Sustainable Tourism Development: A Critique

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Sustainable tourism has become an increasingly popular field of research since the late 1980s. However, the sustainable tourism debate is patchy, disjointed and often flawed with false assumptions and arguments. This paper is a brief critique of some of the weaknesses in the sustainable tourism literature. In particular, it explores six issues that are often overlooked but must be addressed in research: the role of tourism demand, the nature of tourism resources, the imperative of intra-generational equity, the role of tourism in promoting sociocultural progress, the measurement of sustainability, and forms of sustainable development. Finally, it is argued that in order to transform research on sustainable tourism to a more scientific level, a systems perspective and an interdisciplinary approach are indispensable.

Introduction

Since the late 1980s, sustainable development has become a buzzword in development studies in general and in tourism research in particular. However, a literature review led the author of this paper to the belief that the 'muddy pool' (Harrison, 1996) of debate on sustainable tourism is patchy, disjointed and at times flawed. Indeed, 'little appears to have been written, in depth, on the meaning and implications of sustainable tourism development' (Hunter & Green, 1995: 69). Most research 'had advanced little beyond the stage of formulating and discussing various principles and assumptions' (Komilis, 1994: 65); while the case studies which explore the ways of applying sustainable principles to practice, often through small eco- or alternative tourism projects, provide at best a micro solution to what is essentially a macro problem (Wheeller, 1991: 93).

With a full appreciation of the contributions made by numerous writers towards the progress in tourism research, this paper attempts to make a brief critique of the research on sustainable tourism. However, it does not intend to inveigh against the literature at large; rather, it is a personal observation of the debate about tourism and sustainability. Indeed, it is a glimpse at the other side of the sustainable tourism debate, the side that has largely been overlooked, neglected or conveniently and implicitly assumed as unimportant or irrelevant by some writers. Furthermore, many of the issues discussed here have already been identified in varying contexts by some of the most insightful researchers in the field though only a very small amount of representative work could be reviewed and acknowledged in this paper.

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The Concept of Sustainable Development

The concept of sustainability has its origins in the environmentalism that grew to prominence in the 1970s. The explicit idea of sustainable development was first highlighted by the International Union for the Conservation of Nature and Natural Resources (IUCN, 1980) in its *World Conservation Strategy*. In 1987, the Brundtland Commission Report defined sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987: 43). The Commission further emphasised that sustainable development is not a fixed state of harmony, but rather a dynamic process of changes which 'are all in harmony and enhance both current and future potential to meet human needs and aspirations' (WCED, 1987: 46).

In tourism, there are a multitude of definitions for sustainability and sustainable development (Butler, 1999b; Page & Dowling, 2002). The World Tourism Organisation (WTO, 2001) prefers the following definition of sustainable development:

> Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems.

Prosser (1994) highlights four forces of social change that are driving this search for sustainability in tourism: dissatisfaction with existing products; growing environmental awareness and cultural sensitivity; realisation by destination regions of the precious resources they possess and their vulnerability; and the changing attitudes of developers and tour operators.

Sustainability has been widely viewed as holding considerable promise as a vehicle for addressing the problems of negative tourism impacts and maintaining its long-term viability. It is praised by Bramwell and Lane (1993) as a positive approach intended to reduce the tensions and friction created by the complex interactions between the tourism industry, tourists, the environment and the host communities so that the long-term capacity and quality of both natural and human resources can be maintained. Cater (1993) identifies three key objectives for sustainable tourism: meeting the needs of the host population in terms of improved living standards both in the short and long term; satisfying the demands of a growing number of tourists; and safeguarding the natural environment in order to achieve both of the preceding aims. Farrell (1999) highlights the 'sustainability trinity' which aims at the smooth and transparent integration of economy, society and environment.

Sustainability, sustainable tourism and sustainable development are all well-established terms that have been used loosely and often interchangeably in the literature. Butler (1999b) and Harris and Leiper (1995) are among the few scholars who have tried to explore the differences between these terms. Without being preoccupied with a semantic debate about the terminology, in this short article, 'sustainability' is broadly considered state-focused which implies steady

life conditions for generations to come; 'sustainable development' is more process-oriented and associated with managed changes that bring about improvement in conditions for those involved in such development. Similarly, sustainable tourism is conveniently defined as all types of tourism (conventional or alternative forms) that are compatible with or contribute to sustainable development. It should also be noted that development does not necessarily involve 'growth' as it is essentially a process of realising 'specific social and economic goals which may call for a stabilisation, increase, reduction, change of quality or even removal of existing products, firms, industries, or other elements' (Liu & Jones, 1996: 217).

