COMMUNITY BASED ECOTOURISM
IN THE PANAMA CANAL WATERSHED

-- A QUALITATIVE STUDY --

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with the support of
the National Environmental Commission

This study does not attempt to represent the views of the U.S. Agency for International Development or the Government of Panama
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<th>Spanish Description</th>
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<tbody>
<tr>
<td>AAAS</td>
<td>American Association for the Advancement of Science</td>
<td>Asociación Nacional para la Conservación de la Naturaleza</td>
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<td>ANCON</td>
<td>National Association for the Conservation of Nature</td>
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<td>ANGE</td>
<td>National Association of Ecotourism Guides</td>
<td>Asociación Nacional de Guías de Ecoturismo</td>
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<td>Pro-Development Technical Association of Artisanal Fishing for the Conservation and Re-establishment of Marine Resources</td>
<td>Asociación Tecnica Pro-Desarrollo de la Pesca Artesanal para La Conservación y Restablecimiento de los Recursos Marinos</td>
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<td>Regional Interoceanic Authority</td>
<td>Autoridad de la Región Interoceánica</td>
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<tr>
<td>UCLA</td>
<td>Lake Alajuela Campesinos Union</td>
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Unión de Campesinos del Lago Alajuela

UNEP    United Nations Environmental Program
UNESCO  United Nations Educational, Scientific and Cultural Organization
USAID   United States Agency for International Development
USAID/Panama  United States Agency for International Development/Panama
WTO     World Tourism Organization
WTTC    World Travel and Tourism Council
EXECUTIVE SUMMARY

Overview

Tourism, which is predicted to become a leading contributor to Panama’s economy, can be harnessed to support conservation, historical preservation, cultural revitalization, research, and community well-being. The fact that Panama has very little tourism infrastructure actually allows the country to position itself to take advantage of tourism’s new global profile that focuses on the synergy of tourism, conservation, and research. Sustainable heritage tourism is one term used to describe this concept (Ayala 1997). Another term is ecotourism. In order for Panama to become a leader in sustainable heritage tourism, strategic alliances must be created between five sectors: communities, the non-profit sector (community based organizations, nongovernmental organizations, and research organizations), government agencies, donor organizations, and the private sector.

Community based ecotourism is undeveloped in Panama, and no tourism masterplan exists that links communities to other sectors involved in tourism. Projects in other countries illustrate that when communities become involved in grassroots level tourism, they can preserve their local environments and earn additional income, thus reducing their reliance on unsustainable environmental practices. Community based ecotourism is particularly useful for communities living within or near protected areas. Efforts must be made to link community based ecotourism with conservation; otherwise, community level tourism actually can have negative effects upon local environments. And other sectors must actively support community efforts to engage in grassroots ecotourism if their own tourism efforts are to succeed.

Plans exist for eco-resorts and other tourism development in the Panama Canal Watershed. There are five protected areas within the watershed (Chagres Park, Soberania Park, Camino de Cruces Park, Altos de Campana Park, and Lake Gatún Recreational Area). Communities live within Chagres Park and in the buffer zones of all five protected areas. Because the watershed provides water to the Panama Canal and is an important source of drinking water to Panama City and Colon, the area must be protected. The area is also important for its biodiversity. A number of organizations have proposed that community based ecotourism could help to provide Panama Canal Watershed communities with alternative income sources while simultaneously helping them to preserve their local environment.

Purpose of Study

This Qualitative Study on Community Based Ecotourism in the Panama Canal Watershed is a study on the feasibility of implementing community based ecotourism among chosen areas (and communities) in the Panama Canal Watershed. The study analyzed community use of natural resources (including a gender analysis), introduced the concept of community based ecotourism to
community members, and explored, through focus groups, community based ecotourism potential for the studied areas. In addition, the report makes recommendations as to how to organize community based ecotourism in the Panama Canal Watershed, focusing particularly on participatory planning that unifies the communities in planning workshops with the non-profit sector, government, donors, and businesses.

**Study Methodology**

Purposive sampling was used to choose study areas and the communities that were subsequently surveyed. This was accomplished by interviewing key persons who have worked in the Panama Canal Watershed and asking their advice as to which communities had high community based ecotourism potential. Then Dr. Lumpkin, the principal investigator, visited these communities and conducted community meetings and informal interviews with community members in order to choose the communities that would subsequently be surveyed in-depth. Preliminary analysis revealed that communities needed to coordinate to create tourism packages if they were to be successful in creating marketable community based ecotourism. Keeping this in mind, Dr. Lumpkin chose three areas (community clusters) for the more in-depth survey:

- Chagres River Biological Corridor and Soberania Park Buffer Zone (Cluster One)
- Lake Gatún Recreational Area and Soberania Park Buffer Zone (Cluster Two)
- Chagres Park (Cluster Three)

The subsequent in-depth survey used the following qualitative data gathering methods: community meetings, informal interviews, key-informant interviews, and focus groups. Two bilingual interviewers assisted Dr. Lumpkin in the survey process. The Panamanian National Environmental Commission provided logistical support for the survey and the United States Agency for International Development in Panama funded the survey and report production.

In addition, Dr. Lumpkin conducted background research on ecotourism and community based ecotourism. She also attended meetings on the topic with non-profit organizations, Panama government agencies, donors, and private sector businesses (including inbound and outbound ecotourism tour operators) in Panama and Washington, DC.

**General Study Results and Recommendations**

_Awareness of Ecotourism_

Communities in the Panama Canal Watershed have had little contact with the concept of ecotourism. Only indigenous Emberá communities have attempted to earn money from ecotourism. However, none of the Emberá communities have had a sense of real ownership of their ecotourism ventures, because visitors and marketing of the community as a product have been controlled principally by
tour operators. However, there is a great deal of interest among Latino and indigenous communities in the watershed in organizing and implementing community based ecotourism.

Over-hunting, Game Raising, Community Game Guards, and Guides

Over-hunting is endemic throughout the Panama Canal Watershed. In order to reduce over-hunting, communities must become part of a system of community game guards. Community game guard systems have been highly effective in other areas of the world. In essence, communities liaise with park guards in order to protect the environment and particularly to reduce over-hunting. The best community game guards and guides are those who know the most about animals and nature: hunters. By recruiting hunters as guides and community game guards, one provides this group with an income and uses their skills to protect rather than harm the environment. This concept was popular among all surveyed communities and was particularly popular among hunters themselves. Furthermore, most communities, and particularly women, were interested in raising game animals to sell. This, too, would reduce over-hunting.

Nature Tourism and Adventure Tourism

Communities are interested in creating nature and adventure tourism. Some of the areas that interest them are: wildlife viewing, fishing, canoeing, rafting, horseback riding, hiking, and camping. Wildlife viewing is the most popular form of nature tourism at this time. Adventure tourism often incorporates wildlife viewing as part of its package and is also popular. As mentioned, former hunters usually make excellent guides.

Ethnotourism, Local and Indigenous Knowledge, and Medicinal Plants

Linking biodiversity conservation with indigenous knowledge systems and ecotourism can best be described as ethnotourism. Worldwide there is increasing interest in medicinal plants and local and indigenous knowledge, including how traditional healers (or shamans) heal. Communities are positioned to offer ecotourists this experience. Many community members not only can grow and sell medicinal plants, they also can explain to tourists how they use these plants and how they use ritual to treat different illnesses. And, most importantly, they can educate tourists about their cultures’ perspectives on illness, healing, and health. This is probably one of the most likely areas to bring communities income, because tour agencies will have difficulty competing with communities in this area. In addition, it is an area in which women generally want to participate; hence, it can empower women. And this sort of experience is highly marketable for larger eco-resorts; thus, it provides a natural link between communities and the private sector. The private sector can help finance the capacity building and infrastructure necessary for this type of product and can then market it to their clients.

Need for Ecotourism Packages
Multiple communities within certain areas (such as the Chagres River Biological Corridor and Soberania Park Buffer Zone, Lake Gatún Recreational Area and Soberania Park Buffer Zone, and Chagres Park) need to coordinate to create community-based ecotourism packages. They also should link with other sectors (non-profit, government, donor, and business) to facilitate this process. In addition, area-based tourism packages should be linked with one another. An example that could be followed by communities trying to plan, coordinate, and implement joint ecotourism packages is the *Everglades Wilderness Model* proposed for Chagres Park. Communities exist within Chagres Park. If these communities are to benefit from community-based ecotourism, they need to coordinate to create a plan that allows tourists to visit multiple communities, and they need to create a reason for the tourist to do so. One suggestion is to have tourists paddle by canoe from community to community, eating or staying over in some communities. Each community would offer a slightly different _experience_ and _personal history_ from any other one. Such a package is far more likely to draw tourists and public attention than each community simply trying to market their own small grassroots ecotourism enterprise.

**Gender Analysis**

Women rarely have *derechos posesorios* in their own names. *Derechos posesorios* is a Spanish term that roughly translates as _rights to land use_. While this is not the same as owning land or having title to land, it does allow community members to occupy and work land that officially belongs to the government. Women generally have less access to capital than men, and they also bear the additional burden of childcare, which is unremunerated work. However, women remain in the community during the day more than men. And many women stated that they were better able to work cooperatively than men. Women expressed strong interest in working in ecotourism in these areas: providing food and accommodations, making and selling crafts, raising game animals, growing and selling medicinal plants, and educating visitors about their culture and knowledge. Only a few women expressed interest in becoming guides/community game guards; however, because this is a high status profession and because guides become de facto environmental educators for their communities, women should be heavily recruited for this job.

**Recommendations for Organizing CBE**

*Inter-Institutional Framework for Sustainable Heritage Tourism*

At this time, an Inter-Institutional Framework for Sustainable Heritage Tourism is being developed by key players in Panama’s government and private sector. It is recommended that the Committee create a framework that purposively includes representatives from communities, as well as the non-profit sector, and donor community.

*Panama Canal Watershed Ecotourism Participatory Planning Process*
In order for sustainable heritage tourism to be successful in the Panama Canal Watershed, it is necessary that a participatory planning process including a Participatory Planning Workshop be held for five sectors: communities, non-profit, government, donor, and private. The output of this participatory planning process will be an Agreement on Ecotourism Policy and Best Practices for the PCW. This agreement, and the process that facilitated it, subsequently can be used as models for other areas in Panama.

Community Based Ecotourism Committees

Before, during, and after the PCW Participatory Planning Workshop, communities need to organize two types of Community Based Ecotourism Committees:

I. Ecotourism Committees need to be organized within individual communities or within groups of communities that must work closely together and that are not physically too far apart. An example of the latter are the four communities (Santa Rosa, Guayabalito, Aguas Claras, and Palenque) in the Chagres River Biological Corridor.

II. In addition, Coordinating Community Based Ecotourism Committees must be set up. The role of these committees is to coordinate tourism packages by working with the smaller Ecotourism Committees so as to ensure maximum marketability and ensure ecotourism standards.

If women are to participate in CBE, Ecotourism Committees should be strongly encouraged to include women.

Local Participatory Planning Workshops

After the initial PCW Participatory Planning Workshops, NGOs working in the Panama Canal Watershed should engage in localized Participatory Planning Workshops based upon: (1) the areas where they are already working, and (2) communities that can collaborate to create marketable tourism packages. These workshops should include: (1) community representatives,(2) community based organizations, nongovernmental organizations, and research organizations (3) relevant government agencies, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies, hotel operators, and other business persons.

Capacity building

While ecotourism participatory planning is taking place at a variety of levels, capacity building will need to occur in communities. Some communities will need aid in organizing Community Based Ecotourism Committees. Other communities further down the community based ecotourism path
(such as Parará Purú) will need specific help in such areas as coordinating with each other, raising funds, creating infrastructure, and promoting their tourism package.
COMMUNITY BASED ECOTOURISM

1. EXPLANATION OF COMMUNITY BASED ECOTOURISM

By the year 2000, tourism is predicted to become the world’s largest industry. Currently, approximately $3.6 trillion is spent each year on tourism, which employs 225 million people. The most rapidly expanding segment of the market is ecotourism, which now grosses $335 billion per year. In 1995 the top ecotourism destinations for North American travelers in order of preference were: Central America, South America, the United States of America, the Caribbean, Antarctica, and Australia. Another important destination was Kenya (Chinchilla 1997).

Because tourism now makes up such a large part of the world’s gross national product, it is no longer possible to ignore the effects that tourism has upon local environments and peoples. In recognition of this reality, on February 26, 1996, representatives from the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Tourism Organization (WTO) signed an accord pledging to cooperate: (1) in the areas of environmental protection and nature-based tourism, and (2) in promoting cultural tourism and the protection of historical sites (Steele-Prohaska 1996, p. 279).

At this time, the most profitable ecotourism worldwide is fauna driven; however, there is an increasing market for flora eco-trips. For example, in 1990 the Kenya Wildlife Service recorded $24 million in revenues from wildlife tourism. By 1995 this had increased to $54 million of which 25% was paid out to communities living in buffer areas around the parks. In Kenya 55,000 people are employed in the wildlife tourism industry and each job provided food for a family of thirteen (Chinchilla 1997).

What exactly is meant then by the term ecotourism? The definition most commonly accepted as correct is that given by The Ecotourism Society (TES): Ecotourism is responsible travel to natural areas which conserves the environment and improves the welfare of local people (Western 1993, p. 8). Furthermore, ecotourism should directly promote biodiversity conservation (Brandon and Margoluis 1996, p. 35).

However, in reality, ecotourism is an over-used and mis-used term that does not strictly follow The Ecotourism Society definition. In its broader usage, ecotourism can be: eco-travel, ecological travel, nature tourism, adventure tourism, cross-cultural exchange, language study, reality tours, earth restoration projects, marine ecotourism, historical tourism, and archaeologically-based tourism (Chinchilla 1997). These aforementioned terms do not necessarily focus on improving the welfare of local people or on conserving the environment but are often, nevertheless, called ecotourism. A newer term that also have been used is sustainable heritage tourism. Sustainable heritage tourism promotes sustainable development, environmental conservation, conservation of historic sites, cultural revitalization, and research that provides interpretive knowledge to tourists (Ayala 1997).
To further accentuate the ecotourism focus on local peoples and their relationship to biodiversity and environmental conservation, a new term, community based ecotourism (CBE), is being used. Community based ecotourism is a specific type of ecotourism that focuses not only on improving communities’ welfare but also on community ownership and participation in ecotourism. Communities discover that protecting the environment and their own cultures can generate income from visitors. Visitors, in turn, decide to visit communities to experience communities’ cultures and their local environment (Sproule 1996, p. 235).

Successfully implemented, community based ecotourism provides communities with additional income-generating opportunities while also protecting the local environment and conserving biodiversity. The initial focus of CBE should be to define and create linkages between community conservation, ecotourism, and improved community well-being. Furthermore, a new niche market for ethnotourism is opening up whereby communities (and most particularly indigenous communities) are discovering that they can market their own knowledge, particularly ethnobotany\(^1\), traditional medical knowledge, indigenous philosophy, nature awareness and survival, and their oral culture (including story-telling). In this niche market, indigenous peoples include their traditional knowledge and their perceived symbiotic relationship with nature as part of the CBE experience offered to the tourist (Wesche 1996, p. 158). This type of CBE can be difficult to find even though it is increasingly popular. Care must be taken, however, that the community be in control of this process, rather than one or two community members or someone from outside the community, such as an inbound tour operator. Marketing indigenous knowledge can help to preserve a community’s culture by revitalizing that culture. Cultural revitalization is a process whereby people preserve their cultural knowledge, history, and language. On the other hand, marketing indigenous knowledge also can be a degrading process of selling of knowledge and can weaken and even destroy a community’s culture. To be successful, communities engaged in marketing their knowledge and culture must educate visitors about their lives, rather than merely sell their dances, crafts, and other cultural customs. Furthermore, ecotourists are more sophisticated now and want to learn from communities and feel that they are contributing to cultural revitalization, rather than cultural dissolution.

In general, countries that have had notable success with ecotourism have had strong government support in the areas of environmental protection, tourism and ecotourism planning, and ecotourism promotion at the national and international levels. CBE involves conservation, business enterprise, and community development. It calls for community partnership with government, non-governmental organizations, and the private sector (Sproule 1996, p.235). CBE also needs the support of research organizations. For community based ecotourism to be effective, local

\(^1\) Ethnobotany is the systematic study of the medicinal plant lore of local peoples whose botanical knowledge usually has come from experience rather than science.
communities must be involved in the planning, implementation, and management of tourism in their own communities and nearby protected areas. They also should have a voice in ecotourism strategies at the regional and national levels (Brandon 1993). CBE does not necessarily require a large capital investment in land or accommodations; however, it almost always does require capacity building for local communities, including an emphasis on planning, design, business and administrations skills, and promotion.

In CBE enterprises there are direct beneficiaries and indirect beneficiaries. Direct beneficiaries are those who directly earn an income from CBE and are usually persons who participate in CBE organizing and planning. Examples of the former would be guides, community game guards, artisans, and those who offer accommodations. Indirect participants are those who benefit from CBE without being personally involved in CBE enterprises or CBE-related natural resource management. For example, an indirect beneficiary is a person who raises chickens and is able to sell more of them to other community members because these community members now have more income from CBE (Sproule 1996, p. 235).

2. BACKGROUND ON THE PANAMA CANAL WATERSHED

The Panama canal watershed (PCW) covers 326,000 hectares (including water bodies) and provides all the water needed for the operation of the Panama canal (two billion gallons of fresh water daily). Although the watershed is vital to the proper functioning of the canal, it has been subject to a variety of forms of environmental degradation that pose a threat to the sustainable operation of the canal in the future.

There are five protected areas within the Panama Canal Watershed: Chagres Park, Soberania Park, Camino de Cruces Park, Altos de Campana Park, and Lake Gatún Recreational Area. Chagres Park consists of 129,000 hectares (Asociación Nacional para la Conservación de la Naturaleza 1995, p.12) and its watersheds supply the majority of the water needed to run the canal as well as the water needed for the populations in Panama City and the city of Colon. Lake Alajuela is the principal lake that stores water in this park. More than 4,000 people live in the park in approximately twenty-two communities. The park is biologically diverse and provides refuge to at least ten endangered species. It is also home to a number of historic sites including the Camino Real (Annex 1) that passes by communities on the lower eastern shore of Lake Alajuela and runs to the Caribbean coast (Instituto Nacional de Recursos Naturales Renovables 1994d). The Camino Real was used during the Spanish conquest to transport gold and silver from Peru across the Panamanian isthmus to Spain. Originally, it ran from the old city of Panama to Nombre de Dios and later the trail forked to Portobelo as well.

Soberania Park consists of 22,104 hectares (Asociación Nacional para la Conservación de la Naturaleza 1995, p.12) and contains a significant concentration of neotropical fauna, particularly bird species, as well as historic sites. The park has been used over the years for a number of important
scientific investigations. Soberania does not have any communities within its borders (Instituto Nacional de Recursos Naturales Renovables 1994a).

Camino de Cruces Park is 4,000 hectares and is located close to Panama City. It contains significant natural and cultural resources. One of the primary problems affecting Camino de Cruces is Cerro Patacón, a landfill that serves Panama City, which has caused environmental degradation within the park. This, in turn, has reduced the park’s ecotourism potential. Furthermore, a new highway called the Northern Corridor (el Corredor Norte) has recently been constructed along the park and now physically separates Camino de Cruces from Metropolitan park, the park closest to Panama City. This road also separates the wildlife that passed between the two parks as well. Although communities do exist in areas near Camino de Cruces Park, no communities currently reside within the park (Instituto Nacional de Recursos Naturales Renovables 1994c).

Altos de Campana Park is 4,815 hectares, much of it mountainous, with some of the most varied vegetation and biodiversity in the world. The park is also home to the endangered golden frog (Atelopus zeteki). Communities bordering the park have subjected the park and its buffer zones to deforestation and over-hunting and are in need of alternative ways to earn a living if they are to abandon slash and burn agricultural practices (Instituto Nacional de Recursos Naturales Renovables 1994b).

