Sustainability of adventure tourism: the economic highway

L. Steynberg & J. P. Grundling Centre for Entrepreneurship, Tshwane University of Technology, South Africa

Abstract

Adventure travel is one of the fastest growing but least understood forms of international tourism. Its role in the economic development of rural destinations and its impact on local society, economy, and the environment are not fully comprehended, even though adventure tourism has been adopted enthusiastically by many Third World nations. This paper analyzes adventure tourism in South Africa and places it within the theoretical frameworks of sustainable development. With its steady growth, adventure tourism in South Africa will play an increasingly important role for national and local development in the frontier areas and therefore the appraisal of adventure tourism for sustainable development prompts critical study of the interactive roles of economic growth and environmental sustainability. By acting as a vehicle for economic interaction between developed and developing regions, adventure tourism thus transfers the concerns of sustainable development to the futures of some of the world's most remote places. Hence, concerns are raised regarding the aggressive growth paths followed, which may have a detrimental effect on sustainable adventure tourism. *Keywords: adventure tourism, sustainability, economic, growth paths.*

1 Introduction

International tourism plays a contentious role for developing countries. The analysis of tourism parallels a general paradigm shift away from purely growth-oriented economic development towards more sustainable forms of development (Brookfield, [3]). The new paradigm requires programmes that limit the negative effects of economic behaviour on local environments and cultures, and propose linkages between economy, culture, and ecology. According to

Norgaard [17] the latter can be termed co-evolutionary development, and are termed by others as ecodevelopment (Farvar and Glaeser [10]). Mass tourism development encounters skepticism mainly because its impacts and linkages are not necessarily sustainable. In this regard Lea [14] concludes that there is no other international trading activity which involves such a critical interplay among economic, political, environmental, and social elements as tourism. The tourism industry has witnessed the appearance of new tourism designs that both recognize tourism's negative impacts and envisage a more positive role for These alternative models of tourism, which include ecotourism (Saayman and Myburgh [18]), ethnic tourism (Slabbert [19]) and adventure tourism (Swarbrooke et al. [23]), regard tourism as a way to foster meaningful cross-cultural relationships as well as to promote environmental conservation and a more equitable distribution of tourism earnings (Gonsalves [11]). Alternatively tourism academics, governments and planners argue that since it provides scope for less negative impacts while retaining the positive economic benefits, it therefore contributes to more appropriate developments.

Hence, economic growth and development are of particular importance for social progress in South Africa. In this regard, adventure tourism receives scant attention in the literature, mainly because its economic role is considered to be minimal (Butler [6]), although it is one of the fastest growing sectors of international tourism, and its impacts, while poorly understood, are especially significant for developing countries. However, as both an economic and social development growth driver, adventure tourism should be made environmentally sustainable in the sense that the actions of the adventure tourist should not compromise the ability of future generations to sustain their livelihood. Thus, making development sustainable means moving beyond a narrow, albeit important, concern of how adventure tourism contributes to economic growth rate per se, to considerations relating to the *quality* of that growth.

2 Sustainability of adventure tourism within the context of economic growth environment interactions

The acceptance of mass tourism as a vehicle for economic development among developing nations, particularly small vulnerable countries, is critically examined in a variety studies (Britton and Clarke [2]; Lundren [15]). Britton [1] argues that tourism is not the great economic *leveler* it is promoted to be, nor does it necessarily provide sustainable forms of internal development within the host countries. It may, in fact contribute to the further underdevelopment of some regions as they lose control over important economic decisions. The critical perspective of Britton and others identifies the political economy of tourism with the formation of structural inequities resulting from capital transfers, economic leakages and enclave development.

A growing number of studies show the adverse social and cultural effects of mass tourism in developing regions (Smith, [21]; Travis, [24]; Young, [25]). Such criticism may hold equally for adventure tourism, which may produce more pronounced impacts because, as Butler [6] noted, alternative forms of tourism

penetrates further into the personal space of residents. Research has shifted away from conventional systematic issues of accessibility, flow, supply and demand, and infrastructure, towards more multidisciplinary perspectives. According to Mitchell and Murphy [16] the latter can be regarded as community concerns that encompass not only economic factors but also social and environmental factors. Cohen's [8] study of alternative tourism found it to be either countercultural travel, that is, pure immersions into the *lost paradises* by backpackers, or responsible tourism intended to relieve the exploitative nature of mass tourism. Neither description fully depicts adventure tourism, which makes possible unconventional tourism for basically conventional people. But more important, Cohen [8] sees such tourists as the spearhead of mass tourism penetration. In such a view, adventure tourism may in fact not be alternative at all, but merely an initial phase in an evolving tourist system. adventure tourism occurs precisely in those places that otherwise would not develop mass tourism because of their remoteness or their unique natural or cultural heritage. In such locations, adventure tourism is not alternative to This issue, then, is not whether adventure tourism is alternative tourism, but whether it is appropriate tourism. The measure of appropriateness ultimately rests in the measure of its sustainability.