Key Issues to be Addressed

The author feels that the following are among the main weaknesses of the sustainable literature which must be addressed if we are to advance further in this field of research.

(1) While emphasising the sustainability of tourism resources, no due attention has yet been paid to that of tourist demand, especially at the destination level, where a sustained flow of tourists cannot be taken for granted though this might be the case at the global level.
(2) When discussing resource sustainability, it is often limited to the preservation and conservation of resources and fails to appreciate that resources are a complex and dynamic concept, evolving with changes in the needs, preferences and technological capabilities of society.
(3) While emphasising intergenerational equity, no due attention has yet been paid to intra-generational equity, that is, the fairness of benefits and costs distribution among the stakeholder groups of tourism development. Where such attempts were made and community involvement was advocated, many writers fail to recognise that the host population is often not empowered to take control of the development process.
(4) While emphasising the interests of the host population, an overwhelming majority of the writers in the field appear to have a view that the destination community should reap the economic benefits of tourism but keep its culture intact. Many argue that the social and cultural impacts of tourism are primarily negative and any tourism-related socio-cultural changes should be avoided.
(5) The determination of the absolute level and pace of development has not been without problems as well. Many tourism organisations and academics have searched for ways to set the limit or threshold to tourism growth, through identifying carrying capacities and indicators of sustainable development, but with limited success.
(6) The means and instruments advocated for achieving sustainable tourism are often fraught with simplistic or naïve views. Many writers and practitioners enthusiastically promote ecotourism, alternative tourism, responsible tourism, soft tourism, low-impact tourism, community tourism, and so on, as the path to sustainable tourism development. But experiences show that none of these forms can be relied on as the way forward for a sustainable and growing tourism industry worldwide.

Is Sustainable Tourism Solely a Supply Issue?

Sustainable tourism requires both the sustainable growth of tourism's contribution to the economy and society and the sustainable use of resources and environment. Neither can be achieved without a sound understanding and proper management of tourism demand. But demand issues have generally been ignored in the sustainable tourism debate, with the exception of few writers (e.g. Butler, 1999b; Middleton & Hawkins 1998) and the case of on-site visitor management which is often used as an impact control measure. This is probably because the concept of sustainability was originally taken, rather conveniently and with little adaptation, from the general sustainable development literature where a constant or increasing overall demand for resources is a given condition. However, as demand patterns and economic structures change, no industry, and in particular no industry at the national or regional level, could or should assume that there is a constant or increasing flow of demand for its outputs and thus focus solely on resource issues.

Tourism development is both supply-led and demand–driven. The provision of tourist facilities and services may arise as a response to growing demand or aim to stimulate tourist demand. Whatever the initial impetus, successful development in the long term necessitates a balance of supply and demand in terms of range, quality, quantity and price. An evolution on one side of the demand-supply equation will usually be accompanied by changes in the other, whether this represents growth, stagnation, decline or some qualitative transformation. Moreover, the nature and extent of the demand and the associated facilities and services provided will also directly influence the broader aspects of development (Pearce, 1989). Indeed, 'Tourism development is a dynamic process of matching tourism resources to the demands and preferences of actual or potential tourists' (Liu, 1994: 21).

Generally speaking, the demand determinants push a tourist into a travel decision while the supply factors pull the tourist towards a particular destination. The size and preferences of global tourist demand are determined by variables in generating countries, whereas the spatial distribution of tourist flows will be influenced by the competitiveness of various tourist destinations.

Globally, tourism has been growing rapidly during the last half a century, from 25 million international tourist arrivals in 1950 to 698 million in 2000 (WTO, 2002), and is expected to grow at an average annual rate of 4.3% until 2020 (WTO, 1998). However, no destination can take the growth of its tourism industry for granted as increasing tourist demand will be shared by, and distributed across, many competing destinations. Therefore, for each individual resort or country, it is unrealistic and pernicious to assume that there is always an increasing demand for its product, and ignore changes in the tourist market. The tourism industry is also vulnerable to external events. For instance, the September 11th terrorist attacks in America led to an 11% decline in world international tourist arrivals during the final four months of 2001 (WTO, 2002). The remarks made by Levitt (1960) 40 years ago are still pertinent: there is no such thing as a growth industry. There are only companies organised and operated to create and capitalise on growth opportunities. Industries that assume themselves to be riding some automatic growth escalator invariably descend into stagnation.

