

# *Community based ecotourism as a panacea for protected areas: the use of common property theory in its analysis and development*

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# **The Commons in an Age of Global Transition: challenges, risks and opportunities.**

## **The 10<sup>th</sup> Biennial Meeting of the IASCP Oaxaca, Mexico, August 9-13 2004**

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### **ABSTRACT: Community Based Ecotourism as a Panacea for Protected Areas: the use of common property theory in its analysis and development**

Tourism is the world's largest employer, accounting for 10% of jobs worldwide (WTO, 1999). There are over 30,000 protected areas around the world, covering about 10% of the land surface (IUCN, 2002). Protected area management is moving towards a more integrated form of management, which recognises the social and economic needs of the world's finest areas and seeks to provide long term income streams and support social cohesion through active but sustainable use of resources. Ecotourism - *'responsible travel to natural areas that conserves the environment and improves the well-being of local people'* – (The Ecotourism Society, 1991) is often cited as a panacea for incorporating the principles of sustainable development in protected area management. However, few examples exist worldwide to substantiate this claim. In reality, ecotourism struggles to provide social and economic empowerment locally and fails to secure proper protection of the local and global environment. Current analysis of ecotourism provides a useful checklist of interconnected principles for more successful initiatives, but no overall framework of analysis or theory. This paper argues that applying common property theory to the application of ecotourism can help to establish more rigorous, multi-layered analysis that identifies the institutional demands of community based ecotourism (CBE). The paper draws on existing literature on ecotourism and several new case studies from developed and developing countries around the world. It focuses on the governance of CBE initiatives, particularly the interaction between local stakeholders and government and the role that third party non-governmental organisations can play in brokering appropriate institutional arrangements. The paper concludes by offering future research directions.

## **1.0 INTRODUCTION**

Since 2000, tourism has been the world's largest employer, with more people in the world employed in the tourist industry than in any other, including agriculture. With nearly 200 million jobs in total, tourism accounts for some 10% of jobs worldwide (WTO, 1999) and 11.75% of the world's GDP.

There are over 30,000 protected areas around the world, covering about 10% of the land surface (IUCN, 2002). Protected area management is moving towards a more integrated form of management, which recognises the social and economic needs of the world's finest areas and seeks to provide long term income streams and support social cohesion through active but sustainable use of resources.

Ecotourism - *'responsible travel to natural areas that conserves the environment and improves the well-being of local people'* – (The Ecotourism Society) is often cited as a panacea for incorporating the principles of sustainable development in protected area management. However, few examples exist worldwide to substantiate this claim. In reality, ecotourism struggles to provide social and economic empowerment locally and fails to secure proper protection of the local and global environment.

Current analysis of ecotourism provides a useful checklist of interconnected principles for more successful initiatives, but no overall framework of analysis or theory. Community based ecotourism management refers to ecotourism programs which take place under the control and with the active participation of the local people who inhabit or own a natural attraction (Drumm, 1998:198). This paper argues that applying common property theory to the application of ecotourism can help to establish more rigorous, multi-layered analysis that identifies the institutional demands of community based ecotourism (CBE).

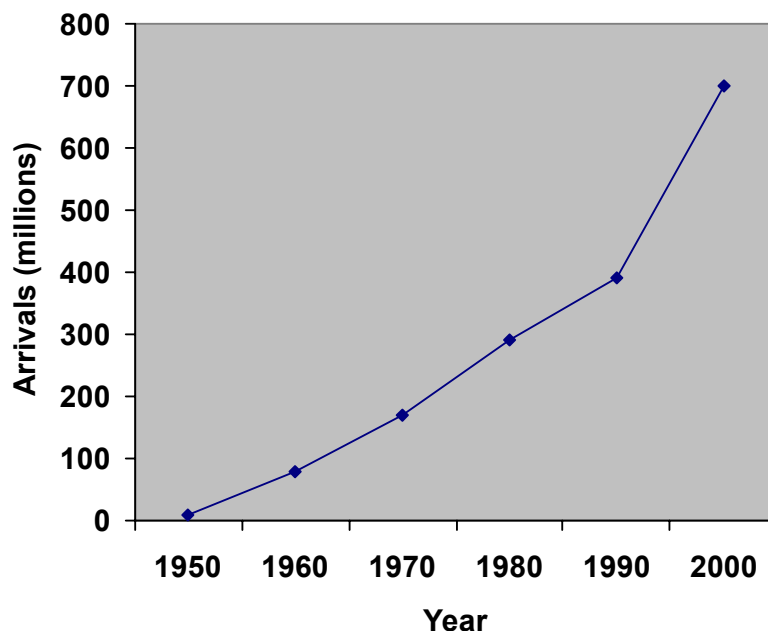
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## **2.0 THE DEVELOPMENT OF TOURISM MARKETS**

### **2.1 The Growth of Tourism**

World tourism grew steadily from the late 1940s with the expansion of a tourist class in passenger aircraft. The use of the jet engine from 1957 further fuelled mass travel and the development of wide-bodied, high-speed aeroplanes in the 1970s allowed for expansion of that market to the developing world. The growth of a more prosperous society, with greater amounts of leisure time, furthered the development of tourism as a leading industry. Between 1992 and 1997, international tourist arrivals grew from 463 million to 594 million: an increase of 30% (WTO, 1999). Current predications are that international tourism is growing at around 7-8% p.a. and that international arrivals will be over 1 billion by 2010 (Lindberg et al, 1998). Figure 1 illustrates the steady growth of tourism arrivals since 1950.

**Figure 1: Global Tourist Arrivals**



**Source: WTO, 1999**

In the latter part of the 20th century, the growth in tourism in developing countries was particularly pronounced. Whilst global tourist arrivals grew by 62% from 1985 to 1994, tourist arrivals to Central America grew by 91%, Africa by 89%, South America by 86%, and the Caribbean by 71%. Only South Asia, where tourism arrivals grew by 48%, was below the world average. In contrast, East Asia and the Pacific encountered growth of 142% (WTO, 1995). In addition, there has been a sharp increase in the amount of domestic tourism taking place around the world, especially in South East Asia, where growing amounts middle-income earners are keen to participate in this essential ingredient of professional life.

## **2.2 The Costs of Tourism**

Around the world, governments keen to earn foreign exchange and to see economic development have encouraged the growth of tourism through policies that include infrastructure development, subsidies and incentive packages. Resort development supplies a market that is essentially still geared to pre-paid package experiences. Such mass tourism became synonymous with the four S's – sun, sea, sand and sex – and mass tourists with the stereotypes that accompanied such an image.

Although countries originally embraced mass tourism as a 'clean' industry, many soon realised that there were external costs associated with that industry. These came in the form of environmental degradation, cultural conflict and social impacts. Environmental degradation can include direct loss of habitat and wildlife through development and tourist intervention (Budowski, 1976; Crittendon, 1975; Cohen, 1978), but also breakdown of local water and sewage supplies, air and water

pollution (Young, 1973; Goldsmith, 1974), and changes in local farming practices, and hence landscapes, to supply the tourist market.

Cultural conflicts have involved the introduction of drugs & alcohol to cultures previously not dependent on such substances, and the social and cultural breakdown of communities associated with excessive use and trade in them. Simple cultural disturbances, such as conflict over introduced language, mannerisms, expressions, beliefs and dress, are also cited by host populations as significant consequences of tourism (Mathieson & Wall, 1982). More serious consequences, however, include prostitution (Shaw & Williams, 1997) and the packaging of arts and crafts for the souvenir trade and music and dance for tourism amusement. Such and 'commodification' of culture can ultimately erode the value and authenticity of products and services (Britton, 1977). Social Impacts include (i) the displacement of local people from tourism destinations to the periphery of new development; (ii) increased pressures on infrastructure, particularly water supplies, resulting in increased costs of provision; and (iii) the realisation that employment benefits of tourism were often seasonal and involved low paid, manual work (see, for example, Britton, 1982; Krippendorf, 1987; Altman, 1989; Lea, 1988; Truong, 1991; Butler, 1991; Ryan, 1991).

