

Ecotourism and Sustainability in a Q'eqchi' Maya Community, Guatemala

by

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Photographs by authors except those otherwise credited

Introduction

Despite the cornucopia of unique natural resources found in Latin America, the average citizen in most countries remains economically destitute. For example, the World Bank (2004, 2008) estimates that 56% of the population of Guatemala lives in poverty. The key to economic success throughout much of Latin America, and Guatemala in particular, is land. Guatemala's economy relies on agriculture. The most fertile land, however, remains concentrated in the hands of either multinational agricultural companies such as Dole or descendants of colonial settlers. Indigenous people in Guatemala, who make up 50% of the population, are left with small infertile plots of land (Lovell 2000).

The environmental consequences of this paradox are pervasive throughout the developing world. Population pressure and the need to increase both food supply and exportable materials have placed in jeopardy the world's most fragile ecosystems. Landless peasants migrate to forested areas in search of land to cultivate. Deforestation is an enormous problem pervasive throughout Latin America. Finding a means of sustainable development is arguably the most urgent conservation goal in Latin America. Given the conflict between need for environmental conservation and economic need for survival the obvious question is: How can Latin American governments and specifically local people, make money from their natural resources without unsustainably exploiting them? Many development agencies and the United Nations offer ecotourism as a response.

Ecotourism has enormous potential to bridge the gap between economic development and environmental conservation. The goal of a successful ecotourism project is to create a situation

where it is more profitable to conserve resources to show to paying tourists than to unsustainably exploit them for agricultural production (Honey 1999). Can ecotourism live up to its potential as a tool for sustainable development? That very question is addressed in this study. Here, we explore the question of sustainability and ecotourism in the small indigenous mountain community of Chicacnab, Guatemala.

Ecotourism and Sustainable Development

The Ecotourism Society defines ecotourism as "enlightening nature travel experiences that contributes to the conservation of the ecosystem and to the cultural and economic resources of the host community" (Ecotourism Society 2006). According to this widely accepted definition ecotourism must be economically, socially, and environmentally sustainable to be considered successful. Plenty of ecotourism projects make money. However is that money invested in conservation of the resource upon which ecotourism is based? Does profit from tourism encourage stewardship of natural resources in local people? A great deal of the literature available on the subject suggests that ecotourism often fails to preserve the environment.

Ecotourism projects are frequently initiated with little input or benefit for local people. Often, national governments, NGOs, and foreign investors establish and develop ecotourism projects and also frequently reap the majority of economic benefit (e.g., Belsky 1999). As Horwich and Lyon (1993) states, one key to economically sustainable ecotourism is to "give rural residents access to the lucrative tourism industry, and thereby tie local livelihoods to a rationale for sustaining wildlife and

habitats as tourist attractions."

A second concern is the social changes (e.g., drug use, crime, moral degradation, loss of indigenous cultures) that occur as a result of ecotourism (Stonich et al. 1995). McCormick (1994) found that in remote areas such as the Amazon, ecotourism disrupts the social and economic traditions of the people there. Such disruptions, however, can offer economic possibilities such as selling crafts to tourists that often require locals to adapt to a new, not necessarily welcome, way of life.

A third commonly cited problem with ecotourism is environmental degradation. (Weinberg et al 2002). Although it seems counterintuitive, conservation of ecotourism destinations is not always a priority. As previously mentioned, money for ecotourism development frequently comes from outside the community, which often places pressure on locals to increase tourism for more profit. With increased tourism come increased pollution, development, and infrastructure need, hence placing in jeopardy the resource upon which tourism is based. Weinberg et al. (2002) have aptly termed this the "ecotourism treadmill."

Despite the commonly discussed problems with ecotourism it remains an attractive tool for sustainable development in many developing countries. Even the United Nations recognizes ecotourism as a means of achieving sustainability. Given this paradigm of conservation and development, ecotourism can be ideally suited to the ecologically rich, economically poor nations of Latin America.