Even though the total scale of world tourism demand is predicted to increase in the foreseeable future, the types and quality of products tourists search for are changing constantly. Tourists are becoming more experienced, more critical, more quality conscious and seek new experiences as well as 'good value for money'. Furthermore, tourist destinations across the world are facing increasing competition from other leisure industries and other destinations as well as constantly changing tourist tastes and behaviours. Some well-established tourist resorts in the Mediterranean have already experienced stagnation or even decline and have started to differentiate their largely homogeneous offerings by developing new products, improving the quality of existing products and penetrating new markets (Morgan, 1998). In order to develop tourism sustainably, demand management, in terms of finding enough tourists to fill capacities, is often more critical than resource management since tourist demand usually fluctuates more frequently and abruptly than tourist resources. For instance, in 1997 global international tourist arrivals increased by 2.4% but one fifth of the WTO member countries recorded a decline in visitor numbers from abroad (WTO, 1999).

The motivations, preferences and perceptions of tourists influence the tourism resource itself in the sense that they determine what object or site becomes a tourist attraction and its relative value in the marketplace. Tourists never buy 'resources', they go to tourist destinations, visit attractions and use facilities. The dynamic nature and changing value of various kinds of tourist resources can largely be explained by the evolution of tourism demand. For instance, before the mid-18th century, nature was not normally regarded as an attraction. The Alps, where some of the world's most popular scenic and ski resorts are located, was to be avoided during the Grand Tour.

Demand management is also important in sustaining tourism resources in that effective marketing can channel tourist demand to places that are more impact-resilient, such as urban and seaside built environments rather than to more fragile wilderness areas. Purpose-built attractions such as theme parks, and resort towns like Orlando and Las Vegas in the USA can absorb millions of tourists and reduce the touristic pressure on the natural environment. Otherwise, the world will find it difficult to cater for the extra one billion international tourists projected by WTO (1998) in 20 years' time in national parks and heritage sites. Visitor management techniques can also be applied to select or deselect tourists, control their flows and influence their behaviour through promotion and education.

Is Tourism Resource a Fixed Entity?

It has been argued that tourism is a resource industry and natural environmental assets are the very foundation upon which all tourism rests and are usually the most successful in attracting tourists. This perhaps partly explains why the sustainable tourism literature has overwhelmingly focused on the preservation and conservation of natural resources. However, sustainable resources management requires a broader and better understanding of the characteristics of tourism resource.

Natural assets or resources can be classified, according to availability, into four main groups: ubiquities, which exist everywhere; commonalities, which are widely available across many areas; rarities, which occur in very few locations; and uniquities, which occur in one place only (Healey & Ilbery, 1990). Preserving and promoting the rare and unique tourist assets, rather than all resources, is the key to achieving competitiveness and sustainability in tourism. Based on the utilities of natural resources, the following resource types can also be easily observed:

(1) touristic resources, which are only suitable for tourism purposes, such as sandy beaches and snowy slopes;
(2) shared tourist resources, which are mainly used in tourism and a limited number of other industries like fishery and agriculture, such as sea and forest;
(3) common resources, which are used in most industries and everyday life, such as land and water.

Whether, how and to what extent the various types of resources are employed in tourism depend on the comparative merits and opportunity cost of the industry in relation to other economic sectors.

From a broader perspective, tourism resources encompass more than nature's endowment. As a place product, tourism requires three levels of resources: the attractions for tourists, including natural, cultural and purpose-built; the infrastructure and superstructure, to support tourist activities; and the physical and social settings, including the hospitality of the community. The transformation of these resources into an effective tourism product usually requires the effort of the tourism agencies, in particular tour operators, travel agents and national tourism organisations, in packaging and promoting the whole destination.

All the components of tourism supply are interrelated with attractions as the core. A coordinated and balanced development of all components is critical because the capacity of the tourism industry is determined by the capacity of the weakest components (the bottleneck). Generally speaking, the number, quality and size of tourist attractions decides the maximum potential tourism (attracting) capacity of a destination. Infrastructure and amenities determine the actual or effective tourism (carrying) capacity while agency and administration normally set the level of the realised capacity in a given period of time.

