11	35%	10	49%	142	36%
Placencia	10	33%	1	5%	46	12%
Benque Viejo	5	16%	5	24%	112	29%
Independence	5	16%	5	24%	92	23%
Total N	31		21		392	

The number of people living in each household ranged from one to sixteen. The average household size for each community was: Placencia 3.95, San Ignacio 4.53, Independence 4.92, and Benque Viejo 4.93. Additionally, it was determined in Part I of the surveys that 13.4% of household heads had lived in their respective communities for less than 5 years, whereas 44.2% had residency for over 30 years.

Economic Security

Economic security is a key indicator for household livelihood because it assesses a household's ability to afford immediate needs while being resilient under financial changes in the future. This indicator is based on data collected regarding occupations held by household members, household expenses, savings, and incidence of debt. Appendix B shows the questions related to economic security. The specific variables used in calculating economic security scores for households include: employment security, perceptions about adequate income, perceptions about extra income, incidence of savings, and incidence of debt.

Employment security is a composite of three variables and was calculated by summing scores on occupational stability (permanent job = 3 points, seasonal work = 2 points, and occasional work = 1 point); occupational diversity (number of household income sources); and dependency ratio (the number of workers relative to the number of total household members). Dependency ratios were calculated by dividing the number of workers by the total number of household members (Alexander and Gibson, in press). This figure was then multiplied by 10 in order to give the measure a weight comparable to the other variables for employment security. A household's employment security level was considered "vulnerable" if it was less than ten, "secure" if it fell between 10 and 18,

or “very secure” if it was 18 or greater. Final employment security scores were used to identify economic security.

The majority of households surveyed were vulnerable for employment security (Table 5.3). Sixty-nine percent of female-headed households were vulnerable, whereas 47% of male-headed and 44% of dual-headed households scored vulnerable.

Surprisingly, only 62 households (15%) were “very secure,” only three of which (10%) were female-headed.

Table 5.3 Employment Security by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	20	69%	8	47%	165	44%
Secure	6	21%	7	41%	152	41%
Very Secure	3	10%	2	12%	57	15%
Total N	29		17		374	

For the second economic security variable, respondents listed their monthly expenses and were asked, “Are you normally able to pay the expenses identified above?” This variable was scored according to the following point system: if they stated “never” or “rarely” a score of 0.0 was given, “sometimes” scored 0.5 points, and “usually” or “always” scored 1.0 point. Eighty-one percent of households report the ability to pay expenses. Table 5.4 shows the responses by household type. There was no significant difference by household for this variable. However, it is noted that 86% of female-headed households are able to pay expenses, compared to 80% of dual-headed.

Table 5.4 Ability to Pay Expenses by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	1	3%	0	0%	11	3%
Secure	3	10%	1	6%	62	16%
Very Secure	25	86%	16	94%	301	80%
Total N	29		17		374	

The third variable was based on whether or not heads of household reported having money left over after paying bills each month. If they stated “never” or “rarely” a score of 0.0 was given, “sometimes” scored 0.5 points, and “usually” or “always” scored 1.0 point. Table 5.5 illustrates the perceptions of extra income by household type. Twenty-four percent of female-headed households reported never having money left over. Twelve percent of male-headed households never had money left over, compared to 18% of dual-headed households. However, there was a greater percentage of “very secure” female-headed households (62%) than dual-headed households (46%). A chi-square distribution showed a significant difference of this variable between household types ($\chi^2 = 11.54$, $P = 0.0211$, d.f. = 4).

Table 5.5 Perceptions of Extra Income

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	7	24%	2	12%	69	18%
Secure	4	14%	2	12%	133	35%
Very Secure	18	62%	13	76%	172	46%
Total N	29		17		374	

The fourth variable for economic security is an indicator of incidence of savings. Savings is a critical factor for a household’s long-term economic security because it is a needed resource during unexpected events or crisis situations. If household heads reported having savings they scored 1.0 point. If they did not have savings a score of 0.0

was given. This variable showed no significant differences between household types (see Table 5.6). However, a greater percentage of female- and male-headed households (66% and 71% respectively) reported having savings than dual-headed households (56%).

Table 5.6 Incidence of Savings by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	10	34%	5	29%	165	44%
Secure	19	66%	15	71%	209	56%
Total N	29		17		374	

Finally, the fifth variable was based on credit. When asked, “Have you, or anyone else in your home, had credit or borrowed money over the last year?” an affirmative response scored 0.0 points and a negative response scored 1.0 point. Although being able to access credit is beneficial to a household, having borrowed money within the last year of the survey indicates a vulnerable economic level. Twenty-three percent of all households had borrowed money; only 1 out of 17 male-headed households (94%) (see Table 5.7).

Table 5.7 Credit in the Past Year by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	6	21%	1	6%	89	24%
Secure	23	79%	16	94%	285	76%
Total N	29		17		374	

The point values of the five variables above were summed to get the economic security score which corresponds to a security level. Table 5.8 summarizes the economic security results for all four communities. Forty-six percent of households in San Ignacio indicate high security levels, whereas only 27% in Independence and 26% in Placencia

showed high security levels. Most noted is that 39% of households in Independence and 34% in Placencia are vulnerable.

Table 5.8 Economic Security Levels by Community

Degree of Security	Placencia		Independence		San Ignacio		Benque Viejo	
Very Secure	13	26%	27	28%	73	46%	35	31%
Secure	20	40%	33	33%	53	33%	46	40%
Vulnerable	17	34%	39	39%	33	21%	33	29%
Total N	50		99		159		114	

Finally, the economic security results were disaggregated by household type and are shown in Table 5.9 for both tourism and non-tourism communities. These data are separated by tourism- and non-tourism based communities to explore possible impacts of the industry on economic security. A chi-square distribution of the “very secure,” “secure,” and “vulnerable” households found a significant difference in economic security levels by household type ($\chi^2 = 10.80$, $P = 0.0290$, d.f. = 4). Male-headed households are the most secure. Three percent more dual-headed than female-headed households rated “very secure”; however, 31% of dual-headed households were insecure, compared to 17% of female-headed.

