

Ecotourism as a development strategy: experiences from Costa Rica

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Abstract This article reflects on the Costa Rican experiences with ecotourism by assessing the positive and negative environmental, economic and social impacts of ecotourism development at four tourist destinations—Manuel Antonio, Monteverde, Tortuguero and ASCOMAFOR. These destinations represent different stages of tourism development. The assessment shows that the development of ecotourism has a dilemma character. Compared to alternative land-use options, ecotourism remains a promising development strategy. However, it should be embedded in a broader process of capacity building.

Keywords Costa Rica · Development strategy · Ecotourism · Impact assessment · Sustainable tourism

1 Ecotourism: potentials and pitfalls

Since the mid-1980s, Costa Rica has been very successful in attracting tourists. Annually, more than one million tourists visit the country, and the tourism industry has an annual turnover of over 1,200 million dollars (ICT 2002). The country has especially much to offer to nature enthusiasts. Ecotourism is the leading concept in the country's development

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strategy. The International Ecotourism Society defines ecotourism as responsible travel to natural areas that conserves the environment and sustains the well-being of local people' (cited in Honey 1999a). Ecotourism has been promoted as a non-consumptive use of nature and as a possible win-win development strategy, especially for underdeveloped areas (a.o. Boo 1990; Honey 1999b; Weaver 2001). Ecotourism should not only conserve the environment, but also improve the welfare of local people (Edwards et al. 1998). It should generate money in an ecologically and socially friendly way than other forms of land exploitation.

In practice, however, ecotourism's principles may be corrupted, watered down and hijacked. An increase in the numbers of visitors for instance calls for waste processing facilities that are often missing (Boo 1990; Hardy et al. 2002; Honey 1999b; Stern et al. 2003). So, the questions can be raised whether it is wise for Costa Rica and other developing countries to focus on ecotourism as a development strategy, or whether these countries face challenges they are not up to.

In this article, we assess in four Costa Rican areas—the Manuel Antonio region, the Monteverde region, the Tortuguero region and the region in which ecotourism is promoted by the non-governmental Asociación Comunal para el Manejo Forestal (ASCOMAFOR)—whether ecotourism actually results in win-win situations. In the Manuel Antonio region, tourism development started in the 1960s, followed in the 1980s by initiatives in Monteverde and Tortuguero. ASCOMAFOR started its activities in the late 1990s.

Following Stern et al. (2003), we expect that scale has an influence upon the impacts of tourism. We presume that a larger scale will give greater benefits, but also more drawbacks. In the end, we expect the drawbacks to dominate the benefits in case of large-scale tourism. A second presumption is that we expect a larger involvement of the local population to result in greater benefits and lesser drawbacks. This expectation stems from the viewpoint that sustainable tourism requires the involvement of local residents in its operations (Barkin 2003; Lindberg et al. 1996; Wunder 2000). Finally, we believe that a greater institutional capacity of a region will result in more sustainable tourism, because this allows for a better planning of the ecotourism facilities.

Development balance sheets are used to assess the potential environmental, economic and social impacts of tourism. These sheets were synthesized after a literature search on the impacts of tourism development (Amaro 1999; Braman and FAA 2001; Brown 1998; Buhalis and Fletcher 1995; Caalders et al. 1999; Convery and Flanagan 2000; Cottrell 2001; Honey and Littlejohn 1994; Hunter and Green 1995; Keane 2000; Koningen 1996; Norris 1994; Olsder and Rullman 1998; Place 1998; Roe et al. 1997; Scheyvens 2000; Tisdell 1996; WTO 1992). Table 1 summarizes the potential, environmental, economic and social impacts of tourism development found in literature.

We made a distinction between benefits and drawbacks that might occur on the environmental, economic or social balance. On each of the balances, benefits may dominate over drawbacks or the other way round. An equilibrium situation is also possible. Table 1 was peer checked by experts in sustainable tourism from NHTV Breda University of Professional Education.

