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## Co-management as an Innovative Practice

Bruno Sarrasin, Ph.D. and Jonathan Tardif

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Article abstract

Tourism is one of the major outcomes of globalization, which also brings new challenges to local authorities. In this perspective, co-management could be analyzed as an innovative practice in promoting natural resources-oriented tourism. Moreover, it raises the following question: how does power sharing – on which co-management is based – contribute to local development? This question could be answered through a case study using political ecology which could contribute to renew the reading of ecotourism through an innovative analytical framework.

# Ecotourism and Natural Resources in Dominica
## Co-management as an Innovative Practice

**Bruno SARRASIN, Ph.D.**
**Professor**
**Department of Urban and Tourism Studies**
**Université du Québec à Montréal (ESG-UQAM)**
**sarrasin.bruno@uqam.ca**

**Jonathan TARDIF**
**Doctoral Student**
**Department of Geography**
**Université de Montréal**
**jonathan.tardif.1@umontreal.ca**

ABSTRACT : Tourism is one of the major outcomes of globalization, which also brings new challenges to local authorities. In this perspective, co-management could be analyzed as an innovative practice in promoting natural resources-oriented tourism. Moreover, it raises the following question: how does power sharing – on which co-management is based – contribute to local development? This question could be answered through a case study using political ecology which could contribute to renew the reading of ecotourism through an innovative analytical framework.

*Key words : ecotourism, co-management, political ecology, protected areas, Dominica.*

Protected areas are a major component of the biodiversity conservation strategy of most countries. Far from being neutral, their creation, which is a highly political issue, is generally accompanied by economic, social and environmental changes (Brechin *et al.*, 2007; West *et al.*, 2006). Often previously used by local communities for decades, their sudden appearance and the ensuing new rules combine to modify local and regional dynamics, sometimes drastically (Borrini-Feyerabend *et al.*, 2004a). As a result, even though protected areas can contribute in some cases to both biodiversity conservation and improved living conditions in certain communities, they are very often the cause of increased poverty levels, particularly if rural communities are forbidden to carry out some of the traditional or non-traditional activities on which their collective welfare depends (CBD, 2008; Scherl *et al.*, 2004).

It is in this context that ecotourism is presented as a panacea for reconciling economic development, environmental protection and the collective welfare of communities (Honey, 2008; WTO and UNEP, 2002; Goodwin, 1996). Ecotourism is a complex phenomenon dependent on quality natural resources and influenced in particular by developments in the tourism industry across various scales (Jamal and Stronza, 2009). For Hawkins and Mann (2007: 352-353), recognition that tourism development is a multisectoral and multidimensional process is the most important lesson to be drawn from the literature of the past 25 years. This context led Farrell and Twining-Ward (2004, 2005) to suggest that the analysis of tourism activities would stand to gain if conducted from the perspective of socio-ecological systems – where human beings and ecosystems form an integrated system – so as to reflect all the complexity of the issues in this sector. This is particularly important when the destination is environmentally sensitive, as is often the case for ecotourism projects implemented in protected areas of countries in the South (Honey, 2008). How can political ecology, which is devoted to interactions between society and the environment, be innovative in renewing the analysis of natural resource management challenges, more specifically in a context of ecotourism development?

The main goal of this article is to identify certain innovative resource management practices on the Island of Dominica, taking into account the role of stakeholders across different scales, as emphasized by political ecology. This is the first step in a more in-depth research project involving key contacts which aims to clarify the following questions: Why would a national government agree to share power with local and regional stakeholders in natural resource management and ecotourism? What would cause it to adopt rules that favour the decentralization of governance in these areas? Lemos and Agrawal (2006) provide some possible answers and mention several reasons that could account

for this trend, particularly in certain so-called developing countries: 1) a large number of nation-states do not have the human and financial resources to properly manage their territories; 2) growing pressure has pushed many countries to adopt democratic processes; 3) communal research in the past 30 years, which has shown that communities as well as other small social organizations have the ability to manage resources, has provided the intellectual groundwork to operate a change toward environmental decentralization. In this article, we explore how political ecology allows the debate to be reopened on the subject.