As if unexpected 'external' costs weren't enough to disappoint countries that had raced to develop their tourism markets, most also came to realise that the expected benefits of tourism were less widely dispersed than anticipated. Tourism 'leakage' soon became a recognised problem, whereby as much as 80% of the tourism spend in a particular location soon 'leaked' out of the host country, often back to the tourists' own country (Getz, 1990; Goodwin, 1995). This happens as a result of many of the products and services being provided by companies based outside the host nation and purchasing only minimal products and services from providers in the host nation. Leakage tends to be highest in less developed countries and island economies, because of the need to buy in more products and services and also because management control of the industry lies in the hands of external, multi-national interests. In such cases, even if businesses such as car hire and restaurants spend some of their revenue locally when paying staff and buying basic food products, etc., profits will disappear outside the host country (Pattullo, 1996).

Dissatisfaction with tourism, and disappointment in its ability to deliver, led to the Manila Declaration on World Tourism in 1980:

"Tourism does more harm than good to people and to societies in the Third World." (Nicholson-Lord, 1997:12).

Both tourism leaders and increasingly sophisticated tourists soon looked for alternatives to mass tourism.

### **2.3 Tourism Planning**

Realisation of the unintended costs of tourism development led to calls for tighter planning of tourism and control over its destiny (Inskeep, 1991; Dowling, 1993; Elliot, 1994; Gunn, 1994). Table 1 shows the application of post-Fordist consumption patterns to tourism (Lash & Urry, 1994:274) and in particular, points to the demand for independent holidays and to the use of environmental planning and control of tourism in providing 'alternatives' to mass tourism.

**Table 1          Post-Fordism and Tourism**

Consumers increasingly dominant and producers have to be much more consumer-orientated	Rejection of certain forms of mass tourism (holiday camp & cheaper packaged holidays) and increased diversity of preferences
Greater volatility of consumer preference	Fewer repeat visits and the proliferation of alternative sites and attractions
Increased market segmentation	multiplication of types of holiday and visitor attractions based on lifestyle research
Growth of consumers' movement	Much more information provided about alternative holidays and attractions through the media
Development of many new products, each of which has a shorter life	Rapid turnover of tourist sites and experiences because of fashion changes
Increased preferences expressed for non-mass forms of production/consumption	Growth of 'green tourism' and of forms of refreshment and accommodation which are individually tailored to the consumer (such as country house hotels)
Consumption less and less 'functional' and increasingly aestheticised	De-differentiation of tourism from leisure, culture, retailing education, sport, hobbies

**Source: Lash & Urry, 1994:274, cited in Mowforth & Munt, 1998:27**

Nevertheless, such approaches have not been without criticism. Burns (2004:25) argues that planning often overlooks the distribution of benefits amongst the local community in much the same way as they are overlooked by market-lead development:

“To be quite blunt, the one-shot, big-bang masterplan alluded to above, is driven not so much by the economic and social needs of the destination as by the structure of technical assistance. The unintentional result has been the marginalization of those who most aid agencies claim are their target beneficiaries (the poor, female-headed households, demobilizing combatants following civil or war strife, women, children, and other rural dwellers).”

Perhaps what was needed was as a smaller scale approach to tourism, one that focused at the local level and approached tourism development in an 'alternative form'?

### **3.0 ECOTOURISM AS A PANACEA**

Governments aspiring to improve the economic, social and cultural conditions of a community have looked to new forms of 'alternative' tourism to further such conditions. 'Ecotourism' is one such alternative form of tourism. Fennell provides evidence that ecotourism was viable long before the 1980s "in practice, if not in name." (Fennell, 1999:32). Nevertheless, it was the 1980s that saw ecotourism emerge as a panacea to mass tourism problems.

There is a plethora of definitions and interpretations of ecotourism. Proponents of ecotourism have failed to reach a consensus on the principles and frameworks that should underpin this concept. Often cited is the International Ecotourism Society's

definition of "responsible travel to natural areas, which conserves the environment and sustains the well-being of local people."

Much as there is little consensus over the definition of ecotourism, there is little conformity of statistical estimates as to its size. In the late 1980s, the American-based Speciality Travel Index suggested that ecotourism accounted for between 1.5% and 2.5% of all tourism (Whelan, 1991). However, according to the World Tourism Organisation (WTO, 1996), ecotourism is the fastest growing niche market in the tourism industry, with an annual growth rate of 5%. Whereas, The World Resources Institute (1993) found that while tourism overall has been growing at an annual rate of 4%, nature travel is increasing at an annual rate between 10% and 30% (Reingold, 1993). Some estimates suggest that 20% of all international tourists are in some way involved in 'ecotourism' (Dowling & Charters, 2000) and The Ecotourism Society (1998) cited sources suggesting 20-40% of all international tourists travel for wildlife-related purposes. There is agreement, however, that growth has been fuelled by the increasing number of people interested in wildlife watching and the increasing demand for more experiential vacations. For example, the Travel Data Centre reported that 43 million US adults took a nature-based related visit between 1992 and 1994 (cited in Honey, 1999).

### **3.1 Ecotourism in Protected Areas**

There are over 33,000 protected areas around the world, covering about 10% of the land surface (Eagles, 2002). Protected area management is moving towards a more integrated form of management, which recognises the social and economic needs of the world's finest areas and seeks to provide long term income streams and support social cohesion through active but sustainable use of resources. National Parks are often seen as the top tier of protected area designation and, consequently, act as a tourism magnet. National Parks have traditionally held a close relationship with tourism and it is generally recognised that that relationship is now being tested to the limit (Boyd & Butler, 2000).

Many developing countries are embracing ecotourism because of its apparent environment-conscious parameters, as well as achieving above average economic performance. In addition, the World Conservation Monitoring Centre (1992) has pointed out that "species richness increases with decreasing latitude and over half of the species of animals in the entire world are in the rainforests of developing countries." The World Wildlife Fund for Nature says that 20% of revenue generated from tourism in *developing* countries is due to ecotourism.

It has been widely recognised that ecotourism can help nature conservation of natural resources *and* generate income and employment for the local residents of an ecotourism destination (Wallace & Pierce, 1986; Ceballos-Lascurain, 1996; Honey, 1999, TIES, 2004). Whereas tourism research acknowledges the negative social, economic and environmental effects of tourism development, ecotourism is praised for its positive effects, with many arguing that it is the only true form of sustainable tourism and that it provides an economic rationale to promote natural resource conservation and wildlife protection policies. For example, in Kenya, the 'visitor attraction' value of a single lion has been estimated at US\$27,000 annually, with a herd of elephants valued at US\$610,000 (Lindberg, 1991). The Kenyan Wildlife Service estimates that more than 90% of tourists visit a game park, and eight out of

ten visitors cite 'nature and wildlife' as their major reason for visiting Kenya. By 1990, wildlife based tourism was earning \$480 million annually, or 43% of Kenya's total foreign exchange (Honey, 1999). Similarly, ecotourism has been used to justify the protection of entire ecosystems. For example, the economic benefits of rainforest ecotourism are often used as arguments to limit the extraction of timber from the forest: as case of where the forest is worth more than the trees.

Forms of revenue from ecotourism might include: entrance, licence and permit fees ('user' fees); admission to specific facilities (such as lavatories or camp sites); user fees associated with goods and services (such as tent hire); sales and concessions (including the profit from *direct* sales of souvenirs, lodgings, food sales, etc.); fees from concessionaries selling such goods and services; and revenues from logos and trademarks (Page & Dowling, 2002:167-8). However, critics of ecotourism have provided evidence that whilst ecotourism has the potential to generate considerable economic benefits, a large proportion of the money tends to be spent on travel to the destination, with relatively little spent on site (Wall, 1994; Honey, 1999). Lindberg (1998) suggests that a common priority in ecotourism is to increase local economic benefits and questions the extent to which this has been achieved. Burns (2004:25) comments that cries to *leave only footprints* "carry an ironic and unintentional truth."

"The eco-centric, ultra-cautious approach of ecotourism will protect the environment but fail to produce economic benefit to all but a handful." (Burns, 2004:24).

