



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

WORKING PAPERS IN ECONOMICS

No 489

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the Bad, and the Ugly**

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February, 2011

**ISSN 1403-2473 (print)
ISSN 1403-2465 (online)**

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**Ecotourism and the Development of Indigenous Communities: the Good, the Bad,
and the Ugly**

Jessica Coria^a and Enrique Calfucura^b

Abstract

A large part of the literature analyzing the links between biodiversity conservation and community development assumes that nature-based tourism managed by indigenous communities will result not only in conservation of natural resources but also in increased development. In practice, indigenous communities have often failed to implement successful ecotourism projects due to a combination of factors, including isolation and a lack of financial resources, management skills, and infrastructure. Based on a review of experiences, we analyze the complex interaction among the factors shaping the success and failure of ecotourism experiences in indigenous communities, and we stress the need for a better approach to indigenous-based ecotourism. Moreover, use of complementary economics instruments and marketing of so-called charismatic species may be crucial elements for maximizing revenues of the ecotourism activities.

Keywords: ecotourism, biodiversity, ICDP, indigenous communities

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1. Introduction

The term ecotourism emerged in the late 1980s as a direct result of the world's acknowledgment of sustainable and global ecological practices (Diamantis, 1999). Ceballos-Lascurain (1996) articulated one of the most influential definitions of ecotourism: *“traveling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas.”* As ecotourism has grown in popularity, its definitions have been expanded to incorporate ideas about ecotourism responsibility, environmentally friendly destination management, and sustainable development of local human populations (Torquebiau and Taylor, 2009). Indeed, the last few decades have witnessed a continuous expansion of ecotourism. Ecotourism has been growing at rates of 10%-12% per year, i.e., 3 times faster than the tourism industry as a whole. And more importantly, ecotourism has been embraced by many developing countries – that are home to many of the world's rare and threatened species – hoping to improve their economies in a way that is environmentally sustainable. It is a leading export and appears to be one of few economic sectors that are able to guide a number of developing countries to higher levels of prosperity (IES, 2008).

Several arguments suggest that the development of indigenous communities is compatible with ecotourism. First, there is a significant overlap between ecotourism and the development of indigenous communities in the sense that the world's least developed areas – which are usually the most natural – coincide with the traditional homelands of indigenous people (Salafsky et al., 2001 and Fisher and Treg, 2007); indigenous territories are usually in peripheral areas, away from mainstream development, where indigenous land practices have maintained biodiversity in pristine or fragile ecosystems (Zeppel, 2005)¹. Second, ecotourists generally have an explicit desire to have a positive impact, i.e., to patronize local services and respect the customs of the destination hosts (Hinch, 1996). Finally, indigenous communities tend to see themselves as being one with the land rather than apart from it, and to possess *“traditional ecological knowledge”*, i.e., *“a cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the*

¹ According to Zeppel (2005), an estimated 50 million indigenous people from about 1,000 tribes live in tropical rainforests in the equatorial belt of Africa, Asia, Oceania, and the Amazon- the richest region in biodiversity over the World.

relationship of living beings with one another and with their environment" (Colding and Folke, 2000)².

However, there is also the argument that the notions of conservation among indigenous communities do not necessarily coincide with those of the conservation core (Boonzaier, 1996). Although in some cases indigenous communities have demonstrated a much better ability to maintain forest than have non-indigenous groups, the presumption that indigenous groups are inherently environmentalist is flawed. For instance, the rate of clearing in some indigenous reserves in Amazonia is alarmingly high: in one extreme case, 11.3% of a reserve was cleared in a two-year period (Fearnside, 2005). Such evidence underlines the fact that the entire socio-cultural environment for indigenous communities is strongly tied to consumptive activities. It could therefore be argued that an ecotourism scheme that precludes indigenous communities from undertaking the consumptive activities that they normally engage in could result in a great deal of unhappiness and frustration, especially if the profitability of ecotourism is not as large as expected.

In spite of this somewhat discouraging argument, the international development community has been motivated to use ecotourism to improve the economic welfare of indigenous people by forming a symbiotic relationship between tourism, indigenous communities, and natural areas. To protect both people and their homes areas, government authorities have legitimized indigenous communities' role in the overall management of protected areas. Unfortunately, the tourism research literature has generally been naive regarding the relationship between indigenous communities and ecotourism, since these groups usually face several constraints that prevent them from being successful. Indeed, although several NGOs and multilateral organizations have performed studies on the links between ecotourism and integrated community development projects (ICDP) in the last two decades, one of the biggest deficits is the lack of independent evaluations that comprehensively analyze the specific mechanisms influencing the performance of ecotourism initiatives in indigenous communities (Barret et al., 2001 and Agarwall and Redford, 2006). Though some studies analyze the experiences of indigenous communities managing ecotourism ventures (e.g., Salafsky et al., 1999; Salafsky et

