Agro-ecotourism in Costa Rica: A Participatory Rural Appraisal Case Study

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Abstract  
In Costa Rica, agro-ecotourism, a merger of ecotourism and agrotourism, is gaining importance as a viable economic development activity. In this paper, we consider the theoretical frameworks that link agriculture, ecology and tourism. Then we discuss the methods through which we conducted a modified participatory rural appraisal (PRA) of an agro-ecotourist association in the Limon region of Costa Rica. We conclude our paper by making recommendations for further development of the agro-ecotourism association in Costa Rica.

Key words: Agrotourism, Participatory Rural Appraisal, Costa Rica, Farmers Networks
Introduction

Costa Rica has a mainly stable economy that depends on the industries of tourism, agriculture and electronics exports. The nation’s GDP purchasing power parity was approximately $50 billion and its GDP real growth rate was 3.4 percent in 2008. Agriculture comprises seven percent of the GDP, industry comprises 29 percent and services comprise 63 percent. Fourteen percent of the labor force is employed in agriculture, 22 percent is employed in industry, and 64 percent is employed in service, which encompasses the tourism industry (Costa Rica, 2009). Accordingly, Costa Rica is one of the top destinations for eco-tourism. There, agro-ecotourism, a merger of ecotourism and agrotourism, is gaining importance as a viable economic development activity.

In this paper, we consider the theoretical frameworks that link agriculture, ecology and tourism. Then we discuss the methods through which we conducted a modified participatory rural appraisal (PRA) of an agro-ecotourist association in the Limon region of Costa Rica. We conclude our paper by making recommendations for further development of the agro-ecotourism association in Costa Rica.

Purpose

The purpose of this research project was to conduct a modified participatory rural appraisal (PRA) of an agro-ecotourism association in Costa Rica. Specifically, we sought to identify development opportunities to increase the success of this agro-ecotourism association.

Theoretical Framework

Costa Rica consistently is one of the most reported destinations for eco-tourism activities (Ingram & Durst, 1989; Lumsdon & Swift 1998; Schlichter, 2007). While there is no widespread agreement about the definition of eco-tourism, there is consensus that eco-tourism encompasses three core criteria:

- “the primary attraction is nature-based, with cultural features constituting a secondary component,
- the emphasis is on the study and/or appreciation of the resource in its own right, as opposed to the use of the resource as a venue for other activities, and
- the activities of the tourists and other participants are benign with respect to their impact upon the physical and cultural environment of the destination” (Weaver, 1999, p. 793).

Despite its declining contribution to the economy, the agriculture sector in Costa Rica continues to play a critical, multifunctional role that makes it indispensable to the economic and social development of the country. Agriculture generates foreign exchange earnings through the export of coffee and bananas, contributes to rural employment and food security, and also plays a role in protecting and conserving the natural resource base of the country. In addition, it now contributes to the creation of economic revenue through agrotourism opportunities. Agrotourism is a “strategic economic activity that could engage rural communities in a mix of activities that provide food related products and leisure within the productive agriculture property” (Little, 2006, p. 10).
According to Little (2006), agrotourism:

- comprises certain elements that make it distinguished from an ordinary visit to the farm to purchase food or engage in other practical, farming matters,
- it involves a direct interaction between the producer, products of the producer and tourist,
- benefits flow primarily towards agriculture (not some other rural development project), and
- is service-oriented to meet the leisure needs of a tourist.

Agro-ecotourism is increasingly gaining importance as a viable economic development activity in many countries. According to Cavaliere (2006, p. 7), agro-ecotourism is “a market-linked method of increasing and protecting biodiversity and sustainable rural community development.” Although different, the elements that characterize eco-tourism and agro-tourism are also characteristic of agro-ecotourism. Eco-tourism aims to protect the environment while contributing to socio-economic development through the tourism industry, thereby striving for local sustainability (Ross & Wall, 1999). Cavaliere (2006) conceptualizes agro-tourism as characterized by conventional agriculture, rural tourism and individual landholders, while agro-ecotourism as characterized by eco-agriculture, ecotourism, and community-based initiatives.

Agro-ecotourism has benefits for farmers, consumers and society. In addition to serving as an additional source of income for farmers, agro-ecotourism can help farmers by creating name recognition for their agricultural products, can help educate consumers about the heritage and importance of agriculture, can generate financial incentives for the protection and enhancement of a farm’s natural resources and can generate increased economic development opportunities for the community by bringing tourists into town who may eat, shop and lodge locally (Agricultural Marketing Resource Center, 2007).

However, opportunities for agro-ecotourism development could be limited by the carrying capacity of the natural environment of Costa Rica, by demands of domestic food production and by inabilities to accommodate large numbers of visitors on a given farm. As well, farmers must determine the extent to which they are comfortable interacting with the various types of people that may visit their farm. Therefore, any benefits of agro-ecotourism must be considered in contrast to potential limitations.

