SIGNIFICANCE OF PROTECTING NATURAL SITES FOR ECOTOURISM DEVELOPMENT

Zhang Zhenjia¹

Abstract: Objectives of this paper are to review and advance the statements of knowledge about the significance of protection of natural sites within the development of ecotourism and explain why the protection of nature sites is an important and significant issue for ecotourism development. Literature review and case quotation are mainly used research methods. Finally, based on many study aspects, such as sustainable development of ecotourism, educational roles for eco-tourists, pollution of environment, etc, this paper concludes that the protection of natural sites within the tourism destinations shows great significance for ecotourism development.

Key words: Natural sites, Ecotourism development, Literature review

1. INTRODUCTION

According to the research by Lisowski (2003), the term "ecotourism" first appeared during the 1970s and is most popularly defined as travel to natural areas in ways that conserve the environment and improve the welfare of local people. Within the theory of tourism management, Weave and Lawton (2002) pointed out that natural sites(as one of pull factors of ecotourism at destination areas), mainly include topography, water, wildlife, protected natural areas, climate and vegetation resources. Further, in the research by Beeton (1998), there is a some general agreement on the elements of ecotourism, of which there are three main ones:ecotourism is nature-based; it is educative (education towards the environment) and it is managed in a sustainable manner. But the recent development of ecotourism has deviated from the requirements of those elments and the development of ecotourism has already resulted in many negative impacts on natural resources, the protection of natural attractions within the tourism destinations shows great significance for ecotourism development. Objectives of this paper are to review and advance the statements of knowledge about the significance of protection of natural sites within the development of ecotourism and explain why the protection of nature sites is an important issue for ecotourism development.

¹ Master of International Tourism and Hospitality Management, Griffith University, Australia; Lecturer of School of Tourism and Geography Science, Shenyang University, China. Address: School of Tourism and Geography Science, Shenyang University, No.54, Lianhe Road, Dadong District, Shenyang, Liaoning Province, 110041, P.R.China. E-mail: paulzzj@hotmail.com; paulzzj_gu@yahoo.cn

^{*} Received 27 November 2007; accepted 21 January 2008

2. LITERATURE REVIEW

A comparative study is undertaken to evaluate the issues of natural sites protection of fast-growing ecotourism that is represented by different areas around the world. A research program named "Songkhla Lake Basin (SLB)" was conducted in Thailand from 1996 to 1999. The general issue of this research program is that the lake system of SLB has been negatively affected by the growing tourism. The objective of this program is to find how the lake system of the SLB area has been destroyed by the visitors. From the result of that program, Chufamanee and Lønholdt (2001) identified that exploitation of the natural resources had strong negative impacts on the ecological systems and sustainability of the planning of the tourism market. They found that for a number of years, the lake system in the SLB area has been under pressure from negative impacts of visitors, and called upon The Office of Environmental Policy and Planning to adopt effective activities for protection of the lake system through restricting numbers of visitors, punishing abusers more seriously, establishing sustainable development view, and so on.

Similarly, Bellan and Bellan-Santini (2001) argued that the coastal area in Mediterranean Sea was used as an all-too-convenient receptacle for a range of waste materials, from tourists. The general problem of this research is the Mediterranean Sea area was threatened to become the garbage heap of waste material from tourists. The purpose of their study was to pinpoint the negative impacts from tourists on the ecosystems and landscapes of the coastal region of the Mediterranean Sea, and identify the importance of protection of this area. A study was undertaken by querying several data banks, notably the ASFA-3-Aquatic Pollution and Environmental Quality (1983–1999), also using a more conventional bibliography in their possession. Bibliographical data covering the last 15 years were assembled.

In contrast, according to the research by Goodwin and Roe (2001) in nine villages around the national park "Gonarezhou" in the south east lowveld of Zimbabwe, although local residents agree that tourism has negative impacts and there was a great need to protect their rural areas, they preferred to develop the natural attractions first to attract many more tourists and use the financial returns from tourism to protect the natural resources, rather than merely conserving the protected areas at the beginning. In all nine communities, there were high expectations of the contribution that tourism could make to their family (74%). Meanwhile, although 73% of those interviewed agree that tourism has negative impacts and there was a great need to protect their rural areas, 82% said they still would like more contact with tourists, and 93% wanted to earn money from tourism. Methodology about this case was that researchers selected sample the families from the nine communities, then interviewed the sample families, finally achieving the results based on data they have already collected.