In order to call ecotourism development sustainable, we use the rather strict criterion that the environmental, the economical and the social balances should be positive.

The impact assessment of ecotourism development in the four areas is based on semi-structured in-depth interviews with 50 key stakeholders from the tourism industry and local population. The balances were transformed into a topic list to structure the interviews. Stakeholders were asked whether the possible impacts summarized in Table 1 were perceived in the area. A benefit of this approach is that it allows for the benefits and drawbacks

Table 1 Potential benefits and drawbacks of ecotourism development

	Benefits	Drawbacks
Environmental impacts	(Stimulation of) preservation of nature	Land clearance and erosion
	Environmental education and consciousness raising	Disturbance and biodiversity losses Increase in garbage and sewage Air pollution
Economic impacts	Foreign exchange, jobs	Economic leakage
	Economic diversification	Loss of resource bases, resulting in growing dependency Inflation
Social impacts	Improved education	Loss of community coherence
	Improved facilities	Degradation of local culture
	Empowerment of deprived groups	Growing crime rates, prostitution, drug and alcohol abuse
	Encouragement of community organization	Loss of access to facilities for local people
	Promotion of local culture	

to be investigated separately. Furthermore, it ensures the consistency of research between the different research areas. In order to investigate the continuing evolution of tourism in the research area, a first round of 50 face-to-face interviews held by the main author of this article between January and May 2002 (Koens 2003) was supplemented by a second round in September and October 2005. To ensure validity and reliability, data were triangulated with data found in policy documents and other literature.

The four research areas are introduced in the next paragraph. This introduction is followed by an assessment of the environmental, economic and social impacts of tourism development in those areas. Following these assessments, we address the way Costa Rican society tries to manage ecotourism development. Some critical remarks will be made on the role of local governments. The analysis results in an overview of conditions that facilitate a more balanced tourism development.

2 Tourism development in four Costa Rican areas

The Manuel Antonio region on the Pacific Coast of Costa Rica is easily accessible from San José (Fig. 1). The combination of easy accessibility, growing investments and scenic beauty made the region one of the most visited areas in the country. Tourism in the region began in the 1960s when a road was built from San José to Quepos. In 1972, on insistence of the local communities, the national government created a recreation park to preserve remaining areas of natural coastal vegetation (J. Badilla 2002, personal communication). Later, in an attempt to protect it from the damage caused by tourism, the area was reclassified as a National Park (Manuel Antonio National Park; MANP). In 1979, MANP was visited by 30,000 people. In the 1980s, Northern Americans started tourism businesses



Fig. 1 Location of the four case study areas

here, and the tourism industry really took off. It is estimated that in 2003 around 200,000 tourists—mostly foreigners—visited the region (Cordero 2004). Since then, the number of visitors to the Manuel Antonio region has increased even more (M. Esperla, 2002/2005, personal communication). Tourism in the Manuel Antonio region is not solely nature based. A study by Ankersmid and Kelder (2001) revealed that most tourists (61%) were interested in the combination of nature and beaches. Only, 17% of tourists mentioned nature as the main reason for visiting the area.

The Monteverde region is situated in the Northwestern part of Costa Rica on the Tilaran Mountain range around the Continental Divide. The altitude of the area varies from about 600 to 1,842 m. Tropical Montane Cloud Forest, one of the world's most threatened ecosystems, covers much of the Monteverde region (Nadkarni and Wheelwright 2000). There are three main protected areas in the region—the Monteverde Cloud Forest Preserve (MCFP, founded in 1972), Bosque Eterno de los Niños (BEN, founded in 1986) and the Santa Elena Reserve (SER, founded in 1992). Although scientific tourism in the Monteverde region started earlier, commercial tourism did not really take off until the 1980s. This surge was partly due to a documentary broadcast by the BBC in 1978. The creation of the BEN and SER helped the region gain further fame as a green tourist location (Aylward et al. 1996). Still, because the area is relatively isolated due to its bad traffic connections, tourism numbers have never risen as high as in the Manuel Antonio region. MCFP, which almost all tourists to this area visit, had almost 55,000 visitors in 2000 (Burlingame 2000). As in the Manuel Antonio region, the number of tourists to the Monteverde region has increased rapidly in the last couple of years to an estimated 75,000 in 2004 (M. Cruz, 2005, personal communication).