## The contribution of political ecology: Innovation through power sharing

Even though it is diverse, political ecology research shares the idea that environmental changes and ecological conditions are the product of political processes. That involves three fundamental assumptions in addressing any problem (Bryant and Bailey, 1997): 1) costs and benefits associated with environmental change are distributed unequally among the stakeholders; 2) this unequal distribution reinforces or reduces existing social and economic inequalities; 3) and leads to altered power relationships that now result among the stakeholders. In *Land Degradation and Society*, Blaikie and Brookfield (1987) clearly laid the foundation for political ecology by defining most of the key concepts in this area, in particular a chain of explanation, which expresses, across different scales, a commitment to explore marginalized communities, and the perspective of a broadly defined political economy. We could summarize by suggesting that one of the key contributions of political ecology is to bring the concept of power to the centre of the analysis of so-called environmental issues with which ecotourism projects are associated.

From this perspective, different stakeholders (the state, resource users, civil society, private sector, etc.) may be induced to share power and responsibilities in relation to natural resource management. This collaborative management approach, commonly called *co-management*, or more generally included in the concept of governance, can take various forms, depending on the type of socio-ecological system in which it is found.

Co-management can be defined as "a collaborative arrangement in which the community of local resource users, local and senior governments, other stakeholders, and external agents share responsibility and authority for management of the natural resource in question" (Tyler, 2006: 95). Through this partnership, several social actors collectively negotiate, define and implement a certain number of functions, benefits and responsibilities for a given territory or set of natural resources (Borrini-Feyerabend *et al.*, 2004b).

In recent years, the concept of *adaptive co-management* of natural resources has been advanced more and more frequently. It is generally presented as a combination of two approaches: *co-management* and *adaptive management* (Berkes *et al.*, 2007). While the first emphasizes sharing power and responsibilities among different stakeholders in managing natural resources, adaptive management focuses instead on learning-by-doing (Tyler, 2008; Berkes *et al.*, 2007). For Tyler (2008: ii), this is reflected by the convergence of some elements of adaptive management (emphasis on natural sciences and ecological systems), social learning (people's power of action and their interactions) and the reflection on resiliency (often associated with socio-ecological systems seen as complex and dynamic entities).

Learning is central to the concept of adaptive co-management (Armitage *et al.*, 2009; Fennell *et al.*, 2008). To some extent, this is what allows a socio-ecological system to respond to disruptions through appropriate strategies. Under conditions of great complexity, uncertainty and connectivity across several scales (micro, macro and meso; and geographic, political and economic, etc.), the concept of learning is not applied in the same way as it would be in a situation with controlled parameters. Armitage *et al.* (2009: 97) therefore highlights four core issues to be considered under these conditions: 1) systemic learning under such conditions requires meaningful social interaction and a concerted effort to build trust; 2) the transition toward adaptive co-management signals a need to apply diverse learning strategies, which are intentional and focus on the development of flexible institutional and organizational arrangements to encourage reflection and innovation; 3) special attention to how learning is defined and conceptualized; and 4) the importance of who is learning and the linkages among learners.

Adaptive co-management is therefore an evolutionary process, with emphasis on social processes that encourage flexibility and innovation, two key ingredients of adaptive capacity (Armitage *et al.*, 2009). From a political ecology perspective, it also recognizes the importance of power and of the resulting dynamics when new institutional agreements are implemented. Finally, it suggests that contextual specificity be considered because it is difficult to transpose an adaptive co-management experience from one location to another (Berkes *et al.*, 2007).

## Ecotourism and co-management in Dominica: Exploring an innovative experience

The case of Dominica is unique in several respects. It is a Caribbean island whose natural resources are relatively preserved in comparison to its neighbours, and whose vegetation and mountainous terrain replace white sand beaches in tourism development for this island space that is marketed having the "pristine allure of an undiscovered destination" (Dehoorne and Murat, 2010a, *translation*). Given the decline in the island's agricultural economy, based notably on banana production, which has been in crisis for several years, government stakeholders (departments, agencies, etc.) are presenting Dominica's natural environment as a building block for economic diversification, focusing in particular on ecotourism development.