² According to Colding and Folke (2000), the term "traditional ecological knowledge" entails that indigenous people possess knowledge about their local natural system in which they are embedded. This type of knowledge can include both taxonomic knowledge and knowledge about ecosystem processes. They analyze the capacity of indigenous people to manage biological diversity to secure a flow of resources and ecological services on which the local social ecological system depends. Their results suggest that indigenous people have the ability to protect threatened species because of the existence of "specific-species taboos" that prohibit the use of some species, predominantly threatened reptiles and mammals.

al., 2001; Bookbinder et al., 1998; Zeppel, 2005; and Brooks et al., 2006), these analyses lack a deeper study of how the particular characteristics of indigenous communities interact with ecotourism and what could be done to improve the likelihood of success of ICDP. In the present paper, we address these issues. We review empirical evidence, presented in journals from many fields, on the relationship between biodiversity conservation, local communities' development, and ecotourism and then analyze the various symbiotic and antagonistic effects, with special emphasis on the ecological and economical sustainability of integrated conservation and development ecotourism projects ICDP .

The paper is organized as follows. Section 2 discusses the main strategies in place to promote biodiversity conservation and local development, the role of ecotourism, as well as the factors shaping the successes or failures of integrating conservation and development into ecotourism projects. Section 3 discusses how the particular characteristics of indigenous communities affect the performance of ecotourism through ICDP. Sector 4 discusses some strategies to overcome the shortfalls. Finally, Section 5 concludes the paper.

2. Biodiversity Conservation and Local Development: A Review of ICDP Assessments

Common approaches to protecting biodiversity include creation of parks and protected areas, establishment of natural reserves, and implementation of integrated conservation and development projects (ICDP). They vary in strictness of conservation in terms of human consumptive uses.

Thus, for instance, the key feature of the national parks strategy is that local livelihood is assumed to conflict with conservation: national parks have strictly defined borders that exclude livelihood activities and rarely facilitate local economic development. People are meant to use resources outside the parks and plants and animals are meant to stay in the park. While national parks remain an important approach for conservation, they have proven difficult to implement in many settings, especially in the developing world since boundaries are difficult to enforce due to inadequate government resources, weak management capacities, remote sites, and ineffective legal systems (Brandon, 1998). In addition, by modifying the boundaries of communities and their control of land use, national parks have both contributed to marginalization of and poverty in the rural communities that have been excluded from parks (de Sherbinin, 2008) and have

negatively affected the rules that govern the use of resources by community members, leading to conflicts over natural resources outside the park (Coad et al., 2008).

Moreover, since many national parks have been proposed on lands or in waters that are legally or customarily owned and managed by local communities, it has often been impractical, illegal, or impossible to declare these lands off-limits for human use. The social and political challenges of establishing national parks have often been beyond the capacity of governments, even when backed by substantial donor assistance. In countries where remote populations endure structural social and economic inequities, it has been politically difficult to spend money on protecting biodiversity at the same time as there are many poor people with great needs.

The need to implement strategies to both make economic development feasible and assure nature conservation and development for local people has led to the development of biosphere reserves, where people are entitled to use biological resources according to defined spatial zones. In a core zone, consumptive use of resources is prohibited, yet buffer zones allow people to use resources within limits that ensure protection of the core zone. Despite the promises of this approach, success has been limited since local people have often continued to use resources in the core zone or have pushed for expanding the buffer zones into the core area. In addition, it has not provided local communities with incentives to stop external threats to the biodiversity.

In response to these shortcomings, conservationists began to develop new approaches based on the idea of making livelihood activities dependent on and hence directly linked to biodiversity, i.e., ICDP. Livelihoods drive conservation, rather than simply being compatible with it. Since livelihoods are given opportunities to benefit directly from the biodiversity, they presumably have an incentive to stop external threats to the biodiversity.

There has been an extensive debate on whether ICDP are actually contributing to conservation and whether they are profitable for local communities (see, e.g., Kramer et al., 1997; Campbell, 1999; Torquebiau and Taylor, 2009; and Winkler, 2011). When it comes to the links between community-based ecotourism and biodiversity conservation, assessments have proved to be difficult due to lack of information. In this respect, most approaches that measure conservation outcome rely heavily on biological indicators of success that involve assessing biological parameters at a given site. Although a great deal of effort has been put into developing biologically based methods, few are practical and cost-effective, especially for use in ICDP in

the developing world³. This lack of measurement of conservation success means that project managers and donors cannot determine whether interventions are working and should be continued or whether they are failing and need to be modified (Salasky and Margoluis, 1999 and Brooks et al., 2006).

In spite of these informational shortfalls, reviews of a series of ecotourism projects in a number of developing nations have attempted to determine the key factors that affect the success of ecotourism in the local communities (e.g., Weshe, 1993; Bookbinder et al., 1998; Doan, 2000; Salafsky et al., 2001; Sinclair, 2003; and Krüger, 2005). In summary, they have found that key factors that influence enterprise success include⁴:

- management skills in local communities,
- established but not too competitive markets,
- political stability,
- good market research and availability of readily visible natural features,
- financial support to conservation,
- employment and income opportunities provided by ecotourism,
- local attitudes toward conservation and tourism,
- cultural disintegration, and
- ecological status and protection status of the area.