Adventure tourism as an economic growth instrument, in its most simplistic form, can be described as the expansion of economic activity in a specific area with the purpose of raising average incomes of the domestic population. On the other hand, adventure tourism's economic development refers to a broader concept which, over and above the growth aim, also refers to ensuring that appropriate changes in the structure of economic activity occurs whilst at the same time ensuring improvements in the distribution of income and wealth as a result of adventure tourism. Economic sustainability, includes the two previous criteria, but also adds to the adventure tourism argument, the following dimensions:

- Having the right balance between investment in adventure tourism infrastructure and levels of adventure tourism consumption (activities and events);
- Having the right balance between the adventure tourism offerings and the prices paid for these offerings; and
- Having continuous improvements (productivity) in the methods employed to foresee in the needs of the adventure tourist.

The Brundlandt report [4] on the other hand provides the standard definition for environmental sustainability as ... development that meets the needs of the present without having to compromise the ability of future generations to meet their own needs. This definition focus on needs, particularly the needs of the poor, and secondly on the capacity of the environment inducing limits beyond which the environment cannot be used to meet these needs (Smith [20]). According to Jacobs [13] the environment has four major economic roles to play, namely:

1. *Life support* including the regulation of climate, the composition of the atmosphere, and the maintenance of the biodiversity;

- Resource provision including non-renewable resources such as fossil
 fuels, renewable resources such as plants, animals and fishing, and
 continuing resources such as sunlight, wave, wind and tidal energy (the
 environment as source);
- 3. Waste assimilation including the assimilation of natural and produced waste, whether by dispersal into low concentrations, reconstruction into usable compounds, or storage in inert or polluting form (the environment as a sink); and
- 4. Recreation and aesthetic including space for recreation, scenery and wildlife and adventure tourism.

The above definition and roles of the environment suggests the existence of a time frame determinant underlying the concept *environmental sustainability*, which are long-term in perspective and which demands living within ecological constraints. Environmental sustainability thus differs vastly from other forms of sustainability such as economic sustainability, which often implies immediate independence of any form of subsidy or support. One can therefore conclude that adventure tourism, which often through its activities, are environmentally demanding should be managed and conducted in such a way that it enhances economic processes in the short-term whilst simultaneously operating within the long-term ecological constraints defined by the environment. Conducting adventure tourism within a framework of *environmental sustainability* will keep choices (capabilities) open for future generations to participate in adventure tourism.

3 Maintenance of adventure tourism destinations

Traditional tourism concerns over land use, zoning, catering provision, performance standards and the like must be augmented for adventure tourism with strategies aimed at managing culture contact and minimising environmental impacts. The needs of tourism, unfortunately, often conflict with those of the local populations and with environmental preservation. The appropriate management of a destination for such a specific goal determines its potential for sustainable tourism development.

As with other forms of tourism, the impact of adventure tourism is tied to the volume of activity in a given destination. In addition to changes in annual visitation, tourism destinations face seasonal fluctuations and competition from adjoining areas. Therefore, host destinations must accommodate the seasonal shifts in visitor arrivals by adjusting activities accordingly. In many remote areas, local people mark time as being either the tourist season or *off-season*. Because of the limitations that seasonality imposes for the expansion of the national tourism industry and the maintenance of specific host destinations, efforts are continually made to develop off-season activities and to maximise activity during the regular season – at the risk of exceeding natural and social carrying capacities.

The creation of adventure destinations in the minds of prospective tourists constitutes a significant achievement for the international adventure tourism

industry. The infrastructural development and maintenance of such destinations, meanwhile, is left largely to the host destination, with varying degrees of success (Lea [14]). The development of adventure tourism attractions in South Africa appears to be following a sequence similar to that proposed by Butler [5] in his tourist-area cycle model: an exploratory stage when tourists are few and facilities nonexistent; an involvement stage when local residents begin to provide simple services to increasing numbers of visitors; a development stage when the destination is advertised in tourist generating areas, facilities are developed as components of national planning, and the number of tourists peaks; a consolidation stage when the economy of the tourist destination becomes primarily, if not exclusively, directed toward tourist services; a stagnation stage when the carrying capacity thresholds are exceeded and genuine attractions are supplanted by *artificial* ones; and, finally, a declining stage when the area loses its appeal and competitiveness in the tourist market.