Purposes of first two researches are quite similar in that the researchers want to state and identify the importance of protection of the natural environment in the ecotourism destinations. However, the third one sought to present the truth that in some developing country or areas, using the natural resources to attract more tourists to earn the value of money is a priority for the local communities within those countries or areas, who then use the financial returns from tourism to repair and protect the natural environment. The methodologies of the first two researches are quite similar. The researchers adopted and analysed the time-series data from 1996 to 1999, and data across 15 years respectively. The methodology of third research was quite different in that it not only included collecting and analysing the data, but the sampling and interviewing. To conclude, although purposes, results and methodologies are different among those researches, they all provide evidence that natural sites pollution has become a serious problem around the whole world; and this will prevent strong development of ecotourism.

A study about environmental management indicators for ecotourism was conducted by Li (2003). It identified that although ecotourism represents one of the more eco-friendly alternatives for the economic use of natural recourses (compared with mining, hunting, farming, etc.), poor ecotourism management may degrade the natural resources. An example of Tianmushan in China was used to warn that natural sites are difficult to retrieve after the degradation has reached serious levels. The Tianmushan area was listed as one of the earliest forest areas within China where logging was forbidden, and it has attracted

more and more visitors in the last 10 years. However, this has also had a negative impact of natural sites, such as trail widening, tread incision and excessive root exposure along the trails causing vegetation damage. This would therefore make tourism development unsustainable. The research was based on basic data collection and analysis. Some secondary data, such as social and economic data, could be obtained from relevant management departments; some information about nature, the environment and artificial facilities can be obtained through regular monitoring and recording; while other data (like interference to locals and visitors' satisfaction) would have to be obtained through a questionnaire survey.

In the research by Ahmad (1999), ecotourism is also identified as having negative impacts on natural sites. The general problem of the research is the vandalism that encountered at Brunei's Merimbun Heritage Park. The purpose of the research is to explain that maintaining a clean and healthy environment is a critical factor in ecotourism. Merimbun Heritage Park is covered with primary forest and supposed to become "the ultimate ecotourism destination". The problems associated with ecotourism development are littering, wilful destruction of park property and noise pollution. There should be greater awareness instilled among visitors through increased education and information, so that visitors will be more responsible in maintaining the cleanliness of the park. It is critical that the authorities ensure the sustainable concept of ecotourism is applied and remains in practice. This research utilised self-administered questionnaires to generate the necessary data; these questionnaires were designed in the Malay language, and were divided into four sections.

Another research concerning dolphin-based marine ecotourism was conducted by Lusseau and Higham in 2003. The general issue of the research is that dolphins and whales feel seriously threatened by boats and cruisers that manoeuvre unpredictably and erratically. The purpose of the research is to explore the impact of tourist vessel interactions on the behaviour of the dolphin population. The result of the research concludes that advocating a non-destructive use of this natural resource and regulating marine tourism operations through the issue of licences from the Ministry of Transport are good methods minimising damage to marine mammals. This article conducted systematic surveys and collected data from boat; photo-identification was also used.

Comparing the three researches, their purposes in seeking to identify the negative ecotourism impacts on natural sites in the destination areas are similar. All three researches collected and analysed data from of surveys, with also using questionnaires.

3. SIGNIFICANCE OF PROTECTION OF NATURAL SITES FOR ECOTOURISM DEVELOPMENT

As discussed before, since the development of ecotourism has already resulted in many negative impacts on natural resources, the protection of natural attractions within the tourism destinations shows great significance for ecotourism development. Besides, there are other reasons why protection of natural sites is very important for the ecotourism; these include the value of protecting natural sites for the local community; supporting sustainable development of ecotourism and fulfilling the educational needs of the eco-tourist.

3.1 Natural sites are threatened by the development of ecotourism

Based on the literature review above, a conclusion can be reached that along with the fast development of ecotourism, conflicts between human activities and natural sites become more acute. If the natural sites are seriously damaged or even destroyed, ecotourism destinations have nothing to attract the tourist to visit, which will prevent the development of ecotourism in those areas. Other researchers also identify the importance of protecting natural sites. For example, Beenton (1998) gave evidence that tourist activities such as whale watching and fishing have already seriously threatened the conservation of natural region's fauna and flora resources. For another instance, based on data collected by Lukashina et

al (1996) at the city of Sochi, Russia from 1989-1992, the 31 industrial motor transport enterprises discharge about 10,000 t/yr of harmful substances into the atmosphere, accounting for 13.6% of the total discharge. Twenty five percent (25%) of these pollutants are solid substances such as SO (33%); CO (15%); NO (5%); hydrocarbons (15%); and others (7%). Similarly, because the ecotourism destinations are usually located in rural areas or remote islands, the crude oil spill from ships, for example, is another serious environmental pollution problem. According to the research of Bucas and Saliot(2002), as crude oil spills, oils are able to damage the beauty of polluted sites; losses of birdlife can also occur as they can easily often being unable to detect slicks which are often colourless, with slight odour. Additionally, although ecotourism is now more oriented towards a reasoned use of space and amusements, Bellan and Bellan-Santini (2001) stressed that this could lead to an overuse of the natural environment with detrimental effects on ecosystems. He also pointed out that the risks from eco-tourism, in the broadest sense, mainly include trampling and the leaving behind of waste.

