

AN ASSESSMENT OF COMMUNITY-BASED MODELS FOR THE CONSERVATION OF BIODIVERSITY

Patrick Campbell

As human pressures on the environment continue to grow, the world's biological diversity has become increasingly concentrated in the relatively few natural areas that have remained more or less unchanged by human activities (Wilson 1988). This trend has led governments and conservationist organizations to develop networks of parks and reserves to protect these few remaining sites (Wells et al. 1992). The primary conservation strategy of the world's three largest conservation organizations (World Wildlife Fund, The Nature Conservancy, and Conservation International), therefore, primarily takes the form of identifying and preserving the most biologically important habitats worldwide (Chapin 2004). The global preservation of such habitats, variably labeled "ecoregions," "hotspots," and "conservation landscapes," is widely viewed as necessary to address the huge global threats that ecosystems and species presently face (Chapin 2004).

Since the United States first established a National Park System in 1872, the predominant model for land preservation has been largely militaristic in nature, relying on guard patrols and stiff penalties in order to deter human activity within park boundaries (Chapin 2004). Such an approach, however, has had a significant impact on many indigenous people groups who call these lands home. As Wells et al. explain, "communities next to protected area boundaries frequently bear substantial costs – as a result of lost access – while receiving little in return. Local residents, who tend to be poor and receive few government services, often perceive protected areas as restricting their

ability to earn a living” (Wells et al. 1992, p. 2). As a result, conflicts have arisen in many areas of the world between the conservationists that manage these protected areas and the local people now living along their borders. Wells et al., for example, cite that the pressures of growing populations and unsustainable land use practices outside protected area boundaries frequently result in illegal and destructive encroachment of park boundaries (Wells et al. 1992).

It is presently acknowledged by many in the conservation community that traditional “preservationist” approaches to park management are unable to balance the competing objectives of conservationists and indigenous peoples (Wells et al. 1992). During the late 1980s and early 1990s, therefore, a variety of alternative strategies to biodiversity conservation were considered which attempted to build on the premise that “successful conservation means contented neighbors” (Honey 2008, p. 193). This paper considers the relative strengths and weaknesses of two strategies in particular that have been developed in response to this perceived need of conservationists to garner the support and cooperation of the people whom their programs and policies impact. The two strategies I will consider are integrated conservation-development projects, or ICDPs, and ecotourism. From my assessment of these two strategies, I will attempt to answer the question of whether effective biodiversity conservation can be achieved without sacrificing the rights or interests of indigenous peoples.

Integrated Conservation-Development Projects (ICDPs)

Integrated conservation-development projects, or ICDPs, “attempt to ensure the conservation of biological diversity by reconciling the management of protected areas

with the social and economic needs of local people” (Wells et al. 1992, p. ix). It is this emphasis on promoting social and economic development among communities adjacent to protected area boundaries that most clearly distinguishes ICDPs from other conservation projects (Wells et al. 1992). Such benefits to local communities, however, should be understood primarily as means to achieve conservation goals rather than ends in themselves. That is to say, “For an ICDP to [fulfill its purpose]...it is not enough for the development component to foster improved local living standards – a difficult enough task. The development process must not only be economically and biologically sustainable, but must also conserve the ecosystem of the protected area” (Wells et al. 1992, p. 25).

In order to satisfy this latter requirement, Wells et al. press the importance of establishing explicit *linkages* between projects’ development components and conservation objectives. Their initial evaluation of 19 such projects, however, found that “[t]here was a general failure to specify exactly how ICDP activities were expected to lead to enhanced protected area management” (Wells et al. 1992, p. 64). The study, furthermore, recognized special difficulties for project managers in anticipating how particular development projects would influence human behavior with respect to park resources. For example,

building an access road may enhance local development by improving market access – but experience shows it may also improve park access for illegal hunting, timber cutting and settlement. Improving farming tools or introducing draft animals may allow farmers to increase productivity – but it may also free up labor, thereby leading to more land clearing and an expansion of the agricultural frontier. Agricultural development may principally benefit smallholders – but the rural landless may represent a greater threat to the park (Wells et al 1992, p. 31).

