

ECOTOURISM IN PANAMA

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Introduction

According to Jonathan Tourtellot, Director of Sustainable Tourism at the National Geographic Society: “The tourism industry does not merely make use of the destinations on which it depends; it interacts with them. It can sustain them. It can ruin them. Sometimes, it can save them.” (Tourtellot, p. 2) What direction will tourism in Panama take? Will the land bridge of the Americas be sustained as a “Mecca for tropical research,” as Hector Guzman of the Smithsonian Tropical Research Institute describes? Or is Panama doomed by “a canal mentality — it lets anyone and anything move through it, as long as they pay,” as the reporter who quoted him perceives? (Paternostro, pp. 2–3)

The importance of tourism in Panama is evident in government policy and tourism statistics. Law No. 8, which was passed in 1994, officially established tourism as an industry of national interest. (Republic of Panama, Law No. 8, Art. 3) The law sets forth incentives for investment in tourism and defines the respon-

sibilities of Panama’s Tourism Bureau in carrying out these incentives. Tourism is also one of the sectors that the Inter-American Development Bank expects to provide an opportunity for economic development and rural economic development. (“IDB...,” p. 20) Between 1990 and 2004, tourist arrivals in Panama grew at an annual rate of 7.9 percent, and tourism receipts at a rate of 10.4 percent. Arrivals totaled 621,000 and receipts totaled \$685 million in 2004. (World Tourism Organization) The number of arrivals is equivalent to about 20 percent of Panama’s estimated 2005 population of 3.2 million people. (World Bank, 2006)

Eight out of the nine areas declared as Tourism Development Zones of National Interest are described as having natural attractions, making it essential to consider the environmental impacts of tourism development. (Business Panama) Conservation International, a nonprofit environmental organization, named Panama one of the hotspot countries that have experienced tourism growth greater than 100 percent between 1990 and 2000. (Christ et al., p. 13) As defined by Meyers et al., “Hotspots are

regions that harbor a great diversity of endemic species and, at the same time, have been significantly impacted and altered by human activities.” (Christ et al., p. 3, quoting Meyers et al.) The continued development of tourism in Panama, therefore, should not be undertaken in a manner that contributes to the alteration of its natural heritage. Rather, ecotourism should be carefully developed to save Panama’s natural heritage.

In this article, I explore the potential that ecotourism has for controlling the negative impacts of tourism growth and contributing to environmental conservation in Panama. First I provide an overview of ecotourism as it relates to responsible development and conservation. Then I examine the strengths and shortcomings of the government of Panama in contributing to the application of ecotourism, and I consider how Panama’s environmental community and the international community provide essential support and oversight. I then introduce certification programs and their potential to hold firms to higher environmental standards. Finally, I consider the outlook for ecotourism in Panama.

The Meaning and Vision of Ecotourism

Upon hearing the word ecotourism, one might think of backpacking in the mountains, flying through the rainforest canopy on a zipline, exploring ancient Mayan ruins, or searching for rare birds. Activities such as these have been recognized as being related to ecotourism (Wight, p. 2), but they also fall under the domain of nature-based tourism and adventure tourism. Nature-based tourism can be differentiated from conventional tourism in that it takes place in natural surroundings, while adventure tourism involves activities in natural surroundings that require physical exertion. (Rome, p. 4)

According to Martha Honey, ecotourism is not differentiable as another niche market. It is instead identified as “a philosophy, a set of practices and principles.” (Christ et al., p. 4, quoting Honey) This philosophy of ecotourism is defined by the International Ecotourism Society as “responsible travel to natural areas

that conserves the environment and improves the wellbeing of the local people.” To be considered ecotourism, tourism should be developed in a way that minimizes the negative impacts of land conversion and the increased pressure from visitors. The interactions between visitors and the local population should be positive and should develop an understanding of the environment and the culture. The financial benefits of tourism should contribute to conservation and local income. If these principles are followed, ecotourism will provide a means for local economic development that also protects the destination’s natural heritage. (International Ecotourism Society)

However, recent trends in conventional tourism contrast sharply with the principles of ecotourism. In 1992 the World Conservation Union named tourism as the second most serious threat to protected areas. (Gossling, p. 314) In 2003 the United Nations Environmental Program reported in its most current Global Environmental Outlook for Latin America and the Caribbean that uncontrolled tourism development is a major cause of coastal degradation. (Global Environmental Outlook..., p. 93) If the infrastructure and facilities for the tourism industry are not appropriately planned so as to have the least possible impact, land conversion and pollution can overwhelm the ecosystem functions of the area. (Christ et al., p. 6) The potential for negative impacts is especially of concern in the remote locations of interest for ecotourism because such locations usually do not have well-developed infrastructure for dealing with waste and sewage.