Table 5.9 Economic Security by Household Type in Tourism and Non-Tourism Communities

Degree of Security	Tourism			Non-tourism		
	Female-Headed	Male-Headed	Dual-Headed	Female-Headed	Male-Headed	Dual-Headed
Very Secure	36%	80%	39%	20%	43%	29%
Secure	42%	20%	35%	70%	29%	36%
Vulnerable	22%	0%	26%	10%	28%	35%
Total N	19	10	180	10	7	195

Social Network Security

Social network security examines the level of participation in organizations and the ability to network with friends and family while feeling safe and accepted in the community. Social network security levels were derived by variables regarding household participation in community organizations, perceptions of time adequacy, incidence of crime, victimization, perceptions of community safety, and the availability to receive help from friends in crisis situations. Similar to economic security, final security indicators were determined in accordance to local definitions.

For the first variable, heads of household were asked whether they participate in any groups or local organizations. This variable is an indicator of “exposable” time, access to social resources, and acceptance within the community. Scoring of this variable was based on the first household head being interviewed; the household scores 1 point for participation and 0 points for no participation. Only 13% of female-headed households reported they belong to a community group, whereas 22% of male-headed and 32% of dual-headed households participate (see Table 5.10). Reasons respondents are not members of an organization, include: “not enough time”; “no one has invited me”; “we were members of a group, but the group doesn’t exist anymore”; “too much gossip”; and, “they are for people who have money.”

Table 5.10 Participation in Community Groups by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	26	87%	14	78%	247	68%
Secure	4	13%	4	22%	116	32%
Total N	30		18		363	

There was a variety of community organizations in which respondents participate; however, church groups were the most common, followed by tourism (most of which were in Placencia, 39% of households surveyed), education, and environmental (Table 5.11). It is interesting to note that Placencia and San Ignacio, the two tourism-based communities, have a higher rate of participation in education groups, environmental organizations, and Town Board / Village Council than Independence and Benque Viejo.

Table 5.11 Types of Community Participation

	Placencia	Independence	San Ignacio	Benque Viejo
Tourism	22	0	2	1
Education	2	2	7	1
Community Service	1	0	5	6
Political	0	0	1	5
Environmental	9	0	3	0
Church	6	25	59	53
Athletics	0	1	4	5
Town Board / Village Council	6	1	1	0
International (e.g., Red Cross)	0	0	4	2
Fisherman's Co-op	2	0	0	0
Humane Society	4	0	0	0
Misc.	3	1	5	4
Total N	55	30	91	77

The second social network security variable was individual perceptions of time adequacy which was scored based on the questions, “Do you have enough time to be with the family you have who live in this community?” and “Do you have enough time to be with the friends you have who live in this community?” If respondents answered “yes” to one or both of the questions they scored 1 point. If they responded “no” to both questions they received 0 points. Table 5.12 shows that the majority of households reported having enough time to spend with friends and family.

Table 5.12 Perceived Time for Friends and Family by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	2	7%	1	5%	20	6%
Secure	28	93%	19	95%	343	94%
Total N	30		20		363	

Crime incidence is a vital factor of social network security as it reflects the safety of neighborhoods and individual confidence for participating in community life.

Households scored 1 point if they have not been victims of a crime within the last 12 months and 0 points if they have been victimized. Of the 410 heads of household, 31 reported being a victim of a crime (Table 5.13).

Table 5.13 Incidence of Crime by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	1	3%	2	11%	28	8%
Secure	29	97%	16	89%	334	92%
Total N	30		18		362	

Looting in Placencia was the most prevalent crime at the time of this study which is not surprising because Part II of the household survey was conducted three months after Hurricane Iris directly hit the village. In the other communities surveyed, there were reports of burglaries, domestic violence, physical assault, and vehicular accidents resulting in hit and run.

Related to the crime incidence variable, the third determinant for social network security is perceived personal safety within the community. Perception of safety is important because it may affect a person's willingness to interact with other residents and hinder their desire to participate in local events. Respondents were asked, "Do you feel safe going outside in your community at night?" A score of 1 point was given for an

affirmative answer and 0 points for a negative answer. The results are shown in Table 5.14 by household type.

Table 5.14 Feelings of Safety in the Community by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	7	23%	2	11%	72	20%
Secure	23	77%	16	89%	291	80%
Total N	30		18		363	

For the tourism-based communities, 63% of residents in San Ignacio and 82% in Placencia feel safe in the community at night. In Benque Viejo and Independence, feelings of safety were 91% and 97% respectively. The most common reasons respondents felt unsafe were: too much crime, violence, vandalism, and drugs; too many unknown people on the streets; gangs; personal history of victimization; and, “it’s just too dark.”

The last variable for Social Network security addresses the accessibility to safety nets. Respondents were asked, “If you needed money, food or other help in a crisis, would your friends living in this community be able and willing to help you with these?” Spanish speaking households, particularly in Benque Viejo, were asked, “¿Siente Ud. que la comunidad le brindaría apoyo en un momento difícil?” (Do you feel that the community would offer support during a difficult time?). If the participant felt they could receive help during a crisis they scored 1 point and if they did not, they received 0 points.” Eighty percent of all respondents believe their friends would be able and willing to assist them during a time of need (Table 5.15).

Table 5.15 Perceived Ability to Get Help from Friends by Household Type

Degree of Security	Female-Headed		Male-Headed		Dual-Headed	
Vulnerable	6	20%	4	24%	73	20%
Secure	24	80%	14	76%	290	80%
Total N	30		17		363	

The ability to receive help from friends is a crucial indicator of livelihood security as it protects a household from vulnerability during and after a crisis situation. Placencia and Independence suffered losses from Hurricane Iris three months before these data were collected. Table 5.16 shows the respondents' perceptions of whether or not they could receive help from friends, divided by each community. Only 56% of residents in Independence (non-tourism community) were secure. Even though Placencia (tourism-based community) was the village most affected by the hurricane, 85% of households were secure; San Ignacio the other tourism-based site also showed 85% secure.

