

Managing the Ecotourism Industry in Latin America: Challenges and Opportunities

Raul Gouvea¹

Abstract

A number of Latin American countries have now embraced ecotourism as one of their approaches to establishing sustainable economic development strategies. Latin America is uniquely suitable for ecotourism. The region has a natural competitive advantage, i.e., Latin America has unique ecosystems, offering one of the world's most promising grounds for the development of the ecotourism industry. Latin American countries are at different levels of development and at different stages in the lifecycles of their ecotourism industries. This paper elaborates on the promises and challenges permeating the management of Latin America's ecotourism industry.

I. Ecotourism: Promoting Sustainable Development?

Ecotourism is the fastest growing segment of the global travel and tourism industry. For the last few years, there has been a new theme in the global tourism industry: tourism in any form or shape should be environmentally sound, should be sustainable (Fennel, 2000; Tyler and Dangerfield, 1999).

In the past decade, a number of countries realized that sound environmental practices resulted in sound sustainable economic strategies (Awazi, 2002; Weaver, 1998). Ecotourism offers an alternative and effective way for countries to insert their economies in the global economy, and provides incentives to establish sustainable development strategies (Aronsson, 2000; Eagles, 2002).

Travellers are becoming increasingly interested in natural environments, cultures, and adventures. For this new segment, wilderness setting, wildlife viewing and hiking/trekking opportunities are becoming increasingly appealing to a wider segment of the tourism and travel industry (Sweeting and Bruner, 1999).

Ecotourism is the kind of tourism that fosters, promotes, and acts as a catalyst for environmental protection. In addition, ecotourism strategies must pay attention to: a) economic development, b) environmental protection, c) cultural protection, d) social development and, e) political development. To sum it up, the challenge of ecotourism is to maximize the benefits of tourism while minimizing the environmental, economic, political, social, and cultural impacts of tourism. In addition, policies have to be devised to optimize the allocation of resources from ecotourism revenues to preserve and sustain the resource base. The way by which eco-tourism is managed, planned, and executed can address and minimize potential welfare costs associated with ecotourism (WTO, 1999; Western, 1993).

However, the lack of a homogeneous and functional definition of ecotourism activity, makes its impact hard to assess. The World Tourism Organization/OMT estimates that ecotourism may represent from 2 to 4 percent of global tourism (www.world-tourism.org, 1998). The share of ecotourism broadly defined as tourists that travel to observe and enjoy nature has been expanding steadily during the last decade. According to the International Ecotourism Society, ecotourism is expanding by 20% annually, compared with 7% expansion for the tourism industry as a whole. According to the International Ecotourism Society, ecotourism generated US\$ 154 billion in revenues for the year 2000.

The International Ecotourism Society (TIES) estimates that between 40%-60% of all world travel is nature-related and that between 20%-40% of tourists are wildlife related tourists (The International Ecotourism Society, 2000). According to these estimates the number of nature

¹FIT Department, Anderson Schools of Management, University of New Mexico, Albuquerque, NM (87131), Ph: (505) 277-6471, Fax: (505) 277-9868, E-mail:rauldg@unm.edu

tourists increased from 157 million in 1988 to about 279 million in 2000. *Nature tourists* are defined as tourists seeking nature type of activities. *Wildlife tourists* are defined as seeking wildlife observation (Fillion, Foley, and Jacquemot, 1992).

It should be mentioned that ecotourism is led by supply side economics rather than demand. In other words, the quality of the ecotourism experience is positively correlated to the level of environmental protection the local ecosystem enjoys. Ecotourism thus, can be classified as a normal good or service. It is therefore, extremely important to make sure that eco-ventures pay attention to the level of environmental disturbance that can be sustained by ecosystem. Any level of interaction with the local ecosystem has environmental impacts that must be minimized (Brandon and Margulis, 1996). The issue of ecosystems carrying capacity is increasingly receiving more attention from policy makers. For instance, in Peru the government has imposed a ceiling on the number of hikers in Machu Pichu. It is important to avoid the creation of an environmental gap between sustainable development and sustainable eco-tourism. Revenues derived from the ecosystem should be directly related to the level of occupation and exploitation. This creates a tension between the need to bring in high numbers of tourists in order to increase profits, and the decrease in interest in an area once it is no longer pristine (Diamantis, 2000). The less pristine a region is, the lower the revenues that will be accrued from it. For instance, the Costa Rican "Manoel Antonio National Park" has become a victim of its own success, because excessive construction and exploitation have diminished its eco appeal.