Protecting the environment is important because human life depends on the goods and services that nature provides. These come directly in the form of food, medicine, and building materials, and indirectly as environmental regulation, soil conservation, and pollution control, for example. (Christ et al., p. 2) Preserving these goods and services requires an understanding of how they are produced, how they depend on the ecosystems of which they are a part, and how human activities influence them. For example, coral reefs provide recreational services for tourists, protect coastlines from erosion, and provide food and shelter for

fish, which in turn provide food for humans. If coastal development leads to excessive runoff and pollution and the health of the reef is compromised, the goods and services provided by the reef will be lost. (Botkin and Keller, p. 12)

Applying the principles of ecotourism offers Panama the opportunity to deal with the negative impacts of tourism growth and to offer economic alternatives to citizens whose livelihoods would otherwise pose a threat to the environment. In order for these results to be achieved, ecotourism must be carefully monitored and managed. Impacts and indicators must be identified and prioritized based on an understanding of how tourism activities affect the environment, the local population, and the economy. Practical methods of measurement must be selected, and ranges of acceptable change need to be identified beyond which management actions are necessary to control the impacts. Staff must be trained and equipped to carry out monitoring, to analyze data, and to adjust management practices accordingly. (Rome, pp. 26–29)

Rome (1999) emphasizes the importance of stakeholder participation, coordination, and cooperation because natural areas are not sealed off from the rest of the country. What happens in the regions surrounding natural areas can be as important as what happens within them. If management decisions about what impacts are most important or what ranges of change are acceptable are imposed without taking into account the needs of the local population, these decisions will not elicit cooperation, and even legally protected natural areas will remain threatened. By building support and environmental awareness in the community, community members are more likely to take pride in the environment and conduct their livelihoods in a more environmentally sensitive manner.

Ecotourism in Panama

The Role of the Government

Adherence to the principles of ecotourism requires a degree of initiative, commitment, and cooperation of individuals within the tourism industry that may be beyond what one

can reasonably expect them to be willing to offer or to be capable of offering. These principles would have individuals place value on things that cannot be easily quantified and that may not seem to be of immediate, personal concern. As was apparent in the discussion of ecotourism above, it takes a great deal of information and planning to make environmentally responsible decisions. Even if it could be expected that each firm in the industry could develop its own monitoring program, there are environmental issues that occur on a larger scale than individuals would take into account. For example, a development 50 miles upstream from the coast can affect the functioning of coral reefs. In such cases, government intervention is usually deemed necessary. The government is presumably able to look at the human and environmental interactions within the country on a large scale and impose the appropriate regulations and fees to take into account the environmental costs that are overlooked by individuals.

The need for government action in addressing environmental issues is well recognized in Panama. The government passed a comprehensive environmental law in 1998, Law No. 41, and created the National Environmental Authority (ANAM) as the agency responsible to act as judge in the conflict between conservation and development, as guardian of natural resources, and as educator. (Winner) Panama is also party to more than 21 regional and international environmental agreements. (Parker et al., Section III, p. 1)

As judge in matters of conservation and development, ANAM is responsible for environmental impact assessments. Any new project or improvement project proposed for construction in Panama is subject to the approval of ANAM and must be submitted with an environmental impact study. The approval of projects may be subject to the adoption of preventative or mitigating measures to limit negative impacts. (Parker et al., Section III, p. 7) The proficient completion of environmental impact assessments is dependent on accurate and up-to-date environmental information at ANAM's disposal. The National System of Environmental Information works to fulfill this need by generating indicators to

assess the status and evolution of Panama's natural resources and environment. (Parker et al., Section III, p. 5) With the help of the World Bank Atlantic Mesoamerican Biological Corridor (PAMBC) Project, ANAM created vegetation and ecosystem maps of the country for the first time in 2000, updated the maps in 2004, and introduced water quality monitoring for 24 rivers. (World Bank, 2005, p. 8)

As guardian of natural resources, ANAM is responsible for the National System of Protected Areas (SINAP). The SINAP is composed of 65 areas totaling about 2.6 million hectares, or about 34 percent of the country. ("ANAM...") The World Bank PAMBC Project helped ANAM to develop technical guidelines for preparing management plans for the SINAP in 2000 and helped prepare management plans for four protected areas. In preparation for these management plans, vegetation maps on a more detailed scale of the individual protected areas were created, as were biodiversity databases. ANAM also initiated a program for monitoring the effectiveness of protected area management, a significant advance according to the World Bank. (World Bank, 2005, pp. 7–8, 11)