This article presents the results of a case study aimed at evaluating the success of ecotourism as a tool for sustainable development in the indigenous community of Chicacnab in the municipality of San Juan Chamelco, Guatemala (Figure 1). The indicators of success are those mentioned

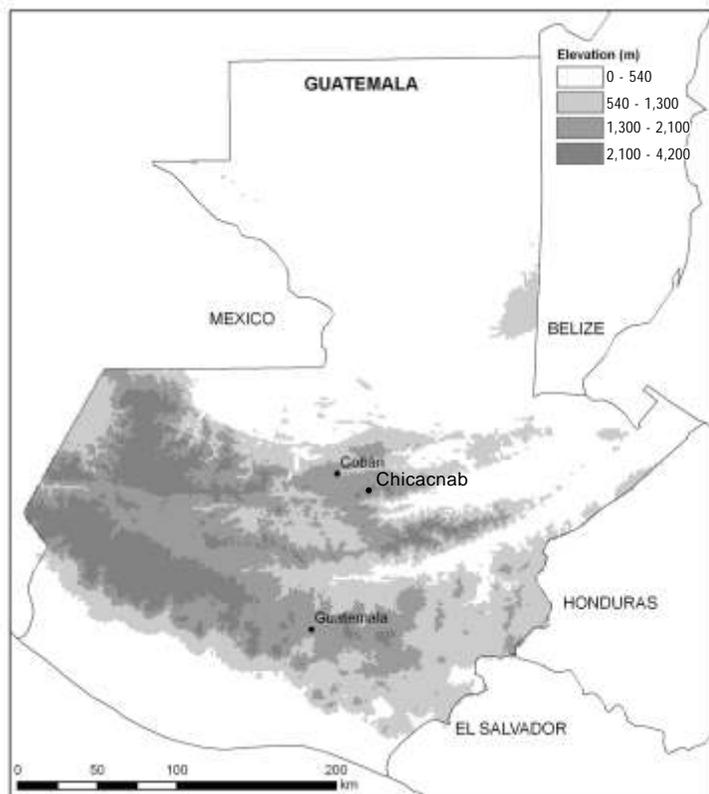


Figure 2: The center of Chicacnab Guatemala.

Figure 1: Location of Chicacnab, Guatemala (left)

above: economic, environmental and social sustainability.

Methods

To determine the success of ecotourism in Chicacnab, semi-structured interviews were conducted with nineteen local families in the summer of 2005 with follow up visits in 2006 and 2007. The primary author, who speaks Spanish, lived in the community and participated in daily activities for one month to gain the trust of community members. All but three participating families were interviewed because they were either inaccessible or not at home. Only men in Chicacnab speak Spanish as a result of their migrating for work and military service. Therefore, when the male head of household was not available, it was necessary to interview women with the help of a local Q'eqchi'-Spanish translator.

Study Site and Evolution of Ecotourism in Chicacnab

Chicacnab is an indigenous Q'eqchi' community of approximately 500 people located at an elevation of 8,000 feet (2,400 m) in the mountains of the Alta Verapaz region of Guatemala (Figures 1 and 2). Ecotourism in Chicacnab began with the help of the non-governmental organization, Ecoquetzal.

Ecoquetzal is a "private, not for profit, apolitical, non-religious organization dedicated to environmental, social, cultural, and educational development" (www.ecoquetzal.org).

The cloud forest surrounding Chicacnab is home to the highest density of Resplendent Quetzals (*Pharomachrus mocinno*) in the country (Figure 3). The Quetzal (Figure 4) is a large elusive bird. The males have long green tails. It is the national bird of Guatemala and also the name of its currency. In 1989 a German film crew traveled to Chicacnab to make a documentary about the Quetzal. Each member of the crew stayed with a local family and paid for their room and board. Other residents of Chicacnab saw their neighbors making money and wanted to be a part of it; the seeds of ecotourism were planted.

Chicacnab is small in population but relatively large geographically. An entire section of the community has been totally deforested for agriculture (Figure 5). An informant explained that tourists initially stayed in both the forested and deforested sections of the community. Later they started to stay only in the forested section of the community, which led to jealousy and animosity between the residents of the two areas. The same informant claims that they have since put aside their grievances.