Several countries that are trying to find a compromise between economic development and environmental protection are championing Ecotourism. Those countries that are rich in natural resources but that are not yet implementing sustainable development strategies, are being encouraged to promote activities such as ecotourism (Bruni, 2001).

Ecotourism must be approached as a part of a number of initiatives to protect local ecosystems. At the macro level, a nation pursuing ecotourism should include as many federal, state, and local agencies as possible. Ecotourism must be a part of the country overall economic development and growth (Drumm, 1993).

Ecotourism does however impose a number of valid questions to the local population bearing the cost of preserving areas that could have potential alternative economic uses. Thus it is important to address intra-generation equity issues as well as inter-generation equity issues related to the use of these natural resources by future generations (Boo, 1991; Hunter, 1997). Ecotourism raises a number of questions about whether its profitability out-weighs the alternative economic uses of natural resources. It is, thus, imperative that locals should be included in the planning, development, and management of ecotourism activities. Exclusion of locals from ecotourism activities, strategies and planning, has historically been the weak link in the implementation of ecotourism (Sherman and Dixon, 1991; Richard and Hall, 2000). For instance, in the Mamiraua natural reserve in the Brazilian Amazon, a new approach to ecotourism and ecological zoning has been used. The reserve rich biodiversity has attracted a number of scientists over the years, to its 6,800 square miles of rich flora and fauna. Policy-makers are working with locals toward the preservation of Mamiraua. A detailed environmental zoning and ecological inventory was performed, estimating Mamiraua potential for the exploration of its natural resources. Thus, locals are now allowed to use their resources in a sustainable fashion. The inclusion of locals in preservation efforts is paying off, as Mamiraua has become a unit of sustainable use and development (IDB, 2002).

Along these lines, the consequences of ecotourism have to be assessed properly. On the positive side of implementing ecotourism, several benefits can be cited, such as:

1. Ecotourism earns foreign currency and constitutes an effective way of exporting services to developed countries.
2. Ecotourism promotes the protection of biodiversity.
3. Ecotourism creates jobs. It has multiplier effects on the generation of direct and indirect jobs, such as creating opportunities for tour operators, lodging & hotels, and restaurants. Eco-tourism is a labor-intensive industry.

4. Ecotourism promotes the establishment of local businesses aimed at providing gear supplies and handcrafts for the industry.
5. Ecotourism creates opportunities for the development of local eco- entrepreneurship. It creates the possibility of placing locally produced products and services. Some of these eco-enterprises help to preserve local endangered flora and fauna.
6. Ecotourism generates additional tax revenues that can be reverted to be used by the local communities.
7. Ecotourism demands personnel training in a number of eco-tourism service related activities that have potential multiplier impacts on other sides of the local economy. It is important to regulate and certify local operators and make sure that they are following procedures for environmental protection.

Policy-makers can resort to a number of economic schemes to capture additional economic benefits from ecotourism activities. Capitalizing on the monopolistic scarcity of these unique ecosystems provides additional rents. The collection of royalties on books, photos and films and other related eco-products can be substantial as well.

Policy-makers can also work jointly with the private sector to promote additional eco-entrepreneurship. For instance, eco-enterprises such as farming forest animals for tour trips and for the establishment of game ranches are increasingly becoming popular in a number of eco-tourist destinations. In Papua New Guinea, farming tropical butterflies and giant beetles generates additional income for local villagers. Crocodile farms are also important sources of revenue for South Africa, Cuba, and Thailand. Plant farming is becoming an important source of revenue in a number of countries as well. Thus, ecotourism has been able to spin-off and promote entrepreneurs. In this fashion, ecotourism has been instrumental in unleashing the “animal spirit” of a number of entrepreneurs in emerging economies.

