



## Responsible Planning and Communities Aspiration towards Rural Tourism Development

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**Abstract:** The importance of researching the environmental impacts of tourism cannot be underestimated given the fact that the potential hostile responses of the local communities would negatively affect rural tourism development. The purpose of this study is to assess the perceptions of rural tourism communities and their aspiration towards tourism development from five main environmental perspectives, namely destination environment, communities' satisfaction, environmental management practices, influence of environmental resources, and communities' attitudes at rural destinations in Malaysia. One hundred and eighty-two respondents comprising of residents of rural tourism in Malaysia took part voluntarily in this study. To assess the developed model, SmartPLS 2.0 (M3) was applied. Interestingly, the findings revealed that local communities' satisfactions and influence of resources at the rural destinations were of the most concerned to the local communities with regards to their future aspirations towards tourism development.

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### 1. Introduction

Tourism has been promoted successfully and used as a tool to alleviate poverty on the local and national scale. It is a known fact that the success of tourism initiatives has sown the seeds of tourism industry growth and consumerism particularly in developing countries. Rural tourism has been growing and developing tremendously since the last decade and in order to maintain the sustainability of rural tourism, it is important to pay serious emphasis on the environment impact in order to ensure long-term success of the tourism industry (Diedrich & Garcí'a-Buades, 2008). Extensive research have been conducted to investigate the impact of tourism on communities, but these studies have not examined some of the deep seated issues faced by local communities such as the impact of tourism on environment, particularly at rural tourism destinations. The importance of researching the environmental impacts of tourism cannot be underestimated given the fact that the potential hostile responses of the local communities would negatively affect rural tourism development, if a balance between benefits and negative effects of tourism development are not properly achieved. In addition to that, understanding

the environmental impact of tourism could have on local communities is extremely crucial for tourism stakeholders so that tourism development plans would not suffer backlash from the communities. It cannot be denied that local communities of rural tourism destinations are one of the fundamental aspect of the tourism product and hence their attitudes and behaviour would have great impact on the success of the destinations (Deery, Jago, & Fredline, 2012).

Rural tourism is different from other types of tourism as their main attraction to tourists is heavily dependent upon its environmental aspect of the destinations. To attract tourists, rural tourism emphasizes to tourists on natural beauty, appreciating and conserving environment as part of its tourism activities. Nonetheless, the question of how to make rural tourism more environmental friendly and at the same time able to strike a balance by not destroying the environment is an interesting issue that worth to be investigated further. As stated by past researchers (e.g., Jurowski, Uysal, & Williams, 1997; Yoon, Gursoy, & Chen, 2000), supports given by the local communities are very much depended upon their

attitudes towards environmental concerns. Some studies have evidenced that tourism has provided new employment opportunities and hence increased the standard of living for the local communities, but at the expense of destroying the natural environment (Stronza, 2007).

For the past 10 years, tourists' arrivals in Malaysia have more than doubled from 10.2 million in 2000 to 24.6 million in 2010. In the corresponding time frame, tourists' receipts increased from RM17.3 billion to RM56.5 billion. Nonetheless, there are various challenges faced by the rural tourism industry in Malaysia and it includes the lack of transport to rural destinations, the lack of varieties of local product base, the service quality provided and also the standard of quality of the local products and safety measure. In the 1970s, the Malaysian government's priority in tourism was to provide basic infrastructures like highways, airports and upgrading the facilities of attractions of potential tourism destination. In the 1980's, tourism was promoted as a means to meet the country's development objectives, and now, the Malaysia government is launching the Economic Transformation Programme (ETP) as they foresee that there is a need to enhance connectivity to key priority tourism markets. Although government efforts play a crucial role in the development of tourism, it is undeniable that the private sectors such as the local industry players contribute to the development decisions by ensuring the industry is run at a profitable level. Past researches have indicated that tourism development has helped to revitalize the rural economy and created more value added channel for local communities (Liu, 2006). One obvious example is the transformation of their existing residences into homestay and that has helped to generate more income for the local communities. It is believed that by having community-based tourism, the local communities will treasure the commercial value which is generated from their natural and cultural resources through tourism.

