

## TOURISM DEVELOPMENT AND SOCIAL IMPACT: THE CASE OF MANTANANI ISLAND, SABAH (MALAYSIAN BORNEO)

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**Abstract** Mantanani Island in Sabah (Malaysian Borneo) is located at the northwest of Kota Belud, a district famous for its weekly *Tamu* (market). The local communities are mainly composed of the Bajau tribe and a majority of its members work as full-time fishermen. Tourism development in Mantanani was first observed in the existence of tour operator on the island few years back and since, has rapidly progressed. The intense tourism development has affected the local communities' such commodification, adaptation to tourist's demands and it alters the local identity because of the increasing number of accommodations. Hence, this study aims to identify the local communities' social impact and their perception toward tourism development. Drawing from 259 respondents surveyed in November 2014, this study concludes that local community on Mantanani are affected by the tourism development both positive and negatively, still, they can accept the high numbers of visitors on the island.

**Keyword:** *Island Tourism, Social Carrying Capacity, Local Communities, Mantanani Island*

### INTRODUCTION

Sharpley (1994) identifies social impact plays a very significant, immediate and visible effect on each tourism destinations. Pizam and Milman (1986) categorise the impact into few such as population structure, forms and types of occupations, values, life style, consumption pattern and benefit of tourist. However the inappropriate tourism development can lead to adverse social and environmental impacts on island (MacDonald and Jolliffe, 2003). The overpopulation of the island community and the large numbers of visitors may cause several problems, such as water pollution, environmental damages, ecosystem degradation, the disposal of increasing demand waste, unaffordable goods and services, and social conflicts (Heikkila & Xu, 2013). The barometers that address social conflicts or the impact of the tourism industry denote social carrying capacity. The high number of social impact on the communities in the area as well as the reduced enjoyment and excitement of both the visitors and the community indicate that this capacity has reached its limit (Mexa & Coccossis, 2004).

Mantanani Island consists of three islands located opposite to the town of Kota Belud in northern Borneo, with the largest component is Mantanani Besar, Mantanani Kecil and Lungisan. Mantanani Island is part of a proposed 1.02 million hectares marine park (Tun Mustapha Park) that includes more than 50

islands and islets across the Kudat-Banggi Priority Conservation Area (Sabah Parks website, 2015). The Board of Trustees of Sabah Parks is the main caretaker of the islands in Sabah, including Mantanani Island. The island can be accessed through a 45-minute speedboat ride from Kuala Abai Jetty, Kota Belud and is 1.5 hours away from Kota Kinabalu by road (Figure 1). The area is populated by the indigenous Ubian tribe of the Bajau ethnic people; the tribe is primarily composed of fishing communities residing in two *kampung* (villages), namely, Siring Bukit and Padang. These villages are located at the southern part of the island (Figure 2).



Figure 1: Map of Sabah / Location of Kota Belud  
Source: Sabah Tourism Board (2010)

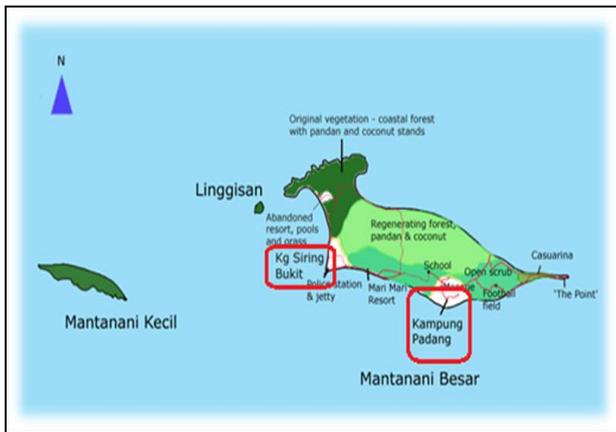


Figure 2: Map of Mantanani Island  
 Source: Sabah Tourism Board (2010)

The current study mainly identifies and clarifies the issues arises from the tourism development activity on the island and the social impacts brought by the tourism development then effect the local community on Mantanani island. Therefore, the objective of the present study is to identify the social carrying capacity of the local communities on an island.

## LITERATURE REVIEW

### *Islands, Tourism Development, and Local Communities*

As per the United Nations Environment Program (UNEP) website (n.d.), the socio-cultural impacts of tourism are defined as the influences on host communities in terms of direct and indirect relations with tourists and of interactions with the tourism industry. The impacts of tourism can be sorted into several categories that encompass economic, environmental, and socio-cultural impacts (Cook, Yale & Marqua, 2006). Tourism development also benefits the local community through the concern shown by the industry for the well-being and welfare of locals through the construction of facilities and provision of education (Puczkó & Smith, 2011).