Others are even more critical of the eco-tourists themselves, and their ego-enhancing needs (Wheeller, 1993, Munt, 1994). Gordon (1990) refers to them as "an emergent, urban-based, alienated petit bourgeoisie."

Further research on tourism in protected areas has focused on the nature and experiences of the tourist (Obua & Harding, 1996; Deng et al, 2002); the economic, social and environmental impacts of tourism (Lindberg et al, 1996; Lindberg & McKercher, 1997; Ross & Wall, 1999; Adams & Infield, 2003; Mbaiwa, 2003); and the need for planning for tourism in protected areas (Agardy, 1993). Edwards (1997) stresses the importance of regarding ecotourism as a process rather than a product and provides a prescriptive definition that incorporates five essential elements of any ecotourism project, making up the acronym 'MECCA': monitoring; education; conservation; community involvement; and advocacy (of environmental conservation).

### **3.2 Community Based Ecotourism (CBE)**

Ecotourism that contributes to environmental and cultural conservation, is managed and owned by local communities, and where the profits go back to the community is now sought. Coined as 'Community based ecotourism (CBE)', this type of ecotourism is seen as a development resource, bringing wider benefits to the community and their environment, and fostering empowerment.

According to Tourism Concern<sup>ii</sup>, community tourism should:-

1. be run with the involvement and consent of local communities;
2. give a fair share of profits back to the local community;
3. involve communities rather than individuals;
4. be environmentally sustainable;
5. respect traditional culture and social structures;

6. have mechanisms to help communities cope with the impacts of Western tourists;
7. keep groups small to minimise cultural/environmental impact;
8. brief tourists before the trip on appropriate behaviour;
9. not make local people perform inappropriate ceremonies;
10. leave communities alone if they do not want tourism (Page & Dowling, 2002:245).

Communities have been encouraged to establish their own ecotourism projects. Drumm (1998) provides a spectrum of community based tourism opportunities, summarised in Table 2, of which true CBE is seen as the ultimate state of “operating fully independent community tourism programmes.”

**Table 2: Spectrum of Community Tourism Opportunities**

Renting land to an operator to develop while simply monitoring progress
Working as occasional, part or full-time staff for outside operators
Providing selected services such as food preparation, guiding, transport or accommodation (or a combination of several or all of these) to operators
Forming joint ventures with outside operators with a division of labour, which allows the community to provide most services, while the operator takes care of marketing
Operating fully independent community tourism programmes

**Source: Drumm, 1998:201**

Duperly-Pinks (2002:151) defines empowerment as:

“not something that is bestowed on an individual, it is a psychological construct that is developed through a process of being.....it is enabling progress, for an individual or collective, towards the perception of control over one’s life and issues relating to it.”

Scheyvens (2002) identifies four types of empowerment that ecotourism can bring to communities: economic, psychological, social and political.<sup>iii</sup> The need to involve local communities in all stages of tourism development is widely accepted. CBE is thought to

“empower local communities by giving them a sense of pride in and awareness of the importance of their natural resources and control over their own development.” (Wearing & Larsen, 1996:13).

### **3.3 Problems with CBE**

In theory, CBE can transform the quality of life of communities, by bringing sources of income and a renewed pride in the natural and cultural heritage of an area. In 50 case studies written up by the World Tourism Organisation (WTO, 2000:11), four major factors were identified as having contributed to the success of the

sustainability of the projects. 'Local Community involvement in the planning, development and management of the projects' was seen as the most critical factor, with 40% of case studies citing it as specifically relevant in determining success<sup>iv</sup>.

In reality, however, many schemes are conceived as a top-down initiative, with benefits concentrated on few community members, with little concept of community ownership (MacKinnon, 1995). The key is to achieve full integration of the CBE within the community, with widespread participation from the start. However, participation in CBE projects is highly varied, particularly in developing countries.

Tourism involves processes that are constructed out of complex and varied social realities and relations, which are often hierarchical and unequal. Mitchell (2001) states that *ideally*, a community involved in ecotourism would have a broad based and open democratic structure, an equitable and efficient decision making process and a high amount of local ownership. However, to assume that all members of a community will have equitable access to involvement in tourism development and the benefits it can bring may be a simplistic and idealistic notion (Taylor, 1995). In reality, the economic benefits and political power in a community are likely to be influenced by a complex interplay of age, class, ethnic affiliation and gender, and certain individuals or families are likely to have more privileges than others because of their apparent status. Research suggests that local elites become wealthier as they have more power and confidence to deal with outsiders and ensure that development opportunities offer specific benefits for themselves and their families.

Local elitism might be gender based. For example, Hitchcock & Brandenburgh (1990) demonstrate how adult, multi-lingual males making up part of an indigenous group in the Kalahari are more likely to benefit financially from tourism enterprises than other members of the community. Stonich et al (1995) report how tourism development has enhanced existing social inequalities in the Bay of Islands, Honduras. Mowforth & Munt (1998) show how local elitism not only secures greater financial benefits of tourism, but also political influence.

Tosun (2000:618) asserts that one of the major obstacles for participation in developing countries is the centralisation of public administration in tourism development. Formulation and implementation of any kind of community participation requires decentralisation of the political, administrative and financial powers of the central government.

#### **4.0 THE RELEVANCE OF COMMON PROPERTY RESOURCE (CPR) THEORY**

##### **4.1 The need for theory**

Explanatory models of tourism development can largely be grouped into three categories: "those which explain the tourist's motivation, those which explain the role of the tourist industry, and those which explain the development of the destination community." (Mowforth & Munt, 1998:85).

Some models attempt to explain the relationship between the industry and the destination, such as Butler's Product Life Cycle Model (Butler, 1980), and others, such as Murphy's identification of three crucial growth factors (motivation, ability and

mobility) explain the evolution of tourism (Murphy, 1995). In summarising the major features of studies in tourism, Mowforth and Munt (1998:88) comment that:

“it is striking how few concepts there actually are in the tourism debate and the hold that these ideas have retained in directing subsequent research. Many of them are endlessly repeated or contested in case study material.”

They identify only four main areas of analysis:-

- Structure of the tourism industry (e.g. Wall, 1982; Shaw & Williams, 1994; and Burns & Holden, 1995)
- Impacts of tourism development (e.g. Lea, 1988; Pearce, 1995)
- Models of tourism development (e.g. Doxey, 1976; Butler, 1980), including blueprints for more ‘appropriate’ development (e.g. Whelan, 1991, Lindberg & Hawkins, 1993)
- Tourist typologies and motivational characteristics (e.g. Cohen, 1979; Smith, 1989).

It is generally accepted that new policy approaches are needed in tourism, but there has been little work on role models or operational frameworks to provide evidence of how this might manifest itself at ground level. In particular, few address the institutional arrangements governing tourism, with their related power structures.

Burns (2004) criticises the dichotomy of “left versus right” approaches to tourism planning characterized by the free market on the one hand and “central master planning” on the other. He suggests a ‘third way’, based on Giddens’s proposal of transcending “both old-style social democracy and neoliberalism” (Giddens, 1998:26). In the past, similar criticism has been voiced in the natural resource management world, where polarized policy analysis often ignored the importance of institutions. Just as some authors assumed that government provision offers a panacea to the problem of supply of collective goods, so others, offering market solutions, ignored the problems of establishing and maintaining a well-functioning market.

#### **4.2 Common Property Resource (CPR) Theory**

CPR theory has traditionally recognised the importance of analysing institutional arrangements governing natural resource decisions (Bromley, 1985; Ostrom, 1990; Feeny, 1988). Whilst current analysis of CBE provides a useful checklist of interconnected principles for more successful initiatives, there is no overall framework of analysis or theory. Applying CPR theory to the application of ecotourism can help to establish more rigorous, multi-layered analysis that identifies the institutional demands of community based ecotourism (CBE).

