tional-level indicators will also be used to evaluate the sustainability of ecotourism projects (Table 1). Macro-scale institutional organization and coordination, both at the national and international levels, are important for the sustainability of community-based projects. Integration of national policies concerning rural development and ecotourism is often a challenge to the success of community-based ecotourism in developing countries (Poucut, 2002). A lack of government regulation, resulting in short-sighted management practices, was identified as an obstacle to the success of ecotourism in Baja California (Monermo, 2002). The lack of regulation was considered to be the result of poor coordination between different government departments. Multiple government departments, including ministries of tourism, natural resources, and rural development, should coordinate policies and programs in order to pursue the success of ecotourism projects. International organizations, which often fund ecotourism projects, must also coordinate with government agencies and local non-profits. Macro-scale institutional organization will be our final indicator of project sustainability (Table 1).

REGIONAL AND NATIONAL ANALYSIS OF SUSTAINABILITY

We will begin our analysis of the study area at the largest organizational level in order to provide context for more specific case studies. We will discuss both national and regional organizing bodies. In the case of Talamanca, Costa Rica, a regional non-governmental organization, the sustainability of the ecotourism projects within this region. Panama lacks an organizational and guiding body of this type. National political regimes also impact the ability of communities to carry out successful ecotourism projects.

Ecotourism at the National Level

The current direction of tourism policy in both Costa Rica and Panama trends towards industrial tourism. Panama's Tourism Law, for example, grants concessions and tax breaks to those entrepreneurs importing goods or raw materials to establish tourism operations in Panama; locally-based ecotourism initiatives do not benefit from these incentives. Costa Rica has adopted a similar policy through the creation of the Costa Rica Tourist Board (Law No. 1917), which promotes foreign visitation and infrastructure development. These policies create an economic disadvantage for locally-based initiatives operating on a much smaller scale than the tourism development occurring in such beach destinations as Bocas del Toro, Panama or Puerto Viejo, Costa Rica.

Another national problem in Panama is the lack of coordination and communication among various government institutions and ministries. Interviews with officials from IPAT and ANAM indicated that these two groups rarely interact. Though the Panamanian communities we visited had little contact with IPAT, they seemed to have regular contact with ANAM. Because IPAT focuses on developing tourism opportunities in Panama, it would behoove local communities to have their ANAM official establish a relationship with IPAT to help promote their local ecotourism projects.

Ecotourism at the Regional Level: ANAI, Costa Rican Regional NGO

ANAI is the only example of a regional umbrella organization working to facilitate the sustainable development of ecotourism projects in La Amistad Biosphere Reserve. ANAI has been working in the Talamanca region for 25 years and has developed a conservation strategy, the Talamanca Initiative, which is "dedicated to supporting the integration of biodiversity and ecosystem conservation, sustainable socio-economic development, and community development of the Talamanca region [and] involves the collaboration and cooperation of over 20 grassroots, community-based organizations, many small-scale producers, and the Costa Rican Ministry of the Environment (ANAI, 2002). Having a regionally specific organization helps facilitate movement and transparency of information among various projects. It also provides a venue for developing training and educational programs for local community members involved in the project. This regional organization ties various local NGOs together and serves as a link to the national and international community, a service which is acutely lacking on the Panamanian side of La Amistad. Having ANAI provide marketing support for local ecotourism projects, as well as organize visits from tourists to their communities, relieves the stress and confusion associated with coordinating ecotourism packages. This regional interface would serve as a valuable tool in Panama, linking different projects together and increasing their visibility in the world market.
sources and personnel, making it difficult for this NGO to act in the same capacity as ANAI in Costa Rica.

COMMUNITY-LEVEL ANALYSIS OF SUSTAINABILITY: CASE STUDIES

We applied our evaluation criteria to projects visited during our rapid assessment, including five communities in Bocas del Toro, Panama, where community-based ecotourism is relatively new, and one well-established project in the BriBri community of the Talamanca, Costa Rica. Three of the projects are located in indigenous communities: the Ngobe-Buglé and Teribe in Panama, and the BriBri in Costa Rica. The other three projects are local community-based initiatives. Each project is described, evaluated, and given a prognosis for future success. Project pitfalls are also addressed.