Lake Gatún Recreational Area consists of 348 hectares (Asociación Nacional para la Conservación de la Naturaleza 1995, p.14) and is located not far from the city of Colon. The lake is the second-largest created lake in the world and is ideal for wildlife watching and kayaking (Horton 1997a, p. 11). There are no communities living within the recreational area (Instituto Nacional de Recursos Naturales Renovables 1994e).

In 1998 the population in the PCW was approximately 150,000 persons. It is projected to grow to approximately 170,000 persons by the year 2000. The PCW does not include the populations of Panama City or Colon. Residents of the PCW use the PCW for subsistence livelihoods or to supplement their wage-labor incomes drawn from the peri-urban areas of Panama City, Colon, and the trans-isthmic corridor between them.

In 1947 seventy percent of the PCW was forested. By 1995 only thirty percent of the watershed retained forest cover. Deforestation has been due to population increases largely related to in-migration from other areas, slash and burn agricultural practices, invasive ranching, and commercial and subsistence wood-cutting. The effects of deforestation are exacerbated by an exotic Vietnamese cane grass, commonly known as paja blanca (saccharum spontaneum) that was originally imported to stop erosion in the Culebra Cut area of the canal. This grass invades cleared areas making reforestation difficult. Deforestation affects the watershed's hydrology, reducing the amount of water in the PCW and leading to erosion and subsequent silting of the canal. Reforestation programs have been implemented by the United States Agency for International Development in Panama
(USAID/Panama) in conjunction with the National Institute for Renewable Natural Resources (INRENARE) and nongovernmental organizations (NGOs). Other environmental problems in the watershed include pollution from factories, agricultural pesticides, and water contamination caused by a lack of effective solid waste disposal systems. Poor mining practices also have negatively affected water quality and some local environments.

There are approximately 229 mammal species in Panama, of which 160 are found in the Panama Canal Watershed. Also, it is estimated that 30 of the 33 protected mammal species in Panama are found in the PCW (Asociación Nacional para la Conservación de la Naturaleza 1995, p.31). According to Dr. Roberto Ibañez at the Smithsonian Tropical Research Institute, who oversees the monitoring and evaluation of vertebrates in the Panama Canal Watershed, over-hunting and habitat destruction have severely reduced game animal populations and their predators (Personal Communication, Ibañez 1998; Asociación Nacional para la Conservación de la Naturaleza, 1995, p. 31). Mammals that have been most depleted by over-hunting are: white-tailed deer (*Odocolleus virginianus*), roe deer (*Mazama americana*), tapir (*Tapirus bairdii*), collared peccary (*Tayassu tajacu*), agouti (*Dasyprocta punctata*), and paca (*Agouti paca*) (Asociación Nacional para la Conservación de la Naturaleza 1995, p.31). Iguana (*Iguana iguana*), a reptile, has also been over-hunted for its meat. Habitat destruction has reduced a variety of monkey species and felines, which always attract tourists. Large felines now can be found only in the upper Chagres (Guagaral hill area) far from human settlements. There one also can find jaguar (*Panthera onca*) and puma (*Puma concolor*). Tapir are also found in that area. Felines such as margay (*Felis weidii*) and ocelot (*Felis pardalis*) are found throughout the protected areas in limited numbers (Asociación Nacional para la Conservación de la Naturaleza 1995, p. 72-73).

3. ECOTOURISM IN THE PANAMA CANAL WATERSHED

Protecting the Environment and Biodiversity

There is no doubt that CBE is an excellent income-earning alternative for communities, including those within PCW protected areas and their buffer zones. It can be particularly useful in protecting biodiversity within the watershed, since it is one of the few ways to reduce over-hunting. As communities discover that wildlife has an income-generating potential through ecotourism, they begin to value and, thus, protect that wildlife. Other alternative income-earning projects such as reforestation and sustainable agriculture help wildlife by increasing habitat and reducing destructive environmental practices; however, neither reforestation nor sustainable agriculture directly address the grave issue of over-hunting, whereas CBE does. In addition, game raising micro-enterprises should be set up in PCW communities to reduce pressure on wild game and provide communities with meat for personal consumption and sale.
A variety of agencies, such as the Panama Government Tourist Bureau (IPAT), INRENARE, the Regional Interoceanic Authority (ARI), USAID/Panama, NGOs, and research organizations, such as the Smithsonian Tropical Research Institute (STRI), have suggested that community based ecotourism is a viable income-earning alternative for communities living within or near protected areas in the PCW. To date, however, only a few limited studies have been conducted that provide qualitative information on natural resource use and the cultural perceptions, social realities, and gender issues facing communities living within the PCW, and none of these studies has focused on the feasibility of community based ecotourism. Without such data, it is difficult to ascertain whether or not community based ecotourism that promotes both environmental conservation and improved livelihoods for those who live within the watershed is viable.

Sustainable Heritage Tourism

Panama has very limited tourism infrastructure outside of Panama City and a minimal number of CBE projects. This is actually an advantage to some degree since the country’s tourism potential has not been destroyed by over-development and poor planning. In February, 1998, Dr. Hana Ayala presented a sustainable heritage tourism plan (Annex 2) at the Symposium on the Development of Ecotourism Strategies for the Panama Canal Watershed in Panama City. She proposed to make Panama a flagship model for sustainable heritage tourism, based on a conceptual framework that integrates tourism, conservation, and research (Ayala 1997, p. 36-37). IPAT has retained Dr. Hana Ayala as a consultant, and her sustainable heritage tourism proposal has the backing of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Environmental Program (UNEP), the American Association for the Advancement of Science (AAAS), INRENARE, ARI, the National Secretariat of Science and Technology (SENACYT), NGOs, such as the National Association for the Conservation of Nature (ANCON), and research organizations, such as the Smithsonian Tropical Research Institute. According to Dr. Ayala’s vision, not only will Panama market its natural environment, cultures, and heritage, it also will market the knowledge, interpretation, and research that link these areas.

Dr. Ayala states that consumers are now demanding enrichment and learning as part of their travel vacations. Knowledge and revitalization of knowledge must, therefore, become part of the sustainable heritage tourism package; hence, a research institute such STRI has an important role to play because of its high profile (Ayala 1997, p. 42-44). Also, there will be a role for NGOs and community groups seeking to revitalize and market environmental and traditional knowledge. In essence, enrichment and experiential learning will benefit both conservation, local cultures, historic sites, and research projects (Ayala 1997, p. 36). According to Ayala, hotels and eco-resorts will form strategic partnerships to promote conservation and underwrite research because they can market these alliances as a product to tourists who will stay in their resorts. Research allows tourists to interpret their eco-experience. And ecotourists at this time are interested in learning more about conservation, culture, and the revitalization of traditional knowledge (Ayala 1997, p. 41).
Ayala writes that a new countrywide tourism-conservation-research master plan should be created that goes beyond the existent IPAT tourism master plan (Ayala 1997, p. 42). At this time, Panama’s master tourism plan only focuses on how Panama’s tourism projects should complement Panama’s attractions (Instituto Panameño de Turismo and States 1993). In addition, it is recommended that a new tourism-conservation-research master plan address the issues of greenwashing and leakage, incorporate local communities in planning and development, and catalyze conservation and research. *Greenwashing* is marketing an enterprise as benefitting biodiversity conservation and local peoples when it does not. This is always a risk when large eco-resorts and hotels focusing on the bottom line become involved in ecotourism that has not been planned and is not regulated. *Leakage* is when money earned by tourism enterprises does not stay in the host country but leaks back to more developed countries. Ayala also states that neither Tourism Law No. 8 nor the master tourism plan are synergistic in their approach: [Neither] _encourage the forging of resort-destination partnerships that could guard the quality of the resort product at a time when the resort’s chief selling point is decidedly shifting beyond the _ resort experience.’ Last, neither law nor plan encourages tourism or hotel operators to offer guests knowledge about the destination’s nature and culture_  (Ayala 1997, p. 39).

**Participatory Planning**

In order to be successful and sustainable, it is essential that the entire planning process and policy-making be participatory, from tourism law-making to creating a tourism-conservation-research master plan, to the conceptualizing of what is *research* and who should be the *interpreters* of local environmental and cultural knowledge. If local peoples are to benefit from these plans, they must be a part of this process every step of the way, along with government agencies, NGOs, and the private sector.

**Ecotourism Packages**

One of the most important parts of planning ecotourism is educating communities, NGOs, the private sector, and government and donor agencies that ecotourism packages need to be offered, rather than focusing on individual projects. When ecotourism projects are linked, a synergistic process occurs: (1) tourist enjoyment is multiplied, and (2) financial benefits are, thus, increased.

For example, in Chagres Park, communities should coordinate their ecotourism planning and implementation so that they can offer packages such as an Exploring the Chagres Tour. Tourists could paddle from community to community in Lake Alajuela and tributaries, and each community could, in turn, position itself to offer different experiences. Although this would necessitate local planning and coordinating among communities, the benefits from offering such a package would far outweigh the efforts, primarily because this sort of package appeals to tourists and is far more marketable than, for example, a day trip to one community.
Because CBE ecotourism packages are so important to the marketing and promotion of CBE in the PCW, this study chose to research clusters of communities, rather than choose one community and explore how a pilot project might be set up. The methodology for setting up community based pilot projects is well-established and principally involves planning, capacity building, and funding for infrastructure. What has emerged from this study, however, is the singular importance of participatory planning among communities (as well as other sectors) so that communities can create a marketable tourism package. The majority of CBE efforts do not fail because of lack of funding or infrastructure, they fail because communities have not focused on marketing and promotion strategies. Communities need to realize the value of coordinating to create a package for the tourist that provide the tourist with an _experience._

**Marketing and Promotion**

In addition to ecotourism packages, other aspects of marketing must be considered, including the need to promote the country of Panama itself as an ecotourism destination. At this time, Panama has a negative image as an ecotourism destination (Ayala 1997, p.44). Tourists know Panama for its canal, and business travelers know the city for its banking sector, but there is limited familiarity with Panama’s rich biodiversity, geography, and cultures. Panama is also perceived by many in North America to be dangerous and corrupt. Furthermore, many of Panama’s hotels have a reputation for being linked with money-laundering. In order for Panamanian ecotourism to avoid becoming tainted by these perceptions, the ecotourism (or sustainable heritage) planning process must be open to public participation and scrutiny. Without transparency and participation, Panamanian ecotourism will not be able to secure a green image.

The PCW has ecotourism potential, because it is close to Panama City and is easily accessible. Furthermore, the PCW is a critical migratory bird stop-over for millions of birds from around the globe; thus, the PCW is an excellent destination for birders (Horton 1997b, p. 6). The PCW also has a variety of vertebrates (Asociación Nacional para la Conservación de la Naturaleza 1995, p. 31), although some of the vertebrate population within the Panama Canal Watershed is low due to over-hunting and habitat destruction (Asociación Nacional para la Conservación de la Naturaleza 1995; Personal Communication, Stanley Heckadon Moreno, 1997; Personal Communication, Roberto Ibañez). Experiences in other countries have shown that community based ecotourism is an excellent mechanism for protecting biodiversity and reducing over-huntingby both subsistence and commercial hunters because it links biodiversity conservation to improved community well-being. In fact, part of the CBE process usually involves training community members to become community game guards rather than relying entirely upon official park guards to protect wildlife. As long as hunting is controlled and reduced, the PCW is well situated in regard to wildlife viewing as a primary ecotourism attraction. The PCW’s easy access from Panama City and the city of Colon makes it particularly marketable, since a variety of tourists can explore the area, from adventure tourists who want a wilderness experience to those who disembark from cruise ships and want to spend a day or half-day exploring the area.
According to the results of this study, ecotourism enterprises that have involved communities within the Panama Canal Watershed have been few and largely unsatisfactory. Furthermore, research reveals that community relations with INRENARE (although not necessarily with individual park guards) are strained. The community-related ecotourism that does exist within the PCW consists primarily of tour agencies bringing visitors to Emberá communities. In general, the three indigenous Emberá communities in the PCW who have experienced ecotourism have not had a sense of ownership and control over that experience. Latino communities within the PCW have even less experience with ecotourism since they have been perceived (and perceive themselves) as less culturally marketable, although a few individuals within some communities have engaged in private enterprises such as renting canoes and serving as fishing guides.

As previously mentioned, a new niche market is opening up whereby communities (and most particularly indigenous communities) market traditional and cultural knowledge as part of the ecotourism experience. This links with Panama’s new vision of sustainable heritage tourism based on conservation, culture, and research. In other countries, NGOs such as Earthwatch offer working research vacations that focus on tourists collaborating with scientists to conduct marine, environmental, biological, archeological, and cultural research. STRI and Panamanian universities might be able to utilize the Earthwatch blueprint and involve communities in these types of research projects. Also, communities themselves can market their own research. Many indigenous communities can teach tourists about ethnobotany and traditional medicine, areas that increasingly interest tourists from developed countries. In conjunction with this teaching process, communities can start medicinal plant gardens and market this product to tourists and others. Also of interest are the cultural stories of indigenous communities, particularly the relationship between the community and the natural world. Latino and Afro-Antillano communities can also market their medicinal plants, traditional medicine, stories, culture, festivals, foods, and history.

The existence of a Panamanian niche market is exemplified by the interest displayed by the two CBE survey interviewers when they met two Emberá shamans and two curanderos (Latino traditional healers) living approximately an hour from Panama City. The interviewers immediately wanted to bring friends and other students to visit the traditional healers. And the traditional healers, in turn, were interested in linking their traditional knowledge with a type of educational ecotourism that they could market to local Panamanians.

As long as Panama has a negative international image, communities need to consider marketing to Panamanian tourists, as well as North Americans. Nevertheless, ultimately, the most lucrative market will be English-speaking North Americans. Although most community members do not speak English, communities can cater to English-speaking tourists by making sure that a translator is available. The community has several options: contracting with someone who is bilingual in Spanish and English, having a community member learn English, or, if a tour agency has brought the tourists to the community, that agency can bring a translator.
Community Capacity Building

In order for participatory planning to be completed in areas such as Chagres Park, Lake Gatún Recreation Area, Chagres River Biological Corridor, and Altos de Campana Park, capacity building will be necessary. This can be provided by community organizers, advisors, consultants, and NGOs. Funding will have to be found for this capacity building. At the same time, while participatory CBE planning is underway, communities also will need capacity building to implement the CBE projects and micro-enterprises that they have chosen in their planning processes.

4. Gender and Community Based Ecotourism

In Latin America particularly, gender has not been a primary component of studies on sustainable resource use. Recently, however, theory and practice have suggested a relationship between empowering women and improving natural resource use. It is likely that this would be valid in the area of community based ecotourism as well. In general, women often depend upon the immediate environment to provide firewood, water, and edible and medicinal plants. They are less likely than men, due to child-rearing responsibilities, to earn a wage-income and are often the primary caretakers of the communities because men work outside the community during the week or for longer periods of time as wage-laborers. Women also are often involved in animal husbandry since they remain daily in the community.

Within the PCW, women have become involved in a variety of pilot micro-enterprise projects. Some are raising endangered pacas for food. Women also have been involved in growing tree seedlings for reforestation projects, growing medicinal and ornamental plants, and growing vegetables to improve nutrition. Because women and their children depend upon local resources, they have a high stake in using those resources sustainably and so must be involved in any CBE efforts. Furthermore, women often include children in efforts to use resources sustainably and so become de facto environmental educators. And when women earn wages, they are more likely than men to spend those wages on improving the lives of their families and communities. For example, studies show that women and children consume more calories when income accrues to women, and women tend to spend a higher proportion of their income on children and collective household consumption, whereas men tend to spend disposable income on personal consumption (Kabeer 1994, p. 103-105).

Cultures often restrict women (overtly or subtly) from assuming the more lucrative CBE roles. In addition, most women have the additional burden of childcare, for which their labor is unpaid. And women very often do not have the same access to resources that men have, such as ownership of land, horses, canoes, etc., which can help facilitate the financing of CBE enterprises. In general, women usually make crafts and cook and clean for other persons; whereas, men (particularly younger men) usually become guides, and older men become business owners. Women tend to make more
money selling crafts than they do working as cooks and cleaners for others. However, women who own restaurants or bed and breakfast accommodations (B&Bs) individually, communally, or cooperatively fare well financially (Sproule 1996, p. 237). Ownership (individually, communally, or cooperatively) of a micro-enterprise linked to ecotourism usually brings in more income than mere service sector jobs, such as cleaning hotel rooms at an eco-resort. Perhaps the only exception to this is working as a guide. Being a guide is a relatively well-paid profession and has high status. In addition, the contact with international visitors that it provides can result in contacts and financial opportunities that are not available in other professions. And guides are often community game guards as well as environmental educators for their own communities. For all these reasons, it is highly recommended that women be encouraged to become guides. Furthermore, it is important that efforts be made to include women in CBE studies, plans, organizations, and implementation, and gender must be considered when CBE earnings are distributed so that women receive an equitable share.

**SCOPE OF COMMUNITY BASED ECOTOURISM STUDY**

5. **STUDY OBJECTIVES**

The purpose of the Qualitative Study on Community Based Ecotourism in the Panama Canal Watershed was: (1) to assess whether or not CBE was viable within the Panama Canal Watershed, and (2) to make recommendations as to how to begin the process of CBE planning and implementation.

6. **STUDY SPONSORS**

Anthropologist Dr. Tara Lumpkin conducted this study as a Worldwide Women in Development (WorldWID) Fellow assigned to USAID/Panama and seconded to the Panamanian National Environmental Commission (CONAMA). USAID/Panama is the only donor agency in Panama that works specifically in the Panama Canal Watershed. CONAMA relies on a Technical Secretariat within the Ministry of Planning and Economic Policy, and it’s mandate is to serve as a consultation and advisory commission to the Executive Branch on matters related to the protection, improvement and defense of the environment, the country’s environmental assets and ecological systems.

7. **METHODOLOGY**

Study Process
In order to fulfill the objectives of the Qualitative Study on Community Based Ecotourism in the Panama Canal Watershed, Dr. Lumpkin:

- conducted research on CBE located in other areas/countries;
- participated in personal meetings, inter-institutional consultations and conferences in both Panama and Washington, DC, that focused on CBE;
- visited twenty-one communities in the PCW and used informal interviews to gather information on the feasibility of CBE in the PCW;
- selected three community clusters from among the twenty-one visited communities, for the purpose of conducting an in-depth qualitative survey on the feasibility of CBE;
- researched social, environmental, and gender issues in the context of CBE feasibility among the three community clusters;
- wrote a report on CBE; and
- provided feedback on the results to the three community clusters.

The study took place from August, 1997, to mid-May, 1998.

**Sampling**

All sampling was purposive. Selective criteria used were:

- communities had to be located within or near the five protected areas within the Panama Canal Watershed (Altos de Campana Park, Soberania Park, Chagres Park, Camino de Cruces Park, and Lake Gatún Recreational Area);
- communities had to be relatively accessible to the survey team;
- communities had to have ecotourism potential; and
- communities had to express interest in CBE.

**Twenty-one Visited Communities**

Dr. Lumpkin interviewed a number of individuals who were knowledgeable about communities in the PCW in order to select communities that initially would be visited. The following individuals were particularly helpful in this process:

- Dr. Franklin Barrett, anthropological consultant, ARI
- Técnica Soledad Batista, Director, Soberania Park, INRENARE
- Profesor Mario Castillo, Geographical Planner, Division of Planning, ARI
- Técnico Evin Cedeño, National Parks Regional Director, Metropolitan Region, INRENARE
- Licenciada Vielka Gozaines, USAID/Panama
- Father Patrick Hanssens, Santa Cruz de Chilibre
- Dr. Stanley Heckadon Moreno, Special Advisor to the Director and Staff Scientist, Smithsonian Tropical Research Institute
- Licenciado Juan Manelia, CONAMA
Ingeniera Virginia Saldaña, National Director, National Management of Environmental Education, INRENARE
Licenciada Desirée Vergara, Director, Camino de Cruces National Park, INRENARE

From August through November, 1997, the following communities were visited in this order: Chica, San Juan de Pequeni/La Bonga, Aguas Claras, Santa Rosa, Guayabalito, Palenque, Mocambito, Mocambo Abajo, Mocambo Arriba, Kuna Nega, Nuevo Chagres (Moja Pollo), La India Dormida, San Vicente de Tranquilla, Boquerón Arriba, Boquerón Abajo, Salamanca, Peñas Blancas, Victoriano Lorenzo, Parará Purú, Limón, and Alfagía.