Protected areas account for close to one fifth of the territory of this island state, and include Morne Trois Pitons National Park (see Figure 1). Traditional activities such as fishing, hunting, farming and logging practised

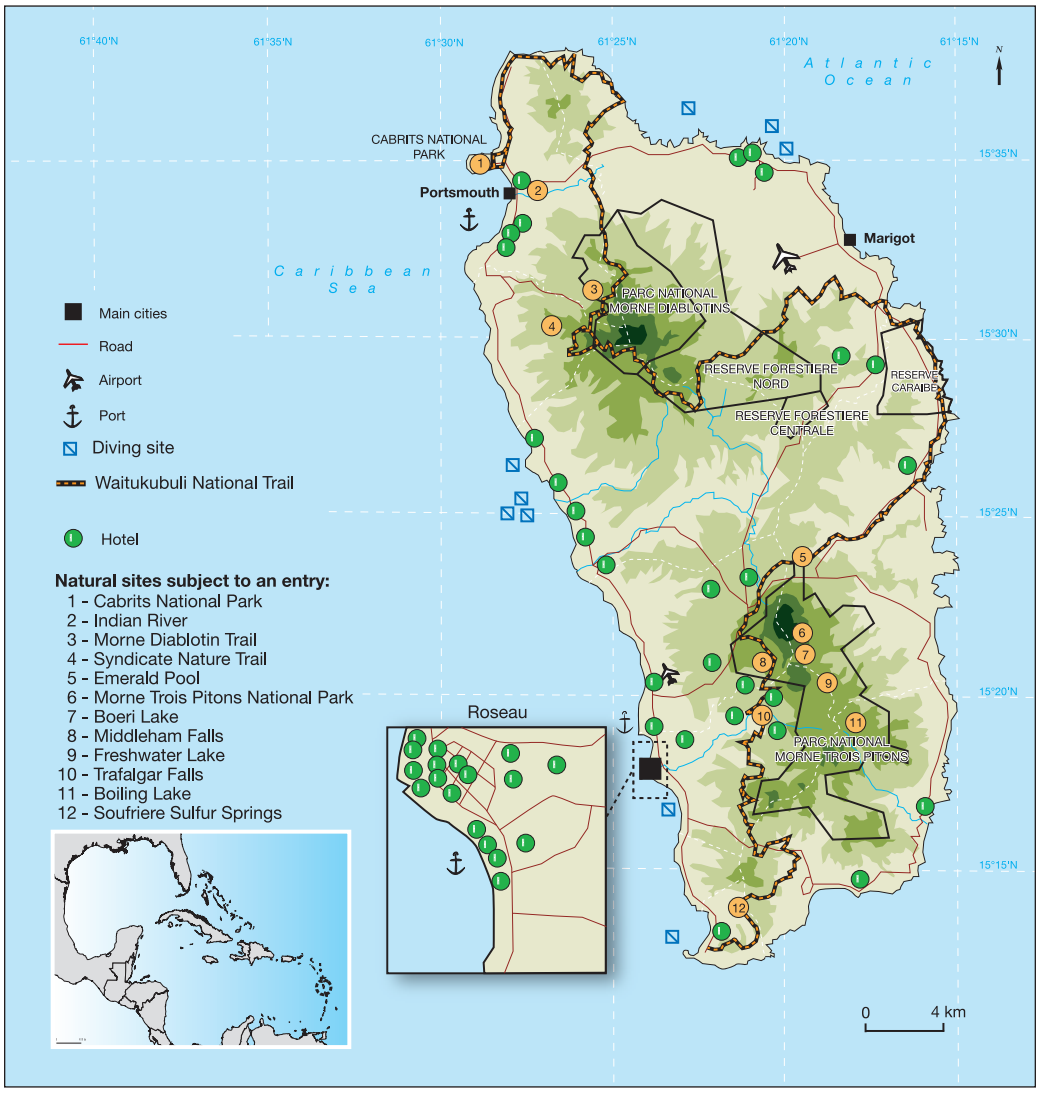


**Figure 1 :** Tourism and development of natural resources in Dominica (source : Dehoorne and Murat (2010a)).

by the neighbouring communities have been prohibited in this park since it was created in 1975 (CANARI, 2006: Appendix 5). The economic alternative proposed by the government is to set up the Waitukubuli National Trail, which is to become the vehicle for Dominica's tourism development. The 184-kilometre trail runs from the north to the south of Dominica through rural communities that are marginalized both economically and geographically. Some communities organize a unique experience at the beginning or end of a trail segment. Food and lodging are provided at homes in the communities, along with a varied range of activities. Other things to do include visiting nature sites "…or meeting villagers as they go about their daily routine while tourists visit their coffee and cocoa, bay oil production, and organic aromatic herb operations. Tourists take part in whatever harvest is under way and are introduced to the local cuisine as well as craft skills" (Dehoorne and Murat, 2010b, *translation*).

The tourist attractions offered near the trail are the result of cooperation between local communities, NGOs and the government (sectoral departments and agencies). As suggested by Geoghegan (2002), in the case of a process similar to participatory forest management, an agreement must be reached on the common objectives of projects that have both ecological and socio-economic dimensions because the motivations of stakeholders differ. The stakeholders involved play various roles, including those of partner, initiator, mobilizer, catalyst, regulator and technical advisor. For instance, in the case of forest management associated with ecotourism development in Dominica, NGOs play a major role in supporting the participation of marginalized communities that are natural resource users (Geoghegan, 2002: iv).

## Methodology and discussion

The procedure used in this article is exploratory, from a theoretical and empirical perspective. Deductive and qualitative, it is based exclusively on documentary sources dealing

with management of natural resources and their development for tourism in Dominica. We support the hypothesis suggesting that decentralizing governance generally produces greater efficiencies, brings decision-making closer to those affected by governance and can help decision-makers take advantage of more precise local knowledge about natural resources (Lemos and Agrawal, 2006: 303).