As the natural resources, though deemed to be finite, are still perceived as abundant and often come free in many destinations, it is often the other categories of resources that decide the effectiveness of tourism development. For instance, it is the lack of capital, technology and marketing and management expertise that restrains the growth of tourism in many less developed regions in the world. The inefficient use of many tourist facilities (hotels for example, often have annual bed occupancy rates of 50–60% in most countries), indicates that the effective marketing of these tourist resources is of great significance in reducing resource wastage.

The concept of a resource itself, as mentioned earlier, is both functional and cultural. Resource does not apply to an object, but to a value placed upon it in view of the function it may perform. The perception of any resource thus does not rely on its physical properties, but on a range of economic, technological and

psychological factors. Resources are not, they become (Zimmerman, 1951). Tourist attractions, like resources in general, need not refer to a fixed or finite quantity or quality. What constitutes an attraction from the human perspective depends on the kind of knowledge and technology acquired by a society and upon human tastes, values and lifestyles. Therefore, how can one anticipate the needs and preferences of future generations? Will they value a wilderness area more highly than a comfortable built environment? Will they enjoy the Pyramids more than Disneyland? Will virtual travel replace holidays to the rainforest since 'technology can give us more reality than nature can'? (Eco, 1986: 44).

Pearce *et al.* (1990) summarise the minimum resource condition for achieving sustainable development as 'constancy of the natural capital stock' which can take on several different meanings: constant physical capital stock; constant economic value of the stock; and the constant value of all capital stocks both man-made and natural. Applying the constant capital rule to tourism, Garrod and Fyall (1998) propose two approaches to sustainable tourism: the macro and micro approaches. The former involves the use of environmental balance sheets to measure sustainability conditions, while the latter entails the use of social cost-benefit analysis at the level of the individual tourism development project. Fossati and Panella (2000) make a distinction between 'strong' and 'weak' sustainability. They argue that the former stresses the importance of irreversibility with regard to certain critical aspects of natural capital while the latter allows substitution between man-made and natural components.

This leads us to the question of how we use resources. Should we try to maximise the physical capital stock or maximise the total capital stock? Should a destination keep its natural assets such as wilderness areas untouched, or transform them into tourist attractions and through tourism increase capital stock in the forms of improved technology and infrastructure while accepting limited changes or reductions of the natural assets? This author believes that research on tourism resource should recognise its complex and dynamic nature and advance beyond the stage of pleading for conservation and preservation to a realm of retaining a balance between the consumption, transformation and creation of tourism resources.

Is Intra-Generational Equity Less Imperative?

'If social and economic development means anything at all, it must mean a clear improvement in the conditions of life and livelihood of ordinary people' (Friedmann, 1992: 72). A meaningful way to evaluate sustainable tourism is to examine how it can meet the needs of the host population in terms of improved living standards both in the short and long term. Tourism is said to have a unique quality in income generation and distribution compared to many other industries in that it promotes regional development, has a high multiplier effect and consumes a wide variety of local goods and services.

However, global experience shows that this potential of tourism has rarely been fully realised. In less developed countries in particular, poverty and social desperation necessitate a great need for the local community to benefit from tourism development, but the inability of the host population to fully participate in the development process results in the lion's share of tourism income being

taken away or 'leaked' out from the destination. It is thus argued that 'a greater level of local involvement in the planning and development of tourism is an essential prerequisite of sustainable tourism' (Hitchcock *et al.*, 1993: 23–4).

Bramwell (1998) rightfully highlights four arguments for intra-generational equity in the sustainability debate. First, it is the local community, especially the disadvantaged social groups, who bear the brunt of negative costs. Second, poverty encourages unsustainable practices in order to seek quick returns to meet immediate needs. Third, high charges for the use of some scarce resources tend to exclude poorer people. And lastly, it is hard to justify caring about fairness to future generations without extending this concern to people in society today.

There is another strong argument for involving and rewarding the local community. The host population is itself a part of the tourism 'place' product. The locals are subjects to be viewed and interacted with, or settings for tourist activities, and their attitudes and behaviour constitute the 'hospitality' resource of a destination (Smith, 1994). The more that local residents gain from tourism, the more they will be motivated to protect the area's natural and cultural heritage and support tourism activities. If they do not benefit from tourism development, they may become resentful and this may drive tourists away from a destination as tourists do not like visiting places where they are not welcomed.