Before ecotourism was completely

initiated an education program was implemented. Peace Corps volunteers and Ecoquetzal workers offered environmental education on subjects including erosion, wildlife habitat, deforestation, and water. To become guides for tourists, participants were required to attend a school where they learned the names of the local flora and fauna and how to explain points of interest for visitors. Again, because only men have a reasonable command of Spanish, only men are able to be tour guides.

Before tourists could stay in Chicacnab some adjustments to daily life were necessary. Peace Corp volunteers explained the importance of boiling drinking water for visitors. Today local people strictly drink boiled water as well. Local women had to adjust the food they prepared for tourists (Figure 6). Sugar, salt, and chile are used in abundance in local cuisine. They were instructed to use sugar and salt more sparingly and serve chile on the side rather than mixed directly into the food. Additionally, they were taught how to prepare some non-traditional foods such as spaghetti with tomatoes.

Hosting families were required to buy foam pads for tourists to sleep on. The three inch thick foam pads are placed on a locally made wooden bed. Traditionally, locals slept on a thin straw mat placed on the wooden bed. Since hosting tourists most locals have abandoned the straw mat in



Figure 3: Guatemala's cloud forest near Chicacnab.



Figure 4: The Resplendent Quetzal. Photo © Lou Hegedus. Used with permission.



Figure 5: Deforestation is common in some parts of Chicacnab. Tourists come not only to see remaining cloud forests and wildlife, but also to understand local culture. For example, here a six-year old Q'eqchi' girl carries on the long tradition of looking after younger siblings while their mother completes other daily tasks.



Figure 6: Visitors can participate in daily activities such as grinding maize for tortillas.

favor of the relative comfort of the foam mattress. Project participants were required to have a slightly separated space for tourists including a table and the previously mentioned bed. Eventually, every family that participates in the project built an addition on to their home to accommodate tourists (Figure 7). The community also built several latrines to accommodate their new visitors. Ecotourists can now perform ablutions in perhaps one of the most unique latrine locations in the world (Figure 8)!

In addition to the household changes required of them, hosting families also had to agree to discontinue slash and burn agriculture. In lieu of the nutrients derived from burned vegetation farmers now

practice crop rotation and add animal fertilizers to their fields. Most families in Chicacnab are subsistence farmers and simply supplement their incomes with money derived from tourism.

Aside from ecotourism or selling extra produce the only source of income most families have is from the wage labor men perform outside of Chicacnab. Almost every family interviewed reported that the male head of household typically works from 2 to 4 months a year outside the home community. This work is typically quite far away and requires vehicular travel or a very long walk. Once there, the work is typically the hard physical labor of farming. For 18 days of work men are paid about \$37.50, roughly the same amount they would make

hosting 2 tourists for 2 nights. Almost every informant said ecotourism alleviates some of the financial need to work on other farms.

To get to Chicacnab is a difficult, physically demanding task, which limits the number of tourists the community receives. After reaching the small nearby village of San Lucas by pick-up truck, the prospective tourist begins the uphill hike to Chicacnab. The first part of the trail is relatively dry. However, half way up the trail tourists reach the cloud forest, where it commonly rains every afternoon. As a result, the two-foot wide trail becomes extremely slippery with deep mud. The hike *should* take about 2.5 hours including stops to look for monkeys and Quetzals. It takes out-of-shape geographers, however, a



Figure 7: The house on the right was built to accommodate tourists. The house on the left remains the living quarters of the host family.



Figure 8: The latrine at the end of the world.

respectable 4 hours of hard slogging through the mud while guides twice our age nimbly traverse the trail.

In addition to a soccer field the village of Chicacnab consists of 4 public buildings; the school, church, tienda (small shop), and a small kitchen. None of these buildings or any of the homes has running water or electricity. The municipal buildings are located on the only visibly flat terrain in Chicacnab (see Figure 2). The homes and fields lie on land that rises immediately and steeply out of the flat-bottomed valley.

Analysis

1: Economic Pillar of Tourism

Ecotourism in Chicacnab was primarily organized by the NGO, Ecoquetzal. Chicacnab residents, however, avoid the flight of capital associated with outside investment (Belsky, 1999). Ecoquetzal retains only the portion of ecotourism money necessary for their office's overhead costs. Two tourists are charged \$41.25 for two nights lodging in Chicacnab. Ecoquetzal keeps \$6 for administration costs. Tourists pay the costs to the Ecoquetzal office in Cobán before heading out to Chicacnab.