The Tortuguero region, a backwater area in the province of Limón, is situated on the Caribbean Coast. The region is relatively isolated as all traffic is water based. Getting to the region requires a boat trip of at least 45 min. Swamps combined with tropical rainforest are the region's main ecosystems. With a record of over 2,600 different species of plants

and trees, Tortuguero’s biodiversity is very high (Solano Marín 1992). Tortuguero National Park (TNP) was created in 1975 to protect sea turtles. The region began to attract a few tourists in the late 1980s. Since 1996, the annual number of visitors to TNP has grown from 9,000 to an estimated 80,000 persons in 2004. This year around 90% of all visitors were foreign. Mostly, nature lovers visit the region. Apart from natural beauty, the region has no other tourist attractions. Tortuguero hardly receives individual visitors as most tourists arrange a package tour in San José. This consists of the trip to the region and an overnight stay in one of a limited number of lodges. (D. Loth, 2002/2005, personal communication; Reyes and Troëng 2002; Harrison and Troëng 2005).

The Asociación Comunal para el Manejo Forestal (ASCOMAFOR) stimulates communal development and forest protection in the rural-mixed tropical lowlands. ASCOMAFOR is situated in the province of Alajuela, a 3.5-h car drive from San José. In 2001, ASCOMAFOR initiated a community-based tourism project in the communities of Quebrada Grande, Santa Elena, Garabito and San Marcos. They work together with Ecoteach (a United States/Costa Rican-based conservation organization). The four communities each independently try to provide tourists with facilities. ASCOMAFOR unites them by promoting tourism and by providing resources. Annually, 850 tourists (mostly youngsters aged 11–18) live with Costa Rican families and follow cultural, ecological (reforestation) and horticultural programs. Recently, a women’s organization has taken the initiative to transform part of their homes to cater for independent tourists. In 2004, they received 218 visitors (J. P. Ruiz, 2002, personal communication; O. Vargas, 2002/2005, personal communication). All tourists in the region are foreign.

The results of the assessment of environmental, economic and social impacts for the different research areas and the net impact of tourism on the three balances are given in Table 2.

3 Environmental impacts of tourism in the research areas

In all regions, tourism resulted in benefits on the environmental balance. First, tourism has given nature an economic value, which has prevented further deforestation (G. Acuña, 2002, personal communication; E. Argcedas, 2002, personal communication; Aylward et al. 1996; Fundevi-ICT-SPN 1993; Inman 1998; CATIE 1983). Environmental education is set up in all regions, but the extent to which it is said to be successful

Table 2 Perceived benefits, drawbacks and net impacts of tourism in the four research areas

Tourist destination	Environmental impacts			Economic impacts			Social impacts		
	Benefits	Drawbacks	Net impact	Benefits	Drawbacks	Net impact	Benefits	Drawbacks	Net impact
Manuel Antonio	*	**	±	*	**	±	*	**	±
Monteverde	**	**	±	**	*	+	**	**	±
Tortuguero	**	*	+	*	**	±	*	*	±
ASCOMAFOR	*	0	+	*	0	+	*	0	+