Table 5.16 Perceived Ability to Get Help from Friends by Community

Degree of Security	Placencia		Independence		San Ignacio		Benque Viejo	
Vulnerable	8	15%	41	44%	23	15%	10	9%
Secure	45	85%	53	56%	128	85%	102	91%
Total N	53		94		151		112	

There are a number of reasons why individuals believe they would not receive help from families, including: the relationship is not on good terms, lack of communication that help is needed, family and friends are more vulnerable than them, and everyone is struggling including themselves. When asked to explain why or why not friends living in the community would be able and willing to help during a crisis, a number of explanations were reported: "have a better relationship with friends than family," "church friends are always helping," "not financially, but emotionally," "they

think we have money and I prefer to ask family for help,” “don’t have friends I can depend on,” and “can’t receive help because people only want to receive and not give”.

The variable scores for community participation, perceptions of time adequacy, incidence of crime, feelings of safety, and the ability to get help from friends were summed to determine the final social network security score. Table 5.17 summarizes the results for all four communities.

Table 5.17 Social Network Security Levels by Community

Degree of Security	Placencia		Independence		San Ignacio		Benque Viejo	
Very Secure	30	56%	51	55%	98	65%	96	86%
Secure	17	31%	38	40%	36	24%	13	12%
Vulnerable	7	13%	5	5%	17	11%	3	3%
Total N	54		94		151		112	

The most secure community was Benque Viejo (86% scored “very secure”). Similar to the economic security results, Placencia Village had the largest percentage of vulnerable households (13%). Due to the fact that life in Placencia has drastically changed since Hurricane Iris, it is possible the results are impacted by the aftermath.

One final comparison was made to analyze the possible impact of household type on the level of social network security. Table 5.18 illustrates the degree of security by household type in both tourism and non-tourism communities. There is no significant difference in social network security among household types. It is interesting to note that there are a greater percentage of female-headed households in San Ignacio and Placencia (tourism communities) with a “high” degree of security (70%) compared to the non-tourism villages of Benque Viejo and Independence (50%).

Table 5.18 Social Network Security by Household Type in Tourism vs. Non-tourism Sites

Degree of Security	Tourism			Non-tourism		
	Female-Headed	Male-Headed	Dual-Headed	Female-Headed	Male-Headed	Dual-Headed
Very Secure	70%	82%	60%	50%	71%	72%
Secure	20%	9%	27%	40%	14%	24%
Vulnerable	10%	9%	12%	10%	14%	4%
Total N	20	11	174	10	7	189

CHAPTER SIX

Data Analysis and Discussion

What does it mean for a household to be healthy and secure in Belize? Research participants stated that the key factors to a healthy and secure household include: education; two parents living together who are emotionally present and stable (“a good father figure”); owning land and your own home; having a ‘good’ job; ability to supply food, clothes, and basic needs for the family; and good communication. Issues that make a home vulnerable are single parents; drugs, alcohol, gambling, and other addictive behaviors; lack of employment opportunities; having a lot of children; no child care while parents are at work; and, domestic abuse.

Community members determine security levels of households based on the house structure and amenities found in the home. According to one informant, it is very important for Belizeans to own their own home, as most people do. It is becoming increasingly more common to both rent homes and to borrow money to buy a home. The rental market is increasing and people rent to both locals and foreigners. There are a number of cases in which Belizeans own a home, move to the states, and then rent out their home while they are away. Also, some financially secure Belizeans are buying multiple homes for the purpose of making money through a rental property.

Another important indicator to Belizeans of household livelihood security is having running water, which is oftentimes more important than having electricity. One woman states that she moved to a newer area just outside of San Ignacio, but would not

do so until the town finished the water pipes. Her family lived out there for one year without electricity. There are some residents who feel differently about having running water, especially the elderly population who grew up without it. They may not want a toilet or a shower inside their home, even if it were easily installed.

The final economic and social network security indicators for this research were determined in accordance to these local definitions. The main findings from household surveys and interviews are as follows:

- Sixty-nine percent of female-headed households scored vulnerable for the employment security index.
- Female-headed households are economically more vulnerable than male-headed households, but are overall more secure than dual-headed households.
- Female-headed households are more secure in terms of social network security in tourism-based communities than in non-tourism based communities.
- Interviews with residents and community leaders revealed discrimination against women in the workplace (e.g., sexual harassment, lower wages, and fewer job promotions).
- Women employed in the tourism industry work long hours, have few holidays, and bear the majority of child-care and housekeeping responsibilities.

The following sections of this chapter will evaluate the findings presented in chapter five regarding economic and social network securities. Special attention will be paid to household livelihood security as defined by Belizeans and comparisons will be made between this research and previous studies. Pseudonyms are used in the discussion in order to protect participant confidentiality.

Economic Security

In reference to the hypothesis *female-headed households have higher rates of economic vulnerability than dual-headed households*, the data show that female-headed households are significantly less vulnerable than dual-headed households and more vulnerable than male-headed households. For all of the communities, 17% of female-headed households are economically vulnerable, compared to 31% of dual-headed and 12% of male-headed. Despite these statistics, interviews with residents provided qualitative data that reveal gendered differences in economic security.

First of all, 69% of female-headed households were vulnerable in terms of employment security, compared to 47% of male-headed households and 44% of dual-headed households. These results are not surprising as previous studies have shown that in nearly all employment sectors in developing countries women are discriminated against in terms of job status, wage, hours worked, and personal time off (Cukier, 1996; Levy and Lerch, 1991; Lundgren, 1993). Seventeen percent more female-headed households in the non-tourism communities were vulnerable for employment security than in the tourism-based communities; and all of the “very secure” female-headed households were in tourism-based communities. This figure suggests that although the overall employment security rate is low among female-headed households, those who live in either Placencia or San Ignacio are more likely to have secure jobs and more occupational diversity with a lower household dependency ratio. However, examination of qualitative data from interviews with residents shows that not all women working in tourism are secure.