Community Clusters

By December, 1997, three community clusters had been selected from among the twenty-one visited communities for the more in-depth Qualitative Survey on Community Based Ecotourism in the PCW. The clusters were then surveyed from January to mid-March, 1998. The clusters were:

Cluster One: Santa Rosa, Guayabalito, Palenque, and Aguas Claras
Cluster Two: Limón and Alfagía
Cluster Three: Victoriano Lorenzo and Parará Purú

Cluster One communities represented the Chagres River Biological Corridor and Soberania Park Buffer Zone. Cluster Two communities represented Lake Gatún Recreational Area and Soberania Park Buffer Zone. Cluster Three communities represented Chagres Park.

The communities that were not chosen for the more in-depth survey were: Chica, San Juan de Pequeni/La Bonga, Mocambito, Mocambo Abajo, Mocambo Arriba, Kuna Nega, Nuevo Chagres (Moja Pollo), La India Dormida, San Vicente de Tranquilla, Boquerón Arriba, Boquerón Abajo, Salamanca, and Peñas Blancas. Of these communities Chica, San Juan de Pequeni/La Bonga, Kuna Nega, San Vicente de Tranquilla, Boquerón Arriba, Boquerón Abajo, Salamanca, and Peñas Blancas all had ecotourism potential. Mocambito, Mocambo Abajo, Mocambo Arriba, Nuevo Chagres (Moja Pollo), and La India Dormida did not have ecotourism potential and information will not be presented on them.

Research Teams

Twenty-one Visited Communities

Dr. Lumpkin accompanied a number of persons into the field to visit the initial twenty-one communities. Arquitecta Regina Logreira (CONAMA), Father Patrick Hanssens, and INRENARE park guards all helped to facilitate transport and access to communities. Sociologist Amelia Sanjur and geographer Carmen Prieto (STRI demography monitoring team members) acted as co-researchers on a number of visits.
Community Clusters

This more formal survey team consisted of Dr. Lumpkin, her counterpart Regina Logreira (CONAMA), and two bilingual interviewers, María del Carmen Ruiz and Indira de la Victoria. Both interviewers were on summer break from the University of Panama and were close to completing their undergraduate degrees in botany.

Community Introduction to Ecotourism

Twenty-one Visited Communities

A brief oral introduction to community based ecotourism was given to community members during all informal interviews.

Community Clusters

Prior to beginning survey data collection, the survey team visited each community within the chosen community cluster and presented an introduction to ecotourism. This process included an oral presentation and distribution of a four-page document titled Introduction to Ecotourism (Annex 3). The oral presentation and written document defined community based ecotourism, described why Panama and the PCW might be appropriate for ecotourism, listed different types of ecotourism that currently existed elsewhere, offered examples of ecotourism-related businesses that might be of interest to communities, and enumerated a few points that communities should consider before deciding to pursue CBE.

Following this presentation, there was a period for questions and answers. Then community members decided whether or not they wanted to participate in the study. All communities within the chosen community clusters agreed to participate in the study, which was not surprising since communities had been visited previously by Dr. Lumpkin and were purposively selected.

Following the presentation, community members selected who would be interviewed as key-informants and who would attend focus groups.

Data Collection

Twenty-one Visited Communities

Two interview techniques were used to collect data:
- X informal interviews
- X community meetings
Informal interviews and community meetings were used to introduce the concept of ecotourism and explore ecotourism potential.

Community Clusters

Three interview techniques were used to collect data:
- **X** community meetings
- **X** key-informant interviews
- **X** focus groups

Community meetings were used to introduce the communities to the concept of ecotourism, to discuss ecotourism, to leave behind a four page written document titled *Introduction to Ecotourism* (Annex 3), and to organize key-informant interviews and focus groups.

Key-informant interviews were used to gather data on: land ownership patterns, access to clean drinking water, agricultural and ranching practices, animal husbandry practices, use of natural resources (including timber, non-timber forest products, wildlife, and waterways), other economic activities, community organizations, community infrastructure, and environmental health (Annex 4). At least half of all key-informants were women.

Focus groups (Annex 5) were used to explore the concept of CBE with community members. Men and women attended separate focus groups except for the Emberá community of Parará Purú, where the focus group contained both men and women. Topics covered in focus groups included: what might attract visitors to the community and surrounding areas; possibilities for nature, adventure, and cultural CBE; community members’ relationships with INRENARE; community members’ interest in community park guards; types of visitors that would initially be most appropriate to visit communities; infrastructure currently in place that could help to facilitate CBE; needed infrastructure; guide training; hunting; community needs for capacity building; and how communities might organize for CBE.

Data Entry

Twenty-one Visited Communities

Dr. Lumpkin entered fieldnotes after every field visit.

Community Clusters
Dr. Lumpkin entered fieldnotes after every field visit. María del Carmen Ruiz and Indira de la Victoria transferred interview responses from their notebooks to computers and also translated the interviews into English. Focus groups were recorded with a tape recorder to assist in this process.

8. TRAINING AND CAPACITY BUILDING

Twenty-one Visited Communities

No training or capacity building occurred during visits to the twenty-one communities.

Community Clusters

One of the more important outcomes of this survey was capacity building. Dr. Lumpkin produced a training manual and trained the interviewers prior to going into the field, including conducting a pre-test. Working with communities introduced both Indira de la Victoria and María del Carmen Ruiz to interviewing techniques and applied anthropological skills. The survey process broadened both interviewers’ knowledge of ecotourism and allowed them to consider innovative approaches to ecotourism that they might pursue in the future, such as linking ecotourism with ethnobotany and traditional medicine.

Carmen Barría, principal organizer of a Housewives’ Club for Cluster One (Santa Rosa, Guayabalito, Aguas Claras, Palenque) attended a two-day Symposium on the Development of Ecotourism Strategies for the Panama Canal Watershed held in Panama City during February, 1998. Antonio Tocamo, Parará Purú community leader and President of the Parará Purú Ecotourism Committee, attended a two-day Symposium on the Development of Ecotourism Strategies for the Panama Canal Watershed held in Panama City during February, 1998. Parará Purú was one of the two communities that made up Cluster Three.
STUDY RESULTS

9. CHAGRES RIVER BIOLOGICAL CORRIDOR AND SOBERANIA PARK BUFFER ZONE

9.1 OVERVIEW

Santa Rosa, Guayabalito, Aguas Claras and Palenque are the Cluster One communities that represent the Chagres River Biological Corridor. All four communities are located in the corregimiento of Santa Rosa within less than a half-hour by car from each other. Santa Rosa lies on the west bank of the Chagres River, and the small community of Guayabalito is a ten-minute walk upstream. Aguas Claras is situated on the border of Soberania Park. Palenque is located farther from the park on a hill and is surrounded by cattle ranches. These four communities lie within the Chagres River Corridor, which needs to be maintained as a biodiversity corridor between Soberania and Chagres Parks.

According to ARI’s current ecotourism plans, the Chagres River will become an ecotourism corridor between Soberania and Chagres Parks. Tourists will depart from Gamboa and follow the Chagres River up to Lake Alajuela. Although ARI’s tourism plans may not come to fruition exactly as planned, there is no doubt that the Chagres River will become an important ecotourism corridor. Therefore, these four communities can take advantage of their location by offering packages to tour agencies or by offering tour packages themselves, if trained in promotion and marketing. Because of Santa Rosa and Guayabalito’s location approximately halfway between Gamboa and Chagres Park, both communities could be disembarkation points for tourists. According to a key-informant, it takes approximately 20 minutes to go by motorized canoe from Gamboa to Santa Rosa, and it takes approximately two hours to paddle a canoe from Gamboa to Santa Rosa. Furthermore, tourists who disembark at Santa Rosa or Guayabalito could visit the nearby communities of Aguas Claras and Palenque. For this reason, the four communities should work together to create an interesting CBE package that takes into account that each community has something quite different to offer.

These communities are located in the buffer zone outside Soberania Park, as well as being in the biological corridor linking Soberania and Chagres Parks. Over-hunting is a grave problem in Soberania Park at this time. It is also a problem in Chagres Park, particularly in the southern area. Yet none of these communities are involved in alternative income generation that is linked to reducing over-hunting. CBE linked with a community game guard system has been shown in other countries to effectively reduce over-hunting and should work effectively in this community cluster.
Focus groups were the principal method used to explore community based ecotourism potential in Cluster One. Because it is imperative that the communities in Cluster One (Santa Rosa, Guayabalito, Aguas Claras, and Palenque) work together to create a plan for community based ecotourism, focus groups included members from each community, which created a precedent for interaction among the four communities. There were two such focus groups, one for men and one for women. Information was also gathered through informal and key-informant interviews.

9.2 CHAGRES RIVER BIOLOGICAL CORRIDOR COMMUNITY BASED ECOTOURISM POTENTIAL

Organizing CBE

Chagres River Biological Corridor CBE Plan

The four communities of Santa Rosa, Guayabalito, Aguas Claras, and Palenque should participate in a Chagres River Biological Corridor CBE planning process. This participatory planning process should include these five sectors: (1) Chagres River Biological Corridor community representatives, (2) NGOs, Community Based Organizations (CBOs), and research organizations, such as STRI, (3) government agencies, such as IPAT, INRENARE, and ARI, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies working in the biological corridor, hotel operators, and other business persons.

Chagres River Biological Corridor Community Organizing (Ecotourism Committee)

Because Cluster One communities have different tourism attractions and need to work together to create a package, the four communities should create a CBE Committee with members from all four communities (Santa Rosa, Guayabalito, Aguas Claras, and Palenque). Indeed, after focus groups made up of members from all four communities met to discuss CBE, they agreed that it would be best to set up an Ecotourism Committee with representatives from all four communities.

Señora Carmen Barría is a member of the Junta Communal. She is also a member of a group called Mujer Rural and has helped to organize a Housewives’ Club (which includes women from Santa Rosa, Guayabalito, and Palenque). At this time, there are approximately 13 women in the Housewives’ Club. Carmen has received the backing of the Honorable Rolando Melhar (representante to the four communities) to work with the communities on CBE. She is trying to organize the four communities to create an interactive CBE Committee. To date, the community members of Guayabalito have created an Ecotourism Committee; however, they need to link with the other three communities in this cluster. She also attended the Symposium on the Development of Ecotourism Strategies for the Panama Canal Watershed in February, 1998, in Panama City. Carmen’s experience working with local women on micro-enterprise development and her belief that
women need to be empowered is critical to the inclusion of women in CBE planning, implementation, and distribution of benefits.

The Cluster One focus groups wanted tourists to visit their communities initially only on Fridays through Sundays, because the men worked during the week and only would be able to help on weekends. They also stated that they wanted to set up their own tour package and then offer this to tour agencies rather than have tour agencies come to their communities with their own packages.

Infrastructure

Access to Santa Rosa, Guayabalito, Aguas Claras, and Palenque is possible by car; however, from September to November during rainy season, 4-wheel drive is often necessary. Furthermore, for an aesthetic, adventurous, and nature-oriented experience, ecotourists should access the communities by canoes from the Chagres River, disembarking at either Santa Rosa or Guayabalito. It is important to remember that trails and paths will be muddy during the rainy season, particularly from September to November, and, if used then, will need more maintenance. Hence, the optimum time for tourists to visit these communities is during the months of December to April (summer/dry season). International visitors from North America often travel at this time to leave the cold weather behind. Also, Christmas vacation (December) and school spring break (March/April) are travel months for families with children. Furthermore, communities usually begin planting in April and start harvesting in August, meaning that they are busier with agriculture during the rainy season and have less work during the dry months.

What sort of tourism-related infrastructure currently exists in the four communities? Very basic snacks and staple groceries can be purchased in local stores in Aguas Claras, Palenque, and Santa Rosa. None of the communities has a restaurant and none has an area for camping or any other type of lodging. There is a health center at Nuevo San Juan, which is approximately a half an hour car drive from any of the four communities. Also, the community of Santa Rosa has a nurse. Garbage in all four communities is collected and burned, and cans are buried. All four communities expressed interest in a recycling program; therefore, a recycling program should be set up in conjunction with CBE, because tourist visitation will increase waste quantities.

Assuming that tourists would access Cluster One via the Chagres River disembarking at Santa Rosa or Guayabalito, it is important that canoe disembarkation points be set up, making sure that these docking areas do not interfere with swimming and do not negatively impact the environment. Santa Rosa and Guayabalito community members need to decide whether they both want docking areas or whether just one community will have the tourism docking area.

Recommended CBE Options
Santa Rosa and Guayabalito CBE Options

Because Santa Rosa and Guayabalito are not located on the border of Soberania Park, their immediate environment is not a place to explore the rainforest. However, both are communities from which canoe transportation and fishing expeditions could be launched. Santa Rosa is a pretty town with a pleasant swimming area, and the river bank is grassy with overhanging trees. Guayabalito is a much smaller community, and, although the Guayabalito area along the Chagres River is pretty, one cannot see the river from the center of the community. Because both Santa Rosa and Guayabalito could be disembarkation points for tourists who arrive in canoes and who would subsequently go to Aguas Claras, both communities could offer restaurants, accommodations and/or camping areas with clean restrooms, and could sell crafts. (Eustacia Almanza from Santa Rosa is interested in preparing food for tourists.) Santa Rosa is substantially larger than Guayabalito and Guayabalito community members can market their Afro-Antillano culture; hence, it would probably be best, from a tourism package perspective, for Santa Rosa to be the primary point of disembarkation. Members from both communities could also serve as fishing guides, canoe guides, and as guides in Soberania Park.

Guayabalito is an Afro-Antillano community that would like to market their culture, crafts, and medicinal plants to tourists. A celebration known as Corpus Cristi, which they are particularly interested in marketing, takes place seven weeks after Holy Week, usually on a Wednesday. Señor Narciso Colpas, the traditional authority in the community, feels that it’s very important to preserve the Afro-Antillano Corpus Cristi tradition. He pays for the mask-making and plays the accordion during the festival. Although Guayabalito has not promoted its Corpus Cristi celebration, according to Señor Colpas, almost 100 visitors come to watch the celebration. He sells beverages (including beer) to the visitors who come to celebrate, and his wife and other women sell food.

Corpus Cristi has been celebrated by Guayabalito since the flooding of Lake Gatún. The celebration is a re-enactment of Biblical times when people disobeyed God and He punished them by turning them into animals. These animals are called diablos, or _devils_ in English. The story is that God was surrounded by a group of angels, but one turned against him, so God turned them into animals or _diablos_ and threw them all to earth.

Animal masks and costumes are prepared before the celebration by a few men in the community. Tomás Becerra is one of the primary mask makers. They are made of mud, paper, and yucca starch and, after drying, are painted bright colors. Some of the masks currently in use are: jaguar, panther, dog, goat, deer, snake, crocodile, cow, and pig. The men and boys in the community dress in costumes and masks representing animals. The majority of the women participate as patronesses; however, a few women in the community also take on the role of _diablos_.

At noon the men of the community and a few women go to the bushes and wait for the patronesses to bring them their costumes and animal masks. The costumes include bells tied to the costumes by a belt. Then community members begin playing drums and the accordion, and one by one, the
**diablos** emerge dancing and dramatizing the animal whose mask they wear. The **diablos** then enter the church. Later there is feasting followed by traditional dancing at night.

Guayabalito community members are interested in producing masks to sell as a craft to tourists. The mask would be accompanied by a pamphlet that explains the origins and meaning of Corpus Cristi. These could be marketed year round and could be sold in a store in Santa Rosa as well as in Guayabalito. The masks could also be sold in Panama City at tourist shops. Although at this time only a few men are skilled in making animal masks, they are not difficult to create, and the mask-makers agree that they could easily teach other community members how to make them. This might be an excellent project for the women from Guayabalito who are involved in the Housewives’ Club and who are looking for home-based micro-enterprises.

Another topic that community members in Guayabalito discussed was marketing medicinal plants and their medicinal plant lore. Señor Narciso Colpas and his wife have extensive knowledge of medicinal plants. For example, children are bathed in water soaked with mango leaves to relieve itching. Avocado leaves are used to treat kidney disease. Sour orange tree leaves are used to treat anxiety and other nervous ailments. Parts of the thistle plant, guava tree, sour orangetree, square tree, and the herb fennel are used to control fevers. Several options were discussed. The community could grow and harvest medicinal plants and market them directly to tourists. Again, it would be best to create a pamphlet that explains the uses of the plants that are grown and sold. The community might have to request land from MIDA to create a medicinal plant project; however, medicinal trees could be planted within the community itself.

Señor Colpas and his wife are interested in teaching other Guayabalito community members more about medicinal plants so that they can offer short interpretive talks about medicinal plants to tourists. Medicinal plants and traditional knowledge about the uses of medicinal plants (known as ethnobotany) is very marketable at this time. Clearly, if tourists first heard a talk about the uses of a variety of medicinal plants as well as the cultural context for the use of these plants, they would be more likely to buy medicinal plant products afterward from the community. Furthermore, such a project would be popular with local Panamanian tourists as well as foreign tourists. As with the **diablo** masks, these products could be marketed in Guayabalito and in a store in Santa Rosa and perhaps, eventually, in tourist shops in Panama City. Also, if the medicinal plant garden project was too large a project for the community of Guayabalito, community members from Santa Rosa, Aguas Claras, and Palenque could participate. Another possible micro-enterprise for Guayabalito is preparing food. The women said that their Afro-Antillano food is different from most food in Panama and that they would like to prepare it for tourists. Juana Colpas and Mercedes Barria are women who expressed interest in preparing food.

*Aguas Claras CBE Options*
After tourists have disembarked at Santa Rosa (or maybe at Guayabalito), they have the option of going to the community of Aguas Claras, which is located on the border of Soberania Park. Someone, of course, will need to provide access to Aguas Claras, either by car, by horse, or as a guide for those who would prefer to hike. Upper Aguas Claras has spectacular scenery. The houses are built in the traditional campesino architecture style of wood with thatched palm roofs and are spread out over the hills in a manner that is pleasing to the eye. There is almost always a breeze high up in the hills. There is a waterfall in Upper Aguas Claras near Señor Justo’s house. Also, Doña Justina María Martinez raises pacas, which, being endangered species, tourists would like to see. Because upper Aguas Claras is aesthetically pleasing and because it is located right next to Soberania Park, adventurous tourists would enjoy sleeping there in a traditional home or in an accommodation such as a simple hut specifically built for tourists. Community members could also provide meals to tourists. María Crescencia Fernandez and Militza Gil are interested in preparing food for tourists.

Because Aguas Claras will rely primarily on providing tourists with a rainforest experience, focus groups spent a great deal of time discussing the over-hunting in Soberania Park near Aguas Claras and how they must reduce this if they are to bring tourists there. They also discussed the need for interpretive paths, trail maintenance, and educational pamphlets that show the animals that can be found in Soberania. Younger men, primarily from Aguas Claras, were interested in becoming wildlife guides. The older men in Aguas Claras were willing to teach younger community members about the paths and wildlife in Soberania Park.

Although only one woman in Aguas Claras might be interested in becoming a guide, the women in Aguas Claras are interested in other aspects of CBE, and, according to one key-informant, are more organized and would be better at planning CBE than men. Also, because the women work at home or close to home, this key-informant felt that women would be better at running CBE micro-enterprises. The women were interested in offering food and B&Bs accommodations. They were also interested in raising pacas and iguanas and hoped that CBE would lead to the creation of local restaurants to which they could sell paca meat.

