

## **Local Community Participatory Process and Intervention Procedure in Mangroves Ecotourism of Marudu Bay, Sabah**

**Abdullah, M.\*, Awang Noor, A. G., I. Faridah-Hanum, Zakaria, M. H. and Hin Wai Yip**

*Faculty of Forestry, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia*

### **ABSTRACT**

Mangrove forest extensively colonizes the coastal front of Malaysia, including Sabah state of Northern Borneo. In Marudu Bay in Sabah, it was not harnessed by local communities for ecotourism purposes to complement their incomes mainly from fishing activities. The objective of study was to assess local community's participation in mangrove ecotourism and the intervention procedure needed for success of such a project. The method involved stakeholder analysis using three consultation workshops comprising of key informants and selected villagers as primary stakeholders. Focus Group Discussion (FGD) was followed to elicit responses on ecotourism development within the locals' surroundings and impacts in their daily lives and future undertakings. Results from stakeholder analysis showed that the local communities have the urgency to participate in ecotourism as a new opportunity while supporting mangroves protection. In fact, most of them were found to be willing to provide the services needed to protect the mangrove ecosystem. The intervention needed included support for business activity including ecotourism products and activities development, identification of local leadership/players to spearhead the activities, technology transfer such as technical and facilities assistance, and human capacity building. As for sustainable endeavour, collaborations with big and successful tourism players are crucial to bring their clients to the site as extended visit.

*Keywords:* Stakeholder, community participation, focus group discussion, intervention procedure, sustainable venture.

### **ARTICLE INFO**

*Article history:*

Received: 27 August 2012

Accepted: 20 September 2012

*E-mail address:*

[amohdm@gmail.com](mailto:amohdm@gmail.com) (Abdullah, M.)

\* Corresponding author

### **INTRODUCTION**

Mangrove vegetation is thought to be originated in the Indo-Malayan region. Mangrove forest presents a unique landscape with taxonomically diverse species that

serves as a source of lifeline for mangrove communities. The vegetations have subjected to inundation of intertidal waves from high tide to low tide along coastal areas. It plays a crucial role as a habitat for many life forms and ecological processes. The mangroves serve as a giant filtering system of effluents and beaches stabilization and are important for fish breeding and marine life. Mangrove forest comprises of a habitat that is dominated by stands of mangrove trees (*Rhizophora* spp., *Brugueira* spp. and *Lumnitzera* spp.) and other species that adapted well to the local weather and conditions. The wildlife population found in this habitat includes primates mainly the macaque and birds species which comprise of resident and migratory species.

In Malaysia, mangrove forests are widely distributed in several parts along the coastal areas. Mangrove forests provide sources of wood and marine resources besides the amenities for the local communities. Most village communities are made up of the people who live in the vicinity since ancient times where they traditionally exploited mangroves for commercial products such as timber for construction materials and wood for charcoal production.

In many regions of Asia, local people exploited mangrove forests to sustain their daily lives. The locals encroach into the forests, cut trees, and collect minor forest produce to be sold for economics gains. The mangroves are cleared for aquaculture or physical development. Conservation is neglected, and this leads to further degradation and destruction of those

resources. Engagement and participation by the local community in the management of mangrove forests will be able to mitigate the problems. This can be done through ecotourism, which involves low impact activities to the forests. Eco-tourism is defined as ‘environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations’ (Ceballos-Lascurain, 1996). Llewellyn (2000) claims that ecotourism also aims to contribute to conservation, sustainable development and poverty alleviation by bringing sustainable benefits to national and local economies.

Many people travel to remote places to experience the environment and natural beings found in it. People are brought closer to the environment and with nature-based attractions (Wearing & Niel, 1999; Dowling, 2001). Meanwhile, Dowling (2001) identified five important keys that are fundamental to ecotourism. These are nature-based activity, ecologically sustainable, environmentally educative, locally beneficial and able to generate satisfaction among tourists. Hence, ecotourism entails the three core criteria, namely, emphasizing on nature-based attractions, learning opportunities and management practices that adhere to the principles of ecological, socio-cultural and economics sustainability (Blamey,

2001; Fennell, 1999; Weaver, 2001a, b). In related situation, Cato (2009) and Adams (2006) viewed sustainability as a concept that encompasses three main dimensions, namely, social, environmental and economics.