In Belize, women employed in the tourism industry are mostly over-worked and under-paid. Waitresses get paid \$2 or \$2.50 per hour plus tips (some restaurants take 30% of those tips) and do not get paid for days off. It is very difficult for women to survive during the dry season because there are no tourists. Job security in some locations is dependent on women looking nice and keeping up with their hair and clothing.

Some informants expressed concerns about the booming tourism industry because it is negatively impacting the household livelihood security of residents who depend on other forms of income. Rosa*, a long-time resident of Placencia believes that two-thirds of the properties in the village are owned by foreigners. Villagers are being “squeezed from all sides” and the success of tourism has brought rising land prices, taxes, and property values. The majority of residents suffer high prices, supply shortages, and power outages without receiving any of the benefits of the boom. Rosa further states that the people who derive benefits from tourism promotion and infrastructural improvements are those who supported the governmental party that won the last election.

The second and third variables of economic security identify the household’s ability to pay all necessary expenses on a monthly basis and whether or not they have money left over. The majority of all households are able to pay their monthly expenses, however male- and female-headed households are more secure (94% and 86% respectively) than dual-headed households (80%). One explanation for this seemingly counterintuitive finding is that female-headed households have a lower standard of living with fewer expenses (e.g., children attend school for fewer years to avoid tuition costs).

Female heads of household may also avoid high-priced commercial goods and instead, relying on locally grown foods for sustenance instead.

The data regarding perceptions of extra income show a bimodal distribution for female-headed households, i.e., the majority of households were either “very secure” (62%) or “vulnerable” (24%). Further investigation shows that 90% of female-headed households in non-tourism community have money left over at least some of the time (either “secure” or “very secure”), compared to only 68% in the tourism communities. The price of living is higher in tourism-based communities and residents are more dependent on commercial goods and grocery foods (Alexander and Whitehouse, 2004). Some female-headed households in Placencia and San Ignacio are impacted by the inflated living costs and do not have money left over. However, there is no difference in vulnerability rates among dual-headed households between tourism and non-tourism communities. This indicates that dual-headed households in tourism-based communities have money left over because their employment security rates are higher, which allows them to compensate for increased living expenses. On the other hand, male-headed households were the most secure with 13 out of 17 scoring “very secure.”

Interestingly, dual- and male-headed households have more employment security, but single-adult households of either gender are more able to pay expenses and indicate a higher incidence of having extra income. There are a number of possible explanations for this finding: 1) dual-headed households have a higher standard of living with more monthly expenses; 2) single-adult households have fewer dependents and little tuition expenses; and 3) male- and female-headed households are more likely to receive additional income from family and friends who live abroad.

The results for this variable were found to be statistically significant and consequently influenced the overall economic security by household type. The 2002 Poverty Assessment Report published by the National Human Development Advisory Committee of Belize revealed results that conflict with the data above (NHDAC, 2004). They found that financial difficulties related to utility expenses were high for both male- and female-headed households (47% and 66% respectively). Fifteen percent of male-headed household and 27% of female-headed households had difficulty meeting mortgage/rent. However, there was very little difference among household types of being able to afford food and clothing expenses.

The final economic security variables for this study showed female-headed households reporting more savings and less credit than dual-headed households. It is encouraging that 66% of female-headed households have some savings as it protects against employment insecurity and vulnerability during crisis situations (Alexander and Whitehouse, in press). Additionally, qualitative data from interviews revealed that some Belizeans receive income from friends and family who live abroad. Although there are no quantitative data showing additional income by household type, it is likely that female-headed households are recipients of extra income and are able to save for unexpected incidents.

Slightly fewer female-headed than dual-headed households have credit, which is a positive economic security indicator in this assessment. However, it may also indicate that women have less access to credit from local businesses and financial institutions. Compared to the data from tourism-based communities, female-headed households in non-tourism communities were twice as likely to have obtained credit within the last

year. It is possible to infer that female-headed households in non-tourism communities have more savings and a higher rate of credit as they are more vulnerable to periods of economic insecurity particularly because of employment vulnerability (e.g., seasonality of jobs and lack of occupational diversity).

Also, it is noted that 56% of respondents in Placencia reported borrowing money from someone within a year of the survey. This trend is due to the fact that individuals and businesses needed financial support to repair and rebuild after Hurricane Iris destroyed nearly the entire village and its structures (Alexander and Whitehouse, in press).

Even though the findings reveal that female-headed households are more economically secure than dual-headed households, much of the qualitative data show women struggle more financially than men. For example, Emma* from San Ignacio works as a cook at a small restaurant and makes US\$50 per week. Her work day is from 5 p.m. to 10:30 p.m. and she works seven days a week. She has a severe illness and although she is a single mother of four young children, she cannot receive social security. Her ex-husband is addicted to crack cocaine and alcohol and since their divorce she has not been able to receive any assistance.

Social Network Security

In reference to the second hypothesis of this thesis, there was not enough statistical evidence to conclude that *female-headed households have higher rates of social network vulnerability than dual-headed households*. In fact, only 3% more female-headed households were vulnerable than dual-headed. However, additional

investigation of the social network security variables and of the qualitative data reveals some differentiation among household types.

These results correlate with previous research in developing countries that show female-headed households having less free time, fewer connections within the community, and conflicting responsibilities of employment and domestic labor (Handa, 1998; Waite, 2000). For example, during the interview process a female resident of Placencia said to the investigator, “This survey takes too long. I have to see about my house which is being repaired, then check on my daughter before going to work.”

This research showed a low rate of participation in community organizations. Membership to a church was the most popular form of community involvement, followed by tourism, educational, and community service groups. Tourism-based communities had a slightly higher rate of community participation than non-tourism communities. The growing tourism industry impacts the social aspects of daily life in Belize. William*, an elderly fisherman from Placencia, states that when he was young the social life revolved around the fishing co-op. Today, social life takes place in the bars. He is concerned for the younger generation because there are not enough “useful” activities in which they can participate.