Environmental education and training was another important part of the PAMBC project. ANAM worked with the Ministry of Education to develop the Strategic Plan for Environmental Education to incorporate environmental education into the general curriculum of both elementary and high schools. The program also included training at the community level for community members and non-governmental organizations who were carrying out conservation subprojects. The training methods and materials were incorporated into the Network of Inter-Institutional Cooperation for Non-Formal Environmental Education, a step that will sustain the impact of the project. (World Bank, 2005, pp. 9–10) Additionally, ANAM's community outreach associated with the subprojects and education efforts was singled out as an important achievement. As the World Bank's PAMBC project evaluators observed, "The public perception of ANAM changed from being seen as an institution that restricted people's access to natural resources

to one that helped provide alternative livelihoods that were more environmentally friendly." (World Bank, 2005, pp. 11–12) The World Bank report also noted that people in buffer zones had become more aware of environmental issues and even, in some cases, adopted improved agricultural techniques. (p. 12)

The actions described above provide encouraging evidence that the government is working to provide an environment in which the principles of ecotourism are being extended beyond the initiatives of a few to the entire country. The required environmental impact studies for all development projects institutionalize the first principle — to minimize impacts. Moreover, the National System of Environmental Information provides the necessary information for making educated decisions as to what impacts need to be minimized and how they can be minimized. It also provides information for monitoring the success, or lack thereof, of preventative and mitigating measures. In support of the second and fourth principles, the National System of Protected Areas (SINAP) serves as a forum for raising environmental awareness among visitors and for collecting visitation fees that provide financial benefits for conservation. Management plans for the SINAP serve to ensure that visitation is low-impact, thus maintaining the integrity of the protected areas. Additionally, ANAM's environmental education and community outreach initiatives build environmental awareness among the local populations, which can lead to their empowerment and the opportunity to capture financial benefits — another principle of ecotourism. All of these measures provide the foundation and building blocks for establishing Panama as an ecotourism destination.

More to Be Done

While the government has clearly taken important steps that bode well for the successful development of ecotourism, like any country Panama is faced with certain realities that limit the government's ability to deal with environmental issues. Every government has limited resources and many important causes in need of support. In Panama, poverty reduction

programs not only compete for resources but also add pressure for development over conservation. In addition to the difficulty of maintaining sufficient funding, environmental management capacity is still being developed, especially at the local level. ANAM and the General Environmental Law that created it are only nine years old. When ANAM replaced the former environmental agency INRENARE, its responsibilities were increased without a corresponding increase in budget and staff. (Bathrick and Kernan, p. 11)

With insufficient budgets to maintain a well-trained staff, ANAM has lacked adequate personnel for environmental impact assessments (EIAs) and has had only a small number of technical specialists. The effective evaluation of EIAs has been further hampered by the lack of biological studies to provide baseline data for much of the country. (Parker et al., Section III, pp. 3, 7) Even for those areas for which the World Bank PAMBC Project did collect baseline data and images for vegetation mapping, the information was regarded as only scratching the surface of what is needed to make informed management decisions and to focus resources where they are most needed. (World Bank, 2005, p. 8) Additionally, environmental impact studies have not been required to present alternative versions of the same project for comparison. (Parker et al., Section III, p. 7) Without sufficient baseline data or alternative projects for comparison, the EIAs are a less meaningful tool for environmental protection.

The effectiveness of the National System of Protected Areas (SINAP) has also been limited by insufficient funds. What the U.S. Agency for International Development Panama Office (USAID/Panama) described as a considerable portion of the SINAP was designated in occupied areas for which the government has not purchased the rights. (Bathrick and Kernan, p. 6) While these and all areas of the SINAP are subject to protected area regulations, the enforcement of such regulations has been limited. It was observed by USAID/Panama in 2003 that only 36 of the then 51 protected areas had designated personnel. (Parker et al., Section I, p. 13) USAID/Panama's descriptions of two areas with staff are not encouraging.