When the needs and interests of the local communities are emphasised, many writers fail to realise that local communities are not some kind of homogeneous mass but contain deep divisions of class, status and power. Community tourism or community involvement in tourism development is often difficult to implement, especially in developing countries (Tosun, 2000). Harrison (1996) argues that it is hard to see how the wishes of local people and communities could ever be sufficiently unified to offer a practical guide to tourism development. There is also a wide range of models for community involvement. The ideal is 'self-mobilisation' and active participation in the planning and management of tourism, but in reality, community involvement in most cases is 'relational' rather than participatory. Without proprietorship, most forms of participation become co-optive, cooperative or collaborative arrangements (Honey, 1999; Scheyvens, 1999). Clearly effort needs to be made to empower the local population economically as well as psychologically, socially and politically (Friedmann, 1992).

Nevertheless, intra-generational equity is not only about local communities. Generally speaking, sustainable development is determined largely by what the stakeholders want it to be. There are a range of actors who have the right and, to a varying extent, ability to make changes to the tourism system and influence the process and consequences of development. These actors or stakeholders include tourists (domestic and foreign); tourist businesses (investors, developers, operators; shareholders, management, employees; public and private); the host community and their governments. These groups often have conflicting interests in, and different perceptions of, tourism development. To be successful and sustainable, tourism development should involve 'various government departments, public and private sector companies, community groups and experts' (Wahab & Pigram, 1998: 283).

Obviously, the needs of one group may take precedence over those of the others in development decisions depending on the specific circumstances of each destination, such as the stage of development, economic conditions or market situation. For example, in the early stages of the destination life cycle, in order to attract the badly needed foreign investment, governments in developing countries may offer generous incentives to multinational companies to develop tourist facilities and introduce expatriate managers to run these facilities in the destination. When the destination becomes more established and local workers are more experienced, a stronger emphasis on local control is often required.

However, the history of tourism developments has shown that all these groups are equally important and that long-range objectives and sustainability cannot be achieved if one group is continually subordinated to the others. Sustainable tourism development requires simultaneously meeting the needs of the tourists, the tourist businesses, the host community and the needs for environmental protection. It calls, as Bramwell and Lane (2000) argue, for the effective planning and implementation of collaboration and partnerships among various stakeholders in the process of tourism development. By integrating and reconciling these needs and concerns, an improved quality of life can be achieved for the community, while the tourists gain satisfactory experiences, the tourism industry makes a fair profit and the environment is protected for continuous future use. Although the complete integration of such diverse interests is unlikely in many destinations, sincere attempts at integration which include the involvement of local communities are more likely to be sustainable than development for which no effort is made to reach compatibility with local, economic, social and ecological conditions (Butler, 1999a).

Does Cultural Integrity Reject Change in Destination Societies?

While recognising the economic benefits of tourism, many writers appear to have a view that its social and cultural impacts are primarily harmful. Croall (1995), for example, claims that tourism has trivialised cultures, brought about uniformity, and had adverse effects on traditional ways of life and on the distinctiveness of local cultures. Preserving cultural heritage, maintaining traditional values and providing authentic experiences for tourists have often been highlighted as important elements of sustainable tourism. However, the author believes that most sociocultural changes brought about by tourism development are beneficial and the unique role of tourism in promoting modern values, social progress and cultural evolution should be greatly appreciated.

Todaro (1997: 16) emphasised that development is 'a multi-dimensional process involving major changes in social structure, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality and the eradication of poverty'. Tourism, through its face-to-face contact between the hosts and the visitors and the 'demonstration effect', often introduces new ideas, values and lifestyles and new stimuli for both economic and social progress. Since most international travellers are generated in the developed world, the cultural impacts of tourism are often seen as Western influences, which in the author's opinion are largely desirable. The developed countries are not only developed technologically and economically; many

elements of the modern Western culture such as fairness, openness, social mobility and human rights represent the universal values of mankind (though these values are not always observable in the touristic host–guest interaction). Even mass consumption and materialism are usually conducive to economic development.