As the tourism business becomes more competitive than ever before, the issue of gaining cooperation and compliance from local communities becomes a critical issue. Hence, to achieve the objectives, the study is designed as follows. Based on previous research, the section on hypotheses proposes a series of hypotheses on the 5 main environment aspects namely, destination environment, communities satisfaction, environmental management practices, influence of environmental resources, and communities attitudes, as perceived by local communities and on communities future aspiration on development of rural tourism destinations. This paper provides a critique of the environment impact of tourism literature, highlighting the inadequacies in the

rural tourism research that has been conducted to date, which then leads to the testing of empirical findings of the environment constructs as perceived by communities.

## 2. Literature Review

### 2.1 Rural Tourism and Sustainable Development

Researchers in the past have been concerned about ecological issues since the early 1970s and various stakeholders have been putting pressure on firms to take measurement to protect and sustain the natural environment (Chan & Wong, 2006; Klassen & Whybark, 1999; Rueda-Manzanares, Aragón-Correa, & Sharma, 2008). Past studies (e.g., Chan, 2008, 2011; Forsyth, 1995; Kasim, 2007a, 2007b; Tzschentke et al., 2008) have further confirmed that the non adoption of eco friendly behaviour could be due to several reasons such as lacking of support of the local authorities, operational matters like reduction in the quality of eco-friendly products/services and extra cost involved in taking ecological actions. Stronza and Gordillo (2008) indicated that in the concept of ecotourism, it is mandatory to involve the local communities to the conservation of nature, and it is proven that the community-base tourism can manage the projects better than the other stakeholders. Hence, it is important to understand the needs and wants of the local communities and the expectation of tourism industry players in providing input that can assist in decision making for the development of rural tourism. Tourism is an important industry which helps to generate growth for the country. Past studies have revealed that the challenges faced by the tourism industry is that tourism destination by its nature is very different than conventional commercial products as it stresses on "experience" to attract tourists and involves the cooperation from multi stakeholders such as communities, enterprises, supporting industries, public sectors and local communities within a particular destination (Fernando & Long, 2012).

### 2.2 Environment

New Environmental Paradigm (NEP) has been paying serious focus on environmental values, attitudes and stresses on the conserving a balance in nature and the need to develop a sustainable economy (Dunlap & Van Liere, 1978). In addition to the natural environment, the other aspects of environment are known as physical and social environments are equally important for the satisfaction of consumers and this is also defined as servicescape (Bitner, 1992). According to Clarke and Schmidt (1995), the service environment constitutes of four elements, namely, physical facility, location, ambience and interpersonal conditions and it is elucidated to affect human behavior, cognitively, physiologically and affectively. Past studies have revealed that in order to

for ecotourism to sustain, there are a number of factors that need to focus on such as environmental conservation, sustainable use of land and natural resources, cultural preservation and deterioration, local control and outside market forces, visitor education and impacts, issues of land rights and many others (Honey, 2008; Scheyvens, 2000; Walter, 2011; Leonidou, Leonidou, Fotiadis, & Zeriti, 2013). It is undeniable that unplanned and uncontrolled constructions would cause damage to the natural environment and wildlife and as a result cost of conserving and preserving the nature and historical and cultural sites are very high (Tatoglu, Erdal, & özgur, 2012).

### **2.3 Communities Satisfaction**

Past studies have evidenced that sustainable tourism does not solely refer to the economic contributions that local communities are enjoying but also refers their wider needs such as physical and social cultural needs (Kauppila et al., 2009). Researchers in the past have also confirmed that sustainability of tourism is dependent upon the extend of community empowerment in a tourism development plan (Okech, 2011; Saarinen, 2006) as the involvement of local communities is crucial in providing input that can assist in decision making for the development of rural tourism. It is important to note that, local communities are becoming increasingly aware and are able to recognize and contribute ideas, such as, products offered by various tourism destinations. Thus, it is crucial for rural tourism industry players to understand and to be aware of what their local counterparts require from the development of their site to remain competitive in the marketplace. According to Brown (1993), satisfied communities are often linked to having a high quality of life, which are dependent upon having a sufficient income and accordingly this is the most important factor as adequate employment and income would determine overall satisfaction of the communities. As stated by Gursoy and Rutherford (2004), the success of rural tourism depended on the support from local communities as local communities play an important role in affecting tourists' satisfaction, expenditure levels, revisiting, and had their promotion through word of mouth of the destinations that they have visited. Having said that, the communities' satisfactions should not be assumed or taken for granted.