With regard to the resources and strategies of the different actors involved in governance, partnerships are often asymmetrical, and most of the time, stakeholders from civil society are the ones at a disadvantage (vis-à-vis the market or the government) (Lemos and Agrawal, 2009). However, that is not always the case, and the large international NGOs in conservation that operate in developing countries are a good example of this (Espinoza and Lipietz, 2005; Chapin, 2004). Protected areas and ecotourism interventions can thus be analyzed as environmental governance strategies that combine the efforts of NGOs and the government, but also of communities and private partners.

An analysis done by Tighe Geoghegan (2002) on behalf of the Caribbean Natural Resources Institute on 17 cases of co-management of forest resources in the Caribbean – including Dominica – shows that the success factors, i.e., cases in which forest management objectives were met while at the same time providing benefits to most of the stakeholders, have the following characteristics in common (Geoghegan, 2002: 17):

1) at least one technically competent actor (government agency, NGO, international organization) gets the process started and maintains support for it until the arrangement is functioning effectively;
2) the objectives of all parties are respected, even when they differ, and are compatible with overall management objectives;
3) the roles and responsibilities of all parties are clearly spelled out;
4) the rights of all parties are secured through a formal agreement such as a management plan accepted by all;
5) the benefits to all parties are perceived by the parties to be commensurate with their investments;
6) mechanisms for ongoing dialogue and negotiation among the parties are effective and their rules are based on mutual respect and equal rights.

Still according to Geoghegan (2002: v), co-management agreements often involve arrangements that include strict contracts and formal and informal agreements between the stakeholders involved and the decision-making bodies. The more stakeholders are involved in negotiating and implementing the arrangement, the greater its potential management effectiveness. In many instances of co-management of natural resources in the Caribbean, the involvement of local communities has helped to change certain practices that were harmful to the environment and has reduced overuse of natural resources while increasing the quality of resource management, thereby having a positive effect in terms of ecological, economic and social factors.

