

Visitor Management for Resource Conservation in Community-based Ecotourism, Thailand

Dachanee Emphandhu, Department of Conservation, Faculty of Forestry, Kasetsart University, Thailand, ffordne@ku.ac.th

Introduction

Ecotourism has been developed as an encouraged approach to both preserving the natural environment and providing people in developing world with opportunities for community development. (Horwich, et al. 1993, p. 152). However, ecotourism can cause impact to natural and cultural resources as well as to visitor experiences if not well managed. If ecotourism is to be a tool for natural resource conservation, good management must be applied. The management strategies must aim at protecting resources while providing good visitor experiences (Manning, 2007). There are various visitor management strategies for tourism management that local communities can apply to fulfill the conservation goal. Their choice of strategies will depend on the capacity and efficiency of local communities as well as the resource implication. Eagles, et al, (2002) described four strategies approaches which can be used to manage tourism impacts of visitors on protected areas: managing the supply of tourism, managing the demand for visitation, managing the resource capabilities to handle use, and managing the impact of use.

Koh Pitakin Thailand is a small island located near Mu Koh Chomphon National park. Most are local fisheries. In 1992, marine resources were in crisis. The commercial fishing boats over-fished in the area close to Koh Pitak. The local people at Koh Pitak finally announced conservation measures to protect marine resources and introduced community-based ecotourism (CBET) to motivate community members in resource conservation. Ecotourism at Koh Pitak has become very popular that many visitors came to visit Koh Pitak, but limited resources and poor management has gradually created tourism impact. This paper aimed to examine how local community has applied visitor management as a tool for resource conservation and managing tourism impact.

Methods

The strategic management to link ecotourism to resource conservation was an essential success key. In this paper the process of finding visitor management strategies to encourage resource conservation and tourism impact reduction at community level was studied. PAR techniques such as mind map, focus group interview on local leaders and village meeting to identify tourism impact issues and explore visitor management strategies was employed.

Results and Discussion

After CBET was introduced, the rehabilitation of marine resources by local villagers gradually started. By the village agreement, Koh Pitak allocated 2% of net income from CBET for marine conservation though most resources were in marine protect-

ed area jurisdiction. Local people realized to attract visitors, marine resources must be healthy. The other stronger connection of ecotourism to resource conservation was found from visitor management perspective through tourist activities designed to involve visitors in conservation such as coral reef planting and young crab release. The interpretation to build conservation awareness was used to communicate the value of marine conservation and local livelihood to visitors.

As Koh Pitak village had continued to receive high tourist visitation, the tourism impacts became more evidence. Profound problems were water scarcity, the expansion of houses to the sea to accommodate more visitors for homestay without proper waste management leading to sea water pollution, and loud noise from visitors partying at late nights disturbing other visitors. These impacts affected the local livelihood, the marine resources, and visitor experiences. The local committee on Koh Pitak CBET finally got help from researchers to build up a process to find strategies for tourism impact management.

The process involved all local people either they involved or not in tourism using the PAR technique so that local people had full participation, were able to identify the impacts and define the limits for tourism development with the guidance from the outsider researchers. The process employed mind map, focus group interview and village meetings to gather data and develop strategies. The impacts and visitor management strategies identified by the villagers was shown in Table 1. Villagers then conducted some visitor management strategies as an effort to cope with the impact. For improving water quality, use of microorganism (EM) was the preferable choice for local people and turned out to be an effective means. The resolution for fresh water scarcity was giving information to visitors so that they can help the villagers conserve the water. Additionally, the water recycling of household and visitor uses for farming turned to be an effective way to conserve water. The over capacity of the homestay was resolved by the local committee on Koh Pitak CBET that no one can expand houses to the sea without permission from the village administrative committee. The improvement of facility was done in some houses and pricing were increased accordingly. The committee on Koh Pitak tourism started to monitor tourism carrying capacity of Koh Pitak and survey of visitor satisfaction.

Conclusion

Negative changes of ecosystem as a result of human activities affected local socio-economic system and gave pressure to local communities to change their practices to improve situation. Koh Pitak used ecotourism for economic incentives as a strong motivation to conserve the marine resources. As ecotourism developed, visitor management strategies to cope with tourism impact were pursued. Koh Pitak chose to manage the demand/supply of ecotourism, the tourist behavior and the impact of use. Several strategies were carried out at community level. The effective strategies included using EM to improve water quality, designing of creative tourism activities, information distribution and interpretation program on resource conservation. This showed that the local community concerned to balance economic gained and the need for resource protection to provide good experience to tourists in their CBET management.

Table 1. Tourism impacts and visitor management strategies from local perspective

Issues/problems	Choices of visitor management strategies	Effectiveness to solve the problem	Villagers' acceptance & ease to apply at community level
Sea water quality caused by direct discharge of human body waste to the sea	Information and education to local villagers	High	High
	Use Effective Microorganism (EM) to improve water quality	High	High
	Install waste water treatment	High	Low
	Monitor water quality	Moderate (need to apply with other strategy)	Low (difficult in some water quality parameters)
Fresh Water scarcity caused by increase demand of water usage by visitor	Information to visitors to conserve fresh water	High	High
	Water recycle from households to farm uses	High	Moderate
	Increase water storage tank	Moderate	Moderate
Loud noise, littering, and other nuisance activities	Information and education to visitors	Moderate	Moderate
	Regulations and enforcement	High	Low
Over capacity of the accommodation	Expand houses into the sea	Low	High
	Pricing management and improve facility	High	Moderate
	Monitor tourism carrying capacity	High	Moderate
Touching and standing on coral reef	Information and interpretation program	Moderate	Moderate
Low support from tourists in nature conservation	Tourism activities involving nature conservation	High	High
	Effective interpretation program	High	Moderate



Eagles, P.F.J., McCool, S. F. and Haynes, C. D. 2002. *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*. IUCN Gland, Switzerland and Cambridge, UK.

Horwich, RH, Murray, D, Saqui, E, Lyon, J & Godfrey, D 1993, "Ecotourism and Community Development: a view from Belize", in K Lindberg & DE Hawkins (eds). *Ecotourism: a guide for planners and managers*. The Ecotourism Society, North Bennington, Vermont

Manning, R.E. 2007. *Parks and Carrying Capacity*. Island Press. Washington, U.S.A.