Ecosystems that support nature based tourism initiatives can be likened to a common pool resource, where several resource ‘users’ might draw from the resource (Healy, 1994). Common pool resources are characterized by being ‘non-exclusive’ (where it is impossible, or at least very costly, to exclude additional users) and ‘rival’, (consumption by one user reduces the quantity or quality available for other users). Common reliance on the ecosystem does not necessarily result in cooperation between the users in conserving the resource. Indeed, Hardin’s ‘Tragedy of the commons’ (1968) has become a strong symbol of the problems of common pool resources. Implicit in Hardin’s theory is an assumption that when a natural resource is physically and legally accessible to multiple users, the result will be a ‘free for all’, with

users competing with one another for a greater share of the resource to the eventual depletion in the quality and/or quantity available of the resource. There is plenty of evidence from the tourism literature of such environmental degradation, from all corners of the globe (see, for example, Edington & Edington, 1986; Mathieon & Wall, 1982; Hunter & Green, 1995; Mieczkowski, 1995; Monbiot, 1994; Pattullo, 1996; Holden, 2000; Honey 1999).

However, absent from Hardin's theory is the recognition that individuals *can*, and indeed *do*, design and enforce rules which govern their individual and collective choices and can minimise such degradation. Whilst it is recognized in natural resource management that it is exactly these decision-making arrangements that are crucial for the sustainable management of common pool resources, little attention has been paid to them in the tourism literature.

In 'pure' common property situations, the rights to the resource will be shared co-equally and are exclusive to a well-defined set of people (Singh, 1994)<sup>v</sup>. However, the ecosystem that supports a tourism destination may be used variously in common, without comprising pure common property, but comprise a mixture of rights, including public and/or private property rights, and where 'open access' may be assumed by some users<sup>vi</sup>. Even where complex property rights exist over common pool resources, and a number of competing users are present, decision making arrangements (or *institutions*) can be devised that prevent depletion or degradation of the resource.

Institutions are defined as

"sets of working rules that are used to determine who is eligible to make decisions in some area, what actions are allowed or constrained, what aggregation rules will be used, what procedures must be followed, what information must or must not be provided, and what payoffs will be assigned to individuals dependent on their action" (Ostrom, 1986:4).

Thus, the institutions, or decision-making arrangements are usually a constellation of rights, rules, conventions (informal codes and agreements) and contracts, supported by an authority structure, which is often vital to their operation and enforcement (Swallow and Bromley, 1995). Empirical research has shown that the institutions associated with common property are as diverse as the social, cultural and ecological context in which they are practiced. However, the prevailing management practices tend to share the characteristics of respect, responsibility, stewardship and user participation.

Recognising that factions within a community need to cooperate well in providing a high quality CBE product and safeguarding the natural environment, Williams (1992, cited in Fennell, 1999), advocates the development of an institutional structures approach which encompasses:-

1. development of a grassroots planning process, driven by local interests and including aboriginal involvement;
2. understanding and appreciation of ecotourism market requirements;
3. an inventory of the region's resources to determine areas that are suitable for ecotourism and ones that are not;

4. the establishment of goals and objectives in line with concerns related to the cultural and natural impacts of ecotourism, with the creation of a vision statement to act as a control mechanism for the future; and
5. the establishment of a formal Tourism Management Board, to work with both the operators and the public, with the responsibility of monitoring.

Whilst Williams' recognition of the importance of institutions is helpful, it is typical of such approaches that do not provide an insight into how such boards and committees might be established, who might establish them, what their lines of authority and accountability might comprise and how decisions might be reached.

Some work has been completed on the link between common property theory and tourism. Healy (1994) addresses the "common pool problem" in tourism landscapes, suggesting that, as common pool resources, landscapes that provide a 'background tourism element' are characterized by (i) a susceptibility to overuse and (ii) resource damage by a lack of incentive for productivity-enhancing investment because of the potential for 'free-riding'. He suggests that common property regimes, involving community control or reciprocal actions among individuals, whilst appearing to be the least common arrangement for managing such resources, clearly have potential for addressing common pool tourism problems. However, he concludes that:

"Further research is needed to evaluate the effectiveness of alternative mixtures of property rights regimes in different settings, including determining which tourism resources are suitable to common property arrangements, in comparison to those best managed privately or by government." (Healy, 1994:609).

Sadly, such empirical work has not been followed up. Although, more recently, Huybers and Bennett (2003) apply CPR theories of cooperation and literature on regional cluster to suppose that inter-firm environmental cooperation at nature based tourism destinations might be expected to materialize. Using empirical evidence from Tropical north Queensland, they assert that;

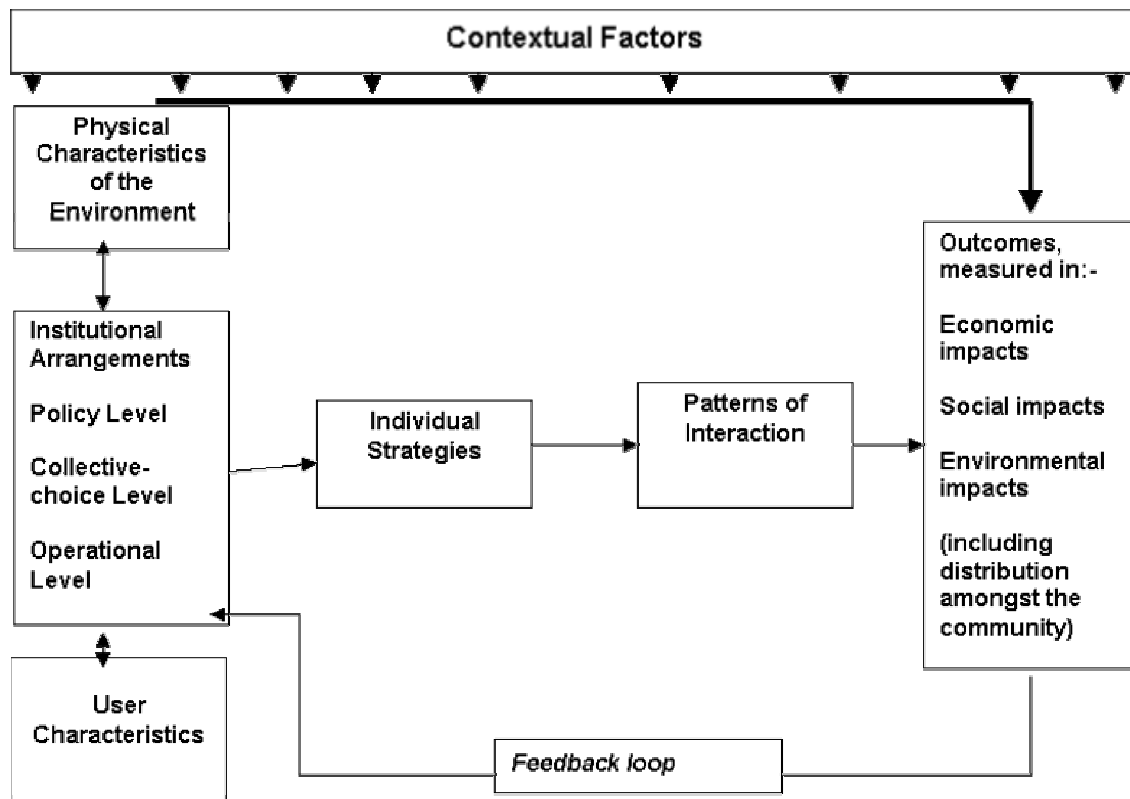
"A self-regulatory governance regime, based on strong internal institutions complemented by informal monitoring and enforcement, can be particularly effective at nature-based tourism destinations." (Huybers and Bennett, 2003:585).

In both cases, the authors use useful concepts that form *part* of CPR theory to help analyse tourism scenarios and suggest future institutional arrangements. However, neither applies the full range of CPR theory and neither focuses on community based ecotourism. Below, I attempt to extract more use from CPR theory by explaining explicitly why it might aid in the analysis of CBE.

#### **4.3 Applying CPR Theory to CBE**

When examining CBE, it is important to examine its success or failure from an institutional perspective. It is suggested here that an analytical framework developed for the study of complex, multiple-use common property resources systems can be particularly useful in assisting such analysis. The framework is presented in Figure 2.