If Westernisation, following the values and steps of developed countries, is undesirable, does it imply that the Western culture is inferior to the traditional cultures? Or does it mean that the Western culture is only good for the West but not suitable for the rest of the world? Are traditional societies really better than modern ones? Are host populations in developing countries happy with their lives? Are they not tempted to change their traditional ways of life when they become aware of the many alternative lifestyles? Even if the changes are detrimental, is tourism the only cause? Do the developing countries really have the choice of not to change?

Changes have been an intrinsic part of human evolution. What is different in the modern world is that changes are occurring more rapidly and are caused by a wider variety of forces. Which changes are negative and damage the cultural integrity of the destination is a subjective judgement based on development objectives and public values (Wight, 1998). Furthermore, the globalisation and homogenisation of culture, often summed up in terms like 'Coca-Colaisation', 'McDonaldisation' or 'Hollywoodisation', cannot be solely attributed to tourism. The mass media, through modern telecommunication and information technology often play a greater part in shaping the values, opinions, lifestyles and fashions across the world.

The author feels that the uniqueness of primitive and traditional society, to a large extent, is more a culture of a particular historical period than a particular ethnic group. The now developed West was once traditional. Many developing societies are still in the 'traditional' stage: it is only because they have failed to keep pace with the development of the world as a whole, that their social values and ways of life have become 'traditional' or 'primitive' in the eyes of modern (Western) culture. It should not be assumed that people in less developed countries do not want change, though they may, appear to be happy to the outsider who may be reluctant to see them change and would be happy if they retained their marginalised positions (Oakes, 1992). 'Paradoxically, in a tourism context, residents of destination areas may be encouraged to retain their traditions in order that they can develop!' (Wall, 1997: 1).

It is also unfair to expect the less developed world to keep its traditional culture for the sake of the tourists who wish to seek exotic and authentic experiences. Although for many less developed tourist destinations the key attraction to tourists is their exoticness or primitiveness, whether it is reflected in the forms of pristine environment, primitive ways of life or traditional crafts and artefacts, not all tourists are seeking authentic cultural attractions all the time. MacCannell (1976) argues that mainstream tourists experience 'staged authenticity' as a general rule. Most mass package holidaymakers are happy to enjoy a commercialised, 'manufactured' or 'pseudo-culture' of the host community. The tourists themselves are often part of the hybrid resort culture, like that developed in some popular Spanish coastal resorts where many tourists are more interested in interacting with other tourists rather than mingling with the host community (even

when authenticity is emphasised by both tourists and the tourist businesses). It is usually 'created by entrepreneurs, marketing agents, tour operators and travel guides' (Hughes, 1995: 781) to reflect tourist expectations rather than portray what actually exists. Therefore, tourism destinations do not have to be authentically 'traditional' to meet with the expectations of tourists since local people can 'negotiate both their own "traditional" identity in the presence of tourists and the latter's quests and experiences in themselves' (Tucker, 2001: 868).

Has Sustainability Been Usefully Measured?

It is said, 'the greatest criticism of the tourism industry relates to the problem of its exceeding desirable limits. It is often "too much of a good thing"' (Rosenow & Pulsipher, 1979: 213–14). But how much is too much? What is exactly the sustainable level of tourism development? How can this level be measured? 'While it is relatively easy to conceptualise and proselytise about the needs for sustainable tourism development, it is far more challenging to develop an effective, yet practical, measurement process' (Murphy, 1998: 180). After more than a decade's debate on sustainable tourism, there is still disagreement on what should be sustained and on the appropriate indicators for measuring sustainability (McCool *et al.*, 2001).

Pigram (1990) argues that the tourism industry should adopt a 'safe minimum standard' approach to development which minimises the risk that irreversible changes will foreclose development opportunities for future generations. But as development effects tend to be accumulative, how can one foresee the final impact of the many incremental changes made to the environment through tourism development over a long period of time?

The carrying capacity concept has often been used to identify the 'thresholds' of a system to absorb changes. It is argued that sustainable tourism can only take place if carrying capacities for key tourism sites are computed and then rigorously implemented through a system of effective planning and operating controls (Wearing & Neil, 1999). The concept of carrying capacity implies the existence of fixed and determinable limits to development and is generally defined as the maximum number of visitors an area could accommodate without there being excessive deterioration of the environment or declining visitor satisfaction. This limit is difficult, if not impossible, to determine as it depends on the nature of the destination, the type of products it offers, the kind of tourists it attracts, and the stages of its lifecycle.