Ecotourism development in many locations connotes economic opportunities, multi-faceted development activities, creative and inter-disciplinary collaboration, interactive engagement with local communities (Abdullah *et al.*, 2000). Among other, it has become an attractive proposition to many protected areas and resource managers. Therefore, the most appropriate ecotourism should be used as a comprehensive and effective management strategy to safeguard the natural environment by means of engaging the local community as a responsible group.

Branton (1999) claimed that setting up ecotourism development in local areas requires careful planning and management through a closed collaboration with the local communities. If it is to contribute to sustainable development, the host community should be given appropriate education in ecology, cultural and its economical importance (Abdullah *et al.*, 2006). The locals have to actively participate and involve in related ecotourism activities when introduced (Wall, 1997; Knowles-Lankford & Lankford, 2000). As ecotourism becomes clear and beneficial to the community development, the locals will realise that they will gain much in increasing their incomes compared to their traditional work. Simultaneously, the locals are able to

conserve the natural resources which can be depleting.

Sabah mangrove forests represent a rich biodiversity that can serve as an ecotourism attraction. It has its own uniqueness with its local cultural characteristics for ecotourism development. In Marudu Bay, however, mangroves are still not fully utilized for tourism industry (Ministry of Tourism, Culture & Environment Sabah, 2005). The main problem is that the local community still lack the knowledge and skills required for the ecotourism industry although they realise the benefits that come along with it. The objective of this study was to assess the local community participatory process and the intervention procedure needed in ensuring its success.

## MATERIALS AND METHODS

The mangroves in Marudu Bay in Sabah, located in the northern part of Borneo, could be found in dominance covering most of the coastal front (Fig.1). The town of Kota Marudu is located about 130km from Kota Kinabalu (the capital city of Sabah), which is about 2 hours' drive from the city.

Consultation workshops involving three Focus Group Discussions (FGDs) were conducted in the District Office of Kota Marudu made up of the key informants and one in its community hall. The techniques used in this study included identifying issues and main problems identification by the participants. The main focus was to determine the potential for ecotourism based on the mangrove resources in the coastal area of Kota Marudu so as to improve

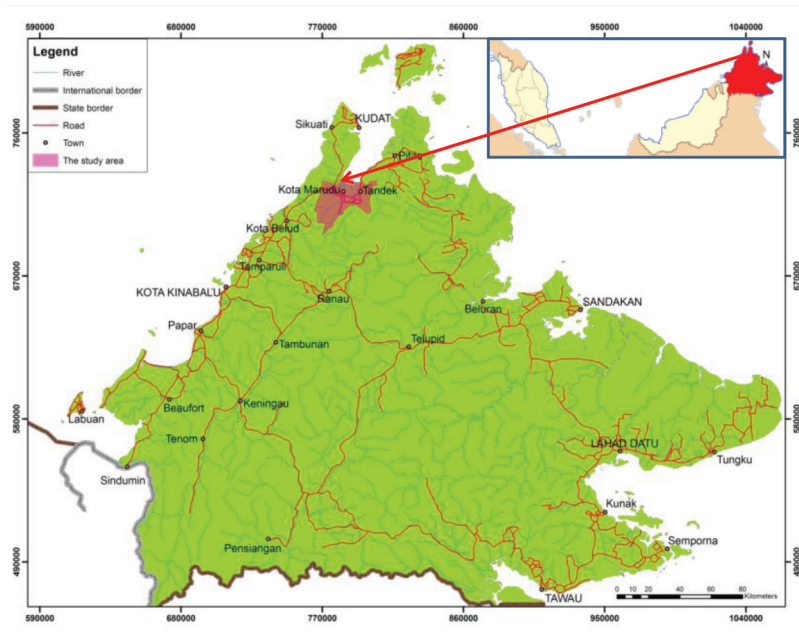


Fig. 1: The map of Sabah in Malaysia (inset) and the location of Marudu Bay in Sabah

the local livelihood, to increase income and the overall community development. Then, an intervention procedure would be suggested for application to enable the local participations in the ecotourism businesses.