Hosting families are given \$25 at the time services are rendered. The remaining \$10.25 for each two-night stay is given to the families at the end of the year. Upon return to Cobán each tourist completes a survey assessing their experience with the host family. Ecoquetzal tells the families that if their surveys are acceptable they will receive the remaining \$10.25. An informant at Ecoquetzal assured me that the families always get the remaining \$10.25. This is

simply their way of assuring the quality of host activities and facilities.

The amount of money a family earns from housing two tourists for two days is roughly equivalent to the amount the male head of household would make working in public sector agriculture for two weeks. The relative ease of hosting tourists compared to wage labor on plantations is what leads 88% of informants to conclude money is a major benefit of ecotourism.

Hemmati (1999) tells us that most local residents in ecotourism communities find stable work in the service industry such as hotel and restaurant workers. No such public establishments occur in Chicacnab. Tourists stay only in the homes of local residents and eat their meals with the family around the kitchen fire. When asked if they would like to have a hotel for tourists, the vast majority of informants said they would rather host tourists in their homes. They claimed to enjoy the opportunity to interact with their foreign guests.

Given the nature of their employment and the irregularity of ecotourist arrivals the disadvantage of this type of employment is instability of income. Families who choose to host tourists in Chicacnab cannot count on a regular income from ecotourism as do their hotel-employed counterparts. Furthermore, as more families become involved in the project, each family will earn less (unless, of course, the number of tourists increases with the number of hosting families). In other words the money from tourists that do come will have to be distributed among more families. Even though this income is inconsistent it is inherently nonintrusive on daily life. Residents of Chicacnab who do

participate in the ecotourism venture are still free to practice traditional subsistence agriculture because they are not required to be at a formal job for 8 to 10 hours per day. Residents of Chicacnab have a long standing familiarity with a cash economy. For several generations adult men have migrated for wage work. Hence McCormick's (1994) concern about the unwanted introduction of a cash economy is not applicable in this instance.

2: Environmental Pillar of Ecotourism

Because investment in ecotourism in Chicacnab is from a non-profit NGO, as opposed to a profit-seeking company, Chicacnab is not subject to what Weinberg (2002) dubbed the "ecotourism treadmill." There are no outside investors in Chicacnab placing undue pressure on the land or people to host more tourists or produce a greater profit.

One of the most commonly touted benefits of ecotourism is that it creates a situation in which it is more profitable to conserve resources and the natural environment than unsustainably exploit it (Horwich and Lyon 1993). This is the case in Chicacnab. Several informants indicated that they ceased previous deforestation practices because they were afraid tourists would stop coming if the forest was gone. It is an Ecoquetzal prerequisite that families discontinue slash and burn agriculture to be admitted into the project. All families interviewed claimed to have stopped using slash and burn agriculture. They also claimed that they would not revert to slash and burn agriculture if for some reason tourists stopped coming. They cited erosion, water quality, and the wish to

preserve the forest for their children as reasons not to deforest. Local people appear to have adopted a genuine sense of pride and stewardship for their unique environment (Figure 9).

One environmental problem, however, can be indirectly attributed to ecotourism. The people of Chicacnab have built a small store in part with the extra income from tourism (Figure 10). The store sells everything from batteries to processed snack foods. As a result, litter is strewn along paths and public spaces in Chicacnab. Several informants said locals, not tourists, are responsible for the trash. And they expressed concern about the trash problem because they believe tourists won't like to see garbage lying around.

We did not observe any environmental degradation that could be directly attributed to ecotourism. Nor did any of the informants interviewed comment on environmental problems associated with hosting tourists.

3: Social pillar of ecotourism

Loss or change in culture and traditions is a social issue commonly associated with ecotourism (Weinburg et al. 2002). This is a not a large concern for Chicacnab at this time. Locals continue to practice subsistence agriculture and perform the same gender-specific tasks they always have. Indeed, observance and participation in a genuine Q'eqchi' home is a principal reason many tourists venture to Chicacnab. In this sense ecotourism actually encourages the maintenance of traditional values in Chicacnab.