From this point of view, the Waitukubuli National Trail project carried out in Dominica is an example of a novel co-management practice for ecotourism-related resources. Dehoorne and Murat (Dehoorne and Murat, 2010a: 154-155) demonstrate that, although not a panacea, this project allows for a more systemic reading of development by considering the needs of marginalized communities. Because they emphasize conservation of biodiversity and ecosystems, protected areas like Morne Trois Pitons National Park are prime locations for ecotourism, which largely depends on a quality natural environment. According to Goodwin (1996), ecotourism can benefit protected areas in three ways: by generating money to manage and protect natural habitats and species, by enabling local people to gain economically, and by offering a means by which people's awareness of the importance of conservation can be raised. This contribution can therefore be direct (by generating income that will be specifically allocated to conservation activities) or indirect (by offering communities an alternative). Tourism is thus one of the most frequently used means to justify and legitimize conservation through protected areas (Brockington *et al.*, 2008: 131). Ecotourism, however, like any form of activity, will always have some negative impacts, both on the natural environment and on the social system of which it is a part, because of tourists, infrastructure or even new institutional arrangements that alter socio-political and economic dynamics on the ground (Brechin *et al.*, 2007; Borrini-Feyerabend *et al.*, 2004a).

To compensate for asymmetrical spinoffs of ecotourism in Dominica, public stakeholders (government departments and agencies) and private ones (local and international NGOs, communities and businesses) are engaged in a co-management process that partially meets the success criteria presented by Geoghegan (2002). The process is based, among other things, on the emergence of a supply of accommodations in the villages around the Waitukubuli National Trail "[where] there is technical assistance for local construction and management of these structures, around which the local tourism economy and the sale of local products are organized, providing new outlets for agriculture and various services" (Dehoorne and Murat, 2010a: 154, *translation*).

The trail is managed by the nearby communities to ensure that the hikes offered to ecotourists end at an accommodation facility (guest house, small hotel or campground) run by the community. All the accommodations are private, family or community facilities, apart from the shelters put up by the national bodies that manage the forest. Local participation and involvement in planning tourism have led to the development of tourism corridors between the segments of the trail and the creation of welcome centres in the villages, which permit the structuring of a certain number of jobs as a result of the visitors (Dehoorne and Murat, 2010a; Dehoorne *et al.*, 2009). For instance, the creation of guest houses made of thatch and wood in some Carib communities, among the poorest in Dominica, allows visitors to enjoy a unique cultural experience where tourists' interests coincide with the interests of local stakeholders who want to showcase their way of life. Recognizing that they need to protect their natural environment has also led communities

to set up projects to manage the catchment basin. In this specific case, ecotourism seems to suitably meet the shared objective of the Carib population and the government of Dominica to revitalize local culture, economy and ecology. In this regard, Slinger (2000) suggests that ecotourism has helped to create a more diversified economy for these communities. It has also encouraged renewed interest in and rediscovery of the Carib culture, including language, dance, music, cuisine and architecture. At the same time, the desire to promote the territory as an ecotourism site has increased awareness of the importance of maintaining the quality of the neighbouring environment in order to meet subsistence agriculture needs and provide a source of raw materials for crafts, as well as potential sites for nature tourism.

## Conclusion

Although we are limited by secondary sources, the case of ecotourism development of the Waitukubuli National Trail in Dominica, and particularly of the neighbouring Carib population, presents an example of co-management which, while it does not meet all the conditions outlined by Armitage *et al.* (2009) to define *adaptive co-management*, does cover the basics of what Geoghegan (2002) has identified as success factors in project implementation. From the perspective of political ecology, the social and environmental concerns that guided the development of the trail allow the identification of points of convergence between the different stakeholders' objectives and the promoting of positive impacts. While the co-management process has its limitations (see, for example, Lambert 2009), in addition to the new jobs and income that the trail has brought to the neighbouring communities, operating the trail is contributing to the conservation and management of natural resources in the areas that the trail crosses and is helping to reduce geographical disparity in wealth.