If ecotourism is far more economically advantageous than other forms of consumptive use, this economic advantage should trigger conservation incentives. However, the ability of local communities – indigenous communities in particular – to capture the benefits from ecotourism is not always ensured (Bookbinder et al., 1998). Thus, ecotourism has added a new element to frontier resource conflicts: tourism operators and indigenous communities compete against each other for resource access. The growing indigenous perception that their relationship with tourism operators is exploitive has triggered a movement toward indigenous-controlled

³ They generally require trained specialists, time dedication, and collecting complex data sets, and do not easily link the biological impact to policy interventions.

⁴ To promote and analyze the economic and environmental impacts of “linked enterprises,” the World Wildlife Fund (WWF) established The Biodiversity Conservation Network (BCN) in 1992 to support enterprise-oriented approaches to biodiversity conservation at a number of sites across the Asia/Pacific region, and to evaluate the economic and biological effectiveness of these enterprise-oriented approaches and provide lessons and results about their performance. Salafsky et al. (2001) summarize the experience from 48 enterprises in 39 locations, including 13 projects related to ecotourism lodging.

ecotourism. For example, several indigenous groups have used barricades, strategic clearings, obstacles, and threats to deny unauthorized passage on their territories (Weshe, 1993).

Greater local involvement in conservation decisions and greater control over programs greatly affect community attitudes to conservation. To have a strategic plan for how to attract ecotourists, how many should be attracted, and how the resulting resources should be distributed have proven to be very important for positive long-term effects. Furthermore, the involvement of local communities in planning and decision making or as substantial labor makes ecotourism projects sustainable through a reduced need for consumptive land use (Krüger, 2005)

On the other hand, although there seems to be a strong link between enterprise success and the degree of local community involvement in the ownership and management of the enterprise, there seems to be only a weak link between enterprise success and conservation success. This may be the case because most projects are intended to conserve rather than improve the existing natural attributes (Salafsky et al., 2001).

Finally, there seems to be significant variation across continents when it comes to the proportion of sustainable case studies: ecotourism seems to be less sustainable in South America and Asia. Possible explanations for this include lack of easy-to-see charismatic wildlife in many protected areas, access difficulties and very low visitation rates in some cases, easy access and very high visitation rates in others⁵, and substantial revenue leakages from the regional tourism to the national and international scale. Moreover, ecotourism seems to be less sustainable on islands and in mountain habitats due to the higher fragility of these ecosystems (Krüger, 2005).

3. Particular Issues on Indigenous Communities and Ecotourism

Success of conservation-based development initiatives in indigenous communities largely depends on the combination of local and external factors that we discuss below. The fact that formal institutions in developing countries generally are weaker and lack resources and sufficient independence to contain corruption and secure property rights adds another dimension of complexity.

3.1 Resource and Skill Constraints

⁵ Bay Island in Honduras and Ambergris Caye in Belize are prime examples of ecotourism in Central America. While these areas have grown dramatically, most of the effects of ecotourism have not been positive (Belanger, 2006).

One of the main problems seen in studies on ecotourism projects in indigenous communities is that NGOs and governments have usually ignored the fact that these communities experience a number of the same problems small ecotourism operators face yet the failure rates are much higher (Buultjens et al., 2010). These organizations overemphasize the role of community cohesion as the main driver of business success and do not take into account that these communities utilize the natural resources to a substantial degree; that their standard of living in terms of economic, educational, and basic infrastructure is far inferior to their national averages; and that running businesses in poor and remote or very remote⁶ areas is associated with many problems, e.g., long distances between markets and key suppliers, lack of access to management skills and skilled labor, and harsh climate and physical conditions (Fuller et al., 2005).

Human capital weaknesses of the communities are associated with lack of skills and experience in planning, business management, financial management, marketing, and product research and development. Some people would argue that provision of such assistance to indigenous communities often places them in a poverty trap. For example, marketing of indigenous ecotourism lodges has been mainly undertaken in developing countries by the partner NGOs, preventing the formation of human capital within the communities (Zeppel, 2005).

Moreover, indigenous communities face difficulties accessing market funding channels due to low income and asset levels, lack of familiarity with the procedures of financial institutions, and inability to prepare the formal business and financial plans required by mainstream commercial lenders. For instance, Fuller et al. (2004) point out that although the Australian government has developed schemes to overcome lack of capital and to build capacity, it has not been very successful since most of the programs developed to help indigenous businesses are complicated and difficult to access for people in indigenous communities. The programs have provided little start-up capital and technical support to generate a qualitative change in the ecotourism business. Obviously, these difficulties are much more accentuated in less developed countries.

A major obstacle is the lack of access to capital since indigenous people generally have low savings due to their economic circumstances (i.e., the unemployment and income levels among this group, as well as human development indicators such as education and health conditions, have consistently lagged behind those of the rest of the population; see Hall and Patrinos, 2006) and face constraints on the use of their communal property as collateral due to land insecurity

⁶ A positive aspect of remoteness is that indigenous tourism enterprises are to a degree protected from competition.