In light of such trends, Wells et al. challenge the “widespread but unsupported assumption that people who are made better off as a result of a development project will refrain from illegal exploitation of a nearby protected area even in the absence of the negative incentive provided by more effective penalties” (Wells et al. 1992, p. x). They suggest, rather, that ICDPs should be used as a supplement to, rather than a replacement of, traditional preservationist approaches to conservation, and encourage that guard patrols and penalties for illegal activities in protected areas be reinforced (Wells et al. 1992). Such enforcement mechanisms are viewed as consistent with the ICDP concept as long as they are integrated with “genuine local development efforts” and “serious attempts to improve local people-park communications through educational campaigns and other means” (Wells et al. 1992, p. x).

The perceived failure of ICDPs to strengthen the functionality of protected areas has led to a resurgence of preservationist-style arguments, arguing that conservation strategies should be based on rigorous biological science rather than social or humanitarian ideals. For example, Katrina Brandon, one of the contributors to the aforementioned evaluation of ICDPs, has recently argued that

[t]he trend to promote sustainable use of resources as a means to protect these resources, while politically expedient and intellectually appealing, is not well-grounded in biological and ecological knowledge. Not all things can be preserved through use. Not all places should be open to use. Without an understanding of broader ecosystem dynamics at specific sites, strategies promoting sustainable use will lead to substantial losses of biodiversity (Brandon et al. 1998).

Chapin (2004) and Dowie (2006) argue precisely to the contrary that successful conservation cannot be achieved as long as local indigenous groups are excluded from the land’s management activities. This position essentially argues that the preservationist

approach to conservation is altogether inefficient. Dowie cites, for example, that during the same period in which conservation organizations succeeded in doubling the total land area under conservation protection, biodiversity on the planet actually decreased by about 40 percent (Dowie 2006). Chapin similarly suggests that concepts such as “ecoregions,” “hotspots,” and “conservation landscapes,” which conservation NGOs have adapted to explain and motivate their agendas, are “little more than slick marketing tools,” and that “the ‘science’ part, given that it exists, is largely for decoration” (Chapin 2004, p. 23). They use these arguments to motivate the thesis that conservation interests are best served by increasing sanctions for indigenous people to continue to manage the land according to historical patterns (Dowie 2006).

The above arguments, however, seem to rely on the assumption that historical patterns of land management by indigenous peoples will remain relatively sustainable – an assumption that the neo-preservationist arguments deny. Lu Holt (2005) takes up these preservationist-style arguments that specifically cite the growth and modernization of indigenous peoples as a justification for excluding them from conservation activities. Such assumptions, argues Lu Holt, constitute a “conservationist Catch-22” in which “[the] cultural conditions deemed compatible with biodiversity conservation are precisely those from which we would not predict conservationist practices to emerge” (Lu Holt 2005, p. 199). According to this argument, it is precisely under such conditions of increased growth and modernization that people develop a conservationist attitude toward resource management. She uses this premise to motivate her argument that conservation agencies, rather than removing their support from communities as they become more

modernized, should lend their knowledge and expertise to facilitate responsible development, thereby minimizing long-term negative impacts (Lu Holt 2005).

Discussion

Wells et al. wrap up their evaluation of 19 integrated conservation-development projects by concluding, “ICDPs cannot address the underlying threats to biological diversity” (Wells et al. 1992, p. xi). They associate this inadequacy of ICDPs with the prevalence of undermining forces that originate far beyond park boundaries. Among the forces cited by the report are “[the] public ownership of extensive areas of land unmatched by the capacity of government agencies to manage these lands; powerful financial incentives encouraging overexploitation of timber, wildlife, grazing lands, and crop fields; an absence of linkages between the needs of conservation and the factors encouraging development; and laws, policies, social changes, and economic forces over which poor people in remote rural areas have no influence” (Wells et al. 1992, p. 60). They use these conclusions to further reinforce their argument that ICDPs should be used as a supplement to, rather than a replacement of, traditional conservation methods. They nonetheless urge that ICDPs continue to be strengthened and expanded, citing the dearth of viable alternatives. They note that human pressures on ecosystems will continue to increase, and that it is “inconceivable” that networks of protected areas can be indefinitely maintained by military force. They thus conclude, “*innovative, well-designed ICDPs at carefully selected sites that constructively address local people-park relationships are essential to the conservation of biodiversity and thus to sustainable development*” (Wells et al. 1992, p. 61).

