



علوم محیطی 9 ، پاییز 1384

ENVIRONMENTAL SCIENCES 9 , Autumn 2005

43-52

The Economics of Tourism – Maximising the Benefits of Ecotourism for the Locality

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Abstract

This paper examines the economic impacts of tourism and considers, in particular, how the benefits to the local economy from ecotourism development can be maximised. Although it does not directly address them, this is a discussion of relevance to the growing interest of developing countries (including Iran) in developing their tourism sectors as a source of foreign currency income. It also relates to the approach of Agenda 21 (UNCED, 1992b) in which tourism is viewed as a form of land use with potential significance for improving both the economic and environmental sustainability of a region if it is correctly developed. The World Summit on Sustainable Development (Johannesburg, 2002) placed ecotourism development for the preservation of biodiversity as one of its five major areas of action. It can provide a suitable response to the need for economic regeneration and job creation in remote areas where the traditional industries can no longer satisfy these needs on their own. The aim of this paper is to analyse the economics of ecotourism development on the macro and micro levels in order to address the question of how far ecotourism development can provide the basis for local economic development. To this end, the economic impacts and the scale of the ecotourism industry worldwide are examined. This examination serves to clarify the way in which tourism projects should be developed to ensure both economic and environmental sustainability. There is an intriguing paradox relating to the economics of ecotourism that is worth some exploration. On the face of it, the small-scale character that typifies ecotourism projects would appear to be in contradiction to the desire of governments to realise significant returns on their investment in the tourism industry. However, experience would suggest that (a) mass tourism is a very unreliable source of income over the medium- to long-term (due to the fickle nature of the industry) and (b) well managed, quality ecotourism products can be very profitable for economy of the destination and its region. Thus ecotourism can offer not only an environmentally sustainable option but also, potentially, a more economically sustainable one. In order to illustrate certain points and as an aid to analysis, a case study of ecotourism development in Scotland – a country heavily reliant on agriculture and the fishing industry - is presented.

Keywords: Ecotourism, Sustainable development, Sustainable tourism, Tourism economics.

اقتصاد اکوتوریسم و کاهش تأثیرات منفی زیست محیطی

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دکترای اقتصاد بین الملل ، استادیار مرکز تحقیقات سیاست علمی کشور

چکیده

این مقاله در چارچوب افزایش علاقمندی کشورهای در حال توسعه (مثل ایران) قرار می گیرد که از دهه 1980 به توسعه بخش های گردشگری پرداخته اند و تأثیرات اقتصادی و زیست محیطی را در روند جهانی شدن مورد بررسی قرار می دهد. تمرکز اصلی مقاله بر روی تأثیرات اقتصادی توسعه گردشگری در مناطق مقصد گردشگری می باشد. در هر حال این ها در رابطه با تأثیرات زیست محیطی قرار می گیرند تا هر نوع توسعه گردشگری پایدار را مشخص نمایند. تأثیرات اقتصادی گردشگری و مزیت ها و عدم مزیت های اقتصادی توسعه گردشگری در کشورهای در حال توسعه مورد بررسی قرار خواهد گرفت. مهم ترین نتیجه حاصل این تجزیه و تحلیل این است که مدل اکوتوریسم همان مدلی است که می تواند توسعه اقتصادی پایدار را برای کشورهای در حال توسعه فراهم می کند. پروژه های اکوتوریسم پتانسیل فراهم کردن منابع مالی لازم برای فعالیت های محافظتی را دارد که در غیر این صورت ممکن بود این فعالیت ها انجام نگردد. این مقاله نشان می دهد که گردشگری پتانسیل کافی دارد تا منافع و ضرر های اقتصادی به روشنی فهمیده شده است. وقتی که مدل توسعه گردشگری را مورد بررسی قرار می دهند آن مدل از نظر زیست محیطی پایدار ترین و مناسب آن کشور می باشد.

کلیدواژه ها: اکوتوریسم، توسعه پایدار، توریسم پایدار، اقتصاد توریسم.

Introduction

The World Summit on Sustainable Development (Johannesburg, 2002) called for the promotion of sustainable tourism development – particularly ecotourism. (WSSD, 2002). Specific measures in relation to sustainable tourism development cited include encouragement of foreign investment, public/private partnerships, promoting diversification of economic activities, facilitating access to markets and participating in local enterprises (especially SMEs).