(Fuller et al., 2003). In this respect, indigenous land regimes are diverse yet are often characterized by land conflicts and tenure insecurity. For instance, the indigenous law in Chile has a provision that makes it difficult to sell or trade these lands (Meza, 2009). Thus, in practice, such land has no value as collateral.

Due to the financial constraints and the limitations on the use of land as collateral, many ecotourism projects have become dependent on external support, and indigenous communities have failed to develop financial and management skills during this process (Kiss, 2004). Securing biodiversity might require continuing external funding since most of the funding for ecotourism in indigenous communities is relatively short-term (Garnet et al., 2007).

3.2 Land Insecurity

Indigenous communities need control over the land in order to prevent destruction of the parks and maintain the trails. Moreover, secure land rights enhance participation of indigenous communities in the conservation of protected areas and ecotourism (Haller et al., 2008). In practice, the historical struggle for territorial control and the indigenous struggle to regain control over land that they presently occupy has created both distrust among indigenous communities and land insecurity in many regions where ecotourism takes place (Bohnam et al., 2008). For instance, the indigenous communities of the MLN in the South of Chile only possess land titles for around 23% of the total area of influence of the MLN⁷, with the rest being claimed by other private parties (forestry companies in particular) and the state. Their fear of losing their lands has limited the interaction with outsiders and prevented the realization of investments. Even worse, indigenous communities' land disputes have led to an ongoing violent conflict causing not only significant economic losses but also to the loss of human lives. The intention was for the MLN to offer a way to strengthen the legitimacy of the participating communities' land rights, yet this has not been the case. Today many families in the communities still face legal disputes over the land on which they live (Meza, 2009).

In the world of vindication of indigenous land rights, ecotourism has sometimes been used by indigenous communities as a means to ensure community land titling and to establish a sense of stewardship among local residents. These represent attempts to "secure" natural resources and indigenous development within the constraints of the national laws and procedures. These efforts, which are less costly than those carried out by government agencies alone, have the potential to speed up the pace of land regularization. For instance, some organizations are using

existing forestry and conservation laws to make territorial claims that are not recognized under conventional agrarian or Indian laws. A case in point is the establishment of the Awa Ethnic Forest Reserve on the border between Ecuador and Colombia. In the face of expanding lumber extraction activities, the Ecuadoran Awa convinced the government to provide them with lands titles in exchange for the Awa's agreement to protect the forest resources of the area. Similar initiatives are taking place in Peru, where indigenous organizations are carrying out land titling projects in exchange for agreement to maintain the natural biodiversity of the forest ecosystems (Bonham et al., 2008).

In some cases, the assignment of *de facto* rights to some groups has reduced resource degradation. An interesting experience has taken place in the Communal Areas Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe, i.e., the flagship community-based resource program in southern Africa, where the legally mandated authority responsible for wildlife management in the country has decentralized state authority and conferred privileges on occupiers of titled land as custodians of wildlife, fish, and plants. Hence, land occupiers were given *de facto* responsibility for wildlife and were made beneficiaries of sound wildlife conservation and use (Taylor, 2009).⁸ CAMPFIRE is supported by long-established legislation and the arrangements have no mandated time limits. Nevertheless, permanence is not guaranteed and unfortunately, in recent years certain attempts to re-centralize wildlife management have undermined the generally supportive legislative environment in which CAMPFIRE operates (Taylor 2009).

3.3 Attitudes Toward the Market

Historically, indigenous communities have lacked a connection to the modern market economy and have instead survived in a traditional subsistence and communal way, commonly experiencing poverty and marginalization. These characteristics may condition their attitudes toward a market economy.

⁸ After 1980, Rural District Councils (RDCs) became the appropriate authorities for wildlife management. They act as intermediaries between safari operators and communities, passing on to producer communities a fixed percentage of the revenues earned. The accepted but not binding guideline is that at least 50% of the revenues belongs to the communities, up to 35% is used for wildlife management, and up to 15% remains with the RDCs as an administrative levy (Frost and Bond, 2008).

In terms of the relationship with the market economy, indigenous cultural values and belief systems are also a source of potential problems since they often conflict with the requirements of operating a business. Many indigenous communities still live in an economy based on the exchange of goods and services (Rodriguez, 2008), and the interaction created through this exchange helps unify the community. Thus, connections with the market economy might negatively affect the reciprocity within communities.

The profitability of ecotourism is inextricably linked to socio-cultural factors. Indigenous economic systems differ significantly from maximizing profits. Thus, for instance, in some cases, such as the community lodge of La Chonta in Amboró National Park in Bolivia, a lack of a culture of reinvestment implies that at the end of the fiscal year the lodge has no money to reinvest in the business. The indigenous emphasis on consultation and negotiation might also have a negative effect: by increasing transactions costs, it reduces the competitiveness and profitability of ecotourism projects. In other cases, spiritual and religious concerns may be given increased priority in ways that lead to interrupted production schedules (Fuller et al., 2005).