**Figure 2: Analytical Framework for Applying CPR Theory to Community Based Ecotourism**



Source: Adapted from Edwards & Steins, 1998

Although all separate elements of the framework are important, it is ultimately their relationship to the institutional arrangements that holds the key to analysing the effective working of a CBE initiative. The institutional arrangements governing the CBE initiative must be devised and revised in ways that take full account of the characteristics of the other elements. Each element is explained in turn, below. In each explanation, the relationship between the element examined and the governing institutional arrangements is highlighted.

### ***Physical Characteristics of the Environment***

First, it is important to understand the characteristics of the environment (built and natural) upon which the CBE is based and the nature in which it can be used to support tourism. There might be specific elements of the ecosystem (in particular, individual species), which are crucial to delivery of a tourism 'product'. For example, in the coastal town of Kaikoura, New Zealand, the presence of sperm whales is essential to the marketing of the town as an ecotourism destination. Although other marine mammals, such as grey seals, dolphins and other whales, help add to the tourism attraction, it is the sperm whales' profile that draws tourists from all corners of the world (Edwards, 1996).

A sound understanding of the physical characteristics of individual species and the environment as a whole is essential in being able to devise and maintain useful

institutional arrangements to ensure their long term sustainability. For example, knowledge of the effects that human interactions can have on the wellbeing of the marine mammals has enabled the Department of Conservation in New Zealand to draw up a set of regulations governing such interaction and setting limits on, for example, the nearness of approach of humans, direction of approach, noise limits, etc. in order to minimise disturbance (see below).

The environment might be evaluated according to the extent to which (i) it is attractive to nature-based tourists; (ii) it is accessible to tourists; (iii) it can meet the infrastructure demands of tourists; (iv) the access and behaviour of tourists can be controlled; and (v) one tourist's enjoyment will impinge on another. These are summarised in Table 3.

Additional information is needed about the environment as a whole and its susceptibility to damage, by both tourists and other uses. In particular, the CBE must be able, through full control or through cooperation and integration of governing institutions, to secure compatibility between competing uses for the ecosystem. For example, a CBE initiative in an area where hunting is permitted (fee hunting or local hunting for food) must be able to integrate design of institutional arrangements between the separate uses of the ecosystem, to ensure that the wildlife is hunted within sustainable limits and to ensure tourists' safety when visiting the area. Similarly, where local farming practices might change water supplies (in quantity or quality) in ways that will adversely affect the environment, the external costs must be internalised into the institutional arrangements. Appreciation of the relationships between different environmental uses is, therefore, an essential starting point for any CBE initiative.

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**Table 3 Evaluation of the Environment for CBE**

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Attractiveness	What can the environment offer nature-based tourists? For example:- <ul style="list-style-type: none"> <li>• High profile species</li> <li>• Endemic species</li> <li>• Aesthetic scenery</li> <li>• Unique Cultural landscape</li> </ul>
Accessibility	Is the environment easily accessible to tourists? Is appropriate transport available? For example:- <ul style="list-style-type: none"> <li>• Restricted, mountainous region</li> <li>• Fragile coastline</li> <li>• Unstable strata (dunes, marshes)</li> </ul>
Adaptability	Can infrastructure demands of the CBE be accommodated? For example:- <ul style="list-style-type: none"> <li>• Appropriate accommodation</li> <li>• Food and water availability</li> </ul>
Control	Can the access and behaviour of tourists be controlled? For example:- <ul style="list-style-type: none"> <li>• physical restrictions &amp; exclusion zones</li> <li>• awareness raising</li> <li>• guiding access</li> <li>• visitor codes</li> </ul>
Subtractability	Will one tourist's enjoyment impinge on another? Is alleviation of impacts possible through, for example:- <ul style="list-style-type: none"> <li>• density of different uses</li> <li>• changing physical conditions of ecosystem</li> <li>• techniques to help reduce impact, such as habitat restoration</li> </ul>

Source: Edwards, 1997

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### ***User Characteristics***

The environment that supports a CBE initiative is likely to be used in multiple ways by different types of users. Thus, a rainforest supporting a CBE might also be used for logging, plant collection and hunting. It is important that there is a full appreciation of the different stakeholders deriving benefit from the ecosystem and their particular characteristics and dependency on it. In particular, we are interested in the extent to which the community is likely to cooperate in furthering shared benefits to be derived from tourism and the protection of the environment.

In a CPR scenario, collective action will typically occur if local stakeholders seek to overcome the problems associated with the 'the tragedy of open access', and agree on decision-making arrangements to control access to, allocation of and control over the CPR, converting it into a common property regime. Consequently, the problem facing its user groups is that of organizing in order to supply and maintain institutions (Ostrom 1990). Huybers & Bennett (2003) identify seven factors that enhance the success of environmental cooperation and self-regulation for tourism: (Table 4).

**Table 4      Conditions for Successful Tourism Collective Action**

1	Size of the group (.i.e. the smaller the number of resource users);
2	Frequency of interactive relationships between group members
3	Durability of interactive relationships between group members;
4	Degree of homogeneity of group members;
5	Capacity of members to learn;
6	Extent to which the product 'sold' by group members is dependent on the environmental resource shared;
8	Geographical size of the shared resource (smaller being more likely to enhance cooperation.
<b>Source: Huybers &amp; Bennett (2003)</b>	

### ***Institutional Arrangements***

Institutional arrangements establish rules and provide incentives that influence the decisions of individuals, organisations and public agencies. Rules can occur at different levels of decision-making. Three levels of analysis can be distinguished (Kiser & Ostrom, 1982):-

1. Policy Level – considers institutions external to the local community and may include appropriate statutes and national policy on tourism and/or resource management. They facilitate the development of an ecotourism policy for a nation state and establish the framework in which collective choice decisions will be made.
2. Collective-Choice Level – considers interactions between the collective decision-makers. Rules at this level are derived from the policy level and may

include industry regulations and codes of practice. They form the framework for ecotourism planning in a particular region or locality.

3. Operational Level – considers interactions between resource users. Rules at this level are derived from the Collective-choice level and are designed to ensure the proper use of the shared ecosystem. They form the basic codes of practice for ecotourism operators.

The operational rules are made within the regulatory framework at the organizational level, which in turn is determined by legislation at the policy level. In other words, the decision-making arrangements at different levels are 'nested': change at one level is the result of patterns of interactions at another level. At all three levels, authority structures are present that "sanction rights, enforce rules, and define the contexts in which conventions and contracts are negotiated" (Swallow and Bromley 1995: 109).

Decision making arenas at the different institutional levels are considered to be vital to the operation of decision-making. Arenas involved in the management of the commons are essentially 'platforms' for resource use negotiation. Platforms are defined as;

a negotiating and/or decision-making body (voluntary or statutory), comprising different stakeholders who perceive the same resource management problem, realize their interdependence in solving it, and come together to agree on action strategies for solving the problem (Röling 1994; Maarleveld et al, 1996).

Whilst some authors criticise the frequent 'top-down' approach to tourism employed through central government planning in many countries (Woods, 1996; Olindo, 1991; Burns, 2002), others are critical of the piecemeal, 'market', fashion in which ecotourism in many countries has developed, often in response to the need for alternative sources of income in remote, rural communities.

Proper design of institutional arrangements, at the operational, collective-choice and policy levels and, in particular, integration of the existing rules between different stakeholders at each level and between levels is needed. Development of this approach demands the cooperation of government (at central, regional and local level), industry (both private sector organisations and individuals and the voluntary sector) and local communities.

### ***policy level***

The establishment of CBEs depends on consistent and supportive policies at the regional and national level. Partnerships are unlikely to be formed without the construction of a shared ecotourism vision that establishes the extent to which a country wants to develop tourism within sustainable limits. Second, policy makers must devise appropriate institutional frameworks within which the tourism industry can operate. However, the ultimate efficacy of CBE rests in its implementation and hence complementary collective action at the collective choice and operational levels. Many examples exist of well designed and laudable national tourism policies, which fail to secure stated objectives due to poor implementation (see, for example a commentary on Botswana in Edwards, 1997).