In Chagres National Park, the administrative buildings were not well located so that the park staff had difficulty keeping track of visitors, controlling their actions, and collecting admission fees. In Camino de Cruces National Park, the park staff had not been able to control the access of garbage trucks that left trash in their wake when cutting through the park to reach the landfill on the other side. (Bathrick and Kernan, p. 15)

Outside of protected areas the challenge of building the capacity of environmental management at the local level is compounded by the fact that environmental management is just one of the areas in which the capacity of local management is still being developed. The government of Panama has been very centralized, leaving municipal governments without much experience in certain areas. In an assessment of the management capacity of a sample of ten municipalities, the Inter-American Development Bank reported that the following three areas had the most significant inadequacies: "(i) financial, tax and human resource management; (ii) management of local services; and (iii) local development planning and environmental management." To address these inadequacies, the Bank approved a loan for municipal modernization and decentralization in 2003. ("Program for Municipal Development...", p. 7)

The evidence presented above places doubt in the ability of the environmental initiatives of the government to control the environmental impacts of tourism growth. Without sufficient technical capacity and information to complete meaningful environmental impact assessments, impacts will not truly be minimized; and without sufficient staff and management capacity for protected areas, biodiversity will not be effectively preserved. However, considering the challenges facing the government of Panama — with poverty issues competing for financial resources and with environmental and local institutions still in a period of development — progress is being made. The question is whether tourism growth will outpace the government's ability to manage its impacts.

Support from the Environmental and International Communities

While the government is building its environmental management capacity, both Panama's environmental community and the international community are providing financial and technical support to help the progress of environmental management keep up with tourism growth. They are also holding the government accountable to meeting environmental standards by drawing attention to problems and scrutinizing government policies. Among those organizations active in Panama are the Smithsonian Tropical Research Institute, ANCON (the National Association for the Conservation of Nature), and the Panama Audubon Society, to name a few.

ANAM has received financial assistance for the National System of Protected Areas from the FIDECO fund (Panama's conservation trust fund) and from two debt-for-nature¹ swaps with the United States. The FIDECO fund began operating in 1996 with contributions from the government of Panama, USAID, and the Nature Conservancy and is administered by Fundacion Natura. (Bathrick and Kernan, pp. 7, 20) Debt swaps, facilitated by the Nature Conservancy, were negotiated with the U.S. to reduce Panama's debt by \$10 million in 2003 and \$10.9 million in 2004. In exchange, Panama has committed to contribute \$10 million over 14 years to Chagres National Park and \$10.9 million over 12 years to Darien National Park. Half of the money from each swap will go towards an endowment fund for the specified park, and the other half will finance conservation projects. (Peavey, 2003, 2004) These contributions are especially significant considering that in 1995 the budget of Darien National Park was \$665,000 with only \$110,000 coming from ANAM's predecessor, INRENARE. (United Nations...)

¹A debt-for-nature swap is a tool for reducing the foreign debt burden of countries with important at-risk environmental resources. In exchange for the reduction in foreign debt, the debtor country is obligated to generate funds for conservation. Debt-for-nature swaps are approved under the Tropical Forest Conservation Act of 1998 in the United States.

As an example of the international and environmental communities' technical and operational support to local governments, USAID facilitated the creation of municipal environmental plans (PAMs) for three municipalities within the Panama Canal watershed. An inter-institutional environmental commission made up of local government officials, local representatives of the national government, non-governmental organizations (NGOs), and private sector representatives was created in each municipality. Each commission was responsible for developing the PAMs, which were presented to the press and government officials in 2000. The inter-institutional nature of the process improved coordination among the different government offices and NGOs with a stake in environmental issues, and the resulting PAMs provided a focal point to stimulate action. NGOs were able to provide technical support and develop specific projects that were given official endorsement. Twenty-one NGOs also developed relationships among themselves around the PAMs, forming the Federation for Integral Sustained Development of the PAMs (FEDISPAM). This initiative bodes well for the long-term success of the PAMs. (Cardwell)

The environmental community's ability to scrutinize and influence government actions was proven in the adoption of a more conservation-friendly version of the Law for Coiba National Park in July 2004. Beginning in 2001 the level of development to be allowed in the park was under debate in the Legislative Assembly. The environmental community favored a plan to prioritize conservation, while President Moscoso favored development. A study initiated by the non-profit organization AVINA helped to tip the scales in favor of the bill supported by the environmental community. The study developed fifteen different development scenarios, varying the level of hotel development on Coiba Island versus the mainland, and compared each of them based on the estimated economic and ecological impacts. It was concluded that the development of accommodations and infrastructure (e.g., hotels, roads, and national park facilities) on the mainland outside of the park boundaries would generate greater economic and social returns in the long run and better protect the park's bio-

diversity. Soon after the study was completed, an original version of the proposed law, which had been vetoed by President Moscoso, was reconsidered and passed restricting construction on the island. (Steinitz et al.)

With environmental and international organizations actively working to help overcome the obstacles to providing adequate environmental protection, the outlook for controlling the negative impacts of tourism is bright. The transfer of knowledge and skills for dealing with environmental issues from international and environmental organizations to Panamanian government agencies, NGOs, and citizens is critical for the long term. From the examples cited above, it seems that projects undertaken by these organizations are building the awareness, networks, and experience necessary to ensure their sustained impact.