** Many impacts perceived; * some impacts perceived; (0) no impacts perceived

(+) Benefits dominate, (±) both benefits and drawbacks are perceived

differs. In the Manuel Antonio region, the environment is subordinate to the economic aspects of tourism for many people, despite the founding of a college of ecotourism. Environmental education of tourists also is quite limited (R. Alvarca, 2002, personal communication; M. Solis, 2002, personal communication). In the Monteverde region, the protected areas provide for sufficient environmental education for local people as well as tourists (Burlingame 2000; M. Díaz, 2002, personal communication; A. Dunes, 2002, personal communication). In Tortuguero, tourists and local children are educated, but adult education is said to be lacking (Jacobson and Robles 1992; A. Castillo, 2002, personal communication; V. Vargas, 2002/2005, personal communication). With ASCOMAFOR, awareness raising is integrated in the tourist experience, and this results in real tourist education. Moreover, a part of the profits raised by tourism goes to environmental education in the local schools (M. Hernandez, 2002, personal communication; T. Rodríguez, 2002, personal communication; J. P. Ruiz, 2002, personal communication; O. Vargas, 2002/2005, personal communication).

Tourism development has environmental drawbacks in three of the regions. In the Manuel Antonio region and the Monteverde region, the construction of infrastructure, accommodation and facilities has resulted in vegetation damage, disturbance of wildlife and an increased possibility of erosion. So far, this has already resulted in a loss of biodiversity in the Manuel Antonio region, with biodiversity losses expected in the Monteverde region in the near future (Acuña et al. 2000; J. Badilla, 2002, personal communication; C. Braman, 2002, personal communication; M. A. Méndez, 2002, personal communication; W. Parejeles, 2002/2005, personal communication; C. Pensa, 2002, personal communication; N. Scrimshaw, 2002, personal communication). The increase of garbage and sewage is the major problem in these regions as well, despite the introduction of recycling projects (U. Alvarado, 2002/2005, personal communication; A. Dunes, 2002, personal communication; M. A. Méndez, 2002, personal communication; C. Ramirez, 2002, personal communication; O. Villalobos Romirey, 2002, personal communication). Air pollution also increased in the Manuel Antonio region as a result of the growing number of vehicles entering the area (J. Matthey, 2002, personal communication).

Land clearance has been a problem in the Tortuguero region as a couple of large hotels have been built without any proper spatial planning (J. Montano, 2002, personal communication). Animal life may be disturbed by passing boats, and wakes are said to cause some erosion of the riverbanks. So far, not many negative impacts on the turtle population have been reported (P. Acuña, 2002/2005, personal communication; A. C. Alfaro, 2002, personal communication; A. Cayasso, 2002, personal communication). Recently, a project to reduce tourism impact on nesting turtles proved to be successful (Harrison and Troëng 2005). A management plan to control the flow of tourists over space and time will be put into place soon (D. Loth, 2002/2005, personal communication). In the Tortuguero region, a recycling plant dealing with solid waste is operational, but money problems threaten its existence. Lack of finances also hampers a solution to the growing sewage problem (V. Barrantes, 2002, personal communication; J. Montana, 2002, personal communication). Still, garbage and sewage are not as big a threat in the Tortuguero region as in the two regions mentioned earlier. Tourism development guided by ASCOMAFOR so far has had hardly any environmental impact, although in the future an increase in solid waste and sewage may cause minor problems (T. Rodríguez, 2002, personal communication; C. E. Sibaja, 2002/2005, personal communication).

4 Economic impacts of tourism in the research areas

Economically, the Manuel Antonio and the Monteverde region benefit from an increase in foreign exchange as a result of tourist spending in hotels, restaurants and souvenirs shops. In the Monteverde region, almost all of this money stays in the region. For example, many of the handicrafts sold are also produced here. Tourism has diversified the local economy rather than resulted in a loss of other resource bases (Burlingame 2000; M. A. Méndez, 2002, personal communication; W. Parejeles, 2002/2005, personal communication). However, in the Manuel Antonio region, local ownership of tourist facilities is very low, which causes much economic leakage out of the region (X. Delgado, 2002, personal communication; Duim et al. 2001). Also, contrary to the Monteverde region, only few handicrafts are produced here, so the linkages between tourism and other economic sectors are weak (G. Acuña, 2002, personal communication; A. C. Alvarado, 2002, personal communication; Duim et al. 2001). Both regions suffer from inflation of local prices, which makes it difficult for local people to make ends meet (G. Acuña, 2002, personal communication; Chamberlain 2000; X. Delgado, 2002, personal communication).