Ecotourism is not a homogeneous phenomenon. But however it is interpreted, an ecotourism operation in a socio-ecological system brings about changes that affect dynamics across several scales. As we have outlined in the case of Dominica, political ecology, by emphasizing the notion of sharing power through co-management, makes it possible to tackle analysis of the issues related to ecotourism in an innovative way. While Morne Trois Pitons National Park was created based on a classical top-down model, the trail project within the park, in both its design and management, brought things partly back into balance by emphasizing collaboration between public sector and private sector actors and actors from civil society, especially nearby residents. Given the complexity inherent in the development of ecotourism, it is nonetheless necessary to take the research further in order to more fully understand the strategies adopted by the various actors and their motivation to take part in the process of decentralizing governance in this area. We think that an approach that draws on political ecology and co-management makes it possible to go beyond the industrial core of the tourism system in order to explore in an innovative manner the complex interactions between this form of activity and the system of which it is a part. ■

**References**


ARMITAGE, Derek R.; Ryan PLUMMER; Fikret BERKES; Robert I. ARTHUR; Anthony T. CHARLES; Ian J. DAVIDSON-HUNT; Alain P. DIDUCK; Nancy C. DOUBLEDAY; Derek S. JOHNSON; Melissa MARSCHKE; Patrick MCCONNEY; Evelyn W. PINKERTON and Eva K. WOLLENBERG (2009) "Adaptive co-management for social-ecological complexity", *Frontiers in Ecology and the Environment*, vol. 7, nº 2, pp. 95-102.

BERKES, Fikret; Derek R. ARMITAGE and Nancy C. DOUBLEDAY (2007) *Adaptive co-management: collaboration, learning, and multi-level governance, Sustainability and the Environment series*, Vancouver: UBC Press. 344 p.

BLAIKIE, Piers M. and Harold BROOKFIELD (1987) *Land Degradation and Society*, London; New York: Methuen. 296 p.

BORRINI-FEYERABEND, Grazia; Michel PIMBERT; M. Taghi FARVAR; Ashish KOTHARI and Yves RENARD (2004a) *Sharing power. Learning-by-doing in co-management of natural resources throughout the world*, IIED and IUCN/CEESP/CMWG, Tehran.

BORRINI-FEYERABEND, Grazia; Ashish KOTHARI and Gonzalo OVIEDO (2004b) *Indigenous and local communities and protected areas: towards equity and enhanced conservation: guidance on policy and practice for co-managed protected areas and community conserved areas*, Best Practice Protected Area Guidelines Series No. 11, nº 2831706750, Gland, Switzerland & Cambridge, UK: IUCN-The World Conservation Union. 112 p.

BRECHIN, Steven R.; Grant MURRAY and Charles BENJAMIN (2007) "Contested Ground in Nature Protection: Current Challenges and Opportunities in Community-Based Natural Resources and Protected Areas Management", in PRETTY, Jules N. (under the direction of) *The SAGE handbook of environment and society*, pp. 553-577. Los Angeles: SAGE.

BROCKINGTON, Dan; Rosaleen DUFFY and Jim IGOE (2008) *Nature unbound: conservation, capitalism and the future of protected areas*, London: Sterling, VA: Earthscan. 249 p.

BRYANT, Raymond L. and Sinéad BAILEY (1997) *Third World political ecology*, London: Routledge. 256 p.

CANARI, Caribbean Natural Resources Institute (2006) *Participatory Forest Management: Key tools and methods as part of the project on "Participatory Forest Management: improving policy and institutional capacity"*, Training Workshop Report, FAO National Forest Programme Facility (NFPF), Commonwealth of Dominica, July 19th-21st. 48 p.

CBD (Secretariat on the Convention on Biological Diversity) (2008) *Protected Areas in Today's World: Their Values and Benefits for the Welfare of the Planet*, CBD Technical Series nº 36, Montreal: Secretariat on the Convention on Biological Diversity.

CHAPIN, Mac (2004) "A Challenge to Conservationists", *World Watch*, vol. 17, nº 6, pp. 17-31.

DEHOORNE, Olivier and Christelle MURAT (2010a) « L'écotourisme au coeur du projet territorial de l'île de la Dominique », in GAGNON, Christiane (under the direction of), pp. 145-164. Quebec City: Presses de l'Université du Québec.

DEHOORNE, Olivier and Christelle MURAT (2010b) « Le tourisme communautaire, de la théorie à l'expérimentation. Des enseignements antillais », in BRETON, Jean-Marie (under the direction of) *Patrimoine, tourisme, environnement et développement durable*, pp. 393-412. Paris: Karthala - CREJETA.