There was a 32% participation rate in dual-headed households, compared to 13% in female-headed households and 22% in male-headed households. Women may be less likely to participate in community groups for the following reasons: they have less disposable time; few organizations include women, and there are gender biases within groups and organizations; only males hold powerful positions; and, women of female-

headed households are less accepted in the community and consequently avoid social groups.

The second social network security variable examined individual perceptions of time adequacy. Ninety-four percent of all households surveyed reported they have enough time to be with friends and family; there were no significant differences among household types. However, these results do not resonate with the qualitative data gathered in this study.

For example, a waitress in Placencia at a restaurant that caters to tourists explains the difficulty she has working full-time, taking care of her children, and keeping her home clean. She typically works the morning shift because of evening child-care issues. When she gets off at 3:30 p.m. she goes to work at an agricultural business for three hours and does not get home until after 6:30 p.m. At that hour, she has to do the wash, make “tea” and do other household chores, all while taking care of the children. She believes she is more productive at home in the morning, but her husband does not allow her to work in the evenings because he believes she wouldn’t spend enough time with their children, and furthermore, he does not want to have to take care of them.

Crime victimization and personal feelings of safety in the community were both variables included within the social network security index. These data show lower crime rates than expected. Respondents may have been hesitant to disclose they were a victim of a crime. Also, qualitative data exposed higher crime rates in Placencia after Hurricane Iris. Of the surveyed households, 31 stated they had been a victim of a crime within 12 months of being surveyed. It was found that only 3% of female-headed

households have been a victim of a crime, compared to 8% of dual-headed and 11% of male-headed households.

Eighty percent of all respondents reported feeling safe in the community at night. Further investigation shows that 94% of households in non-tourism communities and 66% in tourism-based communities feel safe. Some residents in Placencia state feeling less safe in the community at night since tourism has increased (Alexander and Whitehouse, 2004). They report seeing suspicious people in the streets at night who are not from the community. Other respondents state that more drug-dealers are in their community targeting foreign tourists.

Crime rates have risen in both rural and urban settings of Belize over the last decade; these crimes include armed robbery, theft, pick-pocketing, and sexual assaults (www.cejamerica.org, 2005). In 2003, 65 murders were reported (23 per 100,000 inhabitants) and 5,326 crimes against property were committed.

As briefly discussed in the previous chapter, looting in Placencia Village was the most reported crime (Alexander and Whitehouse, in press). Looters from outside the community arrived after the evacuation and some residents stayed behind in order to steal from their neighbors. One woman recalls seeing truckloads of zinc, wood, furniture, large household appliances, and items from her own gift shop being taken out of the village.

Domestic abuse is a hidden crime that often goes unreported to authorities in Belize. According to a Development Officer in the Office of Human Development and Women, domestic abuse is fairly common in San Ignacio and the Cayo District. There are a number of causes of domestic abuse, including drugs and alcohol. A woman may

become a victim of domestic abuse if she earns more than her husband and he is ashamed of his lack of personal financial stability to provide for the household.

The government recently revised policies for domestic violence. A network of police, social services, health, and education workers are supposed to work together to develop prevention strategies and to help victims of abuse. Unfortunately, due to poorly structured systems and communication flaws the police, social workers, and mental health specialists are not always accessible to women in crisis.

The period of time following a personal or community crisis (such as, Hurricane Iris in Belize) can illuminate household security levels in terms of being able to receive help from others. Eighty percent of respondents, regardless of household type, believe their friends would be able and willing to assist them during a time of need. This rate was 8% higher in Placencia and San Ignacio than in Independence and Benque Viejo. Also, 85% of female-headed households in tourism-based communities believed they could receive help from friends, compared to 70% in non-tourism communities. The majority of female-headed households in this study were located in the tourism-based communities. It is likely that these women would help each other during a time of need.

During and after crises, it was reported that people will go to church ministers, government officials, or area representatives and ask for money or other types of assistance. Individuals will also visit local shops and businesses to solicit donations. In some of the larger villages in Belize, including the four research sites, residents have family members living abroad who are able to send them money.

Overall social network security rates by household type differed between tourism and non-tourism communities. Twenty percent more female-headed households in

Placencia and San Ignacio were “very secure.” Although these social network security statistics do not show significant differences among household types and reveal a higher rate of security in tourism communities, they do not correlate with most of the qualitative data.

Information gathered through interviews of local residents in tourism communities showed that there are social consequences for being a woman in tourism. Sexual harassment in the workplace is rampant in Belizean communities. Women are not only being paid less for doing the same tasks, but they are also treated much differently than their male counterparts. Even when a woman has more education than a man, the man usually receives a higher salary. Personal appearance can impact whether you are hired and/or fired. On a daily basis waitresses get harassed by co-workers and guests in the restaurant, most of whom are foreign tourists. Also, there are no discrimination laws against hiring a person based on gender. It is legal for job advertisements to specify whether or not they want a male or female employee.

Not only are there blatant cases of gender discrimination and sexual harassment, but there are also instances when the work environment can be laden with discriminatory undertones. Evelyn*, a receptionist at a resort outside of San Ignacio, reported that as a woman working in tourism she has to be strong and assertive otherwise people won't take her seriously. She has noticed in previous work environments that tourists and employers try to take advantage of her because they believe she is ill-informed and won't understand the situation.

Powerful women who own businesses in tourism (and other sectors) are not always received well in the community. According to one business owner in San

Ignacio, she is perceived as being tough and mean and focused on herself and only herself. She said, “I work hard to try to show the Belizean people that they can make it in tourism if they work hard, but you won’t get rich in tourism.” When she started her business she would work 20 hours per day and she would frequently sleep on the cement floor or kitchen table.