### **2.4 Environmental Management Practices**

Recent studies on tourism have indicated that there is an alarming issue about environmental pollution at tourism destinations (Bohdanowicz, 2006; Kasim, 2009). In fact, United Nations has shown their concern about environmental protection for the past decades (Chong, Wong, & Lo, 2009). Tourism

industry was said to have involved the consumption of vast amount of local and imported nondurable goods, furnishings and appliances without the proper planning of sufficient facilities for water conservation, waste and energy management (Bramwell & Alletorp, 2001; Kirk, 1998). Hence, it is timely for stakeholders in the tourism industry to initiate practices which will help in the sustainability of the environment (Chan, 2008). In fact, some practices are already in place in the tourism industry to help to preserve and protect the environment. Mensah (2006) indicated that there is an environmental management practices known as Sustainable Tourism Practices (STP) among hotels which serves as a guideline to reduce the cost of operating hotel businesses, enhance images and protect the environment. It was stated that the three focus areas in STP are energy management, waste management, and water conservation (Chong, Wong, & Lo, 2009; Park, 2009; Ustad, 2010). As for rural tourism, "nature" means "products" and hence preserving the products would lead to profits. Nonetheless, it was noted that when rural tourism grows from just simple business to one of the cornerstone industry of the country, the situation becomes complex and issues such as environmental conservation, the right of indigenous and local people and the development of local communities have become issues (Reimer & Walter, 2013). Past studies have elucidated that environmental management practices mainly concern the preservation of the environment (explicit) or by factors unrelated to green thinking (tacit) (Céspedes-Lorente, Burgos-Jiménez, & Alvarez-Gil, 2003; Erdogan & Baris, 2007). Nonetheless, it is up to the respective tourism stakeholders to adopt the required environmental management practices and how seriously the stakeholders view the importance of protecting the environment.

### **2.5 Influence of Environmental Resources**

According to Ritchie and Crouch (1993), the competitiveness of the rural tourism destinations depended on the destinations attractions or resources that are available. The attractions and resources are such as the uniqueness of natural features, climate, culture and social characteristics, general infrastructure and many others. Some researchers defined natural destinations as the wilderness areas in mountains, deserts, rainforest and others (Hall, James & Baird, 2011; Weaver, 2005). Rural tourism is gaining its popularity due to the fact that its natural areas have provided venues for tourists to relax, seek out new experiences with nature (Snepenger, Snepenger, Dalbey, & Wessol, 2007) and also to reduce stress (Hipp & Ogunseitani, 2011). Hence, the natural resources of rural destinations are the main reason why they have become favourite places and

hold special meaning for many tourists (Ferreira, 2011; Ramkissoon, Smith, & Weiler, 2013). Past studies have indicated that tourism has contributed to adverse natural environmental impact which are related to travelling, accommodations and recreational activities (Lee, Jan, & Yang, 2013) and hence it is imperative for new environmental regulations to be put into practice to preserve these natural resources (Fons, Fierro, & Patino, 2011).

### **2.6 Communities Attitudes towards Tourism**

Rural communities at tourism destinations are becoming more aware and concerned about the environmental issues because of their participation in tourism activities (Butler & Menzies, 2007; Walter, 2009). Past studies (e.g., Akis, Peristianis, & Warner, 1996; Jurowski et al., 1997; Yoon, Gursoy, & Chen, 2000) have examined communities reactions towards tourism activities and it is evidenced that community support for tourism development is mandatory for the sustainability of tourism industry (Yoon, 1998). This is also due to the fact that tourism relies heavily on the goodwill of the local communities and hence it is vital to understand local communities' reactions towards tourism development in order to get their participation and cooperation (Yoon, Gursoy, & Chen, 2000). As stated by past studies, the perception and attitudes of residents toward the impacts of tourism are important to the planning and policy consideration for successful development, marketing, and operation of existing and future tourism program (Ap, 1992). In view of the above, it is imperative to maintain a positive perception of local communities towards tourism development in order to ensure the success of tourism (Knollenberg, 2011). In order to facilitate the positive interaction between local communities and industry stakeholders, it is mandatory for stakeholders to understand their attitudes, perceptions, levels of satisfaction, ensuring that needs and desires of the communities are met (Kitnuntaviwat & Tang, 2008).