The experiences of countries such as Scotland (presented as a case study at the end of this paper) illustrate the potential of ecotourism for promoting development in countries traditionally reliant on such industries as farming. It can provide a very suitable response to the need for economic regeneration and job creation in remote areas where the traditional industries can no longer satisfy these needs on their own. The aim of this paper is to analyse the economics of ecotourism development on the macro and micro levels in order to address the question of how far ecotourism development can provide the basis for local economic development.

The theoretical position that underpins this paper is that there are three types of sustainability necessary for the realisation of sustainable tourism development – ecological sustainability, economic sustainability and socio-cultural sustainability. There are complex interactions between all three, but here it is the question of economic sustainability that is the focus of this paper. This is considered, then, from the viewpoint that achieving economically sustainable tourism development is not only an end in itself but also will have important implications for the environmental (ecological) sustainability or otherwise of any tourism project.

Many governments and local authorities in destination countries have come to view tourism as a route to economic development and to the creation of the better standard of living for their populations. Ecotourism is one of the fastest growing sectors of the

tourism industry at the global level. Many commentators believe its domain is very extended and it has a large market for tourists seeking environmentally friendly tourism. The magnitude and expansion of the ecotourism industry is not unified in different countries. (Fennel, 1999; Ross and Wall, 1999b; Holden, 2000).

By 1991, the international tourism industry employed 112 million people world wide and generated income of over 2.5 \$ trillion at 1989 prices. According to the World Trade Organization (WTO, 1997), over 593 million tourists travelled abroad in 1996 and generated earnings of 218.7 billion US dollars. This expansion in the global level of international tourism activity continues to generate an economically sustainable demand for overseas travel in many countries. According to the World Travel and Tourism Council (WTTC), tourism is the largest industry in the world generating 6 per cent of gross national product of the world economy annually. It is estimated that the number of tourists world wide will reach 1 billion by the year 2010 and 1.6 billion by the year 2020. (Page and Dowling, 2002) This latter figure is four times more than the number of tourists in the 1990s.

Discussion

Evaluating the Economic Impacts of Tourism

Tourism is increasingly regarded by many governments as providing an opportunity for the regeneration of their weak economies, and by the less developed countries as a means of facilitating their economic development. However, to assume that the positive economic effects of tourism will always be stable in any community is risky for several reasons. First, the tourism industry is an unreliable one that is highly seasonal and employment in the tourism sector is often characterised as low skilled, poorly paid and low status and is generally unstable in long term. Second, tourism demand can be easily affected by external factors. These may be political upheavals, terrorist threats or unusual climatic and environmental

conditions which are beyond the power of any destination to control. Third, the motivations that lie behind tourist travel choices are complex and variable and constantly changing within a very competitive market place. Lastly, tourism in economic terms is price and income elastic (Bull, 1955), which means that it is easily influenced by even small changes in tourism products or income disposal.

In view of these concerns, when seeking to promote tourism, politicians must look at the question strategically in order to consider the economic structure of an area with limited economic resources. This is especially true in countries such as Kenya where almost 10 per cent of that country has been set aside for ecotourism and 12 percent of the country's GDP comes from tourism (Akama, 1996). Moreover, these economic statistics must be considered in relation to a cost/benefit analysis of the environmental impacts of tourism (even ecotourism) in that area.

When one seeks to identify and analyse the economic impacts of tourism, there is the immediate problem that, unfortunately, there is little agreement within the literature as to what elements constitute the tourism industry and evaluating the economic impacts of tourism can be a long and complicated task. (Akama, 1996) The sectors of an economy that are usually included under the tourism industry are as follows: accommodation, transport, attractions, the travel organiser sector, the destination organiser sector and hospitality and ancillary services (Page, 2002).

It is also very difficult to separate the flow of tourism income to the local economy from other sources of income since it is difficult to identify the proportion of tourism expenditure on goods and services to the total expenditure by all consumers in the region or area studied. There is, however, a range of factors that influence the scale of the economic impacts of tourism and that can be identified. These include: the volume and scale of tourist expenditure in the local economy; the size and nature of the local economy, for example its level of economic development, the economy in its industrial cities; the

extent to which tourist expenditure circulates around the local economy and the degree to which the local economy faces the problem of seasonality.