Although foreign money is spent in the Tortuguero region, the emphasis on package tours means that most money is made outside the region and that there is little room for local entrepreneurs. Nevertheless, tourism has brought some more money to the local economy, especially to local guides. Nowadays, the region is very much dependent on tourism and subject to inflation (D. Loth, 2002/2005, personal communication; V. Vargas, 2002/2005, personal communication; S. Troëng, 2005, personal communication; Place 1998: 115). The small scale of tourism with ASCOMAFOR brings only little extra income to the region. On the other hand, tourism is community based, which means that it only employs locals, and all foreign exchange stays within the region. No other economic drawbacks are observed (T. Rodríguez, 2002, personal communication; C. E. Sibaja, 2002/2005, personal communication).

5 Social impacts of tourism in the research areas

Tourism in both the Manuel Antonio and the Monteverde region has stimulated locals to improve their education (e.g., the private college of ecotourism). Medical care has also improved, and women have gained empowerment (C. Aruya, 2002, personal communication; M. Gonzales, 2002/2005, personal communication; Koningen 1996; J. Vargas, 2002, personal communication). Support given to local culture in the Monteverde region is another positive aspect of tourism. In the Manuel Antonio region, on the other hand, cultural disintegration is perceived, especially between different generations (Arts and Gudden 2002; Delgado personal communication). In both regions, the growing number of tourists and immigrants has caused community organization to diminish. In the Monteverde region, this has caused the community development planning system to stop functioning effectively (N. Scrimshaw, 2002, personal communication). Also, the increased access to alcohol and an increase in crime rates are considered troublesome in these regions (Acuña et al. 2000; Chaves, personal communication; Koningen 1996; Moffat 2000; F. Nuñez, 2002, personal communication). Drug abuse and prostitution are said to have become troublesome in the Manuel Antonio region as well. Another negative social aspect of tourism in the Manuel Antonio region is that the higher prices in this region cause locals to be excluded from some tourist facilities and parts of the coastal area (Duim et al. 2001; Vergeer, personal communication).

In the Tortuguero region, the package tour structure limits the contacts between locals and tourists. Also, local people appear to make little use of the recreational facilities. Tourism development has nevertheless slightly stimulated the improvement of education, infrastructure and medical facilities in the region (J. Madden, 2002, personal communication; J. Montana, 2002, personal communication; E. Orlando, 2002, personal communication). Following the influx of tourists, women also gained empowerment. The Women's Association that manages the recycling plant exemplifies this (J. Madden, 2002, personal communication). However, frictions about how the incoming communal money should be used have been reported too. This has had a negative effect on the way the people deal with environmental and social issues. Also, alienation has taken place in the community, possibly as a result of the influx of tourism workers (D. Loth, 2002/2005, personal communication). Tourism with ASCOMAFOR integrates local education and culture in the tourist experience and stimulates intercultural exchanges. Women are the leading force behind tourism with ASCOMAFOR, and in this way, they have gained empowerment. Unfortunately, the positive effects of tourism remain limited due to the small scale of tourism. On the other hand, no negative social aspects of tourism were mentioned either (G. Alvarez, 2002, personal communication; G. Espinoza, 2002, personal communication; M. Hernandez, 2002, personal communication; O. Vargas, 2002/2005, personal communication).