### **2.7 Aspiration towards Future Tourism Development**

Researchers in the past have confirmed that sustainable tourism cannot be achieved in a short period of time as efforts need to be put in by all stakeholders in certain aspects of tourism such as economic, sociological and environmental issues. In order to inculcate the positive aspiration of local communities towards future tourism development, both tourists and communities must continuously enjoy the satisfaction in a long term (Angelkova, Koteski, Jakovlev, & Mitrevska, 2012). In addition to that, if local communities perceive that the costs of tourism overshadow the benefits, feelings of anger and irritation towards tourists can develop and thus lower community satisfaction (Doxey, 1975; Faulkner & Tideswell, 1997; Ko & Stewart, 2002). On other

hand, those who feel that they are participating in tourism planning on the other hand will have more positive attitudes towards tourism (Cavus & Tanrisevdi, 2002), and this will enhance their perception and aspiration towards future tourism development. Various suggestions had been proposed to ensure the support from the communities towards future tourism development, example, stakeholders can change their participatory habits by localising and familiarising themselves with the local processes Michalska (2008) and involving communities in decision making (Howard, 2003). It is believed that, participations of local communities would more likely generate better ideas for future tourism development (Strzelecka, 2012).

### **3. Method**

The population of the present study consists of local communities currently residing in rural tourism destination in Sarawak, Malaysia. A total of 500 questionnaires were distributed to the local communities and only 182 questionnaires were used for analysis.

### **4. Findings**

To assess the model developed (see figure 1), the study used the SmartPLS 2.0 (M3) which is based on path modelling and then the bootstrapping (Chin 1998; Tenenhaus et al., 2005; Wetzels et al., 2009) with 200 re-samples were used to generate the standard error of the estimate and t-values.

#### **4.1 Assessment of the Measurement Model**

The study conducted a confirmatory factor analysis (CFA) to assess reliability, convergent validity, and discriminant validity of the scales. As shown in table 1 and 2, most item loadings were larger than 0.5 (significant at  $p < 0.01$ ). All Average Variance Extracted (AVEs) exceeded 0.5 (Bagozzi & Yi, 1988). The Composite Reliability (CRs) exceeded 0.7 (Gefen, Straub, & Boudreau, 2000) while the Cronbach alpha values 0.7 (Nunnally, 1978). Thus, the study ensured convergent validity because all the indicators loaded much higher on their hypothesized factor than on other factors (own loading are higher than cross loadings; Chin, 1998, 2010) (see Table 1). In addition, the square root of the AVE was tested against the intercorrelations of the construct with the other constructs in the model to ensure discriminant validity (Chin, 2010, 1998; Fornell & Larcker, 1981) and all the square root of the AVE exceeded the correlations with other variables. Thus, the measurement model was considered satisfactory with the evidence of adequate reliability, convergent validity, and discriminant validity. Next the study proceeded to test the hypotheses generated for this research.