By considering the above factors, it is then possible to evaluate how far the arrival of tourists can bring such benefits as the generation of income for the local economy and the creation of new employment opportunities. Further benefits that can also be considered are improvements to the structure and balance of economic activity locally (and, to some extent, nationally) and the encouragement of entrepreneurial activity.

The arrival of tourism in an area also carries some costs which the local population and economy must expect to face. These are as follows.

- The potential for over dependency on one particular form of economic activity.
- The risk of inflationary costs placed on the local economy as new arrivals come to the area.
- The development of facilities and infrastructure can cause an increase in the importation of goods and labour to the area.
- The seasonal nature of tourism consumption and production can lead to the limitation of investment returns.
- The leakage of tourism expenditure from the local economy is very frequently a major problem, especially in developing countries that are often also those with important ecological and environmental resources that are exploited for tourism.

Measuring the economic impacts of tourism is a far more complicated business than simply calculating the level of tourism expenditure. It is important to measure the direct, indirect and induced impacts by estimating the total impact of tourism. If we regard the economy of tourism from the point of view of a market-oriented economy, it is an open economic system which varies according to the degree of influences by outside interests and the amount of goods imported. In view of the above, when we consider the economic impacts of tourism

development, we must accept that the economics benefits (a) are not always realised and (b) do not always trickle down to the local area or community.

One of the great dilemmas facing those who wish to employ tourism as an engine for economic development in the developing world is that it is often those most needy countries that are least able to derive direct benefits from that industry. This is mainly due to the structure of the global tourism industry that favours industrialised countries, where the multinational companies that control accommodation, reservation and airline booking services are located. This point is central when considering the economic/environmental nexus that lies at the centre of assessing the true sustainability of tourism since sufficient tourism-generated income must reach the locality in order to fund environmental protection measures.

There are, of course, various economic techniques available for measuring the impacts of tourism on the local economy. For example, techniques such as Tourism Multiplier analysis and Input-Output analysis have traditionally (and are still commonly) used to estimate the impact of changes in tourism expenditure. However, since these techniques have serious limitations, alternative techniques have been developed. Dwyer *et al.*, (2004) propose extending the application of the Computable General Model (CGE) to estimating economic impacts of changes and policies in the tourism sector. Thus far, according to Dwyer *et al.*, (2004) economic evaluation in tourism has not yet reached an acceptable level of accuracy. However, further discussion of these techniques of economic evaluation would find its place in a separate paper taking a different approach. Here, the emphasis is placed on what type of tourism development can best fulfil the requirements of both local economic development and the protection of the environment.

The Magnitude and Scale of Ecotourism

Ecotourism is one of the fastest growing sections of the global tourism industry and it has created a strong

market among environmentally aware tourists. It is also popular with government authorities and conservation bodies since it can provide simultaneous environmental and economic benefits. Estimates concerning the scale and magnitude of ecotourism vary substantially among the different sources. The first reliable set of statistics seems to be that of the Ecotourism Society which estimated in 1998 that the ecotourism sector constituted between 20-40 per cent of all tourist activity in the world. In view of the statistics given below, ecotourism is thus an economically significant part of the total tourism sector.

Even in 1994 Hvenegaard noted that ecotourism activities generate large economic impacts on a world, national and even local scale and it has been estimated that as far back as 1987 between 12-25 billion US dollars were spent by international visitors in developing countries on ecotourism. In the 1990s, ecotourism experienced a steady rise due to growing ecological awareness and the need for sustainable tourism development has increased. (Khan and Hawkins, 1997) In 2005, the travel and tourism sector is expected to generate 6,201.49 billion US dollars of economic activity worldwide and it will constitute 10.6% of total GDP. It is also estimated that it will create 221,569,000 jobs, or 8.3% of total employment, worldwide in 2005 and generate 12% of the world's exports. By 2015, it is forecast that tourism will make up 10678.5 billion US dollars of total world economic activities. (WTTC, 2005)

Economic Impacts of Ecotourism

According to Lindberg and McKercher (1997), there are various stakeholders within the ecotourism industry from operators to protected area managers and local communities that have to be considered in the economic analysis of this business activity. They highlighted the growing problems that accrue from protected areas in relation to economic benefits, as the number of competing sites and opportunities for ecotourism have expanded both within and between

countries. Ecotourism has been seen as a source of revenue to offset declining public sector subsidies, to manage conservation and, in some cases, to replace declining economic activities such as forestry.