Figure 9: A guide from Chicacnab cares for and respects the local cloud forest.



Figure 10: Local children congregate at the newly built store. The litter, however, spreads afar.

Certainly, hosting families have had to change some aspects of daily life to accommodate tourists. They are required to boil water, they make special food such as pasta, and men are distracted from their work in the fields while guiding tourists. However, the most significant social result of ecotourism is a rift that has developed between hosting and non-hosting families.

Approximately 35 out of the 70 families in Chicacnab and San Lucas choose to participate in the ecotourism project. Participants cited several reasons why some families choose not to participate. Those reasons include a fear of outsiders, inability to speak Spanish or communicate with tourists, reluctance to change their culture, and lack of forests near their home to show tourists. The two non-participating interviewees were able to corroborate these explanations. Both non-participating respondents live in the deforested section of Chicacnab and are therefore unable to host tourists. They cited concern for the safety of their children and a lack of Spanish fluency as reasons not to participate in ecotourism.

Regardless of their reasons, a rift in the community between families that host tourists and those that don't has come about. Community members are not universal in their acceptance of foreigners in the community. It is inevitable that some non-participating residents may harbor resentment about the unwanted changes in their community or jealousy over suddenly diverging economic status. Most

informants agreed that the two factions of the community have worked out their differences, yet tensions do still exist.

Conclusion

The fact that every family interviewed said they want to host more tourists in the future and almost half of the respondents said there were no negative effects of ecotourism is testament to the relative success of the project. We must, however, ask the difficult question of carrying capacity. How many tourists can Chicacnab host without encountering the environmental and social problems of mass tourism?

Chicacnab receives only 175 tourists per year, down from a high of 500 tourists in 2000. The success of ecotourism in Chicacnab is partly due to the limited number of tourists the community receives. The arduous task of getting there, coupled with the very basic services provided limits the number and type of tourists visiting Chicacnab. These tourists have a minimal effect on the natural environment and are easily absorbed into the community. And since the type of tourist who is willing to travel to Chicacnab is likely to be in search of a unique environmental and cultural experience, he or she tends to be sensitive to the local environment and customs.

Passof (1991) speculates that there are two basic types of successful ecotourism. The first being small scale, expensive

projects where the number of tourists is strictly limited and local people are fully utilized in the projects conception and implementation. The second type consists of “small-scale, highly regulated low-budget tours...[that] tend to fall into the domain of hard-core backpackers and kayakers” (p. 3). Ecotourism in Chicacnab has characteristics from both of these types of successful ecotourism.

The apparent success of ecotourism and positive resident attitudes towards the program, however, may be due to the fact that Chicacnab is in the early stage of tourism development. Doxey (1976) created a four stage “irritation index” which measures local attitudes towards tourism and tourists. The four stages are euphoria, apathy, annoyance, and antagonism. The residents of Chicacnab appear to be in the first stage. If tourists do indeed start getting off a bus in Chicacnab, as one informant requested, resident opinions might become more negative, in which case ecotourism could no longer be considered sustainable. Such an increase in tourists and the infrastructure they would require would affect the environmental sustainability of Chicacnab.

This study concludes that at this time the benefits of ecotourism in Chicacnab outweigh the negative effects. Locals who participate are making enough money from tourism to encourage conservation. Participants are aware of the stewardship role they play in the conservation of their cloud forest. They are aware of the uniqueness of their environment and culture and take pride in preserving both. The fact that they receive money from tourists to do so is certainly a strong contributing factor to this sense of stewardship.

This ecotourism project, then, serves as a model for other communities in Guatemala and the developing world on how to successfully create and cope with an alternative livelihood strategy. Importantly, ecotourism permits residents to partly break away from 500 years of debt-peonage and wage labor on the land of the elite minority. By all accounts, hosting tourists is a preferable source of revenue compared to the available wage labor on distant plantations.

If you want to discover the real Guatemala far from the mass-tourism circuit and the “gringo” trail, we suggest you spend some time with the people of Chicacnab. You will take away important life lessons and provide residents with much-needed support (Figure 11).



Figure 11: Locals welcome you to Chicacnab to experience their lives and struggles.

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