### ***collective choice level***

The collective choice level can help establish appropriate decision-making platforms for the local community, to facilitate the development and management of ecotourism markets. Such platforms should provide access for all members of the community to participate in decision making over the resource base and tourism development. They should be based on existing arenas and learn from the successes and failures of traditional CPR platforms; particularly the failures.

Frequently, ecotourism is sought to diversify income sources in areas where a reliance on primary based industries such as farming, forestry and fishing have failed. In such cases, where the industry has been based on a common pool resource, much can be learned to inform the future development of tourism. For example, was failure the result of a breakdown in the institutions governing the resource base or in a failure for the institutions to cope with external influences over the resource base or the marketing of its products? For example, many whale watching locations around the world have emerged in areas where the local fishery has declined due to over fishing and lack of appropriate institutions to prevent resource depletion. In such cases, the lessons to be learned from the management of the fishery can be valuable in informing the newly evolving ecotourism industry on how to collectively manage the whales as a common pool resource.

### ***operational level***

Individual ecotourism operators must act collectively to ensure the proper use of shared resources at the operational level. This might involve the enforcement of locally designed and self-determined rules. The establishment and operation of reliable monitoring procedures might be one of the most valuable tasks to be achieved by partnerships that integrate public and private sector interests. Much can be achieved by self-regulation and enforcement (informal monitoring of ecotourism operators by ecotourism operators), but such an approach can only work if it is based on clearly publicised and widely accepted codes and regulations. The acceptance of practice codes is more likely if they are devised at the collective-choice level, where the ecotourism operators have an opportunity to participate in their creation, rather than imposed by some higher authority. The higher authority might, however, play an important role in the enforcement of appropriate sanctions on violations of the codes. One such code has been devised for marine mammal watching in New Zealand. All marine mammals are fully protected under the Marine Mammals Protection Act 1978. However, in 1990, the Department of Conservation introduced regulations specifically for the control and management of marine mammal watching. The regulations are monitored and enforced by casual observers, acting on behalf of the Department. In addition, there is an element of self-regulation, with operators gently reinforcing the regulations amongst themselves through observation of each other's practices and subsequent peer pressure.

Part of the analysis of existing institutions at the operational level should focus on the rights attached to individual species or parts of the ecosystem underpinning the CBE initiative. In the case of the sperm whales in New Zealand, they were considered an 'open access' resource for many years and 'supported' an important hunting economy. Nowadays, the whales are considered a common property resource, to be enjoyed by the whole community and tourists alike. However, some exclusivity of right has been assigned to them through the issuing of permits to view the whales.

Only one company (*Whalewatch*) holds the licence (issued by the Department of Conservation) to take tourists by boat to view the whales.

While competition amongst ecotourism operators may improve standards and ensure the delivery of a quality service, too much competition can lead to price-cutting that gradually erodes the gross margin of each trip. Inevitably, operators forced into a price-cutting situation are persuaded to offer a lower quality service and/or cut costs by some means in order to retain profitability. Such price-cutting destabilises a small industry and is inconsistent with the long term objectives of sustainable development, by encouraging cost reductions that might result in action that is detrimental to the environment or the client's safety. For example, some swimming-with-dolphins operators in Kaikoura began to offer refunds when clients did not enjoy a good experience. Such practice, while providing a competitive advantage, might encourage operators to relentlessly pursue dolphin pods in sometimes unsuitable situations (such as pods swimming with young dolphins or in sleep patterns) in order to avoid the refund demands from customers.

Market mechanisms have their place in the development of an economically sustainable ecotourism industry. However, market expectations for the ecotourism industry must be tempered with the reality of the need for regulations to protect common interests and internalise external costs.

### ***Individual Strategies and Patterns of Interaction***

Given particular situational variables (physical and technological characteristics of the resource and institutional arrangements), individuals make choices from sets of different possible strategies in relation to the common pool resource and to one another. Some pattern of interaction emerges from such choices, which then results in a certain outcome of resource management. In determining the motivations, values and norms of different user groups, the analyst must appreciate the effect that local influences have made on individuals' strategies, including, inter alia:

1. knowledge of the opportunity cost of selecting certain strategies. For example the presence of 'better value' choices (see Galjart, 1992);
2. existing knowledge. For example, about the array of different decision-making possibilities;
3. past experiences. For example, successful collective action in the past will have a positive influence on collective decision-making (see Steins, 1995);
4. normative behavioural and cultural codes. For example, a community characterized by multi-stranded relationships may perceive difficulties in acting collectively (see Steins, 1995).

In addition to the interdependence of the actions at the collective management level and the users' everyday environment, the behavior of individuals involved in the CBE is interdependent: that is, observations and expectations of how *others* behave will affect the strategies of individuals (Runge, 1981). In the evaluation of others' behavior, users will use social experience gained from their involvement in the common, as well as experience from everyday life.

### ***Outcomes & Monitoring***

The individual strategies of those involved in the CBE initiative will result in patterns of interaction, eventually leading to outcomes<sup>vii</sup>. These might be measured in economic,

social and environmental terms. Several criteria can be employed to evaluate the outcomes of collective behavior. Oakerson (1992) suggests the adoption of 'efficiency' and 'equity' as appropriate. Ostrom *et al.* (1995: 36) suggest that the key question to be addressed is 'how do predicted outcomes conform to evaluative criteria?'<sup>viii</sup>

The presence of a well-established set of institutional arrangements is not enough to guarantee sustained collective action in the long term. Empirical research into the management of CPRs has identified a number of design principles underlying collective action in such scenarios (Table 5). These might equally be applied to CBE initiatives. Where undesirable or disappointing outcomes are encountered, the governing institutions should be capable of redesigning rules

**Table 5 Determinants of Collective Action in CPR Situations**

<b>Source</b>	<b>Principles</b>
Wade, 1988	<ol style="list-style-type: none"> <li>1. the nature of the resource</li> <li>2. the costs of exclusion</li> <li>3. the relationship between resources and user groups</li> <li>4. the characteristics of the user group</li> <li>5. noticeability of cheating; and</li> <li>6. the relationship between users and the state.</li> </ol>
Ostrom, 1990	<ol style="list-style-type: none"> <li>1. clearly defined boundaries</li> <li>2. congruence between allocation and access rules and local conditions</li> <li>3. users' ability to modify the operational rules through collective-choice arrangements</li> <li>4. monitoring of management systems</li> <li>5. graduated sanctions</li> <li>6. conflict resolution mechanisms; and</li> <li>7. management rights of resource users are not challenged by external agents.</li> </ol>
Pinkerton & Weinstein, 1995	<ol style="list-style-type: none"> <li>1. accountability</li> <li>2. effectiveness</li> <li>3. representativeness; and</li> <li>4. adaptability</li> </ol>

**Source: Steins & Edwards, 1999**

#### **4.4 Application of CPR Theory to CBE in the Dominican Republic**

This section uses the illustration of two case studies in the Dominican Republic to demonstrate how the institutional development of CBE projects can help determine their success. The research was conducted by Rachel Clelland as part of a masters thesis at the University of Portsmouth in 2003 and can be read in full (Clelland, 2003).

##### ***El Salto de Limon***

El Salto de Limon (the waterfall of Limon) is one of few recognised and established community tourism projects in the Dominican Republic.<sup>ix</sup> Before the initiation of the project, the environmental condition of the waterfall and surrounding areas was deteriorating due to erosion, indiscriminate fishing and deforestation. A local NGO, CEBSE (*the Centre for the Conservation and Eco-Development of Samana Bay and its Surroundings*) decided to intervene and, with the help of the German

development NGO, DED (*Deutsche Entwicklungs Dienst*), SECTUR (the Ministry of Tourism) and several other government agencies, helped the surrounding communities of Arroyo Surbido, El Rancho Espanol, Lona de la Cruz, and El Café organise their own sustainable community tourism project. A community organisation and association of ecotourism providers, ASECAL (*Asociacion Comunitario de Ecoturismo del Salto del Limon*) was founded and is now recognised by the government.