Key informants from 10 villages located in Marudu Bay were chosen for the exercise began from 2009 ended in 2010. One FGD was participated by key informants made up of 22 heads of villages (*Ketua Kampung*) and one FGD with 40 villagers from the 10 coastal villages, i.e., fishermen, farmers, businessmen, boat operators, etc. The other workshop included the 24 officers, government agencies such as district offices, forest departments, fishery departments, state tourism, NGO representatives and related institutions.

The workshop was administered through brainstorming procedure using facilitation technique by the researchers. Notes were taken and information gathered was analysed so as to design the participatory and intervention procedure for stakeholders (Abdullah & Yip, 2008).

## RESULTS AND DISCUSSION

The outcomes from the stakeholder consultation workshop showed that the participants recognised mangrove forest and its surroundings which have rich biodiversities that make up the core components of ecotourism. It possesses the aesthetic, education, and scientific values and a multifaceted socio-cultural ecosystem. The responses also reflected

that ecotourism is perceived by the locals as a new opportunity to be developed for everybody's benefits, besides protecting the coastal areas from waves, erosion or pollutions, illegal logging and needs for future generation.

Another crucial issue identified was the locals with low income have the desire for alternative employment. The main problem however is that they have inadequate knowledge and also lack the skills to participate actively in the ecotourism industry. They highly opined that ecotourism development would be able to support their livelihood as they were not satisfied with their present employment. In particular, the locals wanted to be involved as ecotourism operators, meet visitors and work as tourist guides, operate trips to mangroves, islands, wildlife and bird watching, homestay, resort or restaurant operations, or as general workers and boat operators. So far, none of them has been in any form of business ownership or possesses any licence to conduct tourism activities.

The local people felt that there were no reasons for them not to participate in the ecotourism industry. In fact, they have the interest or motivation, time, and confidence, with family blessing though most of them have no capital, skills or opportunities to start the ecotourism business. Hence, if given the opportunities, capital and entrepreneurship training such hosting or services related businesses, most of the respondents would like start own businesses in the near future. Significantly, the participation from the local community and the benefits generated from

ecotourism development would determine the success of the initiatives (Moscardo, 2011). From FGD, the key informants from the government institutions and NGOs provided the information and ideas related to the local ecotourism problems. Marudu is not included in the Sabah Tourism Plan, and therefore, it is not promoted as a tourism destination and being by-passed from the main tourism road, i.e. the Kudat District (e.g. the tip of Borneo as a main attraction).

From the stakeholder analysis, it was found that an intervention procedure is needed. Local leadership or actors have to take up the leading role. During the implementation process, initial support such as field technical assistance is needed to make the activity run uninterrupted and directed as planned (Currie *et al.*, 2009). Activity design, provision of services and supplies, general operation and maintenance of facilities can be developed by appropriate agencies or universities. The locals are very much willing to participate in the ecotourism as individual operators through co-operation or associations.

A summary of the overall participatory process of the local communities in the mangrove ecotourism and intervention procedure when required is shown in a model illustrated in Fig.2.