South Africa's adventure tourism move rapidly through the early stages, but it is unlikely that they will ever truly proceed beyond the development stage. Any further change along this proposed sequence invalidates a destination as an adventure destination. The destination itself may indeed continue to evolve as a tourist destination, as Butler's model proposes, but beyond the involvement stage, where local residents provide meager services in traditional ways, it will cease to be a destination for true adventure tourists. In effect, with increasing visitation rates, the tourism product would change (Butler [6]). The implication is that adventure tourism shortens the tourism development cycle at the Hence, before adventure destinations become fully developmental stage. articulated into the national economy, they will be abandoned for adventure tourism purposes. South African can partially solve these limits of growth problem by managing national parks and conservation areas to converge the interests of local people, the environment, tourists, and the national economy. Such places, if properly designed and managed, may apprehend the evolutionary process outlined by Butler at the development stage and prolong it in some balanced fashion. The resulting development product may be a touristic system tailored more toward local than national development, but with limited growth potential for the South African economy. If such tourist destinations continue to evolve beyond the development stage, they will in effect become advanced stages for more conventional tourism, bringing with them the impacts commonly encountered in mass tourism

4 Problem statement

This paper describes adventure tourism in South Africa, where tourists visit some of the world's most remote natural and cultural settings, and discusses its contribution to the national economy, its impacts on local society and the natural environment. Adventure tourism destinations have little traditional investment in tourism and are particularly vulnerable to changes initiated by tourists. Hence, having stated the interactive role between economic growth and environmental sustainability the following questions arise:

- What is the general economic growth path inclination of South African youth? and;
- What are the implications on adventure tourism in South Africa if the preferred economic and environmental system is implemented?

Finding answers to the proposed questions will lead to searching out those costs associated with preferred pathways of economic growth and, in particular, identify where adventure tourism and natural resources conflict (actual and potential) may lie. Ways need to be found in which human (adventure tourism uses) and natural resources uses can complement each other to minimise the costs and add value to the development process while protecting the environment

5 Purpose of the research

The purpose of this paper is to identify which economic growth path, from the four presented hypothetical growth paths, are preferred by South African youth in order to provide an indication of the preferred economic and environmental system. The four possible economic growth paths are defined as follows:

- Path A results from high investment and pollution levels. Consumption initially grows rapidly and then declines as the environment deteriorates:
- Path B presents a lower pollution level compared to path A, resulting in lower consumption levels but improving environmental quality and ongoing economic growth;
- Path C has even lower pollution levels and also lower investment outlays. As a result, the environment improves and consumption grows slower until the growth rate stops; and
- Path D depicts a stationary economy, where investment equal depreciation and pollution equals absorption capacity at each moment.

6 Research methodology

6.1 The sample

A structured questionnaire was applied to 229 youth respondents in South Africa of which 72.9% (n=218) were young students at graduate level, 17.47% (n=53) were full time workers, while 2.62% (n=8) did not declare their occupation. The majority of the sample came from the black ethnic group (54.15%), followed by white (13.97%) and coloured (0.87%). A high percentage of the respondents (31%) were not prepared to indicate their ethnic group.

6.2 The measuring instrument

The questionnaire presented two distinct sets of variables: demographic variables and reference variables. The first set was constituted by variables like age, gender, ethnic group, present occupation and educational level. The reference



variables were described in terms of three criteria to arrive at a preferred growth path defined by Smulders [22] as:

- Greenness The sensitivity for a clean environment (8 questions);
- Impatience The discount rate (5 questions); and
- Flexibility The elasticity of the substitution between utility now and utility in the future, called inter-temporal flexibility (5 questions).

Given the particular structure of the questionnaire the researchers used an implicit grading scale in which all answers were classified into categories of high-low or high-medium-low sensitivity to the specific area investigated.