Sport fishing and hunting have been considered by a number of countries as a way to accrue additional revenues and to protect local ecosystems. The magnitude of sport fishing can be illustrated by the fact that in the United States alone, 60-million sport fishermen spend US\$ 24 billion annually. The Brazilian Amazon region offers a tremendous potential for the development of sport fishing in Latin America.

When considering implementing a plan for ecotourism in a country, it is important to emphasize the potential costs involved in fostering ecotourism activities (Mieczkowski, 1995; Mastny, 2002). The continuous environmental assessment of the areas being exposed to ecotourism activities must be seriously considered (Sirakaya, Sasidharan, and Sonmez, 1999).

Among the potential disruptions caused by ecotourism are:

1. Ecotourism can alter local cultures and the life style of local populations.
2. Ecotourism can lead to erosion from hiking or from developing new hiking trails.
3. Ecotourism operations can pollute the local environment. Disposal of trash and sewage must be done properly.
4. Ecotourism can lead to deforestation. Deforestation aimed at expanding local infrastructure and hotel accommodations must be properly assessed.
5. Ecotourism may have a very limited economic impact on the local community.
6. The foreign control of ecotourism operations may limit the local economic impact of ecotourism operations. This can lead to the leakage of foreign currency. Moreover, the reliance on foreign supplies and foreign controlled services may limit the impact of operations.

II. Latin American Travel & Tourism Economy: Economic and Environmental Aspects

The past two decades have seen a dramatic expansion of the global tourism industry. Several factors have contributed to the growth of the Latin American travel & tourism industry. Market oriented reforms by Latin American countries driven by globalization trends brought a number of Latin American countries closer to the global tourism industry. Latin American countries’ massive investments in infrastructure, such as telecommunications, airport, and port facilities, have facilitated the flow of tourism to traditional and non-traditional Latin American

destinations. Latin American emerging E-commerce industry has also had a substantial impact on the industry, making information available, checking flight availability, prices, and reservations. E-commerce is making the Latin American travel & tourism industry more efficient, transparent, and more accessible (Gouvea, and Kassicieh, 2002).

Latin American countries are also at different stages of development in their tourism and travel economies. Brazil for instance, is slowly developing its ecotourism economy in the Amazon region, and at the same time beginning to emulate Mexico in terms of building beach tourism centers such as Costa do Suipe. In other words, Latin American countries are at different stages of the travel & tourism industry learning curve and at different stages of the tourism & travel life cycle.

In the period of 1990-2000, several countries in Latin America saw an increase in tourism arrivals. For instance, Mexico, Latin America's main tourist destination, saw the number of tourists increase from 6.39 million visitors in 1990 to 19,42 million in 2000. Costa Rica, the Latin American ecotourism darling, saw the number of tourists visiting the country increase from 435 thousand in 1987 to 1.1 million in 2000.

The tourism & travel industry is also becoming increasingly important for Latin American economies. For instance, in Costa Rica the travel & tourism industry accounted for 7.9% of the country's GDP. The industry is also an important source of employment for Latin American countries. For instance, it accounted for 18.6% of total employment in the Dominican Republic, and for 8.9% of total employment in Mexico. The industry is also an important source of export earnings. It accounted for 20.5% of Bolivia's export earnings and for 39.9% of the Dominican Republic's total export earnings. Exports of tourism services are also becoming increasingly important to a number of Latin American economies. For instance, countries like Costa Rica and Mexico have seen a substantial increase in export revenues from their travel & tourism industry. For instance, by 2001, Costa Rica exports of tourism services accounted for the 18.4% of the country's total exports, and 13.4% of Mexico's total exports. These numbers reaffirm the increasing importance of the travel & tourism economy for Latin American economies.