The many dimensions of carrying capacity – physical, ecological, psychological, social and economic – further complicate this task. Each of these carrying capacities has different thresholds and different implications for tourism development. Physical carrying capacity refers to the maximum number of tourists a site or destination can physically accommodate, based on the minimum space a tourist needs, say a couple of square metres on a crowded beach. Ecological carrying capacity is related to the impacts of tourism on the natural environment and the long-term viability of the natural resources. Psychological carrying capacity is concerned with the perception and satisfaction of tourists, which varies across different types of tourists, holidays and destinations. Social carrying capacity involves the sociocultural impacts of tourism that will

influence the attitude of the local community towards tourism. Economic carrying capacity has strong connections with the profitability and opportunity costs of tourism development. Carrying capacity and visitor impacts are also affected by tourist behaviour, developer practices and resilience of the destination's socioeconomic-physical environments.

It is no surprise, therefore, that limited success has been achieved in measuring and applying the carrying capacity concept to a destination. Many have started to abandon the idea of a specific capacity for a tourism destination. Butler (1997) argues that there can rarely, if ever, be a single definitive figure that realistically represents the maximum number of visitors who should visit a site over a particular period of time. Furthermore, even if limits could be identified and accepted, there is rarely a clear and effective method of enforcing those limits. Tourism is a fragmented industry and many of its resources and facilities are privately owned.

Therefore, the primary question underlying carrying capacity should not be 'how many is too many?' but rather determining how many changes to environmental conditions are acceptable given the development objectives of a destination (McCool & Lime, 2001). McCool and Lime (2001:381) argue that '[u]ltimately, impacts cannot be avoided, but they can be managed based on established objectives or an understanding of the biophysical or social conditions desired'. In order to define important values, particular issues, indicator variables and desired or acceptable conditions, they further advocate the adoption of several established decision-making frameworks, such as the Limits of Acceptable Change (LAC), Visitor Impact Management (VIM), Visitor Experience and Resource Protection, and the Tourism Optimisation Management Model (VAMP).

Is Ecotourism the Path to Sustainability?

Due to the problems associated with, and sometimes unfairly attributed to, conventional mass tourism, many academics and practitioners enthusiastically promote some 'ideal' forms of tourism – alternative tourism, appropriate tourism, soft tourism, responsible tourism, low-impact tourism, and ecotourism – as the means of achieving sustainability in tourism development.

However, close examination shows that these 'sustainable forms' of tourism are 'far from fulfilling their promise to transform the way in which modern, conventional tourism is conducted. With few exceptions, [they have] not succeeded in moving beyond a narrow niche market to a set of principles and practices that diffuses the entire tourism industry' (Honey, 1999: 394). In particular, it is a fallacy to suppose that ecotourism, which is generally defined as environmentally responsible travel to relatively undisturbed or protected natural areas (Ceballos-Lascurain, 1996), though its exact definition varies widely in the literature (see Fennell, 2001), can be the path to sustainable development.

It is precisely these more remote and pristine areas which ecotourists seek that are extremely fragile and sensitive to human impact, however lightly they tread, and most vulnerable to cultural disruption and environmental degradation. Ecotourism's impacts will be exacerbated by the growing tourist flows

encouraged by the tour companies' marketing activities and the insatiable demand of increasingly large numbers of tourists for getting off the beaten track. 'Getting "off the beaten track" often means that the track soon becomes a road, even a highway' (Wearing & Neil, 1999: xiii), thus disturbing and even destroying the very few undisturbed areas of the world! Through exploitation, dislocation and desecration, ecotourism is arguably the prime force today threatening indigenous homelands and cultures (Johnston, 2000).

Globally speaking, all the non-conventional or alternative forms of tourism are at best playing a complementary role in tourism development. As they are 'essentially small scale, low-density, dispersed in non-urban areas, and they cater to special interest groups of people' (Mieczkowski, 1995), alternative forms of tourism cannot offer a realistic general model for tourism development. For instance, even in the high profile 'ecotourism destinations', like Costa Rica, Kenya and Thailand, ecotourism is negligible in size and is directly dependent upon the existence of well-developed mass-tourism sectors (Weaver, 1998). Obviously, one cannot find locations for the 'millions' of eco- or alternative-tourism projects that are required to accommodate the extra one billion international tourists a year expected by 2020 (WTO, 1998). Therefore, ecotourism or alternative tourism is at best a micro solution to what is essentially a macro problem (Wheeller, 1991: 93). Whether the International Year of Ecotourism 2002 launched by the WTO and the United Nations Environment Programme (UNEP) really contributed to world tourism sustainability remains to be seen.