*Palenque CBE Options*

Palenque has a scenic look-out that offers views of the surrounding countryside. Unfortunately, there is a great deal of garbage near the look-out that spoils the view. There is a restaurant called the Cantina Billay near the look-out, but the restaurant was closed. Cantina Billay had an open patio area and, with minimal investment, the structure could house a restaurant. Carlos Villareal says that his brother, who is single, has an empty house that he would like to use to lodge tourists. Adan Becerra thought his family would like to set up a B&B. Because many of the residents have horses, the community is interested in offering horse-back riding to tourists. According to community members, there is a waterfall (referred to locally as a chorro) above Palenque that would be an attractive place to take tourists. A key-informant in Palenque stated that the women would be better able to participate in CBE because the men leave the community each day to work. The women
proposed micro-enterprises such as cooking food and offering accommodations. Yelitza Castillo was interested in preparing food and thought that Bertina Gómez might be interested as well.

**Hunting**

Hunting was acknowledged during the four-community focus groups (men’s and women’s) as being out of control in Soberania Park. Although some hunting was by others from outside the communities of Cluster One, many Cluster One community members hunted as well. Any CBE plan should particularly focus on making hunters beneficiaries of ecotourism income, and this is usually accomplished by making them guides and community game guards. In general, because of hunters’ knowledge of animal habitats and behaviors, they make excellent wildlife guides and community game guards.

Community game guard systems have been successful in many buffer zones outside of protected areas in other countries. A further advantage to a community game guard project is that it reduces tension between protected area managers and community members by uniting them in the same cause and providing needed income to those who previously hunted for subsistence and income. Considering that Aguas Claras has a largely male population and that hunting in nearby Soberania Park is out of control, a project to train wildlife guides and community game guards should target this group to reduce over-hunting. However, interested members from all four communities should have the option of participating. INRENARE can train the community game guards and create a plan to work with them. (A list of persons who mentioned that they would be interested in becoming guides can be found in Annex 6.)

**Trails**

A trail runs from Aguas Claras to Frijolito and then on to Alfaigia, which is a community in Cluster Three. According to one resident of Aguas Claras, it takes approximately four hours to walk this trail, which was built and is maintained by INRENARE and ANCON. Also, from San Antonio hill, one can see Gamboa, many of the forest trails, and the community of Frijolito. One key-informant said that the hill of Altos La Gloria is an excellent place to see birds. Another trail runs from Gamboa to Aguas Claras, although it needs to be cleared if tourists are to use it. There are numerous other paths in Soberania Park in the area between Aguas Claras and Frijolito. Many of the men in Aguas Claras know these paths quite well. However, if all these paths are cleared and maintained as part of a CBE plan, this could contribute to wildlife depredation by hunters. It is, thus, very important that paths *not* be cleared until the communities of Cluster One have established an ecotourism plan and have put mechanisms in place for a community game guard system.

**Game Raising**

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According to Carmen Barría, ANCON has been out to visit the communities. Currently, ANCON is working with Doña Justina María Martínez in upper Aguas Claras to raise pacas. Community members expressed a great deal of interest in raising game animals such as paca, iguana, collared peccary, and deer. ANCON has a program to teach community members to raise paca and iguana, but does not teach people how to raise deer or collared peccary. It was interesting, however, that community members were finding baby collared peccaries and raising them, suggesting that this would be a popular game animal for people to raise. Community members in all four communities were particularly interested in raising these animals if they could sell them directly to local restaurants that would then serve them to tourists. This should be considered during the Cluster One participatory CBE planning process. It also may be necessary to ask ANCON to revisit Cluster One communities to re-propose the micro-enterprises of raising pacas and iguanas. ANCON might also concentrate more on helping those who raise game animals to market them.

9.3 SANTA ROSA BACKGROUND

Santa Rosa, located along the Chagres River, has approximately 121 inhabitants and 26 dwellings (La Controlaría Generale de la República de Panamá 1997). According to community members, they have derechos posesorios, but do not have title to their land. Derechos posesorios is a Spanish term that roughly translates as _rights to land use_. While this is not the same as owning land or having title to land, it does allow community members to occupy and work land that officially belongs to the government. No women have derechos posesorios. The houses are built of cinder blocks and are brightly painted. The town has electricity and receives water from the rural aqueduct that takes water from the Frijolito river in Soberania Park near Aguas Claras. During the dry season, this aqueduct often runs dry. Five houses have flush toilets and the rest use latrines. Community members use the Chagres River for transportation, swimming, washing clothes, and fishing.

Corn, yucca, guandú, yam, and a small amount of rice are grown. Watermelon, cucumber, cabbage, Bijao (Heliconia leaves), saril (a berry used to make a refreshing red drink), and chives are also grown. Herbicides and pesticides are used.

Two men in the community raise cattle. Women primarily raise chickens, ducks, and pigs. One key-informant mentioned that she had a collared peccary that she was raising at home that her sons had found near the river.

Community members work as agriculturists, and some work in Panama City or Colon, holding jobs as drivers, construction workers, and yard workers. Some women work as house-keepers. Most people come back each evening to the community, although some come home only on weekends.

Community members said that they did not extract timber from the forest anymore, because INRENARE prohibited timber extraction. To build a canoe or a traditional house made of wood, one
had to find downed trees, fill out paper-work for INRENARE, and then pay a fee for using the timber. This process was not seen as worth the bother. Community members gather palm thatching from forests and from local ranches. They also gather medicinal plants from the forest. Firewood is gathered locally. In addition, community members hunt for personal consumption.

There are several organizations that some community members belong to, including a Housewives’ Club and a church group. A number of people are community leaders, such as Julian Domínguez (representante), and the two store owners, Mercedes Hernández and Eda Cruz.

9.4 Guayabalito Background

Guayabalito, like Santa Rosa, is located on the west bank of the Chagres River, and is a ten-minute walk upstream from Santa Rosa. There are 68 inhabitants and 15 dwellings (La Controlaría Generale de la República de Panamá 1997). The community has Afro-Antillano origins and, thus, has a different culture from the other three Latino communities in Cluster One. A particularly important tradition is the celebration of Corpus Cristi during the seventh week after Holy Week. The tradition was brought to Guayabalito by the people of the communities of Cruces and San Juan de Pequeni, who were relocated because their communities were flooded by the Panama Canal. Señor Narciso Colpas, who works for the Panama Canal Commission in the Gamboa dredging division, is the traditional authority of the community and has lived in Guayabalito his whole life, almost 60 years.

Community members do not own their land outright but have derechos posesorios. Unlike the other three communities in the cluster, single women (about half of the women in Guayabalito) retain derechos posesorios. However, in the case of women who are married, derechos posesorios are held by their husbands.

Guayabalito is served by the same rural aqueduct that serves Aguas Claras and Santa Rosa. During the dry season, this aqueduct often runs dry. The community uses the Chagres River for transportation, washing clothes, fishing, and swimming. Some of the houses have electricity, two have flush toilets, and the others have latrines.

Women, men, and children plant crops primarily for personal consumption using slash and burn agriculture. Some of the crops that are planted are: corn, yuca, plantains, yam, beans, guandú (a particular type of bean), sugar cane, saril, and papaya. No chemicals, pesticides, or fertilizers are used.

No one in the community raises cattle, although some people in the community work for local ranchers. Occasionally, cows escape from their fields and eat people’s crops; however, such occurrences have been handled diplomatically between involved parties. Women raise ducks, chickens, and pigeons, and men raise pigs.
The forest is rarely used for its timber products anymore since one must apply for permits from INRENARE. Community members used to make canoes from trees, but because they find the INRENARE permit process lengthy and time-consuming, they no longer make canoes. The result has been that the art of canoe-making is dying out. In the past, houses were also made from wood extracted from the forest, but houses are now made from cinder blocks. Firewood, palm thatching, and medicinal plants are the only products regularly extracted from the forest. Many of the medicinal plants are grown within the community rather than collected from the forest.

The community hunts for its own personal consumption primarily along the river banks and sometimes in protected areas. Animals that are hunted are: paca, agouti, collared peccary, iguana, capybara (*Hydrochaeris hydrochaeris*), and armadillo. When asked how over-hunting could be reduced, one key-informant suggested raising wild game such as pacas and iguanas for meat.

Many of the men in Guayabalito work outside the community at gravel quarries such as Grava S.A. and Shahani S.A. There is a gravel quarry located upriver that is polluting the Chagres River. Others work for the Colon municipal government and the Panama Canal Commission. The men depart and return to the community daily. One woman works as a nurse in Santa Rosa. However, most women stay at home and care for their families.

Narciso Colpas is the traditional community authority. There also are men’s and women’s local councils that prepare for certain holidays; for example, the men prepare for the mother’s day celebrations, and the women prepare for the father’s day celebrations. Another community leader is Señor César Colpas, who organizes the men’s council. Some of the women, including Catalina Colpas, are members of the Housewives’ Club. Catalina is a community leader and catalyst, who also organizes religious activities. She is very interested in participating in CBE.

### 9.5 Aguas Claras Background

Aguas Claras is a small community of approximately 60 people with 19 dwellings (La Controlaría Generale de la República de Panamá 1997). The community is sandwiched between the border of Soberania Park and the more extensive property holdings of comparatively wealthy people, many of whom live and work in Panama City. Aguas Claras consists of two areas: (1) lower Aguas Claras at the end of the road where houses, a church, and a store are clustered, and (2) upper Aguas Claras where a few traditional houses dot the hills at some distance from one another.

The community was formed 40 years ago by persons who came from the community of Espave de San Francisco in Veraguas. Don Sabino Jordan, who was one of the founders of the community and who still is considered to be a community leader, resides in lower Aguas Claras and also owns the store there. Community members are older, the majority being over fifty years old. Young adults
usually leave Aguas Claras due to lack of opportunities. There are very few women in the community. According to a key-informant, only seven women live in the community, ranging from 20-60 years in age, and two are single. The same key-informant said that there are 15 children in the community. Children who wish to attend secondary school often go live with relatives because the community does not have a secondary school.

There is no electricity and houses have latrines. A rural aqueduct brings water from a river within Soberania Park to all the houses of Aguas Claras except for four located in the hills. The water is treated with chlorine. The aqueduct supplies water not only to the lower dwellings in Aguas Claras, but also to the town of Santa Rosa and the community of Guayabalito. During summer, the water often dries up, and people must collect water from local creeks. Community members in Aguas Claras also use local creeks for washing clothes, bathing, and watering horses and cattle.

No community members actually own land, instead they have derechos posesorios. No women in the community have derechos posesorios. All such rights are in the men’s names. Women, thus, only have access to land though their husbands or another male relative. Community members who live in the hills of upper Aguas Claras have derechos posesorios to slightly larger areas of land than those living below, meaning they can use their land for agriculture or cattle. Community members who live in lower Aguas Claras only have derechos posesorios for the land that their dwellings are built upon.

Both men and women engage in agricultural activities, using slash and burn agriculture. Corn, rice, plantains, bananas, yucca, yam, sugar cane, and guandú (a type of bean) are all grown. Rice and corn are planted when the rains begin, generally in April. The herbicides Gramuzone, Matamaleza and Matahierba are used.

Only four families have cattle or horses. Most community members raise chickens, ducks, and pigs. Doña Justina María Martinez raises pacas and Señor Justo used to raise iguanas. One key-informant said that community members also used to raise deer and collared peccary when there were more animals in the forest. Both women and men care for domestic animals. Snake-bite is a danger to domestic animals, including cattle and horses.

Economic options for Aguas Claras community members are limited. Community members engage in subsistence agriculture and animal husbandry. The men work as local laborers on the ranches, teak farms, and second-home properties surrounding the community. The women stay at home and care for their families and work in agriculture and animal husbandry.

There is an INRENARE hut located within the community. When questioned about using the nearby forest in Soberania Park, community members said that they no longer use the forest anymore because INRENARE prohibits them from using it. Previously, community members said they could cut trees to construct houses, but now they must purchase wood from a store on the Carretera
Transístmica. Community members extract firewood, palm leaves for roof thatching, and medicinal plants (such as Raíz de la India, which is used to make a medicinal tea) from the forest. Men, women, and children are involved in these activities.

Extensive over-hunting in the Soberania Park area by both community members and those from outside the community is a problem. Hunting is illegal. Park guards confiscate hunting guns used by Aguas Claras (and other) community members. Community members admitted to hunting for personal consumption and to selling the meat. Furthermore, participant observation fieldwork conducted in August, 1997, by researcher Daniel Colón found that the men of Aguas Claras hunted collared peccary and deer for personal consumption and hunted armadillo to sell. He also reported that people came from Panama City and Colon late on Friday evenings, entered Soberania Park from Frijolito, hunted the entire weekend, and left with sacks of game on Sunday afternoon (Colón 1997). According to community members, they used to hunt iguana, paca, deer, collared peccary, capybara, wood-partridges, and other birds. All those interviewed agreed that over-hunting had depleted wildlife.

Many projects in Aguas Claras have failed; hence, it would be difficult to start a CBE project only in Aguas Claras, and it is imperative that any CBE project include all four communities in the cluster to ensure success. The only project that a majority of community members say has been successful to date was a dam-building project, which was supported by the Catholic church and which was initiated from within the community. One woman, Doña Justina María Martinez has been working with ANCON to raise pacas; however, she has not made any money from this yet and she is unclear as to how she can market the pacas. Because so many projects have failed, the community is wary of cooperatives and organizations, and, at this time, no one is participating in any organization. Don Sabino Jordan, the patriarch of Aguas Claras, was cited as the community leader. Pedro Jordan was mentioned as being a leader as well and president of the Aqueduct Water Committee, which has members from Santa Rosa and Guayabalito. Furthermore, Doña Justina María Martinez is a community leader by example. She has been involved in almost every project that the community has tried, and she also is interested in pursuing CBE.

9.6 PALENQUE BACKGROUND

Palenque is located in the hills in the middle of cattle ranch country not too far from the border of Soberania Park. There are 312 people and 75 dwellings (La Controlaría Generale de la República de Panamá 1997). The houses are made of cinder blocks and have electricity. A few houses have flush toilets; however, everyone uses latrines because there is never enough water. Most people own their own land in Palenque, although some have derechos posesorios. Approximately 12 women have land, and they are all single.
Water is delivered to Palenque by an aqueduct from Chilibre. This aqueduct does not serve all the households and regularly runs dry. People use the Palenque river for bathing, washing clothes, and for drinking water when the Chilibre aqueduct is dry.

There is little agricultural activity in Palenque. Most of the families are involved in ranching, which is predominantly a male activity. During the dry season, cattle often do not have enough grass to eat. Women raise chickens, ducks, and pigeons, and men raise pigs. Some men and women plant corn, beans, guandú (a particular type of bean), yucca, yam, and plantains for their own consumption using slash and burn agriculture. Occasionally herbicides are applied; however, fertilizer is not used.

The community of Palenque does not use the forest very much because it is not easy to access. If there is no gas for cooking, people gather firewood from local trees. They also gather palm leaves for thatching from local areas.

Half of the men, mostly the younger men, work outside the community in the Colon Free Zone. The other half work on the surrounding cattle ranches. A few women work in the Colon Free Zone and with the Colon municipality, but most women are housewives and stay at home.

There are several groups within the community. Women belong to the Housewives’ Club and to the Catholic ladies club. Señora Carmen Barría is an important community leader who attends meetings outside the community. She is a member of the Junta Communal and organized the Housewives’ Club.

9.7 Gender Analysis of Cluster One

Cluster One has excellent potential from a CBE perspective to empower women and improve overall community welfare. Señora Carmen Barría’s role in organizing the Housewives’ Club and her interest in organizing the cluster for CBE means that women are sure to have a strong role in CBE planning and implementation. The women in the community have shown strong interest in CBE, particularly in the areas of providing food and lodging, growing medicinal plants, making crafts, and raising game animals. It is likely that one or two women also would be interested in becoming guides.

Some of the drawbacks for women’s involvement is their lack of access to capital and the fact that few have items that could be used to build up some ecotourism enterprises such as canoes, horses, and land rights. Furthermore, childcare takes up much of women’s time, reducing some of the time that they can put into CBE-related micro-enterprises. On the other hand, it is women who work primarily within the communities each day, whereas, men often work outside the communities, and
so women are positioned to be the hosts to visiting tourists. In general, properly planned CBE should enhance women’s status and roles within the four communities that make up Cluster One.

10. **LAKE GATÚN RECREATIONAL AREA AND SOBERANIA PARK BUFFER ZONE (CLUSTER TWO)**

10.1 **OVERVIEW**

Limón and Alfagía are the Cluster Two communities that represent Lake Gatún Recreational Area and that are located in a buffer zone of Soberania Park. Both communities are located in the corregimiento of Limón, and both lie on the shores of Lake Gatún. The communities are distinctly different. Limón is a large town with Afro-Antillano influence; whereas, Alfagía is a rural campesino community.

As previously mentioned, IPAT and ARI have plans for Gamboa to become an ecotourism center with an eco-resort. For the purposes of CBE, visitors would access Limón by canoe from Gamboa. If they had visited the Colon Free Zone to shop, they might drive by car to Limón, which takes approximately forty-five minutes. The last part of this drive is on a well-maintained dirt road that there are plans to soon pave. Tourists would access Alfagía by canoe either from Limón or directly from Gamboa. Alfagía is a 25-minute canoe ride from Limón. Alfagía also can be reached during the dry season by 4-wheel drive vehicle via a poorly-maintained dirt road that turns off the Carretera Transístmica.

10.2 **LAKE GATÚN RECREATIONAL AREA COMMUNITY BASED ECOTOURISM POTENTIAL**

**Organizing CBE**

*Lake Gatún Recreational Area CBE Plan*

The communities in Lake Gatún Recreational Area, including Limón and Alfagía should participate in a Lake Gatún CBE planning process. This participatory planning process should include these five sectors: (1) Lake Gatún Recreational Area community representatives, (2) NGOs and CBOs, including research organizations such as STRI, (3) government agencies, such as IPAT, INRENARE and ARI, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies working in the Lake Gatún area, hoteliers, and business persons.

*Lake Gatún Recreational Area Community Organizing (Ecotourism Committees)*
Each community that decides to participate in the Lake Gatún CBE planning process needs to establish its own CBE Committee. Corregidor Grimaldo Rojas of Limón and Alfagía and Honorable H.R. Marco Hughes, the representante for both communities, have agreed to help Lake Gatún Recreational Area communities organize CBE Committees. Both Señores Rojas and Hughes were present at the community meeting on CBE in Limón. They subsequently stated that they were interested in developing CBE among the multiple communities that they oversee, including Limón and Alfagía.

In addition, Miguel Johnson, a member of a NGO called the Pro-Development Technical Association of Artesanal Fishing for the Conservation and Re-establishment of Marine Resources (APROREMAR) attended the community meeting in Limón. He is interested in having APROREMAR organize CBE participatory planning and implementation in Lake Gatún area communities. Clearly, a CBE package that includes approximately seven communities, as envisioned by Rojas and Hughes, would be advantageous. Ecotourists could take a canoe from community to community and learn something about each one. Furthermore, because the fishing in Lake Gatún is quite good, visitors could fish as they travel from community to community. A few tourists already come to Limón to rent canoes and fish.

Community members in Limón and Alfagía are eager to participate in CBE and would be interested in CBE participatory planning and capacity building. Euclides Castillo and Rodolfo Arrocha would like to participate in organizing an Ecotourism Committee in Limón if they can receive aid from the corregidor and representante. In addition, Limón community members stated that they would like to work with Miguel Johnson of APROREMAR. In Alfagía, community members would like assistance in organizing an Ecotourism Committee.

**Linking CBE Clusters**

Lake Gatún Recreational Area communities should communicate with Chagres River Biological Corridor communities to link their CBE efforts. There is a trail that links Aguas Claras (a Chagres River Biological Corridor community) with Alfagía (a Lake Gatún Recreational Area community). Both communities are in Soberania Park Buffer Zones. The trail passes through Frijolito outside of Soberania Park and takes approximately four hours by horseback. However, the trail should only be opened to tourists if community game guard systems have been organized to prevent over-hunting.