Table 1 shows some environmental characteristics of selected Latin American countries. The Environmental Sustainability Index (ESI) is an assessment of a country's overall progress in the direction of environmental sustainability. The World Economic Forum publishes the ESI. Costa Rica shows the highest ESI, ranking number nine in the world. Venezuela shows the highest percentage, 56.1% of its land area covered by forests. On the biodiversity side, measured by the number of birds, mammals, and higher plants, Colombia, Brazil, and Peru show the highest levels of biodiversity in the region. Ecuador shows the highest percentage, 43.1% of total land protected by the government, in the form of national parks and reserves.

Table 1

Selected Latin American Countries: Environmental Aspects

Country	ESI Index	ESI Ranking	% Total Land Area - Forests	Mammals	Birds	Higher Plants	% of Total Land area Nationally Protected areas
Argentina	61.5	15	12.7	320	897	9,372	1.7
Bolivia	59.4	21	48.9	316	n.a.	17,367	14.4
Brazil	59.6	20	63	394	1,492	56,215	4.2
Chile	55.1	35	20.7	91	296	5,284	18.9
Colombia	59.1	22	47.8	359	1,695	51,220	9
Costa Rica	63.2	9	38.5	205	600	12,119	13.7
Dominican Rep	48.4	79	28.4	20	136	5,657	25.2
Ecuador	54.3	41	38.1	302	1,388	19,362	43.1

Table 1 (continuous)

Guatemala	49.6	67	26.3	250	458	8,681	16.8
Honduras	53.1	47	48.1	173	422	5,680	9.9
México	45.9	59	28.9	450	769	26,071	3.7
Nicaragua	51.8	52	27	200	482	7,590	7.4
Panama	60	17	38.6	218	732	9,915	19.1
Peru	56.5	29	50.9	344	1,538	18,245	2.7
Venezuela	53	48	56.1	305	1,181	21,073	36.3

Source: World Bank (2001). World Development Report. Washington, D.C.

III. Ecotourism: Development Strategies

The ecotourism industry gained momentum in Latin America in the 1990s. The 1992 Rio Earth Summit worked as a catalyst for Latin American countries to rethink their economic development strategies. Increasingly, a number of Latin American countries started to view at the ecotourism industry as a way to merge environmental sustainability with economic development. The 2001 Cuiaba Conference further stressed the need to promote ecotourism in the environmentally rich regions.

The ecotourism industry in Latin America is at different stages of development, at different stages of the industry learning curve and at different stages of its life cycle. For instance, Costa Rica is the darling of the Latin American ecotourism industry, sitting further along the stage of development and learning curve of the Latin American ecotourism industry. The Brazilian Amazon region, on the other hand, is sitting at the first stage of its ecotourism industry development. In between, a number of Latin American countries are facing different stages of ecotourism development.

The estimates for the number of ecotourists in Latin America are not very reliable. For instance, the Brazilian Tourism Agency, Embratur, has not to this date made an effort to quantify the number of tourists that arrive in Brazil seeking for ecotourism. The same is true for the number of other Latin American countries. Anecdotal evidence, however, points to a growing industry. The lack of reliable data poses additional challenges for the future development and growth of the industry in Latin America.

While the number of ecotourists visiting a majority of Latin American countries is still unknown, the International Ecotourism Society states that in 22,000 travelers visited the parks and reserves in Belize. In Ecuador 60,000 tourists visited the Galapagos Islands. In 2001, Costa Rica received about 800,000 ecotourists, making Costa Rica the largest recipient of ecotourists in Latin America. Still, these numbers may not reflect current number of ecotourists visiting Latin America. It is vital for the region to establish a method to study the number, frequency, and profile of eco-travelers flowing to the region.