Nonetheless, the negative social impacts of tourism development have been presented in previous studies. Davies (2006) stated that this industry can heighten the number of crimes committed in the tourism destination, such as the introduction of gambling activity by visitors to the locals and the use of drugs and alcoholism to encourage unacceptable behavior in the locals. Other scholars indicated that the tourism industry generates pollution (Yoon et al., 2001) and rubbish. In addition, this industry promotes overcrowding in public facilities and the overuse of resources in the tourist destination (Bujosa & Rosselló, 2007)

## METHODOLOGY

The present case study is conducted on the local communities residing in Mantanani Island. The purpose and scope of this study involve investigating the social impacts of tourism development at Mantanani Island as perceived by its host communities. This work aims to examine the perceptions of the local residents regarding the current state of tourism development and conducts an exploratory research that focuses on two main villages on the island which are Siring Bukit and Padang. A total of 350 questionnaires were distributed, and a return rate of 74% was achieved; however, only 259 of the completed questionnaires were usable.

## ANALYSIS AND RESULT

### *Demographic Profiles of the Respondents*

The majority of the respondents ( $n = 259$ ) originates from Padang Village (79.9%), whereas 20.1% was from Siring Bukit Village. Majority of them are locals, minority are the one who migrated from the mainland. Total married (55.2%), and single (44.8%). Most of the study participants are aged between 16 and 25 years (35.6%); only 0.4% were aged between 66 and 75 years. More than half of the respondents attended primary school (50.6%), and almost half had attended secondary school (43.6%). The factor analysis of the social impacts of tourism development is categorized and presented in Table 2.

Table 1: Demographic Profiles of the Respondents

Demographic Profile		Mantanani Island ( $n = 259$ )
Location	Siring Bukit Village	52 (20.1%)
	Padang Village	207 (79.9%)
Marital Status	Married	143 (55.2%)
	Single	116 (44.8%)
Gender	Male	146 (56.4%)
	Female	113 (43.6%)
Nationality	Malaysian	259 (100.0%)
	Non-Malaysian	-
Race	Sabah Ethnic	257 (99.2%)
	Chinese	-
	India	-
	Others (Bajau-Ubians)	1 (0.4%)
	Others (Ibans)	1 (0.4%)
Age	16 – 25 years old	92 (35.6%)
	26 – 35 years old	71 (27.4%)
	36 – 45 years old	59 (22.8%)
	46 – 55 years old	33 (12.7%)
	56 – 65 years old	3 (1.2%)

	66 – 75 years old	1 (0.4%)
Education	Not Enrolled	11 (4.2%)
	Primary School	131 (50.6%)
	Secondary School	113 (43.6%)
	Diploma	3 (1.2%)
	Degree	1 (0.4%)

### Factor Analysis of the Social Impacts of Tourism Development

Factor analysis was conducted on the 20 social impact components using data collected from 259 respondents in the local community on Mantanani Island. The objective of performing the factor analysis is to group the 20 items into social impact components; these items have since been grouped under six components, and the majority of the components are classified under quality of life (crime and cleanliness), quality of life (community well-being), and tourist arrival. The other three measures have been grouped under 3 different factors and will be excluded from further analysis.

Table 2: Six Factors of the Indicators of the Social Impacts of Tourism Development

Component	Factor Loading ( $\mu$ )	Alpha value
<b>Quality of Life (crime and cleanliness)</b>	0.743	0.85
1. The large numbers of visitors influence the island's cleanliness.	0.706	
2. The large numbers of visitors raise concerns regarding the safety of the locals.	0.677	
3. The large numbers of visitors influence the quality of the environment.	0.511	
4. The changes demanded from the visitors on the island pressure the local community.	0.485	
5. The large numbers of visitors aggravate vandalism.		
<b>Quality of Life (community well-being)</b>	0.738	0.756
1. Exposure to the foreign cultures of tourists, remove the authenticity of the local community.	0.688	
2. Exposure to the foreign practices of tourists, eliminate the authenticity of the local community.	0.438	
	0.436	
	0.412	

3. Facilities developed by the tourism industry are beneficial for the local communities.	0.412	0.86
4. The large number of tourists complicates the accessibility of Mantanani Island.	0.410	
5. Tourism development on Mantanani Island can help strengthen the bond among locals.	0.352	
6. Tourism development can improve the socialization strategies between myself and the visitors as well as other local community members.		
7. The high demand for accommodation and services by the visitors influences the way of life, beliefs, and practices of the local community.		
8. Tourism development on Mantanani Island can be a force for peace between visitors and the local community.		
<b>Tourist Arrival</b>	0.661	
1. A group of local community members has been exposed to gambling activity since the initiation of tourism development on the island	0.505	
2. The local community began abusing the use of alcohol and drugs since the initiation of tourism development on the island.	0.519	
3. Tourism development on Mantanani Island helps improve the standard of education facilities.	0.489	
4. The number of visitors to Mantanani Island increase annually.		
<b>Competitiveness</b>	0.383	Single measure
1. The large numbers of visitors on the island increase the competition for the use of the facilities.		
<b>Tourism Experience</b>	0.834	Single measure
1. The large number of visitors to Mantanani Island is accepted by		

the local community.		
<b>Quality of Life (emotional well-being)</b>	0.757	Single measure
1. The large number of visitors to Mantanani Island compromises the locals' comfort.		