**Recommended CBE Options for Limón**

**Overview**

Limón is a pretty town located on a hilly peninsula surrounded by Lake Gatún on three sides. It was founded approximately 40 years ago. The town has 670 inhabitants and 149 dwellings (La
Controlaría Generale de la República de Panamá (1997), and there is a strong Afro-Antillano influence. Because Limón is a relatively large community with easy access and good infrastructure, the town can be a hub for travel by canoe to other Lake Gatún communities. Community members can offer tourists fishing trips, wildlife viewing, canoe transport, restaurants, clean camping areas, accommodations, and unique cultural events. They also would like to sell crafts. A large number of the younger men are interested in becoming fishing and wildlife guides. Women are primarily interested in selling crafts, preparing and selling food, offering B&B accommodations, and raising game animals.

**Tourist Visits**

In Limón, community members stated that they wanted tourists to visit their community initially only over the weekends because most of the men work outside the community during weekdays. Limón community members explained that they were particularly interested in creating a tourism package that was community-based but that they were not adverse to having tour operators bring in tourists. Some male community members, who wanted to be guides, are interested in having scientists visit their community and are interested in creating educational programs not only for international tourists but also for Panamanian schoolchildren, students, and tourists.

**Cultural Events and Crafts**

There is a pleasant swimming area in Limón. Above it on a hillside is an open-sided thatched-roofed structure that community members say could be used to present cultural shows. Community members would like to present evening and weekend drumming shows based upon their Afro-Antillano roots.

Carnival is a time of celebration for Limón when people from other communities come to visit. During Carnival people dress in sweaters with holes, pants with fringes and feathers, and wear straw hats. Some also wear animal masks like those worn by the community members of Guayabalito. The animal masks represent the *diablos* thrown from heaven in Biblical times. Drums and trumpets are played, and there is dancing. No women in the community know how to make these masks, which are made of newspapers mixed with yucca starch, dried, and then painted, but they are interested in learning how to make the masks if they could sell them to tourists and shops in Panama City throughout the year.

Many women make *tembleques* and would like to sell these to tourists. *Tembleques* are flower decorations made from fish scales that women wear in their hair when they dress in the traditional *La Pollera* costume, which has Hispanic roots. Some of the men make wooden trays and other wooden handicrafts. All of these crafts could be sold locally and in shops in Panama City.

**Fishing, Hunting, Guides, and Raising Game Animals**
Because Lake Gatún has excellent fishing, it is one of the primary recreational activities that can be offered to ecotourists. Men in Limón could rent canoes to ecotourists and could act as fishing guides.

All interviewed community members stated that over-hunting was a serious problem and that the community’s relationship with INRENARE is poor. Community members complained that they had no land to work for agriculture and had to plant and harvest without INRENARE knowing about it. They also stated that they could no longer take trees from the forests to build canoes and had to do this illegally as well.

During the month of February, Dr. Lumpkin saw several dead iguanas brought into the town to be sold. Iguanas lay eggs during the month of February and they are, thus, easy to catch at that time. Were CBE to be implemented, February would be an excellent month for tourists to see iguanas. Community members estimate that approximately 10% of the town hunts for subsistence and sells game outside the community. Young men who do not have work and who have families to support are the primary hunters. This group also was the most interested in becoming guides and community game guards; however, one woman expressed interest in becoming a guide as well (Annex 6). Furthermore, those interviewed stated that they thought that guides could work simultaneously as community game guards to protect wildlife, but there was some concern that this would divide the community.

There is also a great deal of interest, particularly among women, in raising pacas, iguanas, and collared peccaries, particularly if the meat could be marketed locally to CBE restaurants. ANCON should visit Limón to help initiate this type of micro-enterprise and should coordinate with persons involved in planning and implementing CBE.

**Accommodations and Food**

Women in Limón are particularly proud of their cooking skills and mentioned that some of their dishes had been influenced by Afro-Antillano culture. They are interested in offering food in their own homes or in local restaurants. Since many of the women thought that they might be able to work cooperatively, it would make sense for women to create a restaurant as a micro-enterprise. Community members, most particularly the women, also are interested in offering accommodations to tourists. The women’s focus group suggested that a camping area, perhaps with one or more traditional thatched roofed huts, be created for tourists. Considering the attractive views from the hills of Limón, a camping area with traditional huts is an excellent idea. However, this would necessitate some sort of planning so that bathrooms and showers could be provided and kept clean, huts (if built) could be maintained, and some sort of reservation or booking system could be set up. Women were also interested in providing B&B accommodations, but would need training in how to set up their homes as B&Bs, how to create a booking system, and how to distribute profits if they decided to work cooperatively in providing this type of accommodation.
Recycling

Interviewed community members expressed interest in having a recycling program. Because CBE would increase waste, it is recommended that a recycling program be part of any CBE planning and implementation. At this time, trash is burned, and metal waste is buried in holes.

Recommended CBE Options for Alfagía

Overview

Alfagía is a Latino community located close to the shores of Lake Gatún and not far from Soberania Park. There are 111 inhabitants and 19 dwellings (La Controlaría Generale de la República de Panamá 1997). After landing by canoe, one walks along a pretty, shaded path past cow pastures and over a river until one reaches the school. The dwellings in Alfagía are spread out throughout the hills. Those located higher up are in upper Alfagía. All the houses are traditional, built of wood with thatched palm roofs. The area has tall trees interspersed among cow pastures and the forested hills have excellent views.

Community members and Corregidor Grimaldo Rojas stated that the Ministry of Housing (MIVI) plans to relocate Alfagía community members from their traditional dwellings to cinder block houses that will be clustered closer together. Those living in upper Alfagía are expected to relocate. Electricity will be brought in. Both of these changes will radically alter the CBE potential of the area, reducing its appeal. Therefore, if alternative housing must be provided to community members, it is recommended that the housing be made of something other than cinder blocks. A special type of clay brick developed by the Technological University of Panama with traditional thatched roofs would be a good alternative.

In general, Alfagía is a community that depends upon slash and burn agriculture, fishing, and hunting for subsistence. It has very high ecotourism potential because of the beauty of the Lake Gatún area, because of its location not far from Soberania Park, and because its community members (particularly hunters) express strong interest in CBE as an alternative way to earn a living.

Tourism Visits

Because community members spend most of their weekdays involved in subsistence activities such as fishing and agriculture, they would prefer that tourists initially visit over weekends when they would have more time to take care of them. Furthermore, Alfagía residents are less busy during the dry season (December to March) and could have more tourists visit at that time. They would prefer to have ecotourists visit who are interested in fishing, wildlife viewing, camping, and medicinal plants. And they would like to control CBE as much as possible, creating their own packages, and
limiting the number of external tour operators, particularly if the external tour operators do not use the community’s services (guides, canoes, accommodations, and restaurants).

**Medicinal Plants and Traditional Medicine**

Alfagía has a resident **curandero**, Señor Claudino Juarez, who is also training an apprentice, Emiliano Sanchez. Señor Juarez has been a healer for the past 30 years and both his father and grandfather were also healers. Community members go to Señor Juarez when they are sick before going to the nurse’s station in Limón or the clinic in Sabanitas. Claudino analyzes a patient’s urine to diagnose illness. He prescribes medicinal plants for his patients and also has a physician’s desk reference, which he uses when he occasionally writes prescriptions for drugs that are filled out by pharmacies. He explained that he was touched by an angel and that this gave him his healing abilities, which he then augmented by studying medicinal plants and other types of healing. Because his background is Christian, the only type of ritual that he uses is prayer. Alfagía community members have a great deal of respect for him and say he is quite effective.

Residents of Alfagía stated that they extract medicinal plants from the surrounding forest and that they also plant them around their homes. Most of the women treat their families themselves for simple ailments. The women are very interested in the idea of creating medicinal plant gardens so that they can sell the plants to tourists and, if possible, to other markets. The plants could be dried and sold as well. The women also are interested in forming a group that could teach tourists about their traditional uses for medicinal plants.

Because of the high level of interest among tourists in medicinal plants and traditional healing, it is strongly recommended that Alfagía’s CBE include medicinal plant gardens, sale of live and dried medicinal plants and other botanical remedies, interpretive tours and explanations of how medicinal plants are used traditionally (most likely offered by a group of women), and, if possible, an introduction to the curandero.

**Fishing, Hunting, Guides, Horseback Riding, Raising Game Animals**

The majority of Alfagía community members live off of agriculture and fishing supplemented by hunting. There is a great deal of knowledge about wildlife in the nearby forests, and almost all the men (and some women) who hunt are interested in becoming guides and community game guards (Annex 6). Many of them realize that over-hunting is depleting wildlife, but they do not perceive any other alternatives. Relations with INRENARE are poor. It is highly recommended that CBE participatory planning focus on capacity building for guides and create a community game guard system.

All the men in the men’s focus group hunted. They suggested that they could take tourists on a three-hour walk from Alfagia to Rio Salud, which they say has wildlife. There, outside Soberania
Park, tourists could camp to view wildlife at dawn and dusk. Another area they recommended was a waterfall called Altos de Divisa, where there are deer, collared peccary, paca, agouti, partridge, other birds, and many different types of snakes. Another man said he knew a place an hour and a half away inhabited by ocelots. Yet another spoke up and said that he knew of a structure, located approximately 40 meters from Soberania Park, near a waterfall and swimming hole that had been built by a *gringo*. It is located in an area known as Quebrada El Ñeque, which is an hour and a half walk and a 30-minute horseback ride from Alfagía. Because there are horses in Alfagía, horseback riding is yet another ecotourism option.

Community members, most particularly women, expressed strong interest in raising game animals such as collared peccary, pacas, and iguana. The women would like to be able to sell game to a local CBE restaurant. ANCON, or another NGO with this capability, needs to visit the community and work with those planning CBE to set up game raising.

**Accommodations and Food**

Numerous community members stated that upper Alfagía had excellent areas for camping. Furthermore, traditional huts for tourists with thatched roofs could be built in scenic parts of upper Alfagía. Residents in all parts of Alfagía are interested in offering B&Bs.

Women would like to prepare food for tourists, offering it in their own homes or in a small local restaurant. It is recommended that women operate a cooperative local restaurant as part of a CBE package. This would allow them to share the work-load and profits.

**Recycling**

Interviewed community members expressed interest in having a recycling program. Because CBE would increase waste, it is recommended that a recycling program be part of any CBE planning and implementation. At this time, trash is burned, and metal waste is buried in holes.

**10.3 Limón Background**

Limón has houses built of cinder blocks and some built of wood that is often brightly painted. The town has electricity. According to key-informants, water is collected from Lake Gatún, treated, and then distributed by aqueduct. Residents also use the lake for washing clothes, swimming, fishing, and transportation. Some houses have flush toilets and septic tanks, but most have latrines. Many houses have telephones. There are three churches: Catholic, Baptist, and a Church of God. According to community members, they have *derechos posesorios* to the land upon which their houses are built; however, they do not have title to that land. No women have *derechos posesorios*, according to key-informants; however, they have the same access to *derechos posesorios* as men.
There are three small grocery stores in town, but most people purchase their food outside the community. A nurse works in Limón at a First Aid Post; however, the closest medical facility is in Sabanitas, which is approximately 30 minutes by car.

Because there is little land available for agriculture, very little cultivation takes place, and the cultivation that does take place is primarily undertaken by the poor men in the community. Slash and burn is the primary agricultural method. Rice, yucca, yam, *guandú* (a type of bean), calabash, bananas, pineapple, and papaya are grown. No pesticides or fertilizers are used. Clearing occurs before the end of the dry season. Planting begins when the rains start (around April or May), and harvesting takes place around September. Because so few people practice agriculture in Limón, this activity would not affect the amount of time that community members have available for CBE.

There is very little ranching due to lack of available land. Approximately three men in Limón have ranches for cattle and horses outside of Limón, two ranches being located in Alfagía. Chickens, ducks, geese, and turkeys are raised primarily by women. Previously, pigs were raised; however, the community stopped because pig dung polluted the lake.

Wood is harvested from Lake Gatún to make canoes, but this is hidden from INRENARE. Firewood used to be harvested from the forest and lakeside; however most people now have gas stoves. Men and women harvest medicinal plants, such as mint and oregano, and wild edible plants, such as guava, soursop, avocado, and mango. They also harvest palm for roof thatching.

Community members stated that most hunting occurs at night in protected areas and that wildlife has been depleted, forcing hunters to travel further for game. Iguana, paca, deer, collared peccary, agouti, and turtles are all hunted. Turtles, in particular, have been substantially reduced. Community members resent INRENARE’s efforts to stop hunting.

The majority of male community members earn a living outside of the community, working in the Colon Free Zone, for the Panama Canal Commission, and for the Colon municipality. More men than women work outside the community; however some women work as school teachers, for the municipal government, and in restaurants and department stores in Colon. There are five buses per day, leaving the community at 5:15 a.m. and returning at 9:00 p.m.

Community members primarily depend upon Honorable Marco Hughes to organize them for projects. There also is a women’s Catholic church group that makes tamales, and there is a women’s group that makes crafts. There is a parent’s club, the Local Council, a Health Committee, and a softball group (made up of men and women) that plays games every Sunday. Some women who were interviewed believed that women would be more likely than men to participate in CBE.

**10.4 Gender Analysis of Limón**
Limón has excellent potential from a CBE perspective to empower women and improve overall community welfare. The women are interested primarily in providing food and lodging, making and selling crafts (specifically diablo masks and tembleques), and raising game animals. A few women are interested in becoming guides. Women are positioned to be the primary hosts and organizers for visiting tourists because most of them stay in the community during weekdays, whereas many men have day jobs outside the community. Hence, it is important that women be involved in CBE planning as they will probably be primarily responsible for organizing CBE and providing and maintaining any CBE infrastructure.

10.5 ALFAGÍA BACKGROUND

Alfagía community members have derechos posesorios to small plots of land. According to those interviewed, women do not have derechos posesorios to any land. Some people from outside Alfagía own larger plots of land, including forested areas. These outside landowners often hire local campesinos to tend their land for them. Houses are built from traditional materials and have latrines. There is no electricity. One small store sells basic goods.

An aqueduct carries water from a dam in the stream Bajo Bonito located in upper Alfagía to most houses; however, some of the houses in upper Alfagía are not served by this aqueduct. The water is treated. Community members use Lake Gatún for fishing, transportation, washing clothes, and bathing. During the rainy season, Alfagía residents use local streams rather than the lake, for bathing and washing clothes.

Slash and burn agriculture is practiced by most community members. The land is cleared prior to the rains; they plant when the rains start (April or May) and harvest approximately three to five months later, depending upon the crop. Community members grow corn, rice, beans, yucca, and yam. They also grow plantains, bananas, coffee, mango, oranges, and coconuts. No pesticides or fertilizers are used, although herbicides are used occasionally.

Ranching is important to the community and, according to key-informants, approximately 25% of the community has a cow or horse. Men are primarily involved in ranching, whereas, women take care of chickens and ducks. Both men and women care for pigs.

Medicinal plants are gathered primarily by women from the forest and also are planted around their houses. Both men and women gather leaves to thatch roofs. Women gather firewood more often than men. Men cut wood to build traditional houses and canoes and are expected to obtain a permit from INRENARE before removing timber from the forest.
It is men who do most of the hunting, although women occasionally hunt. Men hunt deer, coatis, paca, collared peccary, agouti, iguana, capybara, and a variety of birds for personal consumption. They sell deer, collared peccary, paca, capybara, and iguana. All of these animals are hunted within Soberania Park, except for capybara, which live along the banks of Lake Gatún. Those interviewed said that wildlife has been depleted; however, they had no alternatives that would reduce hunting. Therefore, they were interested in CBE. Fishing is another primary subsistence activity among male community members.

Some people work outside the community. Men who work outside the community primarily work as laborers or in the Colon Free Zone. A few women work as house-keepers, cleaners, and secretaries, and those who work in Panama City only return to Alfagía on weekends. Most of the men who work outside the community return each night by canoe.

Community members primarily depend upon the Honorable Marco Hughes (representante) to organize projects. However, there is also a Housewives Club, a Club 4 S (a group of young people who work on different projects), and a Parents Club. The Housewives Club has five women. The Club 4 S has 12 members, most of them young men. And the Parents Club has seven men and two women. The Rotary Club has also contributed funds to various community projects and should be approached for CBE funding.

10.6 Gender Analysis of Alfagía

Alfagía has excellent potential from a CBE perspective to empower women and improve overall community welfare. The women of Alfagía are interested in providing accommodations, preparing food and perhaps opening a restaurant, raising game animals, growing and selling medicinal plants, and offering talks on their usage of medicinal plants. A few women might be interested in becoming guides.

Because Alfagía is a community that will focus on nature tourism such as wildlife viewing and fishing, which tend to be male dominated, it is important that women also have a specific niche in CBE. Women in the community have extensive knowledge of medicinal plants, and ecotourists currently are very interested in this type of knowledge. Therefore, it is recommended that some women in Alfagía form a cooperative that creates medicinal plant gardens and that the group sell medicinal plants and other botanical remedies to tourists and, if possible, other markets. In addition, this women’s group should also prepare an interpretive package that educates tourists about medicinal plants and their uses. This will help to preserve the women’s ethnobotanical knowledge as well as bring in additional income and increase women’s self-esteem. Furthermore, the women can liaise with Claudino Juarez, the local curandero in this process. It will be necessary for a NGO or other community organizer to help the women to organize this and other micro-enterprises.
11. CHAGRES PARK (CLUSTER THREE)

11.1 OVERVIEW

Chagres Park, which provides most of the water for the Panama Canal, is the only protected area within the Panama Canal Watershed that has communities (Latino and Emberá) living within its boundaries. The park has a high level of biodiversity, an interesting geography, and is home to fauna not found in Soberania or Lake Gatún protected areas.

Due to logistics and time, it was impossible for Dr. Lumpkin to include all the communities in Chagres Park in the CBE survey. Cluster Three communities that were surveyed were: Victoriano Lorenzo and Parará Purú. These communities, one Latino and one Emberá, are representative of the many communities in Chagres Park.

Dr. Lumpkin visited other communities in Chagres Park, but did not conduct her survey among these communities. Instead these communities were investigated using informal interviews and community meetings at which an introduction to CBE was presented. Communities in Chagres Park that were part of the broader CBE study were: San Juan de Pequeni/La Bonga, San Vicente de Tranquilla, Peñas Blancas, Victoriano Lorenzo, Parará Purú, Boquerón Abajo, Boquerón Arriba, and Salamanca. Although Dos Sesenta was not visited, a community leader involved in CBE in Dos Sesenta was interviewed.

Visited communities located on the eastern shore of Lake Alajuela are: San Vicente de Tranquilla, Peñas Blancas, Victoriano Lorenzo, and Parará Purú. Visited communities located on the western shore of Lake Alajuela are: Boquerón Abajo, Boquerón Arriba, and Salamanca. There are three indigenous Emberá communities in Chagres Park: Parará Purú, La Bonga, and Dos Sesenta. In addition, a group of Emberá live in Victoriano Lorenzo. Numerous communities exist in Chagres Park that were not visited and these must be included in any CBE planning.

11.2 CHAGRES PARK COMMUNITY BASED ECOTOURISM POTENTIAL

Chagres Park CBE Plan

The communities in Chagres Park (most particularly communities located on the eastern shore of Lake Alajuela and the communities of San Juan de Pequeni/La Bonga and Dos Sesenta) should participate in a Chagres Park CBE planning process. The synergy of the Chagres Park communities working together will increase CBE potential and opportunities substantially. This participatory planning process should include these five sectors: (1) Chagres Park community representatives, (2)
NGOs and CBOs, including research organizations such as STRI, (3) government agencies, such as IPAT, INRENARE and ARI, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies working in Chagres Park, hoteliers, and business persons.