Besides, it is important for Latin American countries to establish guidelines and certification programs. These programs rank how countries are performing in terms of environmental management and how it interacts with the local community. These rankings would provide Latin American countries with a scale to measure their current standings and to plan future steps and goals for the industry. The measurement of sustainability is an important component of ecotourism strategies for these countries. In addition, it is also important for Latin American countries to devise environmental policies and guidelines that guarantee the longevity of the ecotourism industry in the region. Along the same lines, the greening of hotels and restaurants is also becoming a key feature in countries quest to follow sustainable tourism strategies. In Latin America, Ariau-Towers in Brazil, Alandaluz environmental education center in Ecuador, in Mexico Las Canadas and Eco Paraiso, and in Costa Rica Rara Avis are currently following sustainable development guidelines.

As mentioned previously, ecotourism is developing in Latin America at different speeds and under different business models and strategies. The role of government and the private sector

in developing the ecotourism industry also changes substantially from country to country within the region.

In Latin America, Costa Rica and Brazil are at different stages in the development of their ecotourism industries. Both countries symbolize the challenges and opportunities facing the industry.

Costa Rica

Costa Rica has been promoting its ecotourism industry since the early 1980s. The Environmental Secretariat and the Costa Rican Tourism Institute are largely responsible for the development and coordination of ecotourism policies in the country (Weaver, 1998).

In two decades, Costa Rica became the darling of the Latin American ecotourism industry. Costa Rica's rich ecosystem, accounting for 5% of the world's biodiversity, offers the country a natural competitive advantage in the industry (Mader, 2002). Ecotourism has also catapulted the flow of tourists to the country. In the early 1980s, about 370,000 tourists flocked to the country. By 2002, about 1.1 million tourists arrived in Costa Rica, with about 830,000 ecotourists (Saenz, 2001). Tourism is Costa Rica's main source of export earning revenues.

Costa Rica has developed a wide array of ecotourism offers, from bird watching to volcano climbing and kayaking. Costa Rica has approximately 25% of its territory under protection, 1.1 million hectares, with 12% of its territory composed of national parks and privately owned reserves. Private reserves are however, where the most of ecotourism has been developed in Costa Rica. The large majority of ecotourism's income is generated by private reserves. Monteverde Biological Preserve, the habitat of the golden toad, has become famous worldwide. Its main source of financing is through admission fees and grants. Over the last two decades, the Monteverde reserve has earned more income than all other national parks combined. Rara Avis is another private reserve that has turned to ecotourism. Rara Avis was opened in 1983, and contains 3,000 acres of primary and secondary forest. It borders on the Braulio Cariilo National Park and the Zona Protectora La Selva, a research station. Private banks financed Rara Avis, and it was the first of its kind in the country. Rara Avis has shown that ecotourism can become a profitable way to manage tropical forest resources.

Costa Rica has also seen the effects of overcrowding in its forest reserves. For instance, the increasing popularity of Manuel Antonio Park led developers to overbuild. This overbuilding threatened the monkey population and other wildlife in the park. The increasing success of ecotourism has begun to overwhelm the forest.

Costa Rica has been consistent in its approach to promoting its ecotourism industry over the past few decades. This consistency has paid off. In addition, ecotourism has had an inclusive strategy, benefiting local communities and revenues have been used to further promote research in the areas of ecology and biodiversity.

Costa Rica offers a picture of what the private sector can do to develop ecotourism in Latin America.

Brazil

The establishment of an ecotourism policy in Brazil dates back to 1987. However, between 1987 and 1991 a number of barriers slowed the development of the industry, putting Brazil further behind in the development of an indigenous ecotourism industry. Brazil's primary barrier was the lack of specific laws and incentives to guide entrepreneurs, investors, and the government in the fostering and exploration of ecotourism (Ministerio do Planejamento e Orcamento, 1997).

The Brazilian Amazon region is 98 times larger than Costa Rica, yet in 2000 it only earned US\$ 400 million in exports of ecotourism, less than half Costa Rica's annual earnings from ecotourism. These figures indicate a strong growth potential for the Brazilian ecotourism industry. In 2000, ecotourism accounted for 10% of Brazilian tourism revenues (Bioesfera, 2001).