Ngobe-Buglé, Norteño, Panama

The Ngobe-Buglé community project, in Norteño, Panama, encouraged ecotourists to "participate in our cultural practices and traditional daily lifestyle" through activities such as visiting the medicine man, grinding cacao beans, watching traditional dances, and bird-watching. Prices listed in the brochure ranged from $15 per person for larger groups to $40 per person for small groups. We interviewed several residents of the village, including the president of the community and an ANAM volunteer from the community. During the interview, women from the village set up a display of their crafts for sale—pineapple-fiber bags and native dresses. However, because of the nature of our visit as researchers and not ecotourists, we did not participate in any of the activities advertised in the brochure.

Community Organization Indicators

Though the concept of ecotourism seems to be popular within the community, there was little apparent community organization. It was unclear who was in charge of the ecotourism project, and the chaotic nature of communication among community members further emphasized the lack of cohesion necessary to operate a project successfully. We were repeatedly asked for money by various individuals, further indicating the disorganized nature of the project.

The only indicators of a successful ecotourism project were the brochure quoted above and distributed to us at the end of our visit, and the display of local crafts by village women during our interview. In other communities, income generated from such handicrafts has led to the empowerment of women by increasing their social status (Scheyvens, 1999). Sale of artisan crafts is also an indication of diversification of the community's economic base. The brochure highlighted the positive aspects of the project, noting that profits were used to preserve their local culture and provide an alternative to agriculture. However, community members emphasized their need for more international monetary aid; using ecotourism as a means of increasing self-sufficiency did not seem to be a priority.

Based on the brochure, the Ngobe-Buglé have the potential to develop a successful ecotourism project as they have a unique culture to showcase, and their natural setting is appealing to tourists. In order to be successful, however, it needs to be clear who is managing the project; it cannot be an unorganized mixture of community members appearing when tourists arrive. Training of individuals involved in the ecotourism project and infrastructure development with the aid of such organizations as the MesoAmerican Biological Corridor, which already provides some support for the group, could help facilitate the success of the project. The current condition of community disorganization and confusion regarding distribution and use of revenues collected from ecotourism for the benefit of the entire community, spells disaster for the organization and success of the project. Community sovereignty in the project's management does not seem to be an issue; given that the Ngobe-Buglé live on a comarca (indigenous reserve), they have the ability to govern their own affairs.

Environmental Indicators

It was apparent that deforestation still occurs around the community as the population grows, despite the rhetoric of promoting sustainability. This trend indicates that the concept of minimum impact was not integrated throughout the community. In fact, while some community members stressed the need to avert deforestation, others continued to clear land for agriculture. Carrying capacity is another issue to address for the purposes of ecotourism. Given the community's proximity to the well-traveled road between two relatively large cities, Changuinola and Almirante, regulating the number and timing of visitors to the village
may be difficult. There was no evidence of education and/or research programs.

Macro-Institutional Indicators

This project receives some funding from the Mesoamerican Biological Corridor. However, other than providing sewing machines for artisanal crafts, little evidence was seen of their support. IPAT has refused to conduct training and capacity-building workshops for the Ngobe-Buglé given their lack of community organization. Infrastructure, in the form of the nearby road, exists for tourist access to the community. The availability of safe drinking water may be problematic; apparently the construction of the road has led to decreased water quality due to sediment loading, and agro-chemical application also poses a threat to sanitary drinking water.

APROMOVEN, Las Delicias, Panama

APROMOVEN is a non-governmental organization in Las Delicias, Panama with a vision of ecotourism as a means for sustainable development. The small community of campesinos running this NGO recently migrated from Chiquí. They have pooled much of their forested land with the intentions of building interpretive trails and a lodge to host tourists.

Community Organization Indicators

This community seemed to have the cohesion in governance structure and planning necessary for a successful ecotourism project. They have plans for future expansion, and have already secured money from the Mesoamerican Biological Corridor for their project. Community sovereignty in managing and organizing the project exists. In terms of benefit sharing, the individuals who have pooled their forested land for interpretive trails will reap any benefits secured by the ecotourism project. This group, however, did not seem to have any other projects, such as cacao or artisanal wares, for economic diversification. Currently they are subsistence farmers and sell some products in the Costa Rican markets just across the river. Relying solely on ecotourism for their economic base could backfire in times of global economic depression; the need for economic diversification is evident.