**Chagres Park Community Organizing (Ecotourism Committees)**

Each community that decides to participate in the Chagres Park CBE planning process needs to establish its own CBE Committee. The Emberá community of Parará Purú already has a CBE Committee, and the Emberá community of Dos Sesenta is trying to organize a CBE Committee. None of the Latino communities have organized CBE Committees. A NGO or community organizer needs to provide capacity building to Chagres Park communities so they can create CBE Committees.

**Chagres Park Ecotourism Options**

INRENARE already has plans to establish a visitors’ center at Campo Chagres, a peninsula in the southern part of Lake Alajuela. Crafts and other products produced by Chagres Park communities could be sold here. Tourists could also find out what type of ecotourism experiences are available at this center. It is recommended that two types of experiences be offered: (1) guided ecotourism experiences and (2) back-country wilderness experiences, such as the Everglades models. Both types of ecotourism can include visits to communities and help to promote CBE.

**Everglades Wilderness Models**

Chagres Park, if marketed correctly, could attract the same type of tourist who visits the Florida Everglades in the United States. There are two possible Everglades models for Chagres Park: (1) the community based Everglades model and (2) the chickee Everglades model.

Initially, the community based Everglades model should be implemented because of its simplicity and because it can provide Chagres communities with environmentally sustainable alternative ways to earn income. This model would establish a system of camping areas and accommodations located within Chagres Park communities. Tourists would be encouraged to visit these communities in succession by paddling their own canoes and sea kayaks, just as tourists in the Everglades paddle the Everglades Wilderness Waterway in Everglades National Park, Florida. Linking communities in an ecotourism _package_ will be far more successful than communities working independently to create their own CBE.

The second model, the chickee Everglades model, would establish a system of chickees in Lake Alajuela. Chickees are open-sided, thatched-roofed huts originally used by indigenous people who lived in the Everglades. Modern chickees are derived from the earlier indigenous design and are open-sided, tin-roofed wooden platforms that are large enough to protect a four-person tent and gear.
Modern chickees also have toilets whose waste is hauled away at regular intervals. Tourists paddle during the day and pitch their tents overnight on a chickee. Chickees can be located near communities so that tourist can paddle to the communities. The advantage to this model is that, because chickees are built over the water away from shore, there are far fewer insects. Furthermore, it is likely that the chickee model would attract ecotourists searching for a wilderness experience. The disadvantage of this model is that the chickee infrastructure would necessitate funding for building and maintenance. In addition, a chickee system in Chagres Park would necessitate collaborating with INRENARE, which would be time-consuming. Furthermore, the chickees would have to be maintained, toilets emptied, and a booking system would have to be created.

Camino Real

Another option that communities could exploit for CBE is the Camino Real (Annex 1). This historic path begins at the lower end of Lake Alajuela (near Victoriano Lorenzo) and winds its way past a number of communities to Portobelo and to Nombre de Dios. The historic road needs to be cleared and maintained. Were the Camino Real maintained as a hiking trail, tourists could hike the path, staying in communities along the way, or tourists could mix traveling by canoe and hiking on the Camino Real. As with any trail, the Camino Real should not be opened until a system of community game guards exists. Otherwise, opening the road will exacerbate over-hunting.

Linking CBE Clusters

The Chagres River flows from Lake Alajuela passing through the Chagres River Biological Corridor to the Panama Canal. Hence, Chagres Park communities should communicate with Chagres River Biological Corridor communities to link their CBE efforts.

Recommended CBE Options for Victoriano Lorenzo

Overview and Organizing Local CBE

Victoriano Lorenzo is located on the eastern shore of lower Lake Alajuela. It can be reached by taking a five-minute canoe ride from Corotú, which is at the end of the La Cabima entrance to Chagres Park at the edge of Lake Alajuela. Because of its easy access, the community is likely to be visited by ecotourists who are not able to participate in a full wilderness experience, but who want to visit a local community. The community has both Latinos and Emberá.

These two groups would prefer to work together in some areas, such as maintaining community cleanliness. In general, however, they would prefer to create CBE micro-enterprises separately because of failed attempts to work together cohesively in the past. During focus groups, Emberá and Latinos also agreed that they could coordinate and plan CBE together. Community members are interested in creating a Chagres Park CBE plan that includes multiple communities within the park.
They envision Victoriano Lorenzo as being a commercial and travel hub for other communities. For example, Victoriano Lorenzo could market crafts and other products from multiple Chagres communities to tourists who do not have an opportunity to explore further inside Chagres Park.

Tourist Visits

Community members would welcome tourists for any length of time during any part of the year; however, they would prefer to organize their own CBE, although they would not be adverse to tourists being brought in by tour agencies.

Cultures and Crafts

The Emberá are particularly interested in marketing their culture, traditional knowledge, and crafts. The women are skilled basket makers and would like to show tourists how they make baskets; they would also like to show tourists what plants they use, where they collect the plants, how they dry them, and how they dye them. The men carve tagua nuts (a hard palm kernel) into small animal representations and also carve a hard, dark wood called cocobolo (Dalbergia retusa) into staffs and other crafts. Baskets, tagua nut carvings, and cocobolo carvings are already popular tourist items sold in stores in Panama City. Emberá community members could market these items to tourists in Victoriano Lorenzo, to stores in Panama City, and, if it is ever constructed, at the visitors’ center in Campo Chagres. The Emberá do not want to dance for tourists. Emberá men and women also have extensive knowledge of medicinal plants, which they gather from the local forest, but they do not have a traditional healer. They are interested in growing medicinal plants and teaching tourists about medicinal plant use.

Fishing, Hunting, Guides, and Raising Game Animals

Most of the Latinos and Emberá conduct subsistence fishing. There also is a fishing cooperative made up only of Latinos that have received cards (carnetas) from MIDA allowing them to fish commercially. This group uses canoes without motors. Focus groups suggested that community members could rent canoes from the fishermen and use them to take tourists out to view wildlife. In the area immediately surrounding Victoriano Lorenzo, over-hunting has radically reduced wildlife. If wildlife populations are to recover, it will be necessary to set up a community game guard system. Numerous men were interested in working as community game guards and as guides (Annex 6) but felt that their lack of English was a drawback to working with tourists. Lack of English is not the problem that some community members think it is. Translators can be hired or trained within the community. Also, there was a general sense that few tourists came to Chagres Park and that the Chagres Park CBE plan would have to focus on promotion.

Among both Latino and Emberá women, the most popular CBE-related micro-enterprise discussed was raising pacas. The women are particularly interested in raising game animals for a community
based restaurant that caters to tourists. They also wanted to raise them for export outside the community. ANCON should facilitate paca raising.

**Hiking and Paths**

Because Victoriano Lorenzo is not located in an area with an abundance of wildlife, community members are interested in creating paths for hiking that do not focus on wildlife viewing but that focus on scenery and medicinal plants. Community members said that the Camino Real (Annex 1) is a half day walk from Victoriano Lorenzo and believe that this historic road would interest tourists.

**Accommodations and Food**

The women are eager to create a community restaurant that can serve typical food and game meat to tourists. They also are interested in setting up accommodations for tourists. If Victoriano Lorenzo becomes a commercial and travel hub for Chagres Park, simple accommodations would be useful for tourists.

**Recycling**

Interviewed community members expressed interest in having a recycling program. Because CBE would increase waste, it is recommended that a recycling program be part of any CBE planning and implementation. At this time, trash is burned, and metal waste is buried in holes.

**Recommended CBE Options for Parará Purú**

**Overview**

Parará Purú is a community of approximately 30 Emberá, who separated from Victoriano Lorenzo in October 1993, in order to specifically establish ecotourism, from which they are trying to earn a living. They were advised to separate from Victoriano Lorenzo by Norma de Ponce, INRENARE Director of Chagres Park, and Licenciado Jorge Tobar of ANCON. The community is located on a hill on the lower eastern shore of Lake Alajuela across a river from Victoriano Lorenzo.

**CBE Committee**

Antonio Tocamo is the community leader. An Ecotourism Committee has been elected by vote and has been in existence for four years. The president is Antonio Tocamo. Claudio Chami is the secretary, and Antonio Sarco is the treasurer. The Ecotourism Committee’s priorities are: (1) to train a community member to learn English, (2) to secure funds to buy canoes and canoe motors, (3) to secure funds to build a hut where tourists can spend the night, and (4) to set up an office in Panama City that can book tourists. The Committee would like to have a tour operator in Panama City who
can contact the community by beeper. At this time, the community is dependent upon tour agencies to bring visitors.

Tourist Visits

According to community members, approximately 500 tourists visit the community each year. Antonio Tocamo also said that in 1996 INRENARE passed a law limiting the number of tourists per visit to 30 persons. At this time, tour agencies bring in the visitors and the community is paid from B/.5-B/.9 per tourist. The tourists stay from half a day to a day and come at all times of year; however, fewer come when Lake Alajuela is low during the dry season.

The Emberá hike with the tourists on a path that takes approximately 35-40 minutes and show the tourists medicinal plants along the way. The community is interested in opening another path that leads to a stream called la Palma. They also would like to take tourists to a waterfall that can be reached by a 15-minute canoe ride. The community has begun building a path that allows tourists to reach the top of this waterfall. And they would like to take tourists hiking on the Camino Real (Annex 1), which passes near Parará Purú.

At this time residents of Parará Purú are working with the following tour agencies: Imama Tours (Daniel Clúa), Panama Discovery (Winston Rice), Panama Paradise (Giovani Camporazo), Howard Military Base (Javier Béliz), and Clayton Military Base (Mr. Orlando).

Cultures and Crafts

Currently, when tourists are brought to the community by tour agencies, the Emberá take them on a hike, show them their traditional dances and music, and sell crafts, such as tagua nut carvings, cocobolo carvings, jewelry, and baskets.

Medicinal Plants and Traditional Medicines

Parará Purú has two traditional healers: Antonio Tocamo, Sr., and Antonio Tocamo, Jr. The community would like to start a medicinal plant garden. Furthermore, they would like to put together an ecotourism package that focuses on medicinal plants and their use. The healers diagnose illness by urine analysis. Examples of medicinal plants that they currently use are sarsa india (to clean the blood), raíz amarga (snake bite), and guabito amargo (insect and snake bites). The healers consider themselves experts at curing snake bite. They also would like a university student or other advisor to help them put together a pamphlet on the medicinal plants that they use.

Fishing, Hunting, Guides, and Raising Game Animals
Community members subsist mostly off of fish; however occasionally some hunting occurs. They hunt pacas, collared peccaries, deer, and birds, but take very few animals because they are aware of the animals’ ecotourism value. They also are interested in raising game animals such as paca. Only male community members are guides, and they would like to have a community member trained in English to be able to guide North American tourists, as they feel that this would give them more control over CBE.

Accommodations and Food

Sometimes community members prepare lunch for tourists. Other times the tour agencies provide food. The community is very interested in building a traditional Emberá house where tourists can spend the night.

Recycling

Interviewed community members expressed interest in having a recycling program. Because CBE would increase waste, it is recommended that a recycling program be part of any CBE planning and implementation. At this time, trash is burned, and metal waste is buried in holes.

Recommended CBE Options for San Juan de Pequeni/La Bonga

San Juan de Pequeni/La Bonga are two communities located on opposite sides of the Pequeni river. This river drains into the northern part of Lake Alajuela. San Juan de Pequeni is a Latino community and La Bonga is an Emberá community.

Because the communities are located in an area of Chagres Park that is not easily accessible and, therefore, has a wilderness setting, both San Juan de Pequeni and La Bonga have high CBE potential. Furthermore, the nearby location of the Camino Real (Annex 1), if the old road were made suitable for hiking, would attract tourists.

It is recommended that the community offer guided tours, simple lodging or camping areas, food, and crafts. Raising game animals could reduce over-hunting and provide food for tourists. In addition, the Emberá can market their indigenous knowledge, with a particular emphasis on medicinal plants, traditional medicine, and other aspects of their culture that need to be protected and revitalized. There is a traditional healer within the Emberá community.

CBE Committees need to be established in both communities, and both Latinos and Emberá will need to coordinate, although not necessarily work, together.

Recommended CBE Options for San Vicente de Tranquilla
San Vicente de Tranquilla on the eastern shore of Lake Alajuela is a very attractive Latino community with high CBE potential. The community is already working on several projects with NGOs and with the Lake Alajuela Campesinos Union (UCLA). The community has requested capacity building and help in setting up CBE. A CBE Committee should be established. It is recommended that the community offer guided tours, simple lodging or camping areas, food, and crafts. Raising game animals could reduce over-hunting and provide food for tourists. The community also can take advantage of the location of the nearby Camino Real (Annex 1).

**Recommended CBE Options for Peñas Blancas**

Peñas Blancas on the eastern shore of Lake Alajuela is an attractive Latino community with high CBE potential. A Peace Corps volunteer is currently working there promoting sustainable agriculture. The community can take advantage of the location of the nearby Camino Real (Annex 1). There are also nearby caves that would make an interesting tourist attraction. The community has requested capacity building and help in setting up CBE. A CBE Committee should be established. It is recommended that the community offer guided tours, simple lodging or camping areas, food, and crafts. Raising game animals could reduce over-hunting and provide food for tourists.

**Recommended CBE Options for Dos Sesenta (260)**

Dos Sesenta is an Emberá community with extremely high CBE potential located on the banks of the Chico river, which drains into Lake Alajuela. The community is located in a wilderness area with high biodiversity; hence, wildlife viewing is excellent here. It also is near rapids that can be used for river-running. The community has traditional healers and can market its indigenous knowledge, particularly ethnobotany and traditional medicine. Paths have already been cleared for tourists. It is recommended that the community offer interpretive tours focusing on Emberá culture, simple lodging or camping areas, food, and crafts. Raising game animals could reduce over-hunting and provide food for tourists. A CBE Committee is being established. Unfortunately, despite its high CBE potential, the community’s previous involvement in ecotourism, initiated by outside tour agencies, created internal strife. Now the community is trying to create internally-driven CBE and is looking for funds and capacity building to aid them in this process.

**Recommended CBE Options for Boquerón Abajo, Boquerón Arriba, and Salamanca**

Boquerón Abajo, Boquerón Arriba, and Salamanca are communities located on the western shore of Lake Alajuela. All have CBE potential. Boquerón Abajo and Boquerón Arriba could take advantage of Panamanian visitors who come to swim in the Boquerón river during the dry season (December - April) by opening a small restaurant, maintaining a picnic area (including latrines), or selling crafts. Furthermore, the Camino Real (Annex 1), which passes near Boquerón Arriba could attract tourists. However, before the Camino Real is opened, these communities would have to participate in a
community game guard system to prevent the opened path from exacerbating over-hunting. According to Técnico Evin Cedeño of INRENARE, there are 2,000-3,000 visitors each year to Chagres Park but few come to this area of the park. These communities need to create CBE Committees.

11.3 VICTORIANO LORENZO BACKGROUND

Victoriano Lorenzo is a very attractive town with an open green area bordering Lake Alajuela. The village also has an open area used for a playing field and is surrounded by trees. The community has 198 inhabitants and 37 dwellings (La Controlaría Generale de la República de Panamá 1997). 1990 census numbers include the community of Parará Purú because that community had not yet separated from Victoriano Lorenzo. The town does not have electricity. Houses have latrines. There is an aqueduct that delivers chlorinated water. Community members use the lake for swimming, transportation, and fishing. Residents of Victoriano Lorenzo have derechos posesorios and do not own land. No women have derechos posesorios. The closest medical facility is in Chilibre, approximately an hour by car after crossing the river by canoe. A Catholic church and an evangelical church exist in the community. The evangelical church has had a negative impact among the Emberá who live there, insisting that the women should not wear their traditional costumes.

Slash and burn cultivation methods are used for subsistence agriculture. Corn, rice, yam, yucca, plantain, banana, and oranges are grown. Planting occurs when the rainy season begins (around May). No pesticides or fertilizers are used. Community members want access to more land for planting and say that INRENARE prevents them from clearing land. No one in the community has cows or horses. Women raise chickens.

Community members gather firewood, wood to build traditional houses, and wood to make canoes from the surrounding forest; however, community members complain that INRENARE over-charges for the wood they use to build canoes and houses. Emberá men gather medicinal plants from the forest, such as hombre grande (used to treat mosquito bites), coquillo (used to reduce swelling), anatexia (used to treat spider bite), and coteño (used to treat bruises). Emberá women gather chunga (Astrocaryum), a type of palm used to make baskets. They also gather nahuala (Carludovica palmata) to make baskets. Jagua (Genipa americana), achiote (Bixa orellana), cocobolo (Dalbergia retusa), and chisná are used to dye basket fibers.

Hunting occurs despite INRENARE’s prohibitions. Pacas and collared peccaries are the primary species that are hunted, and most of the hunting occurs in the upper headwaters of Chagres Park.

Although community members subsist off fishing, some community members engage in alternative economic activities. Some men and women work outside the community. The men work as day laborers in agriculture or ranching, as construction workers, gardeners, and in furniture shops. They
return to the community late each afternoon. Women who work outside the community usually work as maids and return to the community only on weekends.

The community does not have many organizations or leaders. There is a fishing cooperative with five male members but no Emberá belong to it. Norberto Hidalgo is the president of the Junta Comunal. Señor Loncho owns a small store selling basic items. And Manuel Caisamo is the Emberá traditional authority. The group of Emberá living in Victoriano Lorenzo do not get along well with the Emberá group that split off from this community and subsequently moved to Parará Purú. Furthermore, there is distrust between the campesino and Emberá community members. Victoriano Lorenzo will need help organizing and overcoming its internal discord if campesino and Emberá community members are to work together to create CBE. However, community members are eager for CBE and would like a NGO to help them organize for CBE.

11.4 GENDER ANALYSIS OF VICTORIANO LORENZO

Both Latina and Emberá women in Victoriano Lorenzo are interested in raising pacas; hence, this micro-enterprise should be implemented, perhaps by ANCON. However, capacity building for raising game animals must also include marketing strategies. In addition, women are interested in opening a restaurant and providing accommodations.

Emberá women are interested in selling crafts and educating tourists about their use of medicinal plants. Therefore, it is recommended that they prepare an interpretive package that educates tourists about: (1) how they make their crafts and (2) medicinal plants and their uses. This will help to preserve the women’s cultural and ethnobotanical knowledge as well as bring in additional income and increase women’s self-esteem.

11.5 PARARÁ PURÚ BACKGROUND

Parará Purú is a small community built on a spit of high land that juts into Lake Alajuela. Houses are built in traditional Emberá style, raised off the ground on poles. The community does not have electricity. There is a latrine that has been built for tourists to use, and other houses have their own latrines. Residents of Parará Purú hope to build a water aqueduct and at this time gather their drinking water from a clean waterfall. They use the lake for swimming, washing clothes, and transport. The men of the community have derechos posesorios of the community’s land. The community does not have a store and the closest medical facility is in Chilibre.

Residents practice slash and burn agricultural cultivation but do not have enough land to grow all they need and so perceive CBE to be a primary income-generating alternative. Only one community member works outside Parará Purú, and he works for a tour agency. Community members grow
yucca, corn, yams, plantains, coconut palm, mangos, and oranges. No pesticides or fertilizers are used. The ground is cleared in January and February, planted when the rains come in April or May, and harvest begins in August. No ranching occurs in the area. Women raise chickens.

Firewood, medicinal plants, palm leaves for thatching, and tagua nuts are all taken from the forest. When wood is needed to build a traditional house or canoe, a down tree must be located and then permission to remove the tree must be requested from INRENARE. Upon occasion, INRENARE has seriously overcharged for timber and Antonio Tocamo has had to bring this to the attention of persons in INRENARE at high levels. The usual process is for a community member to request permission to harvest timber from the local INRENARE officials, who then pass the request on to INRENARE in El Paraíso, who then pass the request on to INRENARE headquarters in Panama City. Permission to the request is then granted through the same three-tiered process and a charge is levied for the timber. Community members believe that INRENARE has seriously overcharged for timber.