An example of this is Tortuguero located on the Caribbean coast and consisting of a village of 211 residents and the Tortuguero National Park (Lee and Snepenger, 1992). Historically, Tortuguero's economy depended on harvesting sea turtles, logging and small-scale agriculture. Although tourism is not its major source of revenue, recreation activities in Tortuguero reflected ecotourism values with 90 percent of the respondents to Lee and Snepenger's (1992) study having participated in nature-oriented activities, such as guided canoe tours and sea turtle walks. These activities generated revenues consistent with ecotourism objectives. Visitor groups stayed between 2 to 4 nights and spent around \$70 and \$150 per person per night on lodging, meals, transportation and other expenses. The significance of tourism to the household economies of residents was evident from the fact that a business survey revealed that 70 percent of owners lived in the village, and that most businesses were staffed by local residents. While this example is not necessarily typical of the economic impact of ecotourism in every locality, it does give a graphic illustration of the scope, extent and nature of the impacts in a local context.

There is, however, a strong criticism of ecotourism that while it has the potential to generate considerable economic benefits a large proportion of this money is spent at the place of origin, primarily to pay for travel, with usually relatively little being spent at the destination (Wall, 1994). Thus, the local economic impact of ecotourism is not always large and sometimes it may not be of any benefit at all. For example, many of the economic benefits from American ecotourists are accrued to the USA and to the nature-based tour operators in that country rather than in the economies of destination countries. (Honey, 1999)

One must also acknowledge that tourism may

increase local reliance upon a global economy, leaking many economic profits out of the community back to the companies and countries that control most of the travel infrastructure. In relation to African tourism destinations, it is estimated that between 55% and 85% of tourism revenues are lost in leakages (mostly to foreign-based companies) before they reach the destination area. (Lepp, 2002) At the same time, tourism decreases dependence on local resources, as technologies, food and health services are imported. Local people may also be pushed out or sell out, and local prices for commodities and services rise as do taxes (McLaren, 1998). Thus, one has to be careful that tourism development does not result in reducing local empowerment and capacity, both important elements in sustainable development.

One useful way to summarise the scope of the economic impacts of ecotourism is to examine the experience of a particular country. Here I introduce the example of marine wildlife tourism in the Highlands and Island of Scotland.

Case Study

Marine wildlife and nature tourism in Scotland

Ecotourism is seen as an important source of progress and development in many countries, both in the developed and developing worlds. For the purposes of this paper, I have chosen to look at ecotourism development in Scotland, a country with a high traditional reliance on agriculture (and fishing) and economically deprived regions that has looked towards ecotourism as an alternative source of income for these remote, rural areas¹.

Scotland is a small country with relatively large number of ecotourism sites in the Highlands and Islands located in the western and northern parts of the country. In 2003, over 18 million tourists took overnight trips to Scotland, a country with a population of ca.5 million. The annual expenditure of tourists in Scotland was about 4.4 billion GBP. (Pounds sterling)² The value of tourism overall to the economy of the Highlands and Islands represents 8%

of GDP and 15% of total employment. This contrasts with 4% of GDP and 9% of employment in Scotland as a whole, reflecting the important role it plays in the economy of remote and rural areas where alternative sources of income are limited. (HIE, 2005)

Tourism based on wildlife was estimated to have created 152 full-time equivalent (FTE) jobs and 4.4 million GBP (Pounds sterling) of visitor spending on the islands of Islay and Jura in Scotland in 1989. (Mackay Consultants, 1989). According to the Surrey Research Group (Master, 1998), tourism multipliers in Scotland ranged in 1993 from one FTE (full-time equivalent) job per 19,000 GBP of visitor spending through to one FTE job per 28,000 GBP of visitor spending depending on the local context. In contrast, a study of Wester Ross, Orkney and Highland Perthshire estimated site-based wildlife tourism revenue to be 5.15 million GBP in 1993, which supported 351 FTE jobs. (Crabtree *et al.*, 1994) Morrison (1995) extended this work to assess marine tourism, concluding that whale-watching trips in the Minch (off the northwest coast of Scotland) generated 445,000 GBP in 1994 and supported 29 full-time and 17 part-time jobs.