The Brazilian Amazon Region is characterized by its large biodiversity, which encompasses rich ecosystems in terms of species and genetic diversity within each species group (Lovejoy, 2000). The establishment of sustainable development strategies is the region's main

challenge. The Amazon region has one of Brazil's lowest per capita incomes. The 22 million Brazilians living in the region need a consistent sustainable development strategy that promotes economic growth and preserves the region's unique environmental assets. Ecotourism offers an avenue for conservation strategies and sustainable development strategies that fulfill some of the region's development needs. The region has a natural competitive advantage in the ecotourism industry, offering one of the world's greatest potentials for ecotourism (Luindia, 2001).

Brazil's ecotourism product, the Amazon's main attraction, resides mainly in its exuberance of forest, the biological diversity of its ecosystem and the great diversity of flora and fauna (Irving, 2001).

The state of Amazonas has 98% of its area intact, showing one of the highest biodiverse environments in the region. The numbers of tourists travelling to the state of Amazonas, however, showed that there is a gap between the state's eco-tourism potential and the current number of tourists visiting the state (Mendes, 2001). For instance, in 2000, the state of Amazonas received 27,000 tourists. These low numbers, when compared to Costa Rica's, show how small the Brazilian Amazon region's share of the global ecotourism industry is, with only 0.05% of the world's ecotourism revenues in 2000.

In the 1990s, the Brazilian government made several efforts. The Brazilian Tourism agency – Embratur – launched the Ecotourism Poles Project in conjunction with the Brazilian Ecotourism Institute (www.ecotourism.org.br) establishing guidelines for the development of ecotourism poles around the country. In 1995, a federal program – Proecotur – was launched. The program aimed at devising, identifying, and promoting poles for ecotourism development. One of Proecotur's goals was to address the low quality of the region's infrastructure (Bruni, 2001). The Amazon region suffers from a lack of widely available energy power, communications, and transportation. Improvements in airports, ports, and the widespread availability of power are a main concern (Sudam, 1997a, b). Proecotur is also addressing the issue of skilled manpower for the region's ecotourism industry.

Despite recent efforts, most of the ecotourism undertaken in the region is practiced without much coordination, and does not pay enough attention to the social-cultural-environmental side of ecotourism.

The Brazilian and Costa Rican experiences show the myriad of shades permeating the Latin American ecotourism industry. Brazil and Costa Rica have followed different business models and strategies. Costa Rica's ecotourism industry has seen a combination of mass type tourism and smaller scale true to the core of the ecotourism industry. Brazilians should learn from Costa Rica's Manoel Antonio overcrowding experience as well as from the likes of Rara Avis.

The Brazilian experience still shows the initial phase of ecotourism development, so far taking place in a much smaller scale. However, that could change rapidly. The state of Amazonas is developing plans to attract a number of cruising lines to the heart of the Amazonas. In addition, direct flights between Miami and Manaus also broke off the isolation of the state of Amazonas pointing to a rising number of tourists flowing to the region.

Costa Rica's experience also shows that the private sector is an important ingredient of the ecotourism industry. The close cooperation between the government and the private sector in Costa Rica has developed a very competitive industry. Brazil should learn from Costa Rica business model.

Besides, Brazil should learn from Costa Rica's experience that ecotourism has to have a strong regional socio-economic component with a direct impact on locals if it is to develop fruitfully. In addition, the development of human resources to man the eco industry has also been successfully developed in Costa Rica. The triple helix, a conjunction of coordinated efforts between Costa Rican universities, the local private sector, and the government was also essential for the development of human resources for the industry. In the state of Amazonas, similar efforts are now being developed. The creation of the State of Amazonas University (UEA) in 2001 is the beginning of the development of triple helix in the region.

IV. Conclusion

Latin American countries have an urgency to develop and grow their economies. Economic sustainability is of paramount importance to the region as well. Intergenerational issues are at stake in the region. Ecotourism offers a unique balance between environmental protection and economic growth and development.

