

Environmental Issues of Agro-Tourism: The Views of Coastal Community in Malaysia

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Abstract: Tourism industry was growing rapidly in Malaysia and has been important contributor to the economy. Many types of tourism industry have been created in Malaysia since it has a unique culture and natural beauty as a tourist attraction. Agro-tourism in coastal villages is one of the new product of tourism to stimulate economic growth in rural community especially among fishermen community. This type of agro-tourism use the environment for tourism resources. Hence, this study is concerned with the environmental impacts of agro-tourism activities in coastal villages listed as Desa Wawasan Nelayan in Malaysia. This is a quantitative study where data were gained through developed questionnaires. Sampling was conducted in 10 fishermen villages in peninsular Malaysia. Finding in this study indicates that the environments of the coastal community in fishermen villages are still natural, protected and not be a negative issue due to the deterioration of agro-tourism program.

Key words: Agro-tourism, coastal community, environment, tourism development, deterioration

INTRODUCTION

Malaysia is one of the countries located in Southeast Asia with are shared land borders with Thailand, Indonesia and Brunei and maritime borders with Singapore, Vietnam and the Philippines. Malaysia covers a land area of 329,758 square kilometers and consists of 14 states (Marzuki *et al.*, 2010). Tourism industry is now recognized as engine of economies growth in the several countries in the world. Similar to other developed countries in the world as a developing country Malaysia has taken a lot of initiatives in developing tourism industry as strategy to embarking develop of rural area and diversity of national economies (Marzuki *et al.*, 2010). Hence, tourism industry drastically become one of the important contributor to the country economy in Malaysia (Yen, 2012).

Rural communities that make agriculture as the main occupation has potential as a tourist destination due to the uniqueness of the local life and natural environment become tourist attraction, particularly the eco-tourism and agro-tourism (Richard and Hall, 2000). Agro-tourism is one of the types of rural tourism which refers to the

recreational and leisure activities organized by the local community for the purpose of tourism (Muhammad *et al.*, 2012; Lopez and Garcia, 2006). Unlike natural-based ecotourism focusing on the flora and fauna such as mountains, forests and wildlife as a major tourist attraction to come, natural-based on tourism in fishermen village more focused on the beauty of the beach, the colorful lives of fishermen and sport fishing. Hence, Fisheries Development Authority of Malaysia (LKIM) in collaboration with the District Fishermen Association (PNK) and State Fishermen Association (PNN) has created a new tourism product called Desa Wawasan Nelayan (DWN) agro-tourism in selected rural fisherman villages.

The existing of tourism literature has mention that the major concern environmental impacts of tourism development may affect to life of resident and natural environment beauty. Past study has suggested that the negative impact of tourism development such destruction of natural ecosystem, pollution and deterioration of cultural resources have commonly surveyed and mentioned (McCool and Martin, 1994). On contrary, some study proposed that the tourism development bring

compensation benefit which are preserved the historical resources, upgrade facilities, provides quality or safer of roads and conserve the natural environment, so that the area remains beautiful and able to attract tourists (Muhammad *et al.*, 2012; Akis *et al.*, 1996). Growth in size and type of tourism and related issues relevant to the conservation and development has prompted many researchers to focus on the beneficial effects of tourism in the local economy, changes in the socio-cultural and community residents as well as environmental protection (Clifton and Benson, 2006). Some researchers emphasized that environmental preservation and protection more crucial than certain expected benefits. Hence, these studies implied that residents might have viewed tourism as having both positive and negative impacts in their environmental.

MATERIALS AND METHODS

This study is based on quantitative questionnaire surveys. The questionnaire adopted from 5 Likert-like scales were respondents has been give responds with choose one of from five score answer choices (strongly disagree = 1; disagree = 2; somewhat disagree = 3; agree = 4 and strongly agree = 5), unless parts of the demographic which require respondents for choose one answer which describe themselves. Sampling was based on a simple random survey with a fixed number of local residents picked from selected DWN villages, a selection of local resident of both genders and a selection of local resident of different age groups and education. Table 1 shows the number of respondents in each of the 10 DWN villages. Sampling locations were chosen randomly based on list of the fishermen village obtained from the LKIM fishing village has won the village competitions of Anugerah Desa Wawasan Nelayan. The data of this study were analyzing using SPSS to determine relevant descriptive statistical analyses such as frequency, percentage and mean score.