As discussed above, the reason why protection of natural sites is a very important tourism management challenge is because natural sites are the most important tourism attractions within the destinations, and if they are seriously damaged or even destroyed, future development of ecotourism in those areas will definitely be prevented.

3.2 Economic value of protection of natural sites for local community

With the rapid increase in demand for nature-based tourism and recreational activities (Mallawaarachchi, et al, 2001), in recent times, economists have begun to assess the economic value of protection of natural sites such as rainforests, wetlands and coral reefs for the local community. If these natural ecotourism resources were seriously polluted or even destroyed, it may become a disaster for the local community. On the other hand, Loon and Polakow (2001) pointed out that if the natural environment within the ecotourism destination was well-protected, local people would reap sustainable benefits from numerous factors such as commercial accommodation, more job opportunities, more cash money, and so on.

Besides, tourism operators within the ecotourism destinations can also benefit if their business is managed more environmentally. Hartman and Stafford (1997) found that companies that can improve relations on the issue of environmental protection with the public sector, non-profit organisations and trading partners, can see result in financial benefits. For example, they may find it easier to access public funds, and can improve staff relations. Besides, companies within the tourism industry that are environmentally aware may gain corporate advantage through enhanced image (Tsai and Child, 1997).

3.3 Supporting the sustainable development of ecotourism

This section is an in-depth study on the sustainable values of natural site protection for local communities, which are concerned not only with the economic benefits, but also with the social and political benefits and with the ecosystem itself. In other words, the protection of natural sites is a sustainable method of managing the ecotourism at the destination areas. As discussed above, a well-protected tourism destination brings lots of economic benefits for local residents and local tourism operators.

Based on the sustainable indictors at local communities, Foucat (2002) found the protection of natural sites is also very important for the development of social aspects such as community cohesion, organisation, and improvement in the condition of local people's health. He also argued that natural sites protection measures are strongly associated with commitment to ecosystem conservation such as impact minimisation and habitat rehabilitation. The development of social and economic elements and of the ecosystem itself will promote or stimulate the development of ecotourism and in turn the tourism destinations.

3.4 Educational significance on the eco-tourist

The results of a recent study by the Travel Industry Association of America (TIA,2002) and National Geographic Traveller found that eco-tourists tend to be middle-aged with relatively high incomes and levels of education, and an expressed interest in learning about the natural environment. However, although they like to know about the environment, Beeton (1998) argued that they still do not have strong environmental concerns, and may be surprised at what they do learn about negative impacts of tourism, either accidental or incidental; that is, eco-tourists need to know more about the significance of protection of natural sites within the destinations. Beeton (1998) also pointed out that education on minimising the impact of tourism would mainly be demonstrated by tourism operators, who will need to manage impacts themselves, whether they are running a tour, accommodation, attraction, or even a special event. Honey(1999) demonstrated that most eco-tours are educational for the tourist, and many ecotourism projects are of lower impact than conventional tours while providing increased benefits for eco-tourists through knowledge of ecology and for the conservation and protection natural sites.

4. CONCLUSIONS

As demonstrated above, the protection of natural sites within the ecotourism destinations shows great significance for ecotourism development. Firstly, the pollution of natural sites in the destination areas of ecotourism has become a serious problem all around the world, and this will prevent the strong future development of ecotourism. Secondly, local communities in the ecotourism destinations obtain economic benefits from natural sites protection. Thirdly, protection of natural resources is a sustainable method of managing ecotourism at the destination areas, which are not only concerned with the economic benefits, but also the social, political elements and even the ecosystem itself in the destination areas. Finally, since eco-tourists usually express interest in learning about environmental issues, the education on environmental protection fulfils their needs in this regard.