Perceptions of unfairness can undermine the effectiveness of ecotourism even when it provides apparent net benefits. Conservation success is therefore contingent on developing positive local attitudes in addition to providing tangible benefits. Inequitable benefit distribution and the potential presence of elite capture in the ecotourism ventures discourage the involvement of the community. One way to overcome the distributional problems linked to ecotourism revenues is to use some of the revenues to finance public goods for the whole community. For example, Gordillo et al. (2008) point out that one of the factors of the success of Posada Amazonas lodge was that a portion of the revenues was used to improve the local public goods, i.e., schools, infrastructure, water supply, and health assistance.

Finally, the trade-off between cultural integrity and commercialization of valuable nature and cultural experiences is not trivial: commercialization of the touristic products generates an interaction with the Western culture that may affect the cultural and traditional assets of the community (Fuller et al., 2005). Moreover, the cultural expressions marketed through tourism do not always receive sufficient respect from tourists and operators. While indigenous operators may add value to nature- and adventure-based activities through the provision of a cultural component, a successful site must be able to communicate its natural history while preserving its sense of identity.

3.4 Collective Action

Ecotourism as a tool for rural development requires shifting economic and political control from governments, multilateral organizations, and NGOs to local communities. Ecotourism should be based on principles that emphasize nature's intrinsic value, the importance of community self-determination, and participation. These elements involve collective action and institutional adaptation to ensure success (Ostrom, 1990). Empowering indigenous communities is an important mechanism that needs to be supported by legal empowerment. Environmental or institutional change to reallocate power, and decision making by local communities should be supported and sanctioned by higher level authorities (Sofield and Li, 2007).

Several indigenous associations have managed to develop their own decision-making mechanisms, rules, and procedures and to establish an agreement on the type of tourism activities to promote. For instance, not long after the "Red Indígena de Turismo" in the Caribbean of Costa Rica was created, the coalitions began setting goals for sustainable ecotourism based on local capacity building and environmental education (Jones, 2007). A similar process occurred in Loma Alta in Ecuador (Becker, 2003) where indigenous communities developed a capacity to make rules to regulate forest exploitation. These social arrangements have led to village-level improvements (development), forest protection and reforestation (conservation), and employment and training related to forest protection and tourism (integrated conservation and development). Without a local institution representing the community, a collective tradition of consensus decision-making, and support for a forest reserve from the many different families and forest users, this would have been difficult to achieve.

Borman (2008) discusses the experience of ecotourism among the Cofan indigenous communities in Ecuador, who have developed a successful ecotourism project based exclusively on the supply of the natural environment to the visitors rather than on a mixed supply of natural environment and cultural and indigenous heritage and traditions. The business is managed entirely by community members. Those who participate in the project receive payments for their services, yet the rest of the community has been involved as well throughout the development and management of the physical infrastructure. The communal profits are used to finance the legalization of lands and the local organization. The development of local skills through ecotourism has allowed members of the community to expand the activities and to achieve greater bargaining power in negotiations with external travel agencies. Long-term sustainability of the community and its environment has been pursued by creating a non-profit organization

with branches in both the US and Ecuador, i.e., the Cofan Survival Fund. This organization seeks outside grants and support to deepen the land legalization and management initiatives, and also provides a financial buffer that can be accessed during bad times. Greater financial resources will allow the community to improve the management and monitoring of the communal forests and to educate young people to form the future leaders of the community.

3.5 Indigenous Communities in Developing Countries

Ecotourism can benefit protected areas and the surrounding local communities if it is small-scale and locally operated or owned. Yet developing countries possess powerful economic incentives to develop ecotourism rapidly and with as few constraints as possible, which represents a danger since when offered enough incentives, they can be quick to cede control of ecotourism development to public and private elites or foreign interests by legal and illegal means (Duffy, 2000 and Griffin, 2002). The primary economic concern of such potential corruption is over the allocation of the benefits of ecotourism and over the percentage of total gross revenues from ecotourism that stays in the local community. Some recent studies have shown that the latter figure is as low as 10 percent for certain countries, including Bahamas and Nepal (Mowforth and Munt, 2003)

If developing countries are going to be promoted as ecotourism destinations, enforcement of regulations to ensure that ecotourism developments do not damage the environment is important. However, a common problem among developing countries is that regulations are not always enforced in the face of the countries' scarce financial resources, limited manpower, and inadequate technological and administrative resources. Also, violations by foreigners and local elites might be overlooked or tolerated by key members of state agencies since parts of the state apparatus have been co-opted by powerful networks of elites (Duffy, 2000).

Finally, although ecotourism might become an important source of income for developing countries, it is not a panacea; economies that become dependent on ecotourism may be easily destabilized by the fluctuating demand. A great deal of ecotourism is seasonal in nature and depends on factors such as foreign currency exchange rates, weather, and political stability in the host countries.

4. Strategies for the Success of Indigenous Ecotourism

4.1 Networking and Alliances

One of the main lessons from long-term successful experiences with ecotourism is that the creation of networks and alliances involving all the actors (i.e., indigenous community, nature conservation NGOs, local government, and tourism operators) is a key factor (TNC, 2007). To make a difference to the livelihoods and capacities of local people, autonomous grassroots institutions must be fostered and linked with markets and political structures at high levels (Edwards, 1999). This means that, on the one hand, actions should be taken to develop more deeply the tourism value chain either among local agents or between local agents with national and international operators. Furthermore, complementary support from local governmental authorities is many times needed.