Methods and Site Descriptions

We utilized a modified participatory rural appraisal (PRA) research approach to identify opportunities for increased agro-ecotourism in the Limon region of Costa Rica. PRA is “a family of approaches and methods to enable rural people to share, enhance, and analyze their knowledge of life and conditions, to plan and to act” (Chambers, 1994, p. 253). PRA evolved from and draws on other research traditions such as activist participatory research, agroecosystem analysis, applied anthropology, field research on farming systems and rapid rural appraisal. It is a research process conducted by a multidisciplinary team of researchers from outside the community being studied, as well as local people from within the community being studied.

Research Sites

In consultation with staff from the Educational Tourism Office at EARTH University (EARTH), we identified three research sites. While small-scale agricultural production is the primary source of income and economic survival for each of these farms, each also supplements their production-based incomes with agro-ecotourism and is a member of the Agro-Eco Tourism
Association (AETA) of La Argentina de Pocora. AETA was established formally in 2005 with eight farms. Since its establishment, AETA membership has increased and decreased due to members’ lack of time to participate with the association and slower than expected increases in earnings. Today, seven farms are members of AETA. The Educational Tourism Office at EARTH works closely with AETA to help the farms attract visitors to their farms to learn first-hand about small-scale, tropical agriculture. As well, EARTH students work closely to provide technical assistance to each member farm.

Each of the three farms is located in and around the town of La Argentina, Costa Rica, which is located within a 20 minute drive of EARTH. Each is involved in different forms of production agriculture and organized differently in terms of the landscape and farm arrangement, housing availability, general farm appearance, and balance between production and tourism.

**Farm One.** The first farm the research team visited is located at the crest of a mountaintop after a steep, rocky road. The owners, an elderly husband and wife team, worked this farm for 30 years. Coffee, cacao, and charcoal are grown and sold for cash, while chickens, bananas, oranges, peppers, cilantro and corn grown are grown for family consumption. The owners also collect fallen timber from their farm and other local farms to make charcoal, which is sold locally. Revenue from the charcoal helps make the farm a sustainable enterprise. This four hectare farm has a steep terrain carved with trenches for water during the rainy season. Most weed work and “mowing” is done by hand with a machete. Occasionally a hired laborer and interns from EARTH University join the husband and wife in work. EARTH students have worked to engineer sustainable agriculture practices for the farm, such as using a by-product from the charcoal production for fertilizer.

To earn additional income, the owners of this farm built an enclosed seating area at the highest elevation point on their farm, where tourists can grind their own cacao beans and taste organic hot chocolate while overlooking a tropical rainforest vista. They are also exploring opportunities to grind and sell their own cocoa powder in small, decorative bags as a value-added product. In addition, they have prepared guest rooms, where visitors may stay overnight.

**Farm Two.** The second farm the team visited was located near the base of the mountain of Finca La Virgin and is an integrated farm with an ideal location. The female owner of this farm has taken an aggressive entrepreneurial approach and readily accepts assistance from and suggestions made by advanced EARTH students. The farm grows organic bananas, yucca, corn, pumpkins, plantains, and medicinal plants, as well as raises cows, ducks, chickens, and rabbits. A biodigester for pig manure supplies methane gas to cook with in the house, while solid waste is used for fertilizer. Due to temporary and unstable markets, the owner decided to integrate her traditional production practices with agro-ecotourism. She has taken 25 training courses about farm management, sustainable agriculture and agrotourism and would like to take more. EARTH students helped her create a soccer field on the farm where she hosts local teams and increases her farm profit by selling refreshments produced on her farm. Furthermore, she built an enclosed seating area, where she serves traditional meals for tourists. Her plans for the future include, cleaning up the lagoon area for Tilapia farming and expanding her enclosed seating area to create a “soda” or little restaurant for local residents.

**Farm Three.** The farmer at this site had been farming for fewer than three years. He grows coconuts, sugarcane, cacao, ginger, plantains, bananas, guava, bread fruit, and cassava.
He also raises chickens for their meat and eggs. The diet of the farm family of five consists almost only of products grown or raised on the farm. The farmer is in the process of building a guest house with rooms for 15 to 18 to increase his income from agro-ecotourism. Because he is a new farmer, he has relied primarily upon AETA and EARTH for bringing tourists to the farm.

**Methods**

At each farm the team followed modified PRA methodology. Prior to each farm visit, team members were assigned a task. Tasks included conducting transect walks, drawing farm resource maps, conducting a semi-structured interview with the farm owners and developing historical trend lines related to farm activities. To complete each of these activities, the research team divided into sub-groups.

Each site visit began with general introduction of all team members and farm owners. After introductions the research team and farmers discussed the purpose of the study and the research team members began their assigned tasks. At the end of the day, the research team members and the farm owners assembled again to discuss preliminary findings about the transect walk, the farm resource maps and the trend lines. In total the group spent an average of three hours at each farm.