The region is increasingly developing their tourism & travel industries. In many countries this industry is now the main source of export earnings revenue and jobs. The increasing attention being paid to sustainable development has also led a number of countries rich in biodiversity to promote and develop their ecotourism industry.

Latin American countries have a natural competitive advantage in the ecotourism industry. However, very few Latin American countries are taking full advantage of such a unique competitive advantage. In the region, Costa Rica possesses the most developed ecotourism industry. Mexico, is also rapidly developing its own ecotourism industry. Brazil, on the other hand, is at the earlier stages of development in the industry, despite having a globally recognizable trademark such as the Amazon region.

Brazil is a latecomer in the global ecotourism industry, however, the potential for growth is substantial. The Brazilian Amazon region is considered as the "El Dorado" of the ecotourism industry. Ecotourism offers the Amazon region a new cycle of economic development that promotes environmental protection and conservation. Brazil can however, learn from the Costa Rican experience in order to avoid some of the mistakes experienced by the Costa Rican business model.

References

1. Aronsson, L. (2000). *The Development of Sustainable Tourism*. London: Continuum.
2. Awazi, W. (2002). "Third World Economic Development: Tourism as a Critical Engine for Growth." *The Journal of Current Research in Global Business*. Vol.4, No.5, p.71-81.
3. Baer, W., and Miles, W. (2001). *Foreign Direct Investment in Latin America: Its Changing Nature at the Turn of the Century*. New York: International Business Press.
4. Biosfera (2001). *Ecoturismo*. Rio de Janeiro: Biosfera.
5. Brandon, K., and Margoluis, R. (1996). "Structuring Ecotourism Success: Framework for Analysis. Paper Presented at "The Ecotourism Equation: Measuring the Impacts. Yale University, April 12-14. New Haven, Connecticut.
6. Boo, E. (1991). "Making Ecotourism Sustainable." In Tensie Whelan (Ed.), *Nature Tourism*. Washington, D.C: Island Press.
7. Bruni, D. (2001). *Ecoturismo*. Rio de Janeiro: Biosfera.
8. Diamantis, D. (2000). "Ecotourism and Sustainability in Mediterranean Islands." *Thunderbird International Business Review*, Vol.42(4), p.427-443.
9. Drumm., A. (1993). "New Approaches to Community-Based Ecotourism Management." In Kreg Lindberg and Donald Hawkins (Eds.), *Ecotourism*. New York: Praeger.
10. Eagles, P. (2002). "Understanding The Market for Sustainable Tourism." Burlington, Vermont: The International Ecotourism Society:
11. Embratur (2000). *Polos de Desenvolvimento do Ecoturismo no Brasil*. Brasilia:
12. Euromonitor (2002). *International Marketing Data and Statistics*. London: Euromonitor.
13. Fennel, D. (2000). *Ecotourism: An Introduction*. New York: Praeger.
14. Fillion, F., Foley, L., James, P., and Jacquemot, A. (1992). "The Economics of Global Ecotourism." Paper Presented at the Fourth World Congress on National Parks and Protected Areas. Caracas, Venezuela: February.
15. Gouvea, R., and Kassiceh, S. (2002). "Brazil.Com." *Thunderbird International Business Review*, Vol.44(1), p.105-117.
16. Honey, M. (1999). *Ecotourism and Sustainable Development: Who Owns Paradise?*. Washington, D.C: Island Press.