Table 1: Location of sampling

Villages	States	Respondents
Rhu Sepuluh	Terengganu	110
Sempang Pantai	Melaka	110
Tanjung Piai	Johor	110
Sedeli Kecil	Johor	110
Kuala Sungai Yan	Kedah	110
Kuala Sungai Baru	Perlis	110
Pantai Suri	Kelantan	110
Tok Adam	Selangor	110
Kampung Jawa	Pahang	110
Kuala Pahang	Pahang	110
Total		1100

RESULTS

A total of 1100 of respondents who filled out the questionnaire of this study were obtained from the data collection process. Data analysis shows that 50.2% respondents were men and 49.8% were female, thus, the gender distribution amongst the respondents can be considered balanced. Distribution of age categories for the respondents in this study showed the majority of respondents were aged between 41-60 years (40.8%) and the mean score recorded was 41.7 years in other words that the majority of residents were the senior local residents. In terms of highest level of education, the majority (33.8%) of respondents who had completed primary school education and followed by 29.4% had obtained an SPM/SPMV/MCE certificate (PMR/SRP/LCE refers to Malaysian Lower Education Certificate. SPM/SPMV/MCE refers to Malaysian Higher Education Certificate and Malaysian Vocational Certificate). Data analysis also showed that most of respondents (80.1%) recorded for monthly income less than RM1,000 (Table 2).

Based on analyses on Table 3, the majority of the respondents were indicate to agree with all nine statement item related to impact of agro-tourism on environment in their village. The ranging mean score were between

Table 2: Social demographic profile of the respondents

Demographic profile	Frequency	Percentage	M	SD
Gender				
Male	552	50.2		
Female	548	49.8		
Total	1100	100.0		
Marital status				
Single	208	18.9		
Married	841	76.5		
Divorce	51	4.6		
Total	1100	100.0		
Age			41.7	15.80
<20 years	124	11.3		
21-40 years	394	35.8		
41-60 years	449	40.8		
61-80 years	131	11.9		
>41 years	2	0.2		
Total	1100	100.0		
Educations level				
Non-formal educational	114	10.4		
Primary school	372	33.8		
PMR/SRP/LCE	231	21.0		
SPM/SPMV/MCE	323	29.4		
Certificate skill	19	1.7		
STPM/diploma	28	2.5		
Bachelor/Master/PhD	13	1.2		
Total	1100	100.0		
Income			836.13	935.11
<RM1000	881	80.1		
RM1001-RM2000	158	14.4		
RM2001-RM3000	36	3.3		
RM3001-RM4000	10	0.9		
RM4001-RM5000	7	0.6		
>RM5001	8	0.7		
Total	1100	100.0		

Table 3: Indicator impact of agro-tourism on environment

Bil.	Statement	Percentage					Mean	SD
		1	2	3	4	5		
1.	There are efforts to enhance the beauty of the area to attract more tourist	2.6	4.2	7.5	53.2	32.5	4.09	0.893
2.	There are progress in upgrading public facilities that lead to better environment	2.0	4.8	7.0	61.8	24.4	4.02	0.829
3.	There are better and safer road that ensure the safety of consumers	2.4	6.5	7.9	61.1	22.1	3.94	0.878
4.	Forest and mangrove have not sacrificed for the construction of hotels and chalets	3.6	8.6	5.3	18.7	63.8	4.31	1.126
5.	Fauna and wildlife have not sacrificed for the development of tourism spot	2.5	9.3	5.3	19.1	63.8	4.32	1.090
6.	The existence of many transportation channels not lead to air and noise pollution	3.8	12.9	8.6	20.7	54.0	4.08	1.215
7.	Unplanned development of tourism project is not lead to destruction of ecosystem and wildlife habitat (such as spot for turtle hatches)	2.3	9.8	4.8	19.8	63.3	4.32	1.085
8.	In this village, there is no unplanned project which lead to bad effects	1.6	7.0	4.8	20.5	66.1	4.42	0.978
9.	Since DWN activities, there are not so many waste in open area that is an eyesore to public	2.5	13.3	11.2	24.1	48.9	4.04	1.167