## CONCLUSION

The engagement of the local people through participatory process and intervention procedure will ensure the success of community ecotourism development programme. Identification and prioritisation

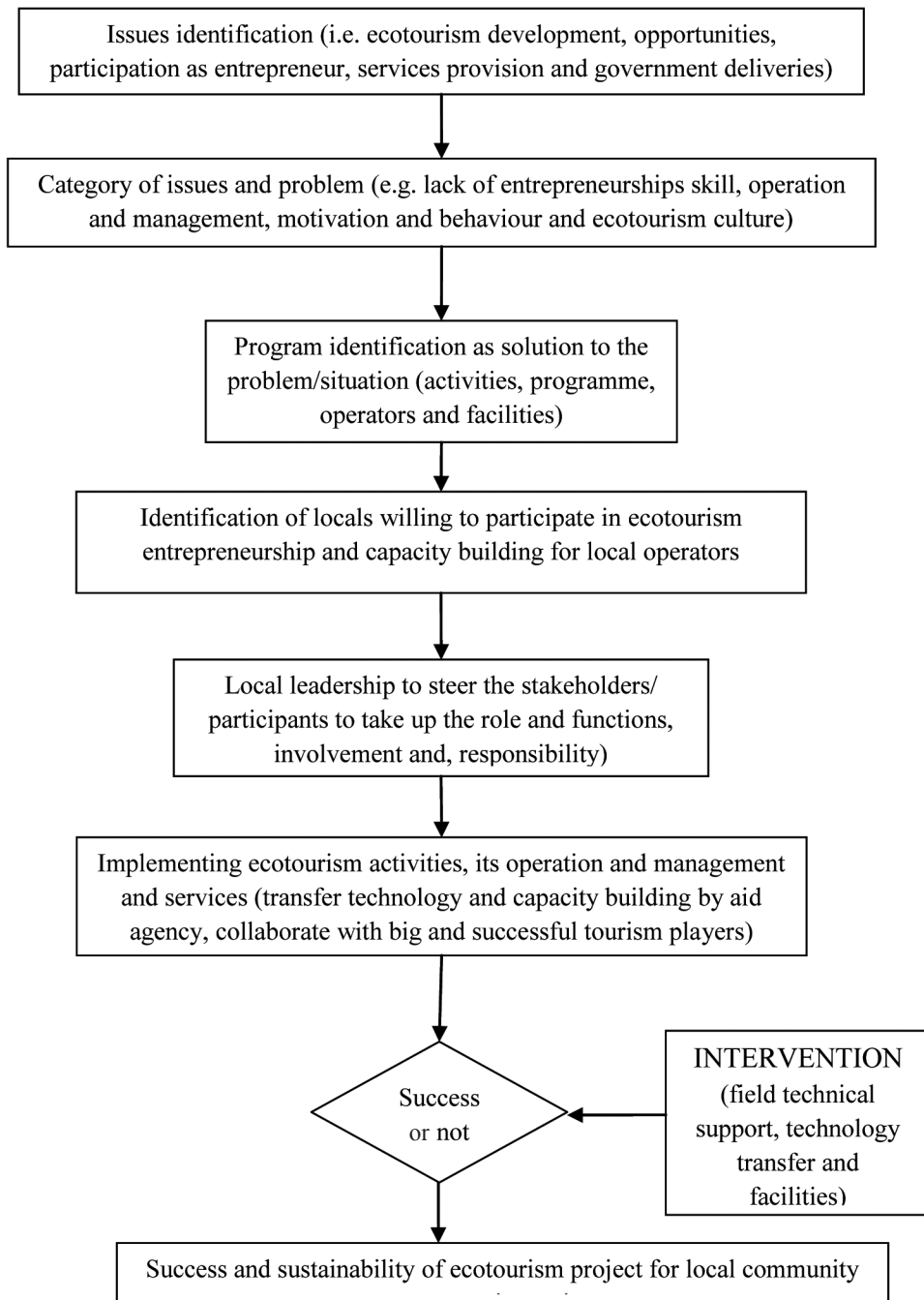


Fig.2: Local community participatory process and intervention procedure in the mangrove ecotourism in Marudu Bay

of the local issues and problems, local community interests are crucial for future development. The local support and willingness to participate in the ecotourism development will help to protect the mangrove ecosystem for sustainable use. These include activities and programme identification and its implementation, determination of local leaderships to spearhead the activities, technical support and facilities required, technology transfer and human capacity building.

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