The CBE comprises fourteen separate *paradas* (micro-enterprises), where tourists can hire horses and guides, purchase refreshments, handicrafts and local produce. Registers are maintained on tourism numbers and show that El Salto received 20,000 visitors in 1998 (CEBSE, 1999). The majority of these are day-trippers who come to visit the waterfall with an organised tour operator, in groups ranging from 5 to 100. According to CEBSE (2000:5), the following are stakeholders in the CBE project:-

*Operational Level*

- owners of *paradas*
- owners of horses and mules
- local (untrained/unofficial guides)
- handicraft workers
- touts ('very' informal guides)
- local hotel/hostel/pension owners
- tour operators and safari tour companies

*Collective Choice Level*

Centre for the Conservation and Eco-Development of Samana Bay and its Surroundings (CEBSE)

*Policy Level*

Ministry for Tourism (SECTUR)

The local communities of El Salto feel that they have benefited tremendously from the CBE project. In the Arroyo Surbido area, of 64 individuals interviewed, 98.2% interviewed believed the community had improved since ecotourism began and 78.7% agreed "tourism has helped the solidarity of the community" (Holmes, 2003, cited in Clelland, 2003). Similar results were obtained in the other local communities, where 31 interviews revealed that no one identified significant disadvantages or negative impacts of the CBE project. Respondents believed that their living conditions had improved as a result of the project, and it had enabled them to buy modern conveniences, such as washing machines, refrigerators and televisions.

In terms of non-material benefits, respondents believed that the project had brought considerable educational benefits to the area, both directly and indirectly. Environmental awareness locally had been raised and, as a consequence, deterioration of the waterfall and surrounding area had halted and users of the waterfall and surrounding neighbours had assumed responsibility for its conservation. People also believed that they had benefited from learning foreign languages and that the increased income from the CBE project might enable them to

send their children to university. In addition, the local communities were educated, mostly through the training provision of CEBSE, in the importance of conserving the environment and using natural resources sustainably and were given advice on book-keeping, hygiene, and horse husbandry.

Although there is a real sense of empowerment in the community, it is evident that there was established social cohesion before inception of the CBE project with clear evidence of social capacity: as one community member said, “Todos ayudan todos” (*everyone helps everyone*). The sense of social cohesion is certainly helped by the presence of the tourism ‘platform’ ASECAL, where everyone has the regular opportunity for communication and discuss problems and collective strategies.

The distribution of benefits amongst stakeholders is equitable, according to individual effort and ability, and benefits tend to be widely dispersed amongst all stakeholders. Perhaps the greatest beneficiaries of the project were the women, who had not enjoyed such financial independence before and many of whom are now directly involved in tourism, working as co-owners of paradas, as guides, and as cooks. Both men and women participate equally in the ASECAL community meeting and are equally involved in the decision making process, through a democratic voting procedure of all 230 members. Members ASECAL who are seen to be exploiting the CBE for their own gain beyond acceptable boundaries are soon pulled into line by other community members. Although not every community member directly benefits from tourism, no social or environmental costs of tourism were identified amongst non-participatory members:

“When questioned ‘*but aren’t there tourists who are rude?*’, an interviewee indignantly replied ‘*yes, but there are many rude Dominicans too!*’ One community member declared ‘*there are no victims here!*’ (Clelland, 2003:54)

### ***Parque Nacional Armando Bermudez***

The case of Parque Nacional Armando Bermudez is a stark contrast to the El Salto de Limon CBE project. The national park houses the highest mountain in the Caribbean, Pico Duarte, at 3,087m above sea level. The park, which was established in 1956 is attractive to birdwatchers (with populations of Hispaniolan parrots, woodpeckers and trogons) and attracts visitors from all over the world. Tourism in the national park began in the 1960s, but did not really take off until the 1980s. The majority of visitors come in tour groups, many of whom are students on field trips. Although the majority of foreign visitors tend to come as independent travellers, a minority come in tour groups. A park fee of RD\$50 (about US\$1) is paid for the 3 to 7 day stay in the park. Visitors stay in *cabanas* between daily hikes.

The closest village to the mountain in La Cienega de Manabao, a small community of 320 families situated just on the outskirts of the park. The residents of La Cienega live in considerable poverty, with no electricity, little running water and wood fires for cooking. Although there are two local schools offering primary education, most community members are only semi-literate. The economy is based on subsistence agriculture. The majority of the men work in agriculture or for the Ministry of the Environment in the national park, as guides (around 80), wardens (40-45) or supervisors (4). The women work at home or in the fields; no women have paid employment.

In terms of benefiting from tourism, interviews revealed that few benefits accrue to the community of La Cienega. One respondent said that the children benefit, because tourists take pity on them and give them pens and sweets. The only opportunities for gaining income from tourism are from paid employment in the national park service (at minimum wage rates of around RD\$2000, or US\$40 a month), renting out mules to tourists (around RD\$100, or US\$2 per day), or guiding (RD\$200 or US\$4 per day). Guides normally only achieve 1 to 20 trips a year, and so guiding merely supplements agricultural income. Tourism employees were noticeably better off than their neighbours, with gas cookers and running water, although no residents had proper bathroom facilities.

The distribution of benefits from tourism were clearly unequal, even amongst those who were employed as guides: there was no fair rotation of guides, with those who live nearer the centre of the village or those who had earned favour of the national park officers tending to be allocated more trips. The community had no tourist shops, cafes or hostels and was gaining no revenue from tourists passing through the village to the national park.

The residents of La Cienega felt completely dis-empowered in terms of any involvement with tourism. All interviewees stated that the government made all of the decisions related to tourism. At one time the local community had shown interest in building a managing a community-run hostel for visitors to the national park. They approached the government for assistance, who promptly built a government-run hostel just outside the village, within the national park boundary. A local NGO, Esperanza La Cienega (*The New Hope of La Cienega*) was established to try to initiate a CBE project involving a community-run restaurant in the village, but faltered though lack of resources and knowledge.

The two case studies demonstrate the vital role of collective choice institutions in engaging community members in CBE projects. The community that was able to establish credible collective choice platform demonstrated sound social cohesion before inception of the CBE. However, the 'successful' CBE community also benefited from third party assistance from a local NGO. Similar results were found in CBE projects in Mexico, where existing social cohesion and the presence of an NGO, helped to establish a credible CBE co-operative (Foucat, 2002).

## **5.0 CONCLUSION**

An awareness of environmental issues, an urgency to experience the natural wonders of the world and a need to 'get back to nature' are all contributing to growth in one of the newest forms of tourism travel: ecotourism. In particular, protected area management is moving towards a more integrated form of management, which recognises the social and economic needs of the world's finest areas and seeks to provide long term income streams and support social cohesion through active but sustainable use of resources. Ecotourism can provide much needed foreign exchange and economic rewards to local communities for the conservation of ecosystems and wildlife. However, ecotourism also threatens to destroy the very resources on which it depends. Concurrently, communities might find that the 'trickle down' effect of piecemeal ecotourism development disappoints their expectations of

increased prosperity while the social and cultural externalities associated with an influx of tourists might exceed their fears.

Proponents of community-based ecotourism (CBE) claim that it holds the key to incorporating the principles of sustainable development in protected area management. So far, this paper has argued that applying common property theory to the application of ecotourism can help to establish more rigorous, multi-layered analysis that identifies the institutional demands of community based ecotourism (CBE). The following sections address the appropriateness of CPR theory and the extent to which it can be applied to help analyse CBE. The final section concludes the paper by offering future research directions.

### **5.1 Advantages of the CPR Approach**

There are several distinct advantages of applying CPR theory to CBE analysis. First, whereas community based tourism research is relatively new, CPR research has been well established for several decades. As such, CPR theory can provide a substantial amount of empirical evidence of analysis of CPRs, some of which comprise active role models in community based resource management with a long history of success.

Second, CPR focuses on the sustainability of the resource and the resource system: a concept that is axiomatic to CBE in protected areas, where the goose that lays the golden egg must be conserved, not just for economic, but also for biodiversity objectives. Understanding of and knowledge of the resource system must be built into the governance mechanisms associated with CBE.