Although some Belizean women economically benefit from the booming ecotourism industry in Belize, they often make a number of sacrifices in their personal lives to be successful. The quantitative data show that female-headed households have higher rates of economic and social network security in tourism-based communities; however, the percentage of vulnerable households also increases suggesting an uneven distribution of ecotourism benefits among households. As in the example above, interviews with respondents revealed that women employed in the tourism industry work long hours, often earn lower wages than men, and face challenges of gender discrimination. The following chapter presents final conclusions for this thesis and offers suggestions for further research.

CHAPTER SEVEN

Conclusions and Recommendations

Ideally, ecotourism development helps manage national parks, protected areas, endangered wildlife and archaeological sites, while at the same time sustains the livelihood of local communities. Since the early 1990s, Belize has promoted its ecotourism industry, which has resulted in drastic increases in visitor arrivals. As the number of businesses that cater to tourists increases, it is becoming clearer that some households are not benefiting from the tourism revenue.

Research Conclusions

The primary goals of this thesis were to examine the differences in economic and social network security levels by household type and to compare household securities in tourism-based and non-tourism based communities. This research found that female-headed households are significantly less vulnerable than dual-headed households, but they are more vulnerable than male-headed households in terms of economic security. Further investigation showed that a greater percentage of female-headed households in tourism communities are economically secure (compared to non-tourism communities), but the number of households that are vulnerable increased by 12%. This distribution suggests that some women have been able to capitalize on the tourism industry, while others are financially struggling with low paying jobs in tourism or other employment sectors. Conversely, Kangas et al. (1995) imply that community members near the Possum Point Biological Station in Belize equally benefit from the ecotourism industry.

The majority of households were found to be vulnerable in terms of employment security. Residents are concerned that an overwhelming number of businesses are owned by foreign investors, thus leaving fewer opportunities for Belizeans to participate in the tourism industry. Also, respondents report that the price of living has increased since the “boom” in tourism. When only a portion of the local community is profiting from tourism, then there is a high percentage of households that cannot afford the increased living costs. As noted earlier, the founders of the Community Baboon Sanctuary anticipated that ecotourism to the area’s eight villages would create sources of supplementary income for community members (Alexander, 2000). However, the ecotourism revenues primarily benefit residents in the main village where visitors pay entrance fees, hire guides, and visit a museum. Furthermore, the tour guides who receive generous tips from visitors are mostly males, while the majority of women in the area work at home.

Considering the economic security findings identified above, development efforts in Belize should focus on supporting the building of small-scale, locally-owned businesses. A portion of the proceeds from tourism taxes and revenues could be used for small grants to aid local residents with new ecotourism projects. These individuals would focus on ways in which they can increase their income by using renewable resources available in their community.

Economic security is an important indicator of other household livelihood securities, including social network security. Kabeer (1992) suggests that in so far as female-headed households are not economically more vulnerable, it is at the price of working harder and sacrificing personal time and energy. However, social network

security results from the quantitative data in this study do not show significant differences among household types. It is possible that women in tourism communities have a more active role in all aspects of their personal and public lives, and therefore have higher levels of social network security.

On the contrary, the qualitative data from interviews with local residents indicate that women are more vulnerable than men. Specifically, women in Belize work more hours, get paid less for the same jobs as men, and have limited access to higher paying jobs. Currently, there are no laws in Belize that protect women against discrimination and sexual harassment in the workplace.

This research revealed that women in female-headed households are less likely to participate in community organizations. Studies show that gender inclusion in conservation efforts and community development ultimately leads to greater protection of natural resources (Warren, 2000). It is recommended that women have the opportunity to participate (i.e., have an active role in all phases, including planning, policy making, and project implementation) in ecotourism development projects in their community. Capacity building workshops could offer women the skills needed to empower themselves to join groups or start their own grassroots organization. Additionally, women who are active participants in community groups will likely feel more empowered in other aspects of their lives. Women who are successful as key stakeholders will likely gain the trust of and respect from government officials and other cohorts in the community.

The findings presented in this thesis reveal the need for more research regarding the economic and social impacts of ecotourism development and local stakeholder

participation. The following discussion presents suggestions for future research in Belize.

Future Research Suggestions

Over 40% of the female-headed households in Belize are located in Belize City (NHDAC, 1998). Household livelihood security data should be collected in the neighborhoods of Belize City to examine female-headed household vulnerability in an urban setting. In addition, case studies of female-headed household in tourism and non-tourism communities would offer a more in-depth look at the daily lives of women and illuminate areas in which change is needed.

Historically, research has shown significant gender differences in educational opportunities that ultimately lead to lower education levels and high illiteracy rates among women (Seager, 2003). Economic securities of households are impacted by the education levels of the adults. Further studies are needed to investigate the effects of education levels on household livelihood security. Possible implications of education levels on ecotourism participation rates and employment opportunities should be explored. Also, previous studies have examined the nutritional security of children in female- and male-headed households (Barros et al., 1997; Kennedy and Haddad, 1994). Future research in Belize could look at household nutritional securities in tourism-based and non-tourism based communities, disaggregated by household type.

Chapter three of this thesis explored both historical and contemporary issues of Belize with particular attention to ethnic and cultural diversity. Additional studies need to be undertaken to examine local stakeholder participation in ecotourism development in terms of opportunities for and impacts on different ethnic groups.

The final suggestion for future research is to consider political issues that influence community participation in local development projects. A life-long resident of San Ignacio questions the ability of the government, political leaders, tourism business owners, and community members to communicate and work together. He fears that development decisions in San Ignacio will be made and enforced by outsiders.

Carrier and MacLeod (2005) found negative impacts of tourism development on local communities in the Caribbean, related to political conflicts and a top-down system that ignored the needs of stakeholders and benefited national political leaders. It would be valuable in Belize to conduct an in-depth investigation of political issues that impact the ecotourism industry and potentially hinder local stakeholder participation.

This thesis explored household livelihood security, the role gender plays in household vulnerability, and the impacts of participation in the tourism industry in Belize. With the support and encouragement of local and federal governments, stakeholders should be involved in identifying problems, developing goals and implementing ecotourism projects. It is the hope that these data will aid Belizean communities in appropriately developing ecotourism programs that meet the needs of residents and tourists, while at the same time preserve the country's natural resources.