6 Costa Rican initiatives to deal with a development dilemma

This study clearly represents the bilateral impact of tourism. Of the four case study areas, only tourism with ASCOMAFOR could be called really sustainable as benefits dominate on all balances. As soon as the scale of tourism begins to grow, the number of drawbacks on the environmental, economic or social dimension seems to rise. However, tourism revenue has become the most important source of income for the Costa Rican government, and there is political and social pressure to maintain Costa Rica's position in the international tourism market. This may lead the government to steer tourism development in Costa Rica to tourism at a larger scale. Nevertheless, activities have been undertaken to develop a more sustainable form of tourism in Costa Rica. For example, a reversion of the deforestation started with the introduction of policy programs like the Environmental Service Payments (ESP). These programs offer a financial stimulus to reforestation and forest protection. As a result, the percentage of forest coverage has been increasing since the 1990s. The promotion of ecotourism as an alternative land use was part of this strategy (Miranda 2003). We also would like to highlight the creation of the Sistema Nacional de Areas de Conservacion (SINAC) in 1995 and the activities of the Instituto Costarricense de Turismo (ICT).

SINAC, the National System of Conservation Areas, has been set up by the Ministry of Environment and Energy. It is a decentralized and participatory institutional system aimed at achieving sustainable management of the country's natural resources. The main objective of SINAC is the consolidation of the protected areas in Costa Rica. SINAC has created regional offices where locals are involved in conservation activities and in the promotion and development of sustainable tourism. Not only SINAC, but also NGOs take an active role in protecting landscapes, as they purchase large amounts of degraded land surrounded by remnant forest and promote protecting activities. Nowadays, 4% of protected land is privately owned (Madriz 2002; Miranda 2003). Such private reserves will be integrated into the national system of protected areas.

ICT established the *blue flag* eco-labelling program for beaches, which incorporates sustainable development principles. Recently, this successful program was supplemented by a certification system for sustainable tourism (CST). Tourism companies and hotels that meet environmental, economic and social standards are certified. CST is praised for being a premier sustainable tourism certification program, although it is sometimes criticized for requiring a lot of paperwork, which would make it less suitable for smaller companies (Bien 2002; Honey 2003).

7 The lack of initiatives at the local level

We have to admit that these promising national level initiatives are not always supplemented at the local level. Tourism policy is primarily the responsibility of the central government despite efforts in the mid-1990s to decentralize public administration. So far, the financial aspects of decentralization, like the collection of territorial taxes, have received more attention than the organizational and political dimensions (Duim et al. 2001). As a result, few municipalities have the capacity to fulfill their legal obligations in the field of physical planning, especially with respect to the planning of tourist facilities. In many cases, technical expertise, political will and/or money are lacking. Also, the local population is often not involved in policymaking. This causes little public interest in politics and planning and a lack of trust, communication and co-ordination. As a result, integrated planning at the local level is still in its infancy in Costa Rica. This general image can be elaborated by focusing on the four different regions.

The Monteverde region, the Tortuguero region and ASCOMAFOR are situated far away from the municipal centers, which makes municipal planning and control impossible. In both the Monteverde region and ASCOMAFOR, the local population has come up with initiatives to overcome these planning problems. Monteverde has an old history of 'community planning', a form of co-operative planning, in which problems are solved by forming a democratic committee that engages itself in the issues at stake. However, the important role of these ad hoc committees and related informal groups diminished with the growth of the community and the introduction of more complicated planning issues (Burlingame 2000). Lack of law enforcement resulted in the unregulated growth of tourism. In March 2002, the municipality of Puntarenas transferred powers to a newly formed Monteverde town council. A new physical plan was drafted to regulate urban growth and the protection of natural areas. The council has hereby started a process to integrate all relevant stakeholders (N. Scrimshaw, 2002, personal communication). A similar role is played by ASCOMAFOR, as the communities in north-eastern Costa Rica do not have their own councils. Although the association has less power than a municipality or a town council, it is quite effective due to its good communication network and high local involvement (O. Vargas, 2002/2005, personal communication). In both the Manuel Antonio region and the Tortuguero region, the latter is not the case. There is a serious distrust among the local population. In the Manuel Antonio region, only 6% of the local population were positive about their municipality, blaming it for its 'passivity', incompetence, corruption and lack of support of community and tourism development (Duim et al. 2001). In the Tortuguero region, local government is absent, and people feel neglected by a remote municipality (J. Montana, 2002, personal communication). The inhabitants of Tortuguero have not yet come up with a solution. This is mainly due to the fact that tourism in Tortuguero is not community based. The Tortuguero package tours

leave much power with too few people, which hampers participation and co-ordination (A. Castillo, 2002, personal communication).