DEHOORNE, Olivier; Pascal SAFFACHE and Christelle MURAT (2009) « De la nature à la culture: le projet touristique de l'île de Dominica »,

in BRETON, Jean-Marie (under the direction of) *Patrimoine culturel et tourisme alternatif*, pp. 169-182. Paris: Karthala - CREJETA.

ESPINOZA, Maria-Fernanda and Alain LIPIETZ (2005) « Les « BINGOs », agents involontaires d'une écologie de droite internationale? », *Mouvement*, vol. 41, pp. 89-100.

FARRELL, Bryan and Louise TWINING-WARD (2004) "Reconceptualizing tourism", *Annals of Tourism Research*, vol. 31, nº 2, April, pp. 274-295.

FARRELL, Bryan and Louise TWINING-WARD (2005) "Seven Steps Towards Sustainability: Tourism in the Context of New Knowledge", *Journal of Sustainable Tourism*, vol. 13, nº 2, pp. 109-122.

FENNELL, David; Ryan PLUMMER and Melissa MARSCHKE (2008) "Is adaptive co-management ethical?", *Journal of Environmental Management*, vol. 88, nº 1, pp. 62-75.

GEOGHEGAN, T. (2002) *Participatory forest management in the insular Caribbean: current status and progress to date*, CANARI Technical Report nº 310, CANARI, Caribbean Natural Resources Institute, Trinidad and Tobago. 36 p.

GOODWIN, Harold (1996) "In Pursuit of Ecotourism", *Biodiversity and Conservation*, vol. 5, pp. 277-291.

HAWKINS, Donald E. and Shaun MANN (2007) "The World Bank's role in tourism development", *Annals of Tourism Research*, vol. 34, nº 2, April, pp. 348-363.

HONEY, Martha (2008) *Ecotourism and sustainable development: who owns paradise?*, 2nd edition, Washington, D.C.: Island Press. 551 p.

JAMAL, Tazim and Amanda STRONZA (2009) "Collaboration theory and tourism practice in protected areas: stakeholders, structuring and sustainability", *Journal of Sustainable Tourism*, vol. 17, nº 2, pp. 169-189.

LAMBERT, Esther E. (2009) "Nature Island Tourism: Applying an Eco-Tourism Sustainability Framework to the Island Of Dominica", Waterloo: Environment and Resource Studies, University of Waterloo, Canada. 198 p.

LEMOS, Maria Carmen and Arun AGRAWAL (2006) "Environmental governance", *Annual Review of Environment and Resources*, nº 31, pp. 297-325.

LEMOS, Maria Carmen and Arun AGRAWAL (2009) "Environmental governance and political science", in DELMAS, Magali A. and Oran R. YOUNG (under the direction of) *Governance for the environment: New perspectives*, Cambridge: Cambridge University Press, pp. 69-97.

SCHERL, Lea M.; Alison WILSON; Robert WILD; Jim M. BLOCKHUS; Phil FRANKS; Jeffrey A. MCNEELY and Thomas MCSHANE (2004) *Can protected areas contribute to poverty reduction? Opportunities and limitations*, Gland, Switzerland and Cambridge, UK: IUCN. 60 p.

SLINGER, Vanessa. (2000) "Ecotourism in the Last Indigenous Caribbean Community", *Annals of Tourism Research*, vol. 27, nº 2, pp. 520-523.

TYLER, Stephen R. (2006) *Comanagement of Natural Resources: Local Learning for Poverty Reduction*, Ottawa: IDRC Books. 106 p.

TYLER, Stephen R. (2008) *Adaptive Learning in Natural Resource Management: Three Approaches to Research*, Rural Poverty and Environment Working Paper Series, Ottawa: International Development Research Centre. 48 p.

WEST, Paige; James IGOE and Dan BROCKINGTON (2006) "Parks and Peoples: The Social Impact of Protected Areas", *Annual Review of Anthropology*, vol. 35, pp. 251-277.

WTO (World Tourism Organization) and UNEP (United Nations Environment Programme) (2002) *World Ecotourism Summit. Final report*, Madrid. 150 p.