17. Hunter, C. (1997). "Sustainable Tourism as an Adaptive Paradigm." *Annals of Tourism Research*, Vol.24, No.4, p.850-867.
18. IDB (1999). *Development and Preparation of Ecotourism Programs (Ecotur)*. Washington, D.C: IDB.
19. IDB (2002). "Man and Nature in Mamiraua." *IDB America*, July 3. www.iadb.org.
20. Irving, M. (2001). "Ecoturismo na Amazonia: Utopia our Oportunidade?" *Proceedings of the Primeiro Simposio e Exposicao Internacional sobre Ecoturismo – Ecotour 2001*. Manaus, September 24-27, p.26-27
21. Luindia, A. (2001). "Ecoturismo e Desenvolvimento Sustentavel: A Sustentabilidade das Populacoes Tradicionais da Amazonia?" *Proceedings of the Primeiro Simposio e Exposicao Internacional sobre Ecoturismo – Ecotour 2001*. Manaus, September 24-27, p. 62-64.
22. Lovejoy, T (2000). "Amazonian Forest Degradation and Fragmentation: Implications for Biodiversity Conservation." In Anthony Hall (Ed.), *Amazonia at the Crossroads*. London: Institute of Latin American Studies, University of London.
23. Mader, R. (2002). *Exploring Ecotourism in the Americas: Costa Rica*. www.planeta.com.
24. Mastny, L. (2002). "Redirecting International Tourism." In Linda Starke (Ed.), *State of the World 2002*. New York: W.W. Norton & Company.
25. Mieczkowski, Z. (1995). *Environmental Issues of Tourism and Recreation*. London: University Press of America, Inc.
26. Mendes, A. (2001). "Turismo Ecologico." *Ecotur, Amazonia 2001*, p. 2-3.
27. Ministerio do Planejamento e Orcamento (1997). *Estrategia para o Desenvolvimento Integrado do Ecoturismo*. Brasilia: Ministerio do Planejamento e Orcamento.
28. Richards, G., and Hall, D. (2000). "The Community: A Sustainable Concept in Tourism Development." In Greg Richards and Derek Hall (Eds.), *Tourism and Sustainable Community Development*. London: Routledge.
29. Saenz, A. (2001). "Capacitacion de Guias Locales." Paper Presented at the *Desarrollo y Gestion Sostenible del Ecoturismo en las Americas*. Cuiaba, Brazil. August 22-24.
30. Sirakaya, E., Sasidharan, V., and Sonmez, S. (1999). "Redefining Ecotourism: The Need for a Supply-Side View." *Journal of Travel Research*, Vol.38(2), p.168-172.
31. Sherman, P., and Dixon, J. (1991). "The Economics of Nature Tourism: Determining if It Pays." In *Nature Tourism* edited by Tensie Whelan. Washington, D.C.: Island Press.
32. Sudam (1997a). *Cenarios Alternativos e Cenario da Amazonia no Horizonte 2010*. Belem, PA: Sudam.
33. Sudam (1997b). *Projeto de Investimento e Desenvolvimento do Setor Turismo na Amazonia*. Belem, PA: Sudam.
34. Sweeting, J., Bruner, A., and Rosenfeld, A. (1999). *The Green Host Effect*. Washington, D.C: Conservation International.
35. The International Ecotourism Society (2000). "Ecotourism Statistical Fact Sheet." Burlington, Vermont: The International Ecotourism Society.
36. Tyler, D., and Dangerfield, J. (1999). "Ecosystem Tourism: A Resource-Based Philosophy for Ecotourism." Vol.7, No.2, p.146-158.
37. Weaver, D. (1998). *Ecotourism in The Less Developed World*. London: Oxford University Press.
38. Western, D. (1993). "Defining Ecotourism." In *Ecotourism* (Ed.), by Kreg Lindberg and Donald E. Hawkins. New York: Praeger.
39. World Bank (2002). *2001 World Development Indicators*. Washington, D.C: World Bank.
40. World Tourism Organization (1998). "Ecotourism, Now One-Fifth of Market." January/February. www.world-tourism.org.
41. World Tourism Organization (1999). *Guide for Local Authorities on Developing Sustainable Tourism*. Geneve: WTO.
42. World Travel & Tourism Council (2002a). *Travel & Tourism Statistics*. London: World Travel and Tourism Council.

43. World Travel & Tourism Council (2002b). "End of the Tunnel in Sight for Travel and Tourism." www.wttc.org.