6.3 Data analysis

It is clear that measuring dispositions like attitudes as it relates to cognitive, emotional and decision-making factors may result in different everyday behavioural outcomes. It is therefore not surprising to find discrepancies between real behaviour of people and choices declared by respondents in questionnaires (Zammuner [26]). A coherence analysis was thus considered to be of utmost importance based on two devices namely:

- General opinion responses versus specific behavioural responses; and
- Re-proposing questions, opinion questions of the same nature versus specific behavioural responses.

The process of data analysis to assess the desirability of a specific growth path has followed a kind of "Data Warehouse" that can be subdivided into three main phases which eventually lead to the content development of Table 1, and include:

Table 1: Comparison of the different growth paths.

C preferred to B

If preferences are sufficiently green, growth is undesirable along this path; If people care little about produced consumption goods and more about a cleaner environment

A preferred to B and C

If society discounts future events at a high rate. Long-run growth is undesirable in this case, because of high impatience. People do not care much about the environment and have a low sensitivity for what happens in the future. The environment therefore deteriorates rapidly.

D preferred to A, B and C

If a high preference for intergenerational equity prevails, leading to a low degree of "flexibility".

If society finds it unfair that people living at one moment in time are better off than those living at another moment.



- The creation of a classification of the answers available to each question (high, medium or low);
- Individualisation of the characteristic of each respondent with regard to the three discriminatory criteria (greenness, flexibility and impatience); and
- Matching the characteristics of each respondent with the preference requirements of one of the preferred economic growth paths (paths A, B, C or D).

In the first analysis the researchers classified respondents according to those whom prefer a Path D approach. As Smulders [22] has indicated, these respondents would have a clear propensity for strong sustainability. The discriminating factor used was low flexibility, and as indicated by previous research, growth is undesired only for those with low flexibility.

In the second phase of analysis the focus shifted to the component greenness. People preferring path A show a low degree of greenness and are more impatient, regardless of their green or not attitude.

As the remaining paths (B and C) all demonstrate a willingness towards sustainable growth, the rest of the analysis focused on how fast they wanted to grow. Respondents preferring path B would appear to be slightly more impatient than those opting for path C. According to their higher or lower degree of impatience, the remaining respondents were divided between path B or C respectively.

7 Findings

It was found that that the majority of respondents revealed a high degree of flexibility and thus a preference for economic growth. A predominance of greenness prevail amongst 43.23% of the respondents, indicating a preference or willingness towards sustainable growth according to either path B or C, whilst 24.89% declares themselves for not having a major concern for environmental issues thus choosing the undesirable and unsustainable growth path A.

The data also revealed that the youth in South Africa ranked medium to high with regard to impatience, indicating that the young generation of this developing country exhibits a strong willingness to catch up to the standard of living of more developed countries, even at the cost of addressing the economy along a growth path that is environmentally unsustainable. Yet, in terms of attitudes, the researchers found that 62.45% of the respondents expressed the wish to follow a sustainable growth path. This indicates a dichotomy between the attitudes of the youth and the real actions of the youth.

8 Recommendations

The present research indicate that the youth of South Africa demonstrate a relatively aggressive orientation toward economic growth and development, as well as an impatience to wait for an improvement in their own economic situation. Furthermore, it remains unclear how the economic benefits of

adventure tourism are distributed through South Africa's national and local economies. A good measure of sustainable development is the degree to which earnings from development are distributed through the involved population (Dearden [9]). Since much of the earnings of adventure tourism never leaves the generating areas, where tour packages are created, the transfer of wealth to the destinations are unclear. The circulation of earnings through the adventure tourism system and the South African economy, from generating areas through the hierarchy of access to rural economies, is poorly understood and constitutes an important additional area for future research.

Overall, adventure tourism draws into the web of the global economy quite remote places and people. The appraisal of adventure tourism for sustainable development prompts critical study of the interactive roles of remote people and places for national development purposes. Coburn [7] and Gorio [12] have commented on local people's participation in conservation as a basis for development, a process that links adventure tourism conservation areas and with subsistence systems. This connection ties the dependent development of local subsistence systems to the design of tourism programmes in the overall national It may positively link adventure tourism with environmental awareness among both tourists and hosts, with the need to maintain cultural traditions, and with economic incentives for national conservation development. The cost of these innovations to host populations is a loss of autonomy, new demands on local resources, and increased vulnerability to outside economic and political events. By extending the geographical centers of tourism to the developing world frontiers, and by acting as a vehicle for social and economic interaction between developed and developing destinations, adventure tourism thus transfers the concerns of sustainable development to the futures of some of the world's remote places.

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