Third, CPR analysis focuses on institutions. It has long been recognised in tourism research that there is a dearth of multi-level analysis of the institutions governing tourism (Mowforth & Munt, 1998). Finding participatory civil institutions that can be developed for CBE initiatives is vital. CPR theory provides us with useful information about social democracy in action and the role of resource management platforms in negotiation. CPR based systems are highly participatory and build on *established* platforms and social institutions. Most analyses criticising CBE initiatives focus on the lack of social institutions underpinning the programme, but offer little advice on the establishment of such institutions; other than that establishment is needed! In developing countries, in particular, CPR institutions might provide the best 'fit' for building ecotourism institutions.

Platforms for resource use negotiation emerge when stakeholders experience the negative impacts of their own and others' use of a natural resource and become aware that these problems require "building human institutions and a capacity for collective learning and decision-making about the ecosystem perceived to be under threat" (Röling and Jiggins, 1998). In this light, Ostrom (1995) refers to the creation of social capital or the arrangement of human resources to improve flows of future benefits.

A key notion in the literature on platforms is the idea of 'social learning' in order to achieve solutions to natural resource management problems. Social learning is a form of learning that has emerged from the realization that environmental policy needs to be designed and implemented in the context of complex interdependent

relationships between multiple stakeholders (Glasbergen, 1996). The notion of social learning is of major importance for collective action processes in the sustainable management of CBEs. In an industry as dynamic as tourism, the community must learn to 'read' the signs of health and ill-health in their environment, to understand the conditions of and trends in the environment around them and in the tourism opportunities around them. The case of La Cienega, above, demonstrates the fate of a community with no opportunity for learning.

Finally, CPRs are evolutionary in nature, adapting management to changing contexts. Analysis of the tourism industry reveals a highly dynamic environment which must constantly adapt to changing demands and social trends, political and economic climates and other 'external' forces, such as terrorism and health scares. Governance of CBE initiatives can learn from the flexibility of institutions governing CPRs, specifically the need to monitor outcomes and allow for institutions to evolve according to new demands.

## **5.2 Constraints of the CPR Approach**

Although CPR theory offers us a useful approach to analysing CBE, it also has several constraints. First, CPR theory has tended to focus on the appropriation of resources, where the resource system supplies primary products to a subsistence or market economy. As such, CPR theory tends to dwell on *quantities* of stock produced. Tourism, however, depends on the development of secondary and tertiary goods and services, where 'added value' and *quality* are the keys to success. It is vital, therefore, that the monitoring of outcomes from CBE is adapted to take into account quality demands and the more complex and sophisticated expectations of the end users.

Second, there is only little evidence of separate CPR communities, especially in the developing world context, working together. In tourism terms, nearby initiatives might be seen as competing for tourists. In reality, there is great scope for CBE initiatives in nearby communities to cooperate and create a wider ecotourism market through regional, and even national strategies. Third party help will be needed to ensure integration of local CBE initiatives at regional and national levels. In addition, tourism is a global industry: national plans can fail because of the power of multinational providers (such as airlines), making local CBE initiatives particularly vulnerable. CBE initiatives must find ways to align their programmes with governments' national goals and institutions and ensure that central government agencies properly represent their interests at national levels. This calls for sophisticated integration between institutional levels and, in particular, well-designed and effective collective-choice platforms that are capable of making themselves heard at the policy level. As well as providing tourism platforms, NGOs can play a vital role as brokers between the operational level of CBEs and the policy level.

Finally, the tourism industry encompasses many different sectors (such as hotels, transport, visitor attractions, restaurants), providing a highly complex service chain, where one enterprise cannot be operated in isolation from the others. CBE initiatives must find ways to integrate the operation of different service sector providers when devising collective action rules.

### 5.3 Future research directions

This paper has only scratched the surface of applying CPR theory to CBE projects. In evaluating existing research on CBE projects around the world, it is evident that the real gaps in analysis lie in a lack of in-depth analysis of the institutional arrangements governing CBEs, at all three levels, and the integration of decision making between institutional levels.

In particular, review of the ability of a community to establish effective collective choice level platforms for resource negotiation and the role that third parties, such as NGOs, might play in that establishment would seem especially pertinent areas for future research.

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i 'Fordism' (taking its name from Henry Ford's assembly line of mass-produced cars) refers to a consumerist approach where economies of scale are achieved through mass production and mass consumption of goods. Hence, 'post-Fordism' represents a qualitative shift from mass production and consumption to more flexible systems of production and organisation. The theory makes links to the way in which goods and services are consumed, including the emergence of niche and segmented markets (Allen, 1992; Mowforth & Munt, 1998).

ii Tourism Concern is a UK based NGO campaigning, mostly on behalf of host nations, for improved tourism provision ([www.tourismconcern.org.uk](http://www.tourismconcern.org.uk)).

iii Economic empowerment might be achieved, for example, by providing employment opportunities and increased income. The economic gains to the community should be sustainable and shared between many households in the community. Psychological empowerment by, for example, providing the ability to learn new skills, and increased self-esteem through the outside recognition of the uniqueness and value of a community's culture and natural resources. Social empowerment can be provided directly by inspiring individuals and families to work together on a tourism project and create a more cohesive society, and indirectly through the building of schools, churches and youth centres fro some of the revenue raised. Political empowerment might be achieved through the community's sense of control of use of their own natural resources and environment.

iv The Three other factors were: Co-operation among different partners in the pursuit of the project's, or initiative's, objectives (36%); Environmental commitment of the project's promoters (36%); and Continuous monitoring of the project's performance (36%).

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v In the commons debate, there has been considerable confusion concerning the terminology of common pool and common property resources. A wide range of resources might be used in common by more than one person: thus comprising a common pool from which individuals might draw 'resource units' (Ostrom, 1990). Such resources may or may not have formal and informal rights attached to them concerning control of their use. By terming a resource as 'property', we identify it as a reservoir or flow of benefits to which rights can be attached. Thus, property rights are social institutions which have evolved as a means of enforcing claims to that benefit stream. By attaching rights to property, we show the intention to enforce duties of a potential user to observe restricted (or prohibited) access to and use of the resource.

vi While property rights classifications of commons can be helpful, they can also be misleading in that they suggest that each resource system will fall neatly into a single category. There are three other basic classifications of property rights for common pool resources: (i) open access, where no use rights are attached to a specific group, resulting in a general 'free for all'; (ii) public property, where access rights for the public are held in trust by the Crown or state; and (iii) private property, where tradable rights are owned by an individual, household or company, who may allocate various rights of use to groups of individuals to use the resource in common. Much of the original work conducted on the analysis of common pool resources has focused on resources that are subject to a single, extractive resource use. However, more recent work has extended research to 'multiple use' commons, where the resources system is enjoyed by multiple types of uses and users (see, for example, Feeny et al., 1990, 1996; Barrett, 1991; Edwards, 1996; Selsky and Creahan, 1996; Van Ginkel, 1996; Steins, 1996; Edwards & Steins, 1998).

vii It should be noted that the physical and technological characteristics of the resource can indirectly affect outcomes through patterns of interactions, but can also directly affect the outcomes, independent of human interaction. This is represented in the framework (Figure 2), where a line shows a direct link between the physical nature of the common and the technology available and outcomes of use.

viii Oakerson (1992: 52) argues that the presence of inequities might be revealed as a breakdown in collective action and subsequent inefficiency of use results from users failing to receive a 'reasonable and fair return on their contribution'. In the evaluation of outcomes of resource management, we must be aware that the researcher's and users' concepts of efficiency and equity are social constructs. For example, researchers are often inclined to view efficiency in terms of ecological sustainability, but local users may have a different point of view. Oerlemans and Steins (1994) report that farmers in the Hills of Nepal could not make the concept of sustainable agriculture explicit: their perception of sustainability can be described as social sustainability, namely enough yield to feed their family, enough labour to work the fields and non-decreasing soil fertility. In the evaluation of outcomes, we must make explicit which meaning we ascribe to efficiency and equity.

<sup>ix</sup> El Salto de Limon is located in the northeastern corner of the Dominican Republic, on the peninsula of Samana, between the popular tourist area of Las Terrenas and the town of Samana.