11.6 GENDER ANALYSIS OF PARARÁ PURÚ

The women of Parará Purú participate in CBE at this time; however, no women are members of the Ecotourism Committee. Although the Committee is elected by vote, it is suggested that the community consider nominating a woman to run for election to the Committee. Furthermore, none of the women currently serve as guides. If the community decides to create a traditional house as accommodation for tourists, the Ecotourism Committee should encourage women to participate in running this micro-enterprise. Also, women could help create and work in medicinal plant gardens.

11.7 SAN VICENTE DE TRANQUILLA BACKGROUND

San Vicente de Tranquilla is located on the eastern shore of Lake Alajuela in Chagres Park. According to community members, there are approximately 26 dwellings. An open green area is surrounded by houses with thatched roofs. There is no electricity. The community is involved in several projects such as apiculture (bee-keeping), a Lake Alajuela Campesinos Union (UCLA) fishing project, and a UCLA housewives clothes-making project.

11.8 PEÑAS BLANCAS BACKGROUND

Peñas Blancas is located on the eastern side of Lake Alajuela and, according to a key-informant, there are approximately 100 inhabitants and 15 houses. It is easiest to access the community by canoe. It is a pretty place with an open, green playing field. The community does not have electricity.
A key-informant related that there are not many women in the community, and that there are quite a few male-headed households with children. Community members primarily subsist off of agriculture and fishing. There is also an apiculture project. In October 1997 a Peace Corps worker was living in the community and was teaching community members, particularly women, how to grow organic vegetables. She also planned on starting up a chicken raising project. Some of the women in the community are involved in the Lake Alajuela Campesinos Union (UCLA) project that makes clothes. According to a key-informant, only the women will work together; the men do not work cooperatively.

The key-informant stated that there have been problems with illegal over-fishing in Lake Alajuela for commercial sale, which has reduced fish stocks. Community members are allowed to conduct subsistence fishing; however, any commercial fishing must be overseen by the Ministry of Agriculture (MIDA). Nevertheless, illegal over-fishing is occurring. Also, according to a key-informant, El Niño has severely reduced the lake’s level and this could be contributing to fish stock depletion as well. The key-informant also explained that the community’s reduced access to fish as a protein source has had a negative affect on many children’s diets. Protein now is being derived primarily from wild game.

11.9 San Juan de Pequeni/La Bonga Background

San Juan de Pequeni/La Bonga is located in Chagres Park on the Pequeni river which empties into the northern part of Lake Alajuela. The community has approximately 155 inhabitants and 32 dwellings (La Controlaría Generale de la República de Panamá 1997). It is divided by the Pequeni river into a Latino side (San Juan de Pequeni) and an Emberá side (La Bonga). There is no electricity.

San Juan de Pequeni is pretty with a large open area next to the church. La Bonga has traditional Emberá houses built up off the ground. San Juan de Pequeni/La Bonga is accessible during the rainy season by canoe and in the dry season by 4-wheel drive and walking. The trip by canoe is an interesting wilderness experience and wildlife can be seen; however, the canoe trip can be difficult when the water level is low.

A path runs from San Juan de Pequeni/La Bonga connecting it to the Camino Real (Annex 1). A community member stated that it took a Peace Corps worker one day to walk the Camino Real from Portobelo to San Juan de Pequeni/La Bonga.

The Emberá at La Bonga have had previous experience with ecotourism. Tour agencies brought tourists and the Emberá dressed in traditional clothes, danced, sold crafts, and demanded payment for photographs that were taken. Tourists had stopped coming to visit the Emberá by September 1997, when Dr. Lumpkin visited, and, according to several sources, the tourism
experience was neither pleasurable nor _authentic_. Furthermore, the Latino community of San Juan de Pequeni was resentful that the tourists only came to see the Emberá.

According to several key-informants, the Latino community of San Juan de Pequeni is divided politically, which would make CBE difficult to implement. However, a community meeting revealed strong interest in CBE among the Latinos, so perhaps this division could be overcome.

11.10 DOS SESENTA (260) BACKGROUND

Dos Sesenta is an Emberá community located in Chagres Park on the Chico river, which drains into Lake Alajuela. Access to Dos Sesenta is by canoe and is difficult during the dry season (December-April) when Lake Alajuela is low. Although Dr. Lumpkin did not visit Dos Sesenta, numerous key-informants mentioned that the community has high ecotourism potential because of its location far up a jungle river, its abundance of wildlife, and the Emberá culture. Adan Caisamo, an INRENARE Chagres Park guard, comes from Dos Sesenta and has been involved in trying to set up CBE. According to Adan Caisamo, Dos Sesenta has 12 houses and 60 inhabitants, of which about half are children. The community, says Caisamo, has several traditional healers, medicinal plants, paths, traditional houses, and an area for camping. According to Evin Cedeño of INRENARE, there are rapids near Dos Sesenta and the rafting is good.

However, Dos Sesenta is not new to ecotourism and has had some problems with it. Several key-informants revealed that the community is divided, partially due to poorly planned ecotourism ventures brought into the community by outside tour agencies. Dos Sesenta is an important example of how ecotourism can cause problems when it is not generated from within the community.

11.11 BOQUERÓNABAJO, BOQUERÓNARRIBA, AND SALAMANCA BACKGROUND

Salamanca is located on the western shore of Lake Alajuela and has approximately 323 inhabitants and 75 dwellings (La Controlaría Generale de la República de Panamá 1997). A resident of Salamanca, Sr. Manuel Espino (known as Canini) plans to become involved in ecotourism. During the rainy season, Lake Alajuela comes up to his house. He would like to build a small lodge, rent canoes, offer horseback riding, and guide people on paths. He says that there is also good fishing and that there are many turtles and birds.

North of Salamanca and also on the western side of Lake Alajuela is Boquerón Abajo in Chagres Park. The community consists of approximately 215 inhabitants and 51 dwellings (La Controlaria Generale de la República de Panamá 1997). The Boquerón river, a pretty and relatively clean river that many people from Colon bathe in during summer (December-April), flows near Boquerón Abajo. Unfortunately, there is a gravel quarry that is harming the river riparian zones and affecting
water quality. In Boquerón Abajo, some community members sell drinks to Panamanians who come to bathe in the river; however, there is no restaurant or other facilities. A small community group of around 10-15 people in Boquerón Abajo collects trash.

Boquerón Arriba is north (upstream, if one follows the Boquerón river) from Boquerón Abajo. It is a small community of approximately 183 inhabitants and 40 dwellings (La Controlaría Generale de la República de Panamá 1997) that does not have close ties with the community of Boquerón Abajo. The people of Boquerón Arriba live largely off of subsistence agriculture. Not far from Boquerón Arriba, the Boquerón river has a waterfall that can be reached by a dirt road that runs through to Santa Librada. This dirt road is eroding and silting the Boquerón river.

12. STUDY RESULTS FOR OTHER VISITED COMMUNITIES WITH COMMUNITY BASED ECOTOURISM POTENTIAL

12.1 CHICA

Chica is a small and attractive town located next to Altos de Campana Park with high ecotourism potential. Some women in the town (and now a few men as well) run a nursery cooperative that grows tree seedlings, ornamental plants, and medicinal plants. This project is overseen by the NGO TechnoServe and is funded by USAID/Panama. Due to the success of the cooperative, women throughout the town now independently grow medicinal and ornamental plants. The fact that the community has had a positive working relationship with TechnoServe means that TechnoServe (or another NGO) could easily launch a CBE pilot project here.

The endangered golden frog (*Atelopus zeteki*) exists in Altos de Campana Park and is a tourist attraction. Also, a botanical interpretive trail, designed with the aid of Dr. Mireya Correa, Dr. Noris Salazar Allen, and Dr. Claudia de Peralta is located in Altos de Campana near the INTEL tower. Allen and Correa gave a seminar to INRENARE park rangers, municipal personnel, and some people from the community of Chica (no women attended) on the existence of the interpretive path, its meaning, and possible uses. They also had a plan for students at the University of Panama to train park rangers and community members to be guides; however, this never crystalized. Should community members be interested in this process, this plan could be revitalized.

Informal interviews conducted with community members revealed that over-hunting had severely reduced the local wildlife population. As previously mentioned, reforestation efforts are underway near Chica; however, over-hunting has not been addressed. Several community members expressed interest in ecotourism as a viable income-generating alternative that could help to reduce over-hunting and protect the park.
CBE options for Chica include: selling plants, opening restaurants, providing accommodations, selling crafts, and offering guide services. A community game guard system should also be organized. Because women are already very active in the community, it will not be difficult to continue empowering women through CBE.

12.2 KUNA NEGA

Kuna Nega is an indigenous Kuna community located on 18 hectares off Chivo-Chivo road, between the hills of Mocambo and San Francisco near Camino de Cruces Park. The community has approximately 82 dwellings and 630 inhabitants (La Controlaría General de la República de Panamá 1997). There is electricity and they have a well but are currently facing water shortages. Kuna Nega was founded in 1980. The community of Kuna Nega has a Kuna Nega Association and sailas, which are traditional leaders. According to the key-informants, the community is accustomed to working communally, which makes it very successful at planning and implementing projects. The majority of the men of Kuna Nega work in Panama City while the women work in their homes.

Key-informants for Kuna Nega were Andrea Mendoza de Gutierrez, President of the community; Delio Herrera, Secretary; and Ernestina de Alfaro. According to these key-informants, because the Northern Corridor and new highway (autopista) make Kuna Nega more accessible, the community is already planning CBE. Some of the women work communally in a mola-making project and could sell molas to tourists. Key-informants expressed interest in growing medicinal plants and said that INRENARE has suggested that they plant medicinal plants in the areas around the community that had been deforested. Community members are interested in marketing the Kuna cultural experience and their indigenous knowledge. They also want to open a restaurant and offer basic accommodations.

Although Kuna Nega has high CBE potential from a cultural perspective, its location not far from the Cerro Patacón landfill is problematic. Until the Panamanian government decides to create an integrated waste management system, communities near Cerro Patacón will have difficulty attracting tourists.

RECOMMENDED COMMUNITY BASED ECOTOURISM ACTION PLAN FOR THE PANAMA CANAL WATERSHED

13. OVERVIEW
In order to successfully implement community based ecotourism in the Panama Canal Watershed, communities must be included in planning, decision-making, and policy-making at local, regional and national levels. They also will need capacity building to coordinate, plan, and implement their own CBE projects. Specific methods have been used successfully in other countries to facilitate this process. Recommendations will be based upon these successes and will be tailored for Panama.

14. INTER-INSTITUTIONAL FRAMEWORK FOR SUSTAINABLE HERITAGE TOURISM

Dr. Hana Ayala’s sustainable heritage tourism vision has the support of the key players in Panama’s government, NGO community, research community, and the private sector. An Inter-institutional Coordinating Committee for sustainable heritage tourism has been formed, which is developing an Inter-institutional Framework for Sustainable Heritage Tourism. The only weak link in this vision is community participation. It is recommended that the Inter-institutional Committee create a framework that purposively includes community representatives. If community representatives are not involved in macro-level planning, it is unlikely that sustainable heritage tourism will actually benefit those living in and near valuable environments that need to be conserved. And if locals do not benefit from tourism, they will not adopt practices (including CBE) that protect the local environments that other groups such as hoteliers wish to market. Put precisely, without community buy-in, sustainable heritage tourism will not work.

15. PANAMA CANAL WATERSHED PARTICIPATORY PLANNING PROCESS

The PCW has been chosen by IPAT as the initial area for pilot sustainable heritage tourism development. Initial planning and implementation of pilot tourism projects in the PCW are already in process; therefore, it is important to create a mechanism that allows for community involvement and that promotes conservation. It is recommended that a Ecotourism Participatory Planning Process that leads to an Ecotourism Participatory Planning Workshop be implemented in the PCW. The output of this Participatory Planning Process will be an Agreement on Ecotourism Policy and Best Practices for the PCW. This agreement, and the process that facilitates it, subsequently can be used as a model for other areas in Panama.

It is suggested that a methodology developed by Conservation International (CI), a NGO based in Washington, DC, be used in the participatory planning process.2 This methodology has been

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2 CI is one of the few international NGOs that has successfully created CBE projects in countries worldwide. One reason for their success has been that they approach CBE as conservation enterprises. CBE cannot just focus on building infrastructure, but also must focus on how communities can be trained in marketing, promotion, and business administration skills. At this time CI is managing and partially funding a CBE project with the Naso (Teribe) in the
successful elsewhere, including Guatemala and Peru. The challenge lies in the complexity of the issue. Ecotourism involves many actors, including tourists (as consumers), regional and national government agencies and the private sector, and also managers of protected areas, nongovernmental organizations, local communities and native peoples and many others (Bonilla 1997). If these groups have not created a plan by consensus, then conflict almost always arises between the various players, with the result being that ecotourism creates more problems than it solves.

This Ecotourism Participatory Planning Process brings together five sectors: (1) community representatives, (2) CBOs, NGOs, and research organizations, such as STRI (3) relevant government agencies, such as IPAT, INRENARE, and ARI, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies, hotel operators, and other business persons.

Should consultants with experience in participatory planning for ecotourism be hired, the Participatory Planning Process would follow this approximate action plan:

a) NGO Workshop
   Some months before the actual Participatory Planning Workshop, a three-day NGO Workshop will take place to develop a methodology and framework for building local NGO and government capacity to conduct Participatory Planning Workshops. This is similar to a train-the-trainers approach but would focus on developing a methodology that everyone feels comfortable and committed to applying. Some of the participants would be certified as facilitators and would help with the Participatory Planning Workshop. In addition, NGOs who attend would take the lead in conducting Community Education Workshops.

b) Community Education Workshops
   These workshops, which will be facilitated by NGOs, will prepare the communities to participate fully in the planning process. Materials for the Community Education Workshops will be made available to NGOs before the NGO Workshop; hence, Community Education Workshops can occur before and after the NGO Workshop.

c) Participatory Planning Workshop
   Working with partner facilitators chosen from the NGO Workshop, the consultants will conduct a three-day workshop of 30-40 people from these five sectors: (1) community

_buffer area adjacent to Amistad park: the Teribe Ecotourism Capacity Building and Development Project. CI also is involved in an ethnobotany project in the same area: the Teribe Community Traditional Medicine Project. The purpose of these projects is to conserve Naso culture and biological diversity, and the two projects have strong links because tourists are interested in ethnobotany. FUNDESPA, a Panamanian NGO, and INRENARE are counterparts in the projects. Linking biodiversity conservation with indigenous knowledge systems and ecotourism creates a type of _ethnotourism_ that holds great potential for Panama._
representatives, (2) CBOs, NGOs, and research organizations (3) relevant government agencies, (4) relevant donor organizations, and (5) the private sector.

16. COMMUNITY BASED ECOTOURISM COMMITTEES

Representatives from existent CBE Committees should attend the Participatory Planning Workshop; however, when no such Committees exist, NGOs will help select community members interested in ecotourism to attend. Before, during, and after the NGO Workshop, NGOS and CBOs must organize CBE Committees within communities.

There are two basic types of CBE Committees:

I. CBE Committees
   a) one CBE Committee per community
   b) one CBE Committee per community cluster

II. Coordinating CBE Committees

A CBE Committee is a committee that is based: (1) within one community or (2) within a cluster of communities that are within relatively easy access of one another and that will strongly benefit from working together on CBE.

A Coordinating CBE Committee is a committee that oversees and coordinates CBE in a specific area (such as the Chagres River Biological Corridor, Lake Gatún Recreational Area, or Chagres Park).

An example of a CBE Committee that is within only one community is the CBE Committee in the Embera community of Parará Purú in Chagres Park. At this time, Parará Purú has its own Ecotourism Committee. However, in order to create a tourism package, the Parará Purú CBE Committee will eventually need to send a representative to a Chagres Park Coordinating CBE Committee once such a Coordinating Committee is established. The Coordinating CBE Committee would help Parará Purú to link with other communities in Lake Alajuela to create a tourism package that is highly marketable.

In general, it is suggested that CBE Committees be organized according to practical needs and limitations. Also, every effort must be made to include women in CBE Committees if women are to benefit from CBE. Communities that are less than an hour’s walk from each other usually would benefit from close coordination and should set up mutual CBE Committees and then send representatives to a Coordinating CBE Committee. Communities that cannot reach each other easily or that have problems working together should create internal CBE Committees that then send representatives to a Coordinating CBE Committee.

Although other areas need to form CBE Committees, the results from this specific study suggest that the following CBE Coordinating Committees should be formed:
X  Chagres River Biological Corridor

There should be one CBE committee for the four communities of Santa Rosa, Guayabalito, Aguas Claras, and Palenque. If other communities in the corridor decide to participate in CBE, all the Chagres River Biological Corridor communities should participate in a Coordinating CBE Committee.

X  Lake Gatún Recreational Area

Corregidor Grimaldo Rojas and the Honorable H. R. Marco Hughes (representante) would like approximately seven communities in their jurisdictional area to partake in CBE. Each individual community, such as Limón and Alfagía, should have its own internal CBE Committee. In addition, communities should participate in a Lake Gatún Recreational Area CBE Coordinating Committee.

X  Chagres Park

Each individual community, such as Victoriano Lorenzo, Parará Purú, San Juan de Pequeni/La Bonga, San Vicente de Tranquilla, Peñas Blancas, Dos Sesenta, Boquerón Abajo, Boquerón Arriba, and Salamanca, should have its own internal CBE Committee. In addition, communities should participate in a Chagres Park CBE Coordinating Committee.

17. LOCAL PARTICIPATORY PLANNING WORKSHOPS

After the initial Participatory Planning Workshop, CBOs and NGOS should engage in localized participatory planning workshops based upon: (1) the areas where they are currently working, and (2) creating marketable tourism packages. These workshops will be facilitated by local NGOs, CBOs, and community organizers who attended the initial Participatory Planning Workshop and learned the methodology. These organizations can apply for grants or business sponsorship to replicate the Participatory Planning Process. One source of funding for such workshops and for funding for subsequent capacity building is the NGO Fundación Natura.

Local participatory planning workshops must include: (1) CBE committee representatives, (2) CBOs, NGOs, and research organizations, such as STRI, (3) relevant government agencies, such as IPAT, INRENARE, and ARI, (4) relevant donor organizations, and (5) the private sector, particularly tour agencies, hotel operators, and other business persons. Those attending these workshops, however, should be stakeholders at the local level. The outcome of the workshop is to create a local ecotourism plan of action and agreements. Again, gender issues must be considered in these workshops and every effort must be made to include women so that they have a strong voice in the local CBE process.

The private sector (tour operators, hotels, eco-resorts, etc.) will benefit immensely from local participatory planning because they can liaise with communities and, thus, create a product that not only benefits communities and protects the environment, but also is a product that they can market.
In addition, the private sector could market themselves as having contributed to community conservation efforts (an important advertising tool in the current tourism market).

In general, however, one program that must be funded concurrently with any CBE projects is a community game guard system, whereby communities members within protected areas and their buffer zones work and are paid to protect wildlife. Should ecotourism projects be funded without this, over-hunting could increase. For example, if a path is cleared as a hiking trail, it is likely that more hunters will have deeper access into the forest, unless a community game guard system is in place.