Tourism firms may play a fundamental role in the success of indigenous-based ecotourism in many ways. As mentioned before, marketing of ecotourism is fundamental, yet it is too often neglected in community-based tourism projects. This is likely due to the nature-conservation NGOs that support the ecotourism projects being unfamiliar with the rigors of business development. In contraposition, TNC (2007) shows an example of successful indigenous-based ecotourism where strong relationships between indigenous communities and national and international tour operators designed to facilitate marketing and manage sales – together with market analysis and development of new products and services – have enhanced the production and diffusion of marketing material. Stronza (2008) cites the example of Canodros S.A., a private company engaged in the development of nature and cultural tourism that has provided capital to the Achuar community in Ecuador for building the lodge, technical services, management operations, and marketing of the destination. This partnership functioned for more than 10 years until it was transferred to the indigenous community in 2008. The training provided by Canodros S.A. in the past has built enough management skills. Thus, the Achuar community is currently running the business almost completely on its own; Canodros S.A. is only in charge of the marketing of the lodge (Grench, 2009).

In the same line, the collaboration between the indigenous community of Infierno, Peru, and a nature-based tour operator, Rainforest Expeditions, helped build local capacity. The parts signed a 20-year agreement for Posada Amazonas Lodge in 1996 that made the tour operator responsible for funding, building, and operating the new lodge, with forty percent of the profits going to the community. After the agreement expired, the community took over the ownership of Posada Amazonas and chose to continue working with the same partner (Gordillo, Hunt, and Stronza, 2008).

Networking and alliances are important for the success of ecotourism in indigenous communities. However, the design of cooperation efforts must balance the different interests in the best possible way. Supportive external institutions may sometimes not necessarily help integrate conservation and development if they create an inappropriate incentive structure that can easily disintegrate social capital, undermine collective action, and hinder institutional capacity building. Other times, faulty knowledge about indigenous communities' management systems has prevented the fulfillment of the development needs of these communities and, thus, the attainment of conservation success (Marie et al., 2009).

Alliances between indigenous communities and conservation NGOs may be difficult to achieve, especially if the interests of indigenous communities in development – even within the broad frame of a forested landscape – differ from those of biodiversity conservationists promoting survival of all species (Adams and Hutton, 2007). These divergences usually affect the desired scale of the ecotourism project and the degree of participation of the local community. Koenig and Juska (2006) present the case of an ecotourism initiative between the indigenous community of Uaxactún, Guatemala, and the Wildlife Conservation Society (WCS). The involvement of the community in the ecotourism development plans is minimal, implying few opportunities for the community members to develop the capacity and skills necessary to sustain the ecotourism business once the NGO cuts the funding.

The excessive involvement of NGO and/or multilateral organization staff in the management of ecotourism projects may also have negative effects as communities become accustomed to little involvement and to patronage. The community may become accustomed to receiving benefits from external partners and to expecting something in exchange for actively participating in the conservation joint-venture (Gordillo et al., 2009).

4.2 The Role of Charismatic Biodiversity

A charismatic fauna might be the most important attraction for visitors of indigenous-based ecotourism projects⁹. In fact, the number and variety of species likely to be encountered seem to be strong predictors of tourist visitation (Naido and Adamowicz, 2005 and Gordillo et al., 2008). The charismatic species of interest for eco-tourists often turn out to be the extinction-prone ones, so ecotourism may be able to align conservation and development incentives in a

⁹ For example, Kerley et al. (2003) evaluate the perception of biodiversity and motives among tourists visiting the Addo Elephant National Park, South Africa, and find that tourists tend to focus on a few charismatic species.

better way in such cases (Lindsey et al., 2007). Moreover, charismatic species help support tourism in times of political instability, as they help communities diversify their sources of income and reduce the susceptibility of tourism to these conflicts (Lindsey et al., 2007). For instance, the mountain gorilla in Rwanda helped sustain ecotourism despite the great political instability in the region (Verissimo et al., 2009).

Conservation projects usually select flagship species to raise awareness in the population or among potential visitors in the case of ecotourism. Flagship selection depends on the purpose of the ecotourism. An often encountered problem is that while the values that indigenous communities place on species are more related to local cultural and religious motivations, foreign visitors are typically interested in high profile, charismatic species like tigers and gorillas (Verissimo et al., 2009).

Tourism flagship species help market the region to tourists and encourage tourists to donate funds directly to conservation projects. Even in areas lacking charismatic species, selection of flagship species can help raise awareness about local biodiversity conservation needs. Tourism revenues related to the conservation of the charismatic species have resulted in protection of biodiversity and have also encouraged positive local attitudes toward conservation. Nevertheless, one of the problems of focusing on charismatic species is that it generates misconceptions of the nature of biodiversity that may affect the public perceptions and policy decisions concerning biodiversity conservation. More information from indigenous guides would lead to a broader comprehension and a higher valuation of wildlife experience and biodiversity among tourists (Lindsey et al., 2007).