After all of the farm visits were conducted, the researchers conducted a nominal group process to prioritize opportunities to increase the success of AETA and identify specific areas for action. Due to time and resource constraints the farmers were not able to participate in the nominal group process. During the nominal group process each of the research team members presented to the group a synopsis of the information that they collected during assigned tasks. During and after each presentation, other team members had the opportunity to ask clarifying questions.

After the presentations of data, each researcher privately identified and recorded with pen and paper three priority action items for AETA. Each researcher then shared their action items with the group and each item was transcribed onto a whiteboard for all to see. Then, each team member was voted for what they perceived to be the top two needs of all those listed. Votes were recorded and totaled.

**Findings**

*Nominal Group Process Findings*

Each member of the research team identified three opportunities for development for AETA farm members. Some action items were mentioned by more than one individual. Identified topics included the following:

- Developing an AETA logo that all farm members could use to market their products
- Renting cooperative office and/or storefront space
- Creating an association mission and vision
- Researching market information
- Developing new value-added products, such as candy, soaps, ground cacao mix, etc.
- Increasing cooperation between EARTH and AETA for increased diffusion of technical information
- Creating and implementing an association-wide marketing plan
- Providing AETA farm members with increased assistance to develop better on-farm financial plans
• Identifying short- and long-term goals for the association as a group
• Writing grants for funding to support the activities of AETA
• Working to receive organic certification
• Identifying alternative transportation options to get products to markets, as well as to attract more tourists
• Offering regularly scheduled educational trainings to association farm members
• Creating opportunities for the farmers to advance their English language skills to better communicate with tourists

From this list, each team member voted for the top two priorities. After tallying the votes, the top two identified items were creating and implementing an association-wide marketing plan and developing new value-added products. The team recommended that AETA form committees for each of these priorities and begin to develop program design and evaluation plans as they relate to these two priority action items.

Additional Findings
Discussions among the research team members, staff from the Educational Tourism Office at EARTH and AETA members revealed additional concerns that did not emerge during the nominal group process. While the farms very much hoped to increase their income from hosting more agro-ecotourists, the farm owners and EARTH staff were concerned that if the farms spent more time hosting more tourists, then the farms would have less time for their traditional agricultural work. Another concern that surfaced was AETA members’ great reliance on EARTH to bring tourists to the farms. Semi-structured interviews with farm owners also uncovered concerns regarding the absence of an agreed upon structure for AETA, as well as a lack of office or storefront space for AETA.

Recommendations
Based on the findings, we recommend that the farm members of AETA, in conjunction with the Educational Tourism Office at EARTH, work to address the two top priority action items that were identified during the nominal group process - implementing an association-wide marketing plan and developing new value-added products. In order to implement an association-wide marketing plan, AETA members must first write an association mission and vision statement. Development of a marketing plan should also encompass identification of short- and long-term goals for the association. Such planning should help the association become more cohesive and independent of EARTH and must precede the development of new value-added products. For without a plan to market these new products, the farmers will have a hard time selling these new products widely.

We also acknowledge some of the limitations of this study. All of the researchers were from the same field of study – agricultural education. Ideally, a group of 10-12 professionals from different fields such as soil conservation, waste management, extension, and horticulture, for example, would comprise the team. Ideally, the team also would spend more than an afternoon at each farm and would spend nearer to three weeks in the community. Finally, if time and resource constraints were not a problem, then the farmers would also have participated in the nominal group process. Thus, for future PRA projects, we make the following recommendations.
Prior to the PRA

- **Focus on recruitment.** A better-rounded group made of various specializations will provide a more authentic learning experience. Additionally, team members will have more confidence in as they make observations and suggestions with the appropriate background and knowledge base.
- **Yo no sé!** Practice local language and be aware of cultural differences.
- **Conduct research.** Know the country and gather as much information as possible about the area before arriving.

During the PRA (In country)

- **Review notes.** Review individual notes as a team after each farm visit or at the end of each day. Compile the notes, and make a master list of questions based upon themes and trends.
- **Let the farmers speak.** Make sure to ask the farmers about their problems and concerns.
- **Open minds.** Be willing to change and adapt to schedules. Listen to what the farmers and community members have to say. Additionally, continue to follow the PRA steps regardless if it makes sense. All the pieces come together in the end.
- **Reach out.** If possible, go beyond the farm and interact with community members.

Conclusion

In Costa Rica, agro-ecotourism, a merger of ecotourism and agrotourism, is gaining importance as a viable economic development activity. In this paper, we considered the theoretical frameworks that link agriculture, ecology and tourism. Then we discussed the methods through which we conducted a modified participatory rural appraisal (PRA) of the agro-ecotourist association AETA in the Limon region of Costa Rica. Based on the findings, we believe that development opportunities for agro-ecotourism exist if the association members work to implement an association-wide marketing plan and develop new value-added products. Such planning should help the association become more cohesive and make use of economies of scale of the small-scale farms.

References