APPENDICES

APPENDIX A

Household Livelihood Security Survey Part I

Household Number: _____

Date: _____

Locality: _____

Investigator: _____

PART 1**HLS/V Survey**

HH Composition and Anthropometrics
2001/02

A. DEMOGRAPHIC INFORMATION

1. Name of head of household: _____
2. Name of second head of household: _____

3. Marital Status: _____
 1. Married
 - _____ 2. Separated
 - _____ 3. Divorced
 - _____ 4. Single
 - _____ 5. Common law
 - _____ 6. Widowed

4. Religion: _____

For Head of Household:

5. How long have you lived in [name of community]: _____

14. Why did you move to (name this community)?
15. Is your family from this community?
_____ 1. yes _____ 2. no
16. Do you have family living in this community now?
_____ 1. yes _____ 2. no

If yes, how are they related to you?

Part B: HOUSEHOLD COMPOSITION (>5 years of age)

Name	Relation to Self	Gender	Age	Education Level	Occupations	Work Frequency	Birth Year
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

Children < 5—Anthropometrics

Name	Relation to HH Head	Gender	Age (months)	Date of Birth	Height (cm)	Weight (kgs)
1.						
2.						
3.						
4.						
5.						
6.						

Doublecheck: How many people live in this house right now?

_____ # adults (16 and over)

_____ # adult males

_____ # adult females

_____ # children (< 16 years of age)

_____ # of children under 5 years of age

_____ **TOTAL IN HOUSE**

APPENDIX B

Household Livelihood Security Survey Part II

Household Number: _____

Date: _____

Locality: _____

Investigator: _____

Person Interviewed: _____

PART 2: HLS/V Survey

(Jan/March 2002)

Part A: NUTRITIONAL SECURITY**1. Children < 5—Anthropometrics (Fill in all boxes for new kids. Name, ht and wt for kids measured in Part 1)**

Name	Relation to HH Head	Gender	Age (months)	Date of Birth	Height (cm)	Weight (lbs)
1.						
2.						
3.						
4.						
5.						
6.						

2. Doublecheck: How many people live in this house right now?

_____ # adults (16 and over)

_____ # adult males

_____ # adult females

_____ # children (< 16 years of age)

_____ # of children under 5 years of age

_____ **TOTAL IN HOUSE**

Part B: HEALTH SECURITY

1. Where do you get your drinking water (check all that apply):

village well

private well

rain water (vat)

river

bottled water

tap water (from vats/wells)

springs/creeks

other: _____

2. What is your primary source of drinking water?

3. Why is this your primary source? _____

4. Does anyone in your home ever get sick from drinking the water?

yes no

If yes, from which source(s)? _____

Sanitation Facilities:

6. Do you have a toilet (bathroom) in your home? yes no

7. Do you have a latrine in your home? yes no

8. If no, where do you use the bathroom most often? _____

Your Family's Health:

9. Please indicate all health care providers that you and your family living in the household use:

local clinic

mobile health clinic

local health worker

local private doctors

local bush doctor (curer, herbalist)

- local midwife

 private dentist

 pharmacy

 homeopath

 chiropractor

 hospital

 private doctor, outside

 other: _____

10. Have you ever any problems with these services?

yes no

Please explain:

11. What do you think about these services? _____

12. Do you ever use homemade remedies? _____

yes

no

What do you use?

And for what symptoms?

For one child under 6 months of age in the house:

13. Is this child being breastfed?

yes no

How long was/is this baby (going to be) breastfed? (get in months if possible)?

14. Do you ever give this baby a bottle? _____

yes no

15. If yes, what do you give this baby in the bottle? _____

16. Do they receive any other kinds of food?

_____ yes _____ no

If yes, what kinds of food?

[Code Exclusive Breastfeeding] _____

Immunizations:

17. Are your children immunized? (For children 12-60 months)

_____ Measles DPT 1 DPT 2 DPT 3 (1=yes, 2=no)

Child 1

Child 2

Child 3

Child 4

Child 5

Child 6

{Doublecheck: _____ # of children in HH 12-60 months} _____

[Immunization Rate] _____

Morbidity Rates: (For children in this household under 5 years of age)

18. How many had diarrhea during the last 2 weeks? _____

19. How many had fever during the last 2 weeks? _____

20. How many had a cough, cold, or respiratory infection during the last 2 weeks? _____

21. Have any of your children had any other serious illness during the last 2 weeks?

_____ yes _____ no

If yes, please list:

For hh members \geq 16 years of age:

22. How many adults in the house have been sick during the last two weeks? _____

Have they been able to work (during the past two weeks)? _____

Pregnancy:

23. Have you (female HH or woman being interviewed) been pregnant in the last 2 years?

_____ yes _____ no

If yes, did you/she get prenatal care during the pregnancy?

_____ yes _____ no

_____ If yes, who did you/she visit?

If no, why not?

Part C: FOOD SECURITY

1. Where do you get most of the food that your family eats?

(Get all sources and in general, which foods from each source. Don't forget hunting, fishing and food gathering)

2. Do you and your family have the foods you want to eat?

_____ yes _____ no

_____ If no, why not?

If no, what other foods would you like to eat?

3. What did you (**only the person being interviewed**) eat yesterday?

Breakfast	
Dinner	
Supper (Tea)	
Snacks	
Other	

Is what you ate yesterday typical? _____ yes _____ no

_____ If no, please explain:

4. Were there times over the past year when your family did not have enough food?

_____ yes _____ no

If yes, when?

[code # of months here] _____

What happened to cause this? _____

What foods didn't you eat? _____

What did you and your family do to get more food? _____

Part D: EDUCATIONAL SECURITY

1. Do you have children (living in your home) who attended school [primary and/or secondary only] this past year? _____ yes _____ no

If yes:

_____ # of boys in school last term [_____ # of school-aged boys in HH]

_____ # of girls in school last term [_____ # of school-aged girls in HH]

[Calculate boys and girls enrollment rates for the HH] _____

Boys____.____

Girls____.____

2. Do you have any children (of primary or secondary school age) living in this home who were **not enrolled** in school this past term?