Recently, many of these conclusions have been incorporated into the development of a new generation of ICDP projects, often referred to as community-based conservation projects. In a report based on 20 years of research in the region of Bay Islands, Honduras, Susan Stonich (2005) offers specific suggestions for enhancing community-based tourism development and conservation in tourist destinations with heterogeneous social and cultural contexts and fragile environments. The common basis of her recommendations is the argument that “effective community participation essentially is based on an understanding of extant social relations” (Stonich 2005, p. 82). Whether such recommendations are ultimately successful in enhancing the quality and effectiveness of community-based conservation projects, the dominant factors threatening biodiversity remain largely beyond their scope of application.

Ecotourism

The International Ecotourism Society (TIES) defines ecotourism as, “Responsible travel to natural areas that conserves the environment and improves the well-being of local people” (Honey 2008, p. 6). When clearly defined and appropriately regulated, ecotourism has been widely recognized for its potential to unite the interests of conservation and development. For example, Wells et al. cite that ecotourism “can justify setting aside large areas of land for conservation; entry fees can generate substantial funds to support management; and tourist expenditures (on lodging, transportation, food, guides, and souvenirs) can be an important source of income for communities nearby, compensating them for loss of access to traditional resources and giving them an incentive to conserve the wildlife” (Wells et al. 1992, p. 34).

As just noted, however, much of ecotourism's potential as a conservation strategy depends on the principles by which it is defined and the standards by which it is regulated. Not surprisingly, then, one of the primary criticisms leveled against the conservation potential of ecotourism is the prevalence of competing terms and lack of precise definitions (Honey 2008). Much effort is being invested, however, into the development and institutionalization of clear standards and certification programs that will help to discriminate genuine instance of ecotourism from what Honey refers to as 'ecotourism lite,' which adopts only its facade. Significant progress has also been made toward defining clear principles that can be used to guide the development of new projects, as well as evaluate and improve upon existing projects. As Honey conceives it, for example, 'real' ecotourism exhibits the following seven characteristics: (1) involves travel to natural destinations; (2) minimizes impact; (3) builds environmental awareness; (4) provides direct financial benefits for conservation; (5) provides financial benefits and empowerment for local people; (6) respects local culture; and (7) supports human rights and democratic movements (Honey 2008). Similar lists of principles have been successfully applied in evaluations of existing projects in ecotourism, as well as in guiding the design and implementation of new projects.

Another criticism of ecotourism as a conservation strategy is that it still carries many of the risks associated with tourism more generally. Problems that have been cited as being associated with new tourism ventures in developing nations include (1) profit leakage from the host country to those of international partners and investors (Honey 2008; Chambers 2010); (2) the introduction of stress to the community's existing social and economic structures, e.g., tourism can lead to the weakening or eroding of local

traditions and values (Chambers 2010), increased criminal activity (Chambers 2010), localized inflation (Chambers 2010), and increased economic stratification within a community (Chambers 2010); (3) the creation of local dependency on an unpredictable and potentially unsustainable market (Chambers 2010; Honey 2008); and (4) failures to make adequate provisions for the long-term viability of the enterprise, e.g., many international ecotourism ventures fail to survive radical transitions in the business's managerial structure¹, changes in local law or political structure, etc., forcing the local community to find new ways to compensate for all its previous functions. With respect to ecotourism projects specifically, Carrier and Macleod (2005) argue that ecotourism is often viewed from within an "ecotourist bubble," i.e., in a way that ignores its socio-cultural context. In particular, they cite the routine exclusion of the environmental costs associated with travel to and from tourist destinations from discussions about ecotourism, as well as to the frequent dislocation and marginalization of local populations in the creation of ecotourist destinations like parks and reserves (Carrier and Macleod 2005).