*1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: agree and 5: strongly agree

M = 3.94-4.42. Out of nine statement, respondents were detected to record the highest mean score (M = 4.42) with strongly agreed (66.1%) with no unplanned project which lead to bad effects in their village. They also strongly agreed (63.3%) with mean score (M = 4.32) with statement related to unplanned development of tourism project is not lead to destruction of ecosystem and wildlife habitat. Meanwhile, the lowest mean score (M = 3.94) were related to statement better and safer road that ensure the safety of consumers in their village with respondent were record to agreed (61.1%).

DISCUSSION

Based on the findings of this study found that the local resident in coastal villages believe that the environment in their villages are still protected and not be a negative issue due to the deterioration of agro-tourism program. Furthermore, there are efforts to enhance the beauty of the village to attract more tourist such upgrading public facilities that lead to better environment. This can be clearly seen on the result of the statements in Table 3 that employed in this study.

Local community perceived that the agro-tourism program in their village bring efforts to upgrade facilities and enhance the beauty of the area to attract more tourist and this makes one of the objectives of tourism development in the fishermen village is to bring about change and development towards creating attractive fishermen village be achieved. But at the same time the physical development effort does not result in adverse effects to the natural environment of their village. This may be due to tourism development in DWN village was done in a small scale and not as rapid development of tourism in the famous beach spots and island have well-know destinations both to foreign as well as local tourists. Rapid development will result to environmental change and mostly degradation. A study conducted by Tan (2000) highlighted in degradation of environment in the Perhentian islands due to the rapid development

tourism. Followed by Chan (2009) also found that same result in their study in three small islands off the east coast of Peninsular Malaysia (Redang, Perhentian and Tioman) due to the rapid environmental change. Another point, based on the observation during data collection there are not so many physical construction such hotel and chalets in DWN village due to some village provide homestay programme for tourist. Indirectly, the local resident able to generate side income with homestay programme. Consequently, unplanned project and rapid development related to construction of hotels and chalets on agro-tourism development in DWN villages which is not lead to destruction of environment change and wildlife habitat does not exist.

The perception study, revealed that agro-tourism in fishermen village is not a big issue on environmental. Based on observation of researcher during data collection, agro-tourism in DWN villages of fishermen the present agro-tourism programme in DWN villages were limited and developed in slowly but have potential to be more developed because of its uniqueness can not be found somewhere else. There are a number of attractive activities that have a big potential to be introduced to attract both local and foreign tourists. To develop toward sustainable agro-tourism in the DWN village, participation of local community and authorities must in line between benefit for both human and environment. Hence, the policies of sustainable tourism are important to develop for strike a balance between economic gains and environmental conservation. Therefore, the politicians must play a role in policies-making related to tourism development that benefits everyone and the environment (Chan, 2009, 2003; Jamaluddin, 1999).

CONCLUSION

Tourism plays an important role and one of strategy to develop rural areas. For the coastal community in Malaysia the DWN agro-tourism is one of the tools to develop fisheries village as well as to generate additional

income of local community. One of the things that has made fishermen village interesting and unique its beauty of the their natural environment. The survey found that respondents from ten fishermen village from difference coastal community and various states in peninsular Malaysia have a strong agreement on the statements regarding to the no negative effect of agro-tourism activities to the natural environment. Despite, agro-tourism also bring positive effect to enhance, upgrading public facilities and preservation of environment from unplanned physical construction.

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