REFERENCES

- Ahmad, A. (1999). Local perception of ecotourism: The risk case of Brunei's Merimbun Heritage Park. *Borneo Review*, 10(1), 51-69.
- Bellan,G.L.,& Bellan-Santini, D.R. (2001). A review of littoral tourism, sport and leisure activities: consequences on marine flora and fauna. *Aquatic Conservation: Marine and Freshwater Ecosystems*. Volume11, Issue4; Pages:325-333.
- Bucas G and Saliot A. (2002). Sea transport of animal and vegetable oils and its environmental consequences. *Marine Pollution Bulletin*, Volume 44, Issue 12, Pages 1388-1396.
- Beeton S. (1998). *Ecotourism: a practical guide for rural communities*. Collingwood, Vic.: Landlinks Press.
- Chufamanee, P., & Lønholdt, J. (2001). Application of integrated environmental management through the preparation of an environmental action programme: Case study from the Songkhla Lake Basin in southern Thailand Lakes and Reservoirs. *Research and Management*. 6:4; p. 323
- Edward, W., Manning, T., & Dougherty, D. (1995). Sustainable Tourism: Preserving the Golden Goose. *The Cornell Hotel and Restaurant Administration Quarterly*, Volume 36, Issue 2, Page 4.
- Font,X., & Tribe, J. (2001). Promoting Green Tourism: the Future of Environmental Awards. *International Journal of Tourism Research*, Res. 3, 9±21.

- Lisowski, M. (2003). Ecotourism and Certification. *The Journal of Environmental Education*. Vol.34,Iss.4;pg.39.
- Foucat, V.S.A. (2002). Community-based ecotourism management moving towards sustainability, in Ventanilla, Oaxaca, *Mexico.Ocean & Coastal Management*, Volume 45, Issue 8, Pages 511-529.
- Goodwin, H., & Roe, D. (2001). Tourism, Livelihoods and Protected Areas: Opportunities for Fair-trade Tourism in and Around National Parks. *International Journal of Tourism Research*. Res. 3, 377-391
- Hartman C, Stafford E.(1997). Green alliances: building new business with environmental groups. *Long Range Planning* 30(2): 184-196.
- Honey, S. M. (1999). Treading lightly? Ecotourism's impact on the environment. Environment, 41(5).
- Kimmel, R., J. (1999). Ecotourism as environmental leaning. *The Journal of Environmental Education*. 30(2).
- Li, W. J. (2003). Environmental management indicators for ecotourism in China's nature reserves: A case study in Tianmushan Nature Reserve. *Tourism Management*. 2004,25(5):559-564.
- Loon, R.M., & Polakow, D. (2002). Ecotourism ventures: Rags or Riches?. Annals of Tourism Research, Volume 28, Issue 4, 2001, Pages 892-907.
- Lukashina, N.S., et, al (1996). Tourism and Environmental Degradation in Sochi, Russia. *Annals of Tourism Research*, Vol. 23, No. 3, pp. 654-665.
- Lusseau, D., & Higham, J. E. S. (2003). Managing the impacts of dolphin-based tourism through the definition of critical habitats: the case of bottlenose dolphins (Tursiops spp.) in Doubtful Sound, New Zealand. *Tourism Management*.
- Mallawaarachchi, T. et, al (2001). Community values for environmental protection in a cane farming catchment in Northern Australia: A choice modelling study. *Journal of Environmental Management*, Volume 62, Issue 3, July 2001, Pages 301-316.
- Rosenberg J, Korsmo FL. (2001). Local participation, international politics and the environment: The World Bank and the Grenada Dove. *Environmental Management*.62: 283–300.
- TIA (Travel Industry Association of America and National Geographic Traveler),(2002). Geotourism study examines the travel habits of 55 million Americans classified as sustainable or geotourists. http://www.hotel.online.com/neo/new/pr2002_1st/mar02_geotourism.html
- Tsai T, Child J.(1997). Strategic responses of multinational corporations to environmental demands. *Journal of General Management* 23 (1): 1-22.
- Weaver, D. and Lawton, L. (2002). Tourism Management. John Wiley & Sons, Australia.



Http://www.cscanada.org

E-mail: callpaper@cscanada.org caooc@hotmail.com

MANAGEMENT SCIENCE AND ENGINEERING ISSN 1913-0341 Subscriptions Form

Name
Title
Company
Address 1
Address 2
Country
Postal Code
Telephone
Fax
E-mail
Website
All correspondence concerning subscriptions should be sent to:
Canadian Research & Development Center of Sciences and Cultures
3-265 Melrose
Montreal, Quebec, Canada
H4H 1T2
Contact with us by:

Volume 2 Nombre 1 Le 20 Mars 2008

MANAGEMENT SCIENCE AND ENGINEERING

CENTRE DE RECHERCHE ET DE D É VELOPPEMENT EN CULTURE ET SCIENCES

www.cscanada.org