4.3 Economic Instruments

Ecotourism is often proposed as a way to make conservation pay for itself, an assumption that is usually wrong. As Wells (1992) points out, due to a combination of factors, e.g., lack of infrastructure, access difficulties, political instability, and absence of spectacular or readily visible natural features and flagship species, only a minority of protected areas in developing countries have a potential to generate large revenues through ecotourism. In this context, there are numerous economic incentives that can be used to increase revenues from biodiversity conservation.

Payments for Environmental Services

One of the instruments that can be used to increase revenues from biodiversity conservation is Payments for Environmental Services (PES), which are voluntary transactions between at least one buyer and at least one seller where payments are conditional on maintaining an ecosystem use that provides well-defined environmental services. The payments¹⁰ thus provide a direct and tangible incentive to conserve the ecosystem and prevent encroachment by others (Pattanayak et al., 2010).

Today there are more than 300 PES programs implemented worldwide (Blackman and Woodward, 2009). In the developing world, Costa Rica has led the efforts to experiment with the application of payments for environmental services. The Costa Rican law recognizes four services that are provided by forests: watershed protection, scenic beauty, carbon fixation/sequestration, and biodiversity conservation. The PES program pays forest owners for producing this bundle of environmental services through three main activities: reforestation, forest management for timber production, and forest preservation. An annual per hectare payment is paid as compensation to landholders for the bundle of all four services, and no distinction is made between ecosystems or any of the individual environmental services with the exception of reforestation, where a larger payment is made. Financing comes from donors, earmarked taxes, and environmental service buyers. Since its implementation in 1996, the program has established contracts on approximately half a million hectares (Pattanayak et al., 2010).

PES schemes help diversify rural livelihood strategies while providing conservation successes. Some of the programs are managed directly by indigenous communities whereas others are managed by external agents (see, e.g., Clements et al. 2010, Nelson et al. 2009 and Somerville et al. 2010).

Implementing PES schemes in a context where land and resource rights are poorly defined and governance of shared resources is poor offers a particular challenge, as it may be difficult to modify individual behavior if individual opportunity costs are not taken into consideration. Moreover, the design of the PES schemes also has to consider their potential negative effects. For instance, PES schemes have to manage the distribution of their benefits and costs across the

¹⁰ PES has to be additional, such that conservation would not have taken place in the absence of the payment.

members of the community so that governance is not weakened even further by the implementation of the instrument.

In the case of indigenous communities, exclusion from the benefits derived from PES may be related to a lack of the capital necessary for initial involvement. For instance, Fisher and Treg (2007) show that participants in Costa Rica's payment system are richer and are more educated than poorer indigenous communities. On the other hand, the fact that the socio-cultural environment for indigenous communities is strongly tied to consumptive use of resources might imply that they do not fulfill PES eligibility requirements. For example, the Costa Rican PES scheme excluded most small-scale farmers and indigenous communities because agro-forestry was not made eligible.

A focus on non-rival and non-excludable benefits, e.g., community infrastructure, would potentially ensure that the entire community is provided an opportunity to access the benefits. However, PES schemes can fail or be detrimental to indigenous communities if they fail to incorporate an understanding of how indigenous communities value and use key environmental services for their own subsistence and well being (Rosa et al., 2004). Hence – though PES schemes offer promise – when it comes to indigenous communities, some new challenges need to be considered.

Pricing

The level of demand for indigenous ecotourism has important implications for the development of the sector. On the one hand, if the number of ecotourists is too high, projects are unlikely to be unsustainable from an ecological perspective. Thus, successful ecotourism projects could subsequently fall victim to their own success if the number of tourists is not strictly controlled or quotas are not enforced. As described earlier, this risk seems particularly latent in developing countries. On the other hand, if the number of ecotourists is too low, there is a risk that ecotourism projects do not generate enough revenue to encourage participation of indigenous communities.

Conventional wisdom is that indigenous tourism is much more popular among international tourists, especially from northern European countries, than among domestic tourists. Moreover, indigenous ecotourism enterprises are to some degree protected from competition due to their relative remoteness. A well-designed system of fees can make these areas more financially self-

sufficient, sending a positive signal regarding the value of land devoted to conservation. Higher entry fees for foreign eco-tourists can boost revenue creation substantially and make ecotourism the best land use option. In addition, since host countries are poor, charging fees below the amounts that foreign visitors are willing to pay for enjoying the resource would imply that the host country would be subsidizing recreation for visitors from richer countries (Alpizar, 2006).

Empirical studies have used stated preference techniques to assess willingness to pay for different ecotourism attributes. These analyses show that entrance fee hikes for protected areas generally result in fewer tourist visits but more revenue since the demand for ecotourism is generally inelastic (Hearne and Santos, 2005 and Naidoo and Adamowicz, 2005). Regions that are rich in biodiversity may be able to charge more than less diverse areas, implying a mechanism for funding conservation of rich ecosystems. For example, Naidoo and Adamowicz (2005) find that the economic benefits derived from avian biodiversity can be used to compensate local communities and could protect 80–90% of a tropical forest reserve's bird species.