In fact, ecotourism is mainly promoted not for the purposes of resource conservation but for marketing reasons. It is often an attempt by destinations to diversify their tourism products, where a mass tourism industry is already in existence, to attract more tourists or increase their length of stay. It is also promoted by destinations that lack popular sun, sea and sand attractions or have locational disadvantages that make them less attractive for conventional mass tourism. It could even be a marketing ploy or tactic to give businesses an apparent 'green edge' on the competition. What we really need in seeking sustainability is not to develop small-scale tourism in undamaged areas but to repair the damage caused by earlier tourism initiatives (Butler, 1998). More fundamentally, our task is to develop conventional mass tourism sustainably and supplement it with all sorts of alternative forms of tourism where and when appropriate.

Conclusions

This paper has briefly analysed the main weaknesses of the sustainable tourism literature. It appears that the sustainable debate is flawed with some misconceptions, faulty measures, and inadequate means. In addition, these issues cannot be easily addressed even if every researcher in the field shares the same view. However, at this point, the author does not wish to paint a gloomy picture of sustainable tourism research: we must acknowledge the substantial progress made in research so far and try to find the ways forward. We have now understood the interrelationships between tourism, the environment and the local community, the need for a long-term perspective in both development

planning and resource conservation and a broader view in managing tourism to include the needs of all stakeholder groups. The following four issues are seen to be of critical importance if we are to carry out further research on sustainable tourism development.

First of all, there should be a balanced view about the concept of sustainability. As sustainability has its origin in environmentalism, many researchers show a kind of 'nature worship' and are somewhat anti-change. But we must not forget the role of humans in 'mastering, harnessing and utilising nature' rather than simply considering ourselves as part of nature.

> The denigration of human progress embodied in the sustainability paradigm is likely to hold back humanity from facing up to and solving problems of poverty and underdevelopment. It is hence a far bigger problem than some of the troublesome by-products of unplanned tourism development. (Butcher, 1997: 31)

Tourism will grow, sometimes rapidly, as at present only about one tenth of the world population travels internationally. Our main task is not to limit growth but to manage growth in a way that is appropriate to the tourists, the destination environment and the host population.

Second, there is an urgent need to develop policies and measures that are not only theoretically sound but also practically feasible. Without the development of effective means of translating ideals into action, sustainable tourism runs the risk of remaining irrelevant and inert as a feasible policy option for the real world of tourism development. In particular, we should research ways of applying the principles of sustainable development to mainstream, conventional mass tourism rather than preoccupying ourselves with inventing or relabelling the various side-shoots of mass tourism. Greater effort should also be made to promote codes, standards and best practices in sustainable tourism across the globe, through accreditation bodies such as the WTO and the Sustainable Tourism Stewardship Council (Font & Sallows, 2002).

Third, a systems perspective is necessary in order to improve our understanding of the characteristics and change patterns of tourism and its dynamic interaction with the natural, technological, social and economic environment (Liu, 1994). The systems approach is not only 'a way of looking at our world' and 'a framework for thought', but also 'undeniably an attitude of mind or a philosophy' (White *et al.*, 1984: 473). It 'makes it possible to analyse, describe and synthesise different viewpoints from an overall perspective' (Kaspar, 1989: 443). The systems approach views sustainability as an exercise in the conditional optimisation and fine-tuning of all elements of the developmental system so that the system, as a whole, keeps its bearings without one of its elements surging forward to the detriment of the others (Farrell & Runyan, 1991: 35).

Finally, to enable researchers from varying educational and intellectual backgrounds to work together in a more harmonious and effective fashion, an interdisciplinary approach should be adopted in researching sustainable tourism where synergies between different disciplines are developed to produce a more holistic synthesis. An interdisciplinary approach, as recommended by Faulkner and Ryan (1999), will facilitate the development of a more coherent

body of theory, techniques, beliefs and attitudes among scholars and advance sustainable tourism research towards a more scientific platform.

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