Table 3 presents the mean, standard deviation and alpha value for each measures derived from factor analysis. From Table 3, the negativity of tourism development was observed as follows: specifically crime occurrences (alcoholism, gambling, vandalism, secure and safety) and environmental (cleanliness and quality of the environment), as well as exposure to the foreign cultures or practices of tourists may eliminate its authenticity and may complicate the accessibility of Mantanani Island. On the other hand, the local communities believe that tourism development helps strengthened the bond between the locals and the visitors, and the increasing recognition is perceived as favourable development mechanism. Nevertheless, increases in tourists' arrival are enjoyed at the expense of jeopardization of comfortableness (quality of life: well-being). Nonetheless, the local communities accept and entertain visitors to the island.

**Table 3:** Mean and Standard Deviation for Each Component-follow Item

Component	Mean ( $\mu$ )	Standard Deviation ( $\sigma$ )
<b>Quality of Life (crime and cleanliness)</b>	2.54	0.783
1. The large numbers of visitors influence the island's cleanliness.	2.56	0.849
2. The large numbers of visitors raise concerns regarding the safety of the locals.	2.67	0.785
	2.97	0.814
3. The large numbers of visitors influence the quality of the environment.	2.46	0.565
4. The changes demanded by the visitors on the Island pressure the local community.		
5. The large numbers of visitors aggravate vandalism.		
<b>Quality of Life (community well-being)</b>	3.22	0.919
1. Exposure to the foreign cultures of tourists, remove the authenticity of the local community.	3.15	0.910
	3.38	0.745

2. Exposure to the foreign practices of tourists, eliminate the authenticity of the local community.	3.15	0.836
	3.09	0.570
3. Facilities developed by tourism industry are beneficial for local communities.	3.24	0.848
	2.84	0.781
4. The large number of tourists complicates the accessibility of Mantanani Island.	3.20	0.718
5. Tourism development on Mantanani Island can help strengthen the bond among locals.		
6. Tourism development can improve the socialization strategies between myself and the visitors as well as other local community members.		
7. The high demand for accommodation and services by the visitors influences the way of life, beliefs and practices of the local community.		
8. Tourism development on Mantanani Island can be a force for peace between visitors and the local community.		
<b>Tourist Arrival</b>		
1. A group of local community members has been exposed to gambling activity since the initiation of tourism development on the island	2.48	0.661
	2.64	0.720
2. The local community began abusing the use of alcohol and drugs since the initiation of tourism development on the island.	3.21	0.751
	4.13	0.600
3. Tourism development on Mantanani Island helps improve the standard of education facilities.		
4. The number of visitors to Mantanani Island increases annually.		

Scale: The questions posed are dichotomous and are scored via a Likert scale (1-Strongly Disagree-5-Strongly Agree).

## CONCLUSION AND DISCUSSION

As a rural tourism destination, Mantanani Island remains subject to the carrying capacity limit and has potential for development. A previous news article stated that, "*Mantanani Island will be developed into a nature-based tourist attraction to generate revenue for its people and contribute to the State's (Sabah) economic growth*" (Daily Express, May 7, 2014); this statement showed the keen intention of the Sabah government to develop the island further. Given the current perception on the cleanliness, safety, and vandalism and environment issues, the local community must cooperate with the tourism industry to build the image of Mantanani Island. The concerns of this community help reduce the cultural and environmental damage to the island.

Despite the few negative impacts on the local communities residing in Mantanani Island, the locals can still benefit from the tourism industry, such as in terms of the well-being and welfare of local communities with the construction of facilities and the provision of education, comfort, and happiness by this industry. These findings support those presented by Puczko and Smith (2011). Furthermore, Krippendorf (1987) reports that the socializing strategy of locals also improved as a result of the presence of visitors on the Island. For example, a local may provide information to visitors through conversation.

Several recommendations are made by the present research as per a survey study conducted based on the reviewed literature, the feedback regarding the information extracted from the questionnaires, and the data analysis output results. First, the dissatisfaction of local communities with tourism should be addressed; for example, tourists should be advised to dress moderately to respect the communities' cultures and religious beliefs as well as to avoid potentially influencing the local community's way of life and originality. Other negative issues, including that of alcohol and drug use on the island, should be considered as well in the hope of reducing the negative impact on the commodification of the host-community culture. Second, a crucial step involves teaching host communities the various skills required by the

tourism industry on the island. The locals are knowledgeable about their residence; hence, they should be prioritized for employment in this sector. Knowledge about the environment should also be taught to either the locals or visitors to limit environmental damages.

## ACKNOWLEDGEMENTS

This research was financially supported by Ministry of Higher Education and Universiti Sains Malaysia under the Long Term Research Grant Scheme 2011 [LRGS304/PPBGN/650571/T121]

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