This latter concern has been echoed by a slue of humanitarian groups and anthropologists studying the impacts of tourism on local people groups. Reid (2003) argues that tourism is fundamentally detrimental to host communities because it acts to homogenize societies and commodify cultures across the globe (Reid 2003). Other anthropologists believe that tourism can act as a positive force both for people and the environment, but emphasize different manners in which this potential has failed to be realized. Wallace and Diamante (2005), for example, argue that, although ecotourism has promise as a mechanism by which environmental conservation can be promoted and

¹ E.g., the property lease on the Maho Bay Camps, begun by New Yorker Stanley Selengut in the U.S. Virgin Islands, runs out in 2012. The land is expected to be picked up by a large luxury hotel chain (Honey 2008).

attained, nature conservation NGOs often fail to recognize that such projects can have unforeseen consequences, especially for local communities. Drawing on a case study in which they served as indirect consultants to The Nature Conservancy in the development of a collaborative network for tourism projects in Guatemala, the authors argue that including anthropologists in the planning and development stages of an ecotourism project can help to mitigate the potential negative impacts of ecotourism projects (Wallace and Diamente 2005). Likewise, Ingles (2005) argues for the place of anthropologists and other social science professionals in nature-based tourism, citing that anthropologists are particularly well suited to serve as guides and interpreters, consultants and analysts. She suggests that the majority of nature-based tourist enterprises fail to recognize the potential benefits of employing anthropologists, filling their ranks instead with students of the environmental sciences. The anthropological perspective, argues Ingles, can provide a more holistic interpretation of the tourist experience by emphasizing the interconnectivity of people and environment (Ingles 2005). We might generalize from these reflections that ecotourism projects generally benefit from increasing the number and variety of perspectives that are brought to bear on their design and implementation.

Discussion

Although pitfalls abound, successful instances of ecotourism are not unheard of, indicating that many of the above difficulties can be greatly alleviated or even resolved completely. For example, Stronza (2005) reports on her four years of research with a community-based ecotourism venture called Posada Amazona, located in Madre de Dios, Peru. Posada Amazona is “one of the longest running experiments in joint management

of a tourism venture, with the aim of one day turning complete ownership over to the local people” (Honey 2008, p. 105). In her report, Stronza discusses specific obstacles that arose during the initial phases of the project and describes how the two parties to the agreement ultimately sought to resolve them. During these negotiations, Stronza considered her unique skills and experience as an anthropologist to be instrumental in facilitating fruitful discussion and reaching satisfactory resolutions (Stronza 2005).

Community-based projects like Posada Amazona are considered the ideal of ecotourism (Grossman and Koch 1995), and their successes are treated as decisive evidence in support of ecotourism’s potential to resolve the often-conflicting interests of conservation and development. One seemingly irresolvable problem with using ecotourism as a conservation strategy, however, is that most biologically important areas simply do not have the potential to attract sufficient numbers of tourists to support conservation (Wells et al. 1992). Perhaps the conditions that presently limit the potential of these locales to attract sustainable numbers of tourists will be different in the future. In the mean time, however, it seems that ecotourism projects, like ICDPs, are restricted to playing a merely marginal role in biodiversity conservation.

Conclusion

Can effective biodiversity conservation be achieved without sacrificing the rights or interests of indigenous peoples? On the basis of our analysis, it seems the answer is sometimes yes, sometimes no. While both ICDPs as well as ecotourism projects remain two of the most promising means of reconciling the often-conflicting interests of conservation and development, neither strategy has wide enough scope to adequately

address the more fundamental threats to biodiversity. Insofar as these are the best options we presently have for accommodating local communities with an interest in growth and modernization, it would seem that the majority of conflicts between people and parks are fated to continue. Therefore, while ICDPs and ecotourism projects should continue to be strengthened and expanded for their integral role in uniting the interests of conservation and development, primary efforts in the conservation of biodiversity should be directed toward the resolution of those forces that originate far beyond park boundaries.

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