A study for the Royal Society for the Protection of Birds (RSPB) found that 26 per cent of tourism expenditure in the Shetland Isles in 1994 was derived from birdwatchers which amounted to 1.07 million GBP and supported 43 FTE jobs. In Scotland, visits to RSPB reserves were estimated to have created 1,200 jobs. In a further study by Mackay Consultants (1997, cited in Master 1998), total wildlife and environmental tourism-related spending generated 105 million GBP in Scotland and supported 12,730 jobs. Arnold (1997), however, examined the revenue from dolphin adopting tourists in the Moray Firth. This study found that initial ranges of studies show that the economic impact studies show great variations in their findings according to what is measured, the methodologies used and the scope of the tourism sector under study. Crabtree *et al.* (1994) provided an interesting regional perspective, in that wildlife tourism in Wester Ross (in the northwest Highlands) generated 0.67 million GBP

a year in tourism expenditure, while Orkney generated 1.78 million GBP and Highland Perthshire generated 2.79 million GBP.

The Cairngorm mountain range in the central Highlands of Scotland provides a further example of the importance to the local economy of well-managed nature-based tourism that also fulfils requirements of environmental protection. The Cairngorms form the largest National Park area in the UK (3,900 square kilometres) and are the highest sub-arctic landscape in the British Isles. They are home to several rare plants and creatures, including 25% of the UK's threatened species. The Cairngorm itself, is the last true wilderness mountain in the UK and an extremely fragile ecological area. For this reason, a funicular train has been built to allow visitors to enjoy the mountain in such a way as to provide protection to the environment by taking visitors to a mountain visitor centre from which they cannot exit onto the mountain itself. Each year, the Cairngorm Mountain receives 100,000 skiers and snowboarders and 160,000 non-skiers and provides 65 permanent jobs in this very remote locality. (CML, 2005)

What all the above examples of wildlife and nature-based tourism in Scotland indicate is that the impacts in terms of employment creation and income generation may be small but that these make a vital contribution to remote and rural economies that have few alternative sources of income available to them. Indeed, it is often tourism that keeps such remote communities alive by providing much-needed jobs and thus contributes to the wider environment by protecting the social fabric of these communities.

Conclusion

Since the Rio Summit in 1992 (UNCED, 1992a) and, in particular, the World Summit held in Johannesburg in 2002 (WSSD, 2002), the potential of ecotourism (as a form of sustainable tourism development) to answer the needs of sustainable development in rural areas has been recognised. It is now understood to be a significant means of achieving local regeneration and

development in rural areas that are traditionally dependent on agriculture and where some form of economic diversification is needed. This paper has addressed this fact within the wider question of the economic as well as environmental sustainability of tourism development, especially for developing countries or those with economies in transition.

Although recognising the complex interrelationship that exists between the potential economic benefits of tourism development and environmental protection, the main focus of this paper has been on the economics of tourism, in particular ecotourism development. Tourism can lead to both positive and negative economic and outcomes and this can have direct impacts on the environment of the destination locality. First, the economic benefits of tourism are not always as clear-cut as politicians would like to believe. Furthermore, although the arrival of tourism generally has a positive impact on the local economy of the destination and the surrounding area, such economic advantages also have costs and these are frequently in environmental terms.

Therefore, when considering the potential environmental impacts of any tourism development, one must be aware of the likely economic impacts (both beneficial and negative) and how these will affect the environment. Mitigation of the negative environmental effects of any tourism development project requires, therefore, a good understanding of how the local economy will be affected and what environmental benefits and/or harms that may imply. The challenge, therefore, is to find the optimum level of and model for tourism development that can mitigate these negative impacts while still bringing economic benefits to the locality. For example, concentrating on small-scale tourism projects can help to achieve environmental as well as economic sustainability. Indeed, an important conclusion to be drawn from this paper is that the more environmentally sustainable forms of tourism may also prove to be the more economically sustainable

given the unreliable nature of the mass tourism industry.

These are important issues for developing countries such as Iran that are looking to tourism development to provide them with a significant source of foreign currency earnings. If they do not take account of these factors, they run the risk of creating a tourism that not only is environmentally damaging but also fails to ensure a secure income for the future.

Notes

- 1- For these reasons, Scotland (although a country in the industrialised North) with its remote and economically-disadvantaged regions provides a useful case study that can be applied to similar regions in developing countries.
- 2- At the time of writing, each pound sterling is worth 1.80 US dollars.

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