Eco-Certification — Harnessing Market Forces

The initiatives made by the government provide a base for controlling the impacts of tourism, but regulations can go only so far in controlling the actions of the tourism industry. If regulations become too much of a financial burden, tourism development will be discouraged and/or illegal activity to circumvent regulations will be encouraged to maintain tourism development. The government must therefore find a balance between controlling negative impacts and restricting economic activity. Consumers have the power to demand performance above and beyond the minimum required by regulations. If firms within the tourism industry are able to attract more customers and charge higher prices for operating at higher environmental standards, these standards will become an important part of building a successful image.

Eco-certification programs provide a means for consumers to pick out those firms that are most responsible and for firms to distinguish themselves. However, in order for certification programs to be effective they must be credible; and with the wide variety of certification programs, it may be difficult for consumers to distinguish among businesses that are truly applying the principles of ecotourism and those

that are not. In some certification schemes firms are certified because they pay a fee for inclusion; in others they are certified because they have developed a plan for meeting certain criteria; and in still other certification programs firms are certified because they have met specific performance-based criteria.

To encourage consistency, in 2001 Panama and other Central American countries supported a plan to adopt a regional certification program based on Costa Rica's Certification for Sustainable Tourism (CST) program. (Honey, p. 155) The CST program was established by the Costa Rican Ministry of Tourism in 1997. Under the program, hotels are rated by independent audit on a "five-leaf" system based on their performance in four categories: management of the physical and biological environment, environmental management of hotel facilities, guest environmental education, and cooperation with local communities. (Rivera, pp. 335, 344–45)

Using a sample of the 52 hotels that had been rated by the CST program as of December 1999 and a stratified random sample of 112 other hotels, Rivera found preliminary evidence that higher-rated hotels and higher room prices exhibit a significant positive relationship. This suggests that consumers are willing to pay higher room prices for hotels with higher leaf ratings, indicating better environmental performance. Although further study is necessary to determine if the higher rating can be said to have led to the higher room prices, the author finds the evidence consistent with the theory "that firms showing credible superior environmental performance and targeting 'green' consumers can gain differentiation advantages that yield price premiums." (Rivera, p. 352) If this theory is shown to consistently hold true, hotels that had been discouraged from investing in improved environmental performance because of the cost may begin to find the investment worthwhile.

For the CST program to provide these benefits in Panama, there must be enough consumers who are aware of the program and who are willing to choose hotels based on their environmental performance. A website that is produced in English, Spanish, and French and that is easy to navigate is provided for the CST pro-

gram in Costa Rica; but the website of IPAT (Panama's tourism authority) does not yet mention the CST program or any other indicators of hotels' environmental performance.

Conclusions

The Panamanian government has undoubtedly made a commitment to protect the unique biodiversity that attracts tourists to Panama. By requiring environmental impact assessments of development projects, building a system of protected areas, and providing environmental education and training, the government has provided an institutional and policy framework that can enable ecotourism to control the negative impacts of tourism on a large scale. Although there are shortcomings in following through on the commitments that the government has made, these shortcomings can be at least partially attributed to the fact that management capacity for dealing with environmental issues is still being developed and to the fact that environmental agencies and initiatives must compete for funding with other important problems such as poverty. There is also competition among different areas of the country for resources. The Panama Canal Watershed attracts a great deal of attention because of its importance in the functioning of the Canal. It is important to carry the experience in environmental management developed in the Canal Watershed to the rest of the country.

The environmental and international communities play an important role in providing both financial and technical support as

partners in environmental protection and in holding the government accountable in carrying out its commitments. With the scientific interest in Panama as a region of highly concentrated biodiversity and the large number of organizations carrying out conservation projects, any tourism development that leads to the degradation of the environment will be confronted.

The question remains as to whether there will be sufficient demand for ecotourism in Panama to push the tourism industry to higher standards. The estimated contribution for 2007 of the tourism industry to GDP in Panama is similar to that in Costa Rica, as is expected growth in total tourism demand in 2007. (World Travel and Tourism Council...) Although these statistics do not differentiate the contribution of ecotourism from conventional tourism, in 2004 two-thirds of international visitors surveyed in the Panamanian section of the Atlantic Mesoamerican Biological Corridor indicated that their visit to Panama was motivated by environmental and/or ecotourism-related factors. (World Bank, 2005, p. 9)

With the current heightened environmental awareness and growth in popularity of ecotourism, attention is being given to tourism and the environment by the government of Panama. With this attention and with the international and environmental communities providing support and oversight, I believe there to be an overall positive outlook for ecotourism contributing to environmental conservation in Panama.

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