8 Conclusion

Not surprisingly, our analysis reveals that the economic, social and environmental effects of tourism development in Costa Rica are both positive and negative. This is in accordance with earlier research (Duhá Buchsbaum 2004; Place 1998; Stern et al. 2003; Vivianco 2001). Often negative aspects of ecotourism are associated with environmental deterioration. Results from this study show that this is not necessarily the case. Important positive aspects of ecotourism development were the protection of natural areas and increasing job opportunities. The most important drawbacks of ecotourism development were sewage problems, lack of sufficient waste management, uncontrolled building of tourist facilities and the disintegration of local communities' social and cultural structures.

The first presumption of the present research was that a larger scale of tourism activities would result in greater benefits, but also in more drawbacks. The second presumption was that a larger involvement of the local population would result in greater benefits and less drawbacks. Third, a greater institutional capacity of a region was said to result in more sustainable tourism, because it allowed for a better planning of ecotourism facilities. Our research supports all three presumptions. In the Manuel Antonio region, environmental, social and economic problems were observed. When this community became more and more dependent on tourism, too little attention was paid to problems that arose from it. Also, a lack of local involvement and distrust among the local population has caused problems. In the Monteverde region, the 'community planning' system stopped functioning after the community became too large. This led to an escalation of tourism growth and environmental problems. Interestingly, in Tortuguero where package tours are common environmental problems can be dealt with successfully. This can be ascribed to an effective management of visitors. However, this type of tourism has major drawbacks for the local population who are effectively kept out of business. With ASCOMAFOR, only a small grade of distortion was observed. Likewise, only small revenues and social benefits occurred here. All in all, it appears that a greater institutional capacity brings about a more sustainable form of ecotourism, due to better planning.

Despite its negative aspects, we would like to stress that we still believe that ecotourism development is a promising development strategy for Costa Rica. Alternative land uses like logging, banana plantations and cattle ranches have far worse drawbacks (Miranda 2003: 51–60). Research by Stern et al. (2003) confirms this finding. Now, Costa Rica is facing the challenge to minimize negative impacts from tourism while maximizing its benefits. Although the basic structures for the development of relevant policy initiatives exist, some institutional gaps are perceived. These gaps are the result of the great velocity at which ecotourism developed. Capacity building, especially at lower political levels, has just not been able to keep up with ecotourism development. Our analysis reveals that a further development of ecotourism requires a better institutional capacity and more integrated planning on the local level. Municipalities should be challenged to start such integrated planning initiatives. One of the main targets of this planning should be an improvement of the pollution and waste management, the so-called brown agenda. At national level, it is important to keep the focus of tourism development away from mass tourism as this will undoubtedly have negative effects on the environment.

All societies are challenged to develop strategies to find an equilibrium between social, economic and environmental impacts on their way towards sustainable progress. The Costa Rican experiences show that ecotourism can be a promising development strategy if good institutional capacity exists, especially at local level. More specifically, this implies that the following conditions have to be met. First, environmental awareness among the general public should be high. Secondly, the private sector should be involved in policies that are based on a sustainable development paradigm. Social, environmental and economic aspects should be given an equal consideration in this paradigm. Moreover, participants and population should have a sense of ownership and understanding of these policies and their implementation. Finally, local entrepreneurship in the tourism industry should be high, and local culture should be integrated in tourists' activities. It is easier to meet these conditions if tourism is small scale and community based.

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