Environmental Indicators

This community displayed a common vision for sustainability, recognizing the ecological benefits to keeping their land forested. They also are excited about promoting environmental education and supporting minimum impact activities for tourists, such as hiking. Again, carrying capacity has not been addressed here, though the macro-institutional indicators discussed below may preclude the establishment of a carrying capacity.

Macro-Institutional Indicators

The largest problem facing this community is at the macro-institutional level. International donors did not address the fact that the most accessible means of accessing this community is crossing the border between Panama and Costa Rica. Las Delicias is not a point of entry to Panama, and does not have the infrastructure or the desire to become a border town. Despite this difficulty, the first phase of this project, financed by the Mesoamerican Biological Corridor, has already been implemented with the completion of a cabana overlooking the Siquale River and the purchase of a cano and a pair of horses to transport tourists.

Though the community organization and environmental indicators for this community are promising, legitimizing the border-crossing issue with the Panamanian and Costa Rican governments is a daunting and perhaps insurmountable task. This issue of institutional coordination and infrastructure must be addressed before further marketing or promotion of the project. ANAI has suggested that they may intervene on behalf of Las Delicias by establishing a tour package including a visit to the village and trying to surmount some of these political barriers.

MONSELVA

MONSELVA is a non-governmental organization that coordinates efforts between a Ngobe indigenous community and a campesino community in Palo Seco Forest Reserve, Panama.

Community Organization Indicators

During our visit, MONSELVA highlighted the partnership between two communities, and addressed their willingness to coordinate and
share profits generated from an ecotourism project. However, the concept of ecotourism still appeared amorphous to them, and they seemed surprised when it was suggested they should have brought their artisanal crafts and garden-raised orchids to sell.

Environmental Indicators

MONSELVA expressed a commitment to conservation. They hoped to develop a project involving environmental education by showcasing the spectacular jungle biodiversity of Palo Seco, perhaps by offering guided quetzal-viewing tours. This village would also be a good base for research projects into Palo Seco; however, promoting research activities has not been a priority of this or any of the communities visited.

Macro-Institutional Indicators

MONSELVA applied for funding from the Mesoamerican Biological Corridor to begin an ecotourism project and was turned down because they had not identified an appropriate carrying capacity. ANAM refused to give the group a forest-use concession to construct a tourism facility, including educational trails, lodging, and a small restaurant, in a cleared area within the Reserve. The community seemed to have a superficially positive relationship with the local ANAM official; however, underlying resentments surfaced once he had departed, indicating a lack of communication regarding management of the local natural resources.

Success for MONSELVA may be secured, if provided with financial and technical support, governmental aid through land concessions, and organized management. In terms of infrastructure, this village is located directly next to a major road, which provides easy access and visibility for the project.

FUNDICCEP Project, Pila Entrance, Cerro Punta

The FUNDICCEP women’s project at the entrance to PILA in Cerro Punta, Panama, secured funding from the Mesoamerican Biological Corridor to build and run a small restaurant to serve tourists visiting the park. They have received training in finance and business management from Mesoamerican Biological Corridor personnel and have a computer for record-keeping.

Community Organization Indicators

This project provides work and a social outlet for local women and their daughters. It also provides a venue for selling local products, such as artisanal crafts and jellies from forest fruits, increasing diversification of local market bases. The community of Cerro Punta is economically depressed and primarily relies on industrial agriculture for economic development (see Shah, this volume), which consequently means that forest clearing and application of agro-chemicals are rampant practices within the community. The women who work at the restaurant are able to share proceeds generated here with their families, though the community-at-large does not benefit directly from the project. In terms of sovereignty, the women at the restaurant manage every aspect of the restaurant; they are only dependent on financial support from the Mesoamerican Biological Corridor. However, given the increasing numbers of tourists to this region, economic independence may be forthcoming.