Certification

In recent years, eco-labeling and certification has emerged as a market mechanism for ecotourism operators to regulate themselves voluntarily in order to minimize the environmental impacts of tourism and to provide a market signal for potential partners and funding from external organizations (Epple-Wood and Halpenny, 2001). To date, several eco-labels for ecotourism are in place (e.g., ecoQuest and Blue Flag in South Africa, the Eco-Rating System in Kenya and Global Green 21; Guatemala's Green Deal Certification of the Maya Biosphere Reserve; Australian Nature and Ecotourism Accreditation Program). In spite of the potential advantages of such schemes, in practice, the certification literature has often pointed to a lack of effect of certification as a means of influencing consumer selection of tourism product (Buckley, 2002).

In addition, none of the certification systems in place explicitly consider the cultural and socioeconomic characteristics of indigenous ecotourism operators (Vivanco, 2007). In this respect, a broad market-based certification for ecotourism may favor only larger tourism companies that are able to finance the implementation of such an instrument (Epple-Wood and Halpenny, 2001). In that way, certification might end up serving as a negative signal for indigenous communities. Therefore, as stressed earlier, efforts to implement a certification of

indigenous ecotourism will require not only full involvement of the indigenous communities in order to provide the inputs needed to take into account the particular characteristics of this part of the population, but also financial and technical support from NGOs as well as governmental and multilateral organizations interested in providing a unique label to the indigenous ecotourism industry.

5. Discussion and Conclusions

The question of whether ecotourism is a form of sustainable development for indigenous communities does not have a definite answer due to the many variables involved. What seems clear is that – at least in the short run – indigenous ecotourism does not survive spontaneously without the full involvement of the indigenous community and the respect and support from external agents in the design, implementation, and diffusion of ecotourism ventures.

Land rights, governance, financial support, and the capacity of stakeholders are some of the conditions enabling a successful ecotourism project. In the case of indigenous communities, lack of management skills and severe infrastructural constraints prevent attainment of success. Moreover, ecotourism development has often been imposed from the national level with the local indigenous people excluded from the planning, preparation, and implementation phases of ecotourism development projects.

One must keep in mind that indigenous notions of conservation practices are fundamentally different from Western notions. Participation of indigenous communities in all phases of planning and implementation is an important factor in minimizing the negative impacts of ecotourism. Indeed, such participation has the potential to create positive cultural and environmental impacts, and may also increase trust, leadership, and organization.

Indigenous communities need to participate also in the benefits of ecotourism. However, this can be difficult in some developing countries. Social conflicts can emerge from unequal earnings and increased gaps between rich and poor households within the communities. Without experience in managing such conflicts, revenues will weaken trust and cohesion in local communities. Some critics would argue that this in fact comprises a negative cultural impact. However, if indigenous communities are involved in decisions and participate in the management of protected areas, they maintain a sense of control over their own relationship

with their habitat, and such a sense of control over their own fate may indeed strengthen their cultural identity.

National level controls are also necessary in order to coordinate infrastructure development with local planning and to provide checks on the speed and quality of ecotourism development. To legitimize the rights of indigenous communities, the national government must also delegate authority by sanctioning local controls.

Ecotourism is not a panacea or a simple way to finance protected areas. At a minimum, ecotourism requires that technical managers become involved in understanding the ecological and cultural issues that arise from establishing protected areas. In its ideal sense, integrated conservation and development ecotourism projects require full-fledged cooperation and a spirit of partnership between various levels of government, NGOs, and indigenous communities. Furthermore, since ecotourism may not be particularly profitable in some countries – due to a combination of factors such as lack of readily natural features and flagship species, infrastructure, and political instability – it should not be conceived as the only source of development of indigenous communities; rather, it must be complemented with other actions implemented by the governments and other agents. In such a sense, there is no substitute for broader commitment by governments, external donors, and nongovernmental organizations to solve other problems and demands faced by indigenous communities. Lack of financial inputs and economic incentives can hamper organizational and institutional building, particularly at the point when the initial voluntary enthusiasm for collective action has dissipated.

There is a need for improving the communication between actors to align objectives and to achieve the goals of conservation and development, especially if actors have different expectations about the results of ecotourism. For example, given the general poverty of indigenous communities worldwide, they usually look for quick and positive social and economic outcomes from ecotourism and conservation activities. On the opposite end, conservation-based NGOs and governments are probably more interested in reducing the level of intervention in areas under protection. To what extent these objectives have been addressed has been largely overlooked in the literature, yet it seems clear that better communication and deeper indigenous involvement are crucial parts in the work to internalize, smooth, and manage players' expectations, as they help provide a more sustainable environment for the joint work between the community and other actors.

The difficulties behind the implementation of indigenous ecotourism do not mean that the initiatives should be abandoned. On the contrary, considering the urgency of reducing degradation and the threats to biodiversity, it is important to use the whole range of potential policy options. However, our review points to a need for a more careful and more supportive approach to the design and implementation of indigenous ecotourism. Empowering indigenous people through education, provision of public goods, and participatory involvement may pave the road for a more fair and sustainable development of these communities around the world.

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