_____ yes, how many? _____

_____ no _____

If yes, why did they not attend school? _____

3. What is your opinion of the quality of the schools?

4. In general, how much education do you think children need to guarantee a good future?

5. Are there particular skills or a trade that children need to secure the well-being of this community?

_____ yes _____ no

If yes, what are they? Where do you get them?

Do children generally have the opportunity to acquire them?

_____ yes _____ no

6. What languages are spoken by members of your household?

Part E: TOURISM

Please tell me what you think about tourism here in your community:

1. Has tourism in your community changed the life of your family in any way?

_____ yes _____ no

Please explain:

2. Has tourism changed your community in any way?

_____ yes _____ no

Please explain:

3. Has tourism changed the environment in any way?

_____ yes _____ no

Please explain:

Part F: ECONOMIC SECURITY

You have told us about everyone's primary occupation in this household. I need to have you tell me about all **sources** of income for your household.

1. What are all of the *current sources* of income for each person working in the household? **(Don't forget to ask about receiving money from others living outside their household).**

Person	Sources of Income	Length of Employment
--------	-------------------	----------------------

*

1.

2.

3.

4.

5.

* P=permanent S= seasonal O=occasional

[CODE # OF TOTAL DIFFERENT SOURCES OF INCOME] _____

[“STABILITY” CODE] _____

Property Ownership:

2. Do you _____ own the house you are living in right now?

_____ rent

_____ borrow

3. Do you, or others who live in your home, own (other) property?

_____ yes _____ no

_____ If yes, what do you own? (list)

For Placencia/Independence only:

4a. Was any of your (physical) property damaged in the hurricane?

_____ yes _____ no

If yes:

4b. What property was damaged?

4c. What are you doing about any property that was damaged?

4d. Are you able to make a living (since the hurricane) doing what you normally do? Has the hurricane changed your employment? If so, please explain:

For any head of household who is self-employed:

5. What is your business? _____

6. How many employees do you have? _____

7. How was your business during the past 12 months?

_____ good _____ average _____ bad

If it wasn't good, what problems did you have?

For Placencia/Independence: Has your business been impacted by the hurricane? _____

_____ yes _____ no

Please explain:

8. If you have a bad year, what do you do to compensate? _____

For Placencia:

What are you doing to help you get through this time after the hurricane?

Monthly Expenses:

9. In a normal month, please estimate what you pay for: [in \$US]

food	_____	_____
housing	_____	_____
electricity	_____	_____
gas	_____	_____
water	_____	_____
health care, medicines	_____	_____
schooling	_____	_____

Can you please estimate about what percent of your income is spent on food each month for your home? _____

10. Are you normally able to pay the expenses identified above?
 _____ never _____ rarely _____ sometimes _____ usually _____ always _____

If anything but “always” please explain:

11. Do you have any money left after you pay your bills each month?
 _____ never _____ rarely _____ sometimes _____ usually _____ always _____

12. If you could not pay your basic expenses, what would your family do?

13. Do you have any savings?
 _____ yes _____ no _____

14. Last year, did you (or anyone in the home) give money to another person outside your home?
 _____ yes _____ no _____
 If yes, please explain:

15. Have you, or anyone else living in your home, had credit or borrowed money over the last year?
 _____ yes, source: _____
 _____ no _____

If yes, for what purpose?

Part G: ENVIRONMENTAL SECURITY

In your community:

1. What is the condition of the environment in your community?

Has it changed over recent years? _____ yes _____ no

If yes, how has it changed?

2. Are there any environmental problems here? _____ yes _____ no

If yes, what are they?

And what should be done about them?

3. How has the creation of _____ [relevant protected area(s)] changed life *for you and your family* (e.g., ability to work, obtain food, etc.)? Please explain.

4. How has the creation of _____ [relevant protected area(s)] changed *your community*? Please explain.

5. How do you dispose of your household garbage? (check all that apply)

_____ burning

_____ collection

_____ burying

_____ recycling

_____ dump site

_____ other: _____

6. What sources of energy do you use in your home for cooking? (check all that apply)

Source	Sources used for cooking?	Primary source for cooking?	Where is the source obtained?
Electricity			
Butane gas			
Fuelwood			
Other:			

7. Has the availability of this (primary) source changed since you've lived here?

_____ yes _____ no

Please explain:

Part H: SOCIAL NETWORK SECURITY

For Head of Household (being interviewed):

1. Are you part of any community organizations or groups?

_____ yes _____ no

If yes, please list the organizations by name:

If yes, what do you do as part of the group (i.e. how do you participate)?

If you are not a member of any groups, please explain why not:

For Second Head of Household (if applicable):

2. Are you part of any community organizations or groups?

_____ yes _____ no

If yes, please list the organizations by name:

If yes, what do you do as part of the group (i.e. how do you participate)?

If you are not a member, please explain why not?

[CODE TOTAL NUMBER OF GROUPS FOR BOTH HHS]

3. Do you have family living in this community? _____ yes _____ no

4. If you needed money, food or other help in a crisis, would your *family* living in this community be able and willing to help you with these? _____ yes _____ no Please explain.

5. If you needed money, food or other help in a crisis, would your *friends* living in this community be able and willing to help you with these? _____ yes _____ no Please explain.

6. Do you feel safe going outside in your community at night?

_____ yes _____ no

If no, why not?

7. Last year, have you or someone in your home been a victim of a crime?

_____ yes _____ no

If yes, please explain what happened? (who, when, what, how, where)

Did you get help from anyone when this (the above crime) happened?

_____ yes _____ no

Please describe the nature of the help.

If no, why did you not get help? (please explain)

8. Do you have enough time to be with the *family* you have who live in this community?

_____ yes _____ no

9. Do you have enough time to be with the *friends* you have who live in this community?

_____ yes _____ no

If no (to either #8 or #9), please explain:

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