Environmental Indicators

The project includes educational bulletin boards celebrating the relictual quetzal (Pharomachrus mocinno) as well as other highlights of the park, which was the only example of environmental education observed throughout the projects. The rhetoric of conservation is actively employed here, and the project could serve as a prototype for similarly situated villages at the entrances to the Parque Internacional La Amistad (PILA) or in the buffer zones. The project also helps foster inclinations for conservation, as the livelihood of project employees depends on maintaining viable wildlife population and natural scenery in and around PILA. In addition to forest clearing, illegal hunting also is a major threat to the wildlife of PILA; seeing the success of the ecotourism project here may influence other less ecologically minded members of the community to curb their illegal activities.

Macro-Institutional Indicators

This project could be considered a successful partnership with an international NGO, the MBC. In terms of marketing strategies, the restaurant is located on the only road to the park and enjoys a visible position for travelers in and out of PILA. The project is supported by local
ANAM personnel, including the park ranger, who encourages tourists to stop here for refreshments.

Teribe, Solon and Wetzo, Panama

The Teribe (Naso) manage a highly successful ecotourism project on the Teribe River, Panama. Visitors embark on a boat journey up the river to Wetzo, formerly one of General Manuel Noriega’s military training camps. Visitors then learn about the Teribe culture through meals prepared from local foods and community members on hand to answer questions regarding their culture and lifestyle. The Teribe possess a sense of pride in their culture and enjoy displaying their wooden crafts and traditional dress to tourists. The artisan who carved many of the wooden animals and hunting tools was available to answer questions. We also visited a village farther upriver from Wetzo, but ecotourists typically end their boat ride at Wetzo, where lodging and meals are provided.

Community Organization Indicators

The community was well-organized and exercised sovereignty over their project, aside from some financial and technical support from Conservation International. One key aspect for cultural preservation is the separation of the visitor area from the community villages, an apparently effective means of protecting their culture from any negative impacts of tourism. They also have a system in place to distribute profits from the ecotourism project. Money is deposited in a bank account and subsequently used to pay salaries and community benefits. This system ensures that the administration and control of profits is a group effort and that the benefits of the ecotourism project are shared among community members.

In order to gauge the satisfaction of visitors to the Teribe project, a survey was distributed at the end of their visit asking tourists to rate the quality of the overall experience and then each aspect of their visit, including quality and quantity of food, lodging, and guide service. This type of monitoring survey should be a model for other groups pursuing ecotourism projects, as it determines where improvements are needed for the contentment of tourists and the local community affected by the project.

This project can serve as a prototype in this region, as the community had plans to expand their project to the upper reaches of the Teribe River to include neighboring communities upstream. Provided with an avenue for information-sharing, the nearby Ngöbe community could also learn from the activities of their neighbor. One of the few drawbacks of the Teribe project was their lack of coordination and cooperation with other indigenous groups in the region.

Environmental Indicators

The Teribe can easily establish a carrying capacity for their project given their complete control over the movement of tourists to and from Wetzo. They have the added benefit of protecting their culture from negative outside influences given their remoteness and the infrequent influx of tourists to their actual living communities. The Teribe were aware of the ecological benefits of preserving their forests and promoted cacao agro-forestry and ecotourism. This ability to protect their forests probably stems from having a much smaller community than the Ngöbe-Buglé. This community is a gateway to the high-mountain reaches of PILA and could be a valuable jumping-off point for researchers should the Teribe want to support research programs.

Macro-Institutional Indicators

Infrastructure is well-developed through the utilization of former military training camp buildings, converted by the community to a restaurant and small lodge. The isolation of the community is an important factor for ensuring the success of their project. This limited accessibility allows the Teribe to enforce the carrying capacity they established. Training in administrative and hard skills, such as boat driving, were provided to members of ODESEN, the community group in charge of the project. IPAT conducted a capacity-building workshop for the Teribe, which was provided to the Teribe in part because of the community’s level of organization. The Wetzo project also collaborated with ANAM to secure funding from the Mesoamerican Biological Corridor. This is the sole example of coordination between a local group and a national governing body in Bocas del Toro.

BriBri, Estibraupa, Yorkin, Costa Rica

The BriBri project is similar to that of the Teribe in that local guides transport tourists upriver to a BriBri community on the Yorkin River. A short hike leads to a traditional thatched-roof stilted lodge built explic-