Some of the issues that need to be discussed in the local participatory planning workshops are:
- how to link CBE to conservation (particularly so as to reduce over-hunting)
- how to create community game guards systems (including women as game guards)
- how the five sectors can work together to help each other create sustainable ecotourism, including CBE. Examples: nature tourism, wildlife viewing, fishing, adventure (canoeing, sea kayaking, rafting, horseback riding), culture and traditional knowledge, micro-enterprises (crafts, restaurants, accommodations), research and experiential learning.
- coordinating with other communities in the area to create tourism packages
- infrastructure needs
- capacity building needs
- marketing and promotion
- how communities and other sectors can learn business skills
- distribution of resources (so as to benefit women as well as men)
- empowerment of women (including encouraging them to become guides)
- funding
- how to monitor and evaluate sustainable ecotourism and CBE

18. ORGANIZATIONS THAT CAN PROVIDE COMMUNITY BASED ECOTOURISM CAPACITY BUILDING IN THE PANAMA CANAL WATERSHED

The following sources can aid communities in capacity building in specific areas (Annex 8):

Asociación Nacional para la Conservación de la Naturaleza (ANCON)
- organizing Ecotourism Committees
- Participatory Planning Workshops
- general CBE capacity building
- raising game animals, such as pacas and iguanas

Asociación para la Promoción del Saneamiento Ambiental en Comunidad (APROSAC)
- organizing Ecotourism Committees
- general capacity building
- small and micro-enterprise development in ecotourism
Asociación Nacional de Guías de Ecoturismo (ANGE)
X guide training to local community members at no cost
Asociación Tecnica Pro-Desarollo de la Pesca Artesanal para La Conservación y Restablecimiento de los Recursos Marinos (APROREMAR)
X organizing Ecotourism Committees
X helping communities with proposal writing for grants
X Participatory Planning Workshops
X general CBE capacity building
X raising game animals, such as pacas and iguanas
Centro de Estudios y Accion Social Panameño (CEASPA)
X micro-enterprise development with a focus on women
X business administration
Corporación Microfinanciera Nacional (MiBanco)
X small loans of up to B/.100 to participants in groups of 10-15 people. Loans to be repaid in 16 weekly installments. After initial loan is repaid, participant can borrow as much as B/.200 for next cycle. Ninety percent of loan participants are women. Loans are made to unemployed or self-employed with some experience in the proposed business enterprise (Neva 1998).
Fundación Natura
X funding for CBE planning
X funding for CBE projects
Fundación Para el Desarrollo Sostenible de Panamá (FUNDESPA)
X Participatory Planning Workshops
X general CBE capacity building
Fundación Para la Promoción de la Mujer
X micro-enterprise development with a focus on women
X business administration
TechnoServe
X organizing Ecotourism Committees
X helping communities with proposal writing for grants
X Participatory Planning Workshops
X general CBE capacity building
X raising game animals, such as pacas and iguanas
ANNEXES

ANNEX 1  INTRODUCTION TO ECOTOURISM USED FOR COMMUNITY BASED ECOTOURISM SURVEY

INTRODUCTION TO ECOTOURISM

WHAT IS ECOTOURISM?

— Ecotourism is probably a new concept for most of you. It is a special type of tourism that brings tourists to local communities and also protects the local environment. Ecotourism is run by the community, not by those from outside, although people from outside often work with communities so that they can benefit from ecotourism.

— By the year 2000, tourism will be the world's largest industry.

— Ecotourism is growing faster than any other type of tourism.

— Ecotourists do not want big, fancy hotels, discos, or boutiques. They want simple, comfortable accommodations that allow them to be in nature and to meet local people from the community.

— Ecotourism should supplement other forms of income-earning. A community can NOT live off of ecotourism alone.

ECOTOURISM IN PANAMA

— Rainforests, such as those that exist in Panama, are THE most popular ecotourism destination.

— Costa Rica (Panama's neighbor) and Belize (located in Central America) are the most visited ecotourism countries in the world.

— Panama is very similar to both Costa Rica and Belize because it has rainforests, birds, and animals that tourists want to see. This means that Panama could be very popular with ecotourists.

— The Autoridad Regional Interoceanica (ARI) has plans to create a nature tourism center in Gamboa. Tourists will travel from Gamboa to visit Lake Gatún, Lake Alajuela, and all the parks. When this happens, communities should already have their own ecotourism businesses in place so that they can benefit from additional tourists who will eventually come from Gamboa. Communities should also realize that ARI's nature tourism plans for Gamboa may take a very long time to happen. Communities do NOT need to depend on the construction of the Gamboa Nature Tourism Center to attract ecotourists.

— Some Panamanian ecotourism agencies already exist; however, at this time, communities make very little money from the tourists who are brought by these travel agencies. If communities organize and plan, they could benefit from working with these tour agencies to increase tourism to their own communities.
— For ecotourism to be successful, it must come from the needs and ideas of communities themselves, not from a business or agency outside the community.
— Communities must organize and decide how they wish to plan for ecotourism.

DIFFERENT TYPES OF ECOTOURISM

— **Wildlife viewing**
The most popular activity for ecotourists is wildlife viewing, including birdwatching. Many wildlife viewers like to take photographs, so if there is a particularly good area for photos to be taken of animals, birds, reptiles, or insects, communities should note this. Communities should also note if animals, birds, fish, etc. migrate at a certain time. For example, if butterflies come during a certain month, communities need to note this so that they can plan to have tourists come to their community at that time.

— **Adventure tourism**
Another popular activity is adventure recreation, such as: canoeing, hiking, rafting, and horseback riding. Communities that are near each other and that can work together can create exciting adventure ecotourism. For example, communities can set up camping sites and sell food to tourists who canoe from one community to another. The benefit of this is that communities rotate caring for tourists and are not overwhelmed by them. It also allows all the communities in one area to benefit from tourism.

— **Conservation work**
Ecotourists also enjoy living in communities and donating their labor and knowledge to communities in conservation efforts. Tourists can donate their labor in areas such as: trail construction and maintenance, tree planting, building campsites, and studying birds and wildlife, etc. This type of tourism experience particularly appeals to families traveling together.

— **Community immersion**
Some ecotourists like to live in another culture. Tourists can live within a community and partake in the community's everyday life, helping with daily tasks and spending some time viewing the surrounding the natural environment. This type of tourism experience particularly appeals to families traveling together.

— **Knowledge exchange**
In this type of ecotourism, tourists exchange knowledge with local community members. The tourists live in the community and help the community with a variety of tasks (from building lodges to planting gardens). The community gains new skills and knowledge from the visitor and the visitor learns from the community about their way of life. For example, a tourist might teach the community about a new way to build latrines or about using solar energy. This type of tourism experience particularly appeals to families traveling together.

SOME EXAMPLES OF ECOTOURISM BUSINESSES FOR COMMUNITIES TO CONSIDER
Community members can:

— provide guides to teach tourists about local birds and animals
— provide fishing guides
— provide trails for tourists
— show tourists tree nurseries and medicinal plant gardens
— rent paddle-canoes to tourists
— rent horses to tourists
  (The horses must be very healthy or tourists will become upset that the animals are not well-cared for. The horses must not be overworked.)
— provide a guide to tourists for horseback riding tours
— sell handicrafts made by local peoples to tourists
— provide food for tourists
  (They can run a restaurant and/or sell food to tourists who will be taking trips into the rainforest or on the water.)
— provide campsites for tourists
— provide permanent tented campsites for tourists
— provide open-sided shelters with thatched roofs for tourists to place their tents
— provide lodging in their own homes for tourists
— build a guest-house for tourists
— provide clean camping areas for tourists with cooking (barbecue) facilities
— provide drivers who can transport communities by motorized transport (canoe and car) to a variety of ecotourism destinations

SOME THINGS THAT COMMUNITIES SHOULD KNOW IF THEY ARE TO HAVE ECOTOURISM

— Most ecotourists come to see wildlife and birds. Communities must protect wildlife so that it is there for tourists to see. If a community refuses to try to stop over-hunting, ecotourism is probably NOT the right business for that community.
— Garbage: The community must be very clean. This can not be over-emphasized! There can not be any litter on the ground. Garbage must be collected and disposed of properly. It is best if the community has begun a recycling program. The community must be able to take care of the extra garbage that comes from having visitors.
— Human waste: very clean latrines with toilet paper must be available for the tourists wherever they are staying (campsite, someone's home, or guest-house).
— Clean, safe water must be available to tourists for drinking.
— Food must be prepared in a hygienic manner for tourists.
— Clean safe bathing facilities must be available to tourists if they are not camping. If they are camping, a clean safe swimming area (such as a river or lake) can be offered.
— Most ecotourists want any houses, guest-houses, or campsites that they stay in to provide some privacy.
— Ecotourists should have an option to stay in accommodations that do NOT have children.
— Most ecotourists like to stay in structures that are built of natural materials such as (1) wood with thatched roofs (palm) or (2) wood and cement with thatched roofs.
— If the structures are built of cement, ecotourists like plenty of natural light. They do not like small windows.
— Ecotourists do not mind staying in communities that do not have electricity. In fact, some prefer this. Kerosene lamps can be provided for light.
— Most ecotourists enjoy arriving at a community by boat or canoe.
— It is better to have fewer tourists who stay longer than to have more tourists who come for less time.
— International tourists (tourists from the US, Canada, and Europe) travel most often from June - September and from December - March.
— The age of most ecotourists is 35-54.
— There are an equal number of male and female ecotourists.
— Many ecotourists are couples traveling together.
— Many ecotourists travel as a family. Ecotourism for families will increase in popularity in the future.
— Life jackets must be worn by all tourists who are in boats or canoes. Tourists can rent these from the communities.
— If there are any community members who speak English, they should be encouraged to help with the ecotourism project since many of the tourists will ONLY speak English.
— It is good for someone in the community to be trained as a doctor, nurse, or to know first-aid so that they can help any tourist who falls ill.
— Communities must have a plan as to how they will evacuate a seriously ill or injured tourist to the hospital in Panama City.
ECOTOURISM KEY-INFORMANT INTERVIEW

[Please fill-in Question Numbers 1-5 below in your notebook before beginning interview.]

1. Name of community:

2. Date of interview:

3. Time of interview:

4. Name of person interviewed and gender (male or female):

5. Position [if applicable] of person interviewed:

[Interviewers, please use the following introduction as a guideline.]

_ My name is ............(name of interviewer). I am working with United States Agency for International Development (USAID) and the National Environmental Commission, which is part of the Panamanian Ministry of Planning. We are conducting a survey on how communities might engage in community based ecotourism.

[If Tara is with you, please introduce her.]

_ My supervisor’s name is Tara Lumpkin. She is from the United States and is in Panama for almost a year on a fellowship provided by the Agencia Internacional para Desarrollo de los Estados Unidos.

_ What is ecotourism? The purpose of ecotourism is 1) to protect the local environment (including wildlife and forests) upon which communities depend, and 2) to provide communities with an increased income from visitors who come to see nature and meet the community. Successful ecotourism is community-run and community-organized._

[Ask for the following in a conversational manner.]

6. What is your mailing address? [if available]

7. What is your telephone number? [if available]

8. What is your age?
9. How long have you lived in this community?

OWNERSHIP OF NATURAL RESOURCES

10. Do most people in this community own land or do they solely have rights to use the land?

11. How many women own land or have rights to use the land?

12. Does anyone in the community own forested land?
   [If the answer is no, skip to #15]

13. Do any women own forested land?
   [If the answer is no, skip to #15]

14. How many?

WATER

15. Does your community have a system that provides clean drinking water?
   [If the answer is no, skip to #18]

16. What type of system does the community have?

17. Do all community members have access to this system?

18. How do community members use local rivers and lakes?

AGRICULTURE

19. Do community members plant any crops, vegetables, etc.? 
   [If the answer is no, skip to #24]

20. Who takes part in these activities?

21. What type of planting and harvesting techniques are used?

22. What time of year does planting, weeding, and harvesting occur and which are the busiest times?
23. Do community members use pesticides or chemical fertilizers?

**Ranching**

24. Do community members raise any livestock?
   [If the answer is _no_, skip to #26.]

25. Who takes part in these activities?

**Animal Husbandry**

26. Does the community raise any other food animals, such as chickens, conejos pintados, iguanas, goats etc.?
   [If the answer is _no_, skip to #30]

27. Who takes part in these activities?

28. Are there any problems with agriculture, ranching, or animal husbandry in this community?
   [If the answer is _no_, skip to 30]

29. How can these problems best be solved?

**Forests**

30. In what ways does the community use the surrounding forest?

31. Does anyone in the community collect *non-timber products* such as medicinal plants, wild plant foods, leaves for thatching, etc.?
   [If the answer is _no_, skip to #33]

32. Who takes part in these activities?

33. Does anyone in the community harvest *timber products* such as wood for cooking, wood for building houses, wood for building canoes?
   [If the answer is _no_, skip to #35]

34. Who takes part in these activities?

35. Does anyone in the community hunt *wildlife* for personal consumption and/or to sell the meat?
   [If the answer is _no_, skip to #41]
36. What wildlife is hunted for personal consumption?

37. Who hunts?
38. What wildlife is hunted to sell the meat?

39. Who takes part in these activities?

40. Does the hunting occur in protected areas?

41. How are relations between community members and protected area managers?

42. Has hunting depleted wildlife?
   [If the answer is _no_, skip to #44]

43. How can this problem be solved?

**Other Economic Activities**

44. What other economic activities do community members take part in?

45. Which community members take part in these activities?

46. Are any community members often away from the community during the day to take part in these activities?

**Community Structure**

47. What organizations, cooperatives, unions, clubs and groups exist in this community?
   [If none exist, skip to #50]

48. How many men/women are in these groups?
   [approximate number if exact number is not known]

49. Which of these groups might be able to participate in community based ecotourism?

50. Who are your community leaders?
   [Prompt or probe to find out about: political leaders, local teachers, traditional healers, agricultural extension agents, traditional authorities, persons who lend money, persons who contact the government for the community, persons from whom the community buys goods, persons whom others ask for advice, etc.]
[List them by name and what they do]

51. Is there a place to buy groceries in your community?

**INFRASTRUCTURE & ENVIRONMENTAL HEALTH**

52. Are there any months when it is difficult to reach your community?  
    [if no, skip to #54]

53. Why is it difficult to reach your community during these months?

54. How is human waste handled in your community (latrines, flush toilets, etc.)?

55. How is garbage handled in your community?

56. Would your community be willing to start a recycling program?

57. Where is the closest medical facility?

58. How long does it take to get to there?
ANNEX 3  FOCUS GROUP INTERVIEW USED FOR COMMUNITY BASED ECOTOURISM SURVEY

ECOTOURISM FOCUS GROUP QUESTIONNAIRE

[Please fill-in Question Numbers 1-3 before beginning focus group.]

1. Name of community:

2. Date of focus group:

3. Time of focus group:

[Interviewers, please use the following introduction as a guideline.]

   _My name is ............(name of interviewer). I am working with the United States Agency for International Development (USAID) and the National Environmental Commission, which is part of the Panamanian Ministry of Planning. We are conducting a survey on how communities might engage in community based ecotourism.

[If Tara is with you, please introduce her.]

   _My supervisor’s name is Tara Lumpkin. She is from the United States and is in Panama for almost a year on a fellowship provided by the Agencia Internacional para Desarrollo de los Estados Unidos.

   _What is ecotourism? The purpose of ecotourism is 1) to protect the local environment (including wildlife and forests) upon which communities depend, and 2) to provide communities with an increased income from visitors who come to see nature and meet the community. Successful ecotourism is community-run and community-organized.

   _This group will discuss what resources (both natural and human) exist in your community that might make it appropriate for ecotourism. We also want to learn what sort of capacity building your community might need to engage in ecotourism._

4. Name and gender (male or female) of persons in group:

NATURE AND ADVENTURE ECOTOURISM

5. What would attract tourists to your community or the surrounding area?
6. Do any community members have enough knowledge of wildlife, fishing or other attractions to act as guides for visitors?
7. Would you be interested in having some community members trained to be community gamekeepers so as to prevent over-hunting of wildlife?

COMMUNITY BASED ACTIVITIES

8. Are there any activities in your community that visitors might like to participate in or watch?

TYPES OF COMMUNITY BASED ECOTOURISM

9. I am going to read a list of different types of visitors that you might want to attract to your community. Please allow me to read through the list twice, then we can discuss which, if any, of these might appeal to your community, and why.

[Read through list completely twice before allowing people to respond]
X Visitors brought by outside tour groups
X Visitors brought by members of the community
X Unescorted visitors
X Schoolchildren and students who visit the community to be educated about the environment
X Scientists who conduct research
X Visitors who come to see wildlife
X Hikers
X Horseback riders
X Birdwatchers
X Canoers
X Fishers

Which, if any, of these appeal to your community, and why?

ORGANIZING

10. How would your community organize to create community based ecotourism?
ANNEX 4  POSSIBLE GUIDES FOR SURVEYED COMMUNITIES

Santa Rosa

X Narciso Rojas (junior) - horseback riding guide
X Rodolfo Rojas (junior) - fishing guide
X Jaime Maure - fishing guide
X Alexis Castillo

Guayabalito

X Tomás Becerra
X Señor Cheto

Aguas Claras

X Nereida Jordan’s brothers
X Señor Eladio knows the trails in Soberania and can teach younger community members about them
X Señor Sabino Jordan knows the trails in Soberania and can teach younger community members about them
X Jorge Toribio
X Sergio Toribio
X Yulitza (Paula de Gracia’s niece) (woman)
X Justino Gil
X Edgardo Gil

Palenque

X Alfredo Becerra
X Adan Becerra
X Milena (woman)
X Yoselyn (woman)
X Elydibeth Almanza (woman)
X Catalino Gómez

Limón

X Darna Garcia (woman)
X Odelis Luna (woman)
X Euclides Castillo (currently is a fishing guide)
X Rodolfo Arrocha
X Ricardo Arrocha
X Augustín Vergara
X César Ceballos (canoe owner)
X Hector Maltes (owner of boat that can hold seven people)

Alfagía

X Francisco Benítez
X Fredy Augusto Castillo
X José Flores Ceballos
X Isaías Flores
X Martínez González
X Ramon Reyes (and his sons)
X Agustín Reyes
X José Pablo
X Antía Sánchez (woman -- José Pablo’s wife)
X Eulalio Villarrieta (fishing guide)
X Florencio González (fishing guide)

Victoriano Lorenzo

X Manuel Caisamo (Emberá)
X Alexander Cabrera

Parará Purú

X numerous male community members
## Annex 5 Relevant Terms

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<th>Panamanian</th>
<th>Latin</th>
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<td>venado corzo</td>
<td><em>Mazama americana</em></td>
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<td>tapir</td>
<td>macho de monte</td>
<td><em>Tapirus bairdii</em></td>
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<td>saíno, puerco de monte</td>
<td><em>Tayassu tajacu</em></td>
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<td>ñeque</td>
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<td>conejo poncho o capíbara</td>
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<td>golden frog</td>
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<td><em>Atelopus zeteki</em></td>
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ANNEX 6 RELEVANT COMMUNITY BASED ECOTOURISM CONTACTS

Asociación Nacional para la Conservación de la Naturaleza (ANCON)
Oscar Vallarino B., Director Ejecutivo
Apartado 1387
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Email: oscarv@ancon.org
Home page: http://www.ancon.org

Asociación Nacional de Guias de Ecoturismo (ANGE)
Anayansi Castillo
Republicá de Panamá
Telephone Miraflores: 272 -8325
Telephone BCI: 272-2124/2142
Telephone Tupper at STRI: 227-6022

Asociación para la Promoción del Saneamiento Ambiental en Comunidad (APROSAC)
Maribel Rodriguez, President
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Avenida Sur 2882
Santiago de Veraguas
República de Panamá
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Fax: 998-6419
Email: aprosac@pananet.com

Asociación Tecnica Pro-Desarollo de la Pesca Artesanal para La Conservación y Restablecimiento de los Recursos Marinos (APROREMAR)
Miguel Johnson, Presidente
Apartado 1496
Panamá
República de Panamá
Telephone: 444-0933 (casa)
Fax: 441-8881

Carmen Barría
Junta Communal
República de Panamá
Telephone: 434-0232
(community organizer for Cluster One)
Manuel Caisamo, Emberá Traditional Authority
Victoriano Lorenzo
República de Panamá
(To contact him, contact Barnardo Chami by radio phone at La Cabima entrance to Chagres Park INRENARE station in Chagres Park and ask Bernardo to give Manuel a message)

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(Has canoe that can transport people to Alfagía)

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Oliver Hillel, Director of Ecotourism Program
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(Says he will organize ecotourism in Cluster Two)

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Chinchilla, Delmy L.

Colón, Daniel

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Instituto Nacional de Recursos Naturales Renovables


Instituto Panameño de Turismo, and Organization of the American States

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