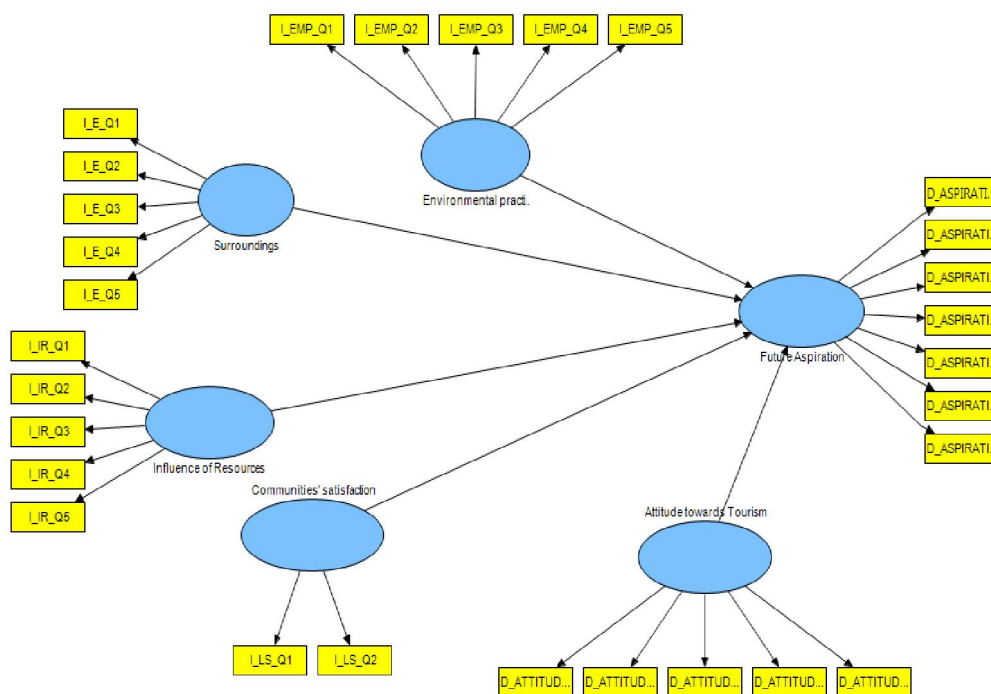


Figure 1. Research Model

Table 1. Loading and Cross Loading

	Attitude towards Tourism	Communities' Satisfaction	Environmental Practices	Influence of Resources	Surroundings	Future Aspiration
D_Attitude_Q1	<b>0.730</b>	0.023	0.403	0.456	0.294	0.126
D_Attitude_Q2	<b>0.830</b>	0.119	0.410	0.409	0.397	0.256
D_Attitude_Q3	<b>0.890</b>	0.141	0.371	0.488	0.370	0.341
D_Attitude_Q4	<b>0.608</b>	0.138	0.246	0.252	0.223	0.134
D_Attitude_Q5	<b>0.695</b>	0.083	0.176	0.278	0.371	0.179
I_LS_Q1	0.117	<b>0.940</b>	0.259	0.238	0.104	0.591
I_LS_Q2	0.148	<b>0.913</b>	0.187	0.232	0.031	0.492
I_EMP_Q1	0.263	0.273	<b>0.865</b>	0.391	0.444	0.355
I_EMP_Q2	0.448	-0.019	<b>0.681</b>	0.411	0.386	0.110
I_EMP_Q4	0.442	0.090	<b>0.598</b>	0.352	0.381	0.116
I_EMP_Q5	0.233	0.174	<b>0.573</b>	0.138	0.151	0.149
I_IR_Q2	0.450	-0.019	0.430	<b>0.585</b>	0.491	0.107
I_IR_Q3	0.323	-0.183	0.263	<b>0.265</b>	0.284	-0.076
I_IR_Q4	0.450	0.267	0.438	<b>0.959</b>	0.493	0.448
I_IR_Q5	0.437	0.103	0.275	<b>0.689</b>	0.394	0.159
I_E_Q1	0.269	0.002	0.334	0.388	<b>0.647</b>	0.082
I_E_Q2	0.448	-0.036	0.375	0.471	<b>0.652</b>	0.069
I_E_Q3	0.286	0.036	0.271	0.386	<b>0.768</b>	0.190
I_E_Q4	0.400	0.075	0.458	0.474	<b>0.836</b>	0.188
I_E_Q5	0.349	0.114	0.449	0.407	<b>0.829</b>	0.237
D_Aspiration_Q1	0.127	0.252	0.108	0.187	0.053	<b>0.594</b>
D_Aspiration_Q2	0.326	0.213	0.304	0.410	0.399	<b>0.543</b>
D_Aspiration_Q3	0.250	0.298	0.237	0.316	0.203	<b>0.561</b>
D_Aspiration_Q4	0.275	0.417	0.234	0.342	0.217	<b>0.642</b>
D_Aspiration_Q5	0.047	0.539	0.124	0.105	-0.082	<b>0.705</b>
D_Aspiration_Q6	-0.118	0.439	0.168	0.065	-0.046	<b>0.650</b>
D_Aspiration_Q7	0.356	0.283	0.193	0.338	0.242	<b>0.551</b>

Table 2. Results of Measurement Model

Model Construct	Measurement Item	Cronbach Alpha	Loading	CR <sup>a</sup>	AVE <sup>b</sup>
Attitude towards Tourism	D_Attitude_Q1	<b>0.818</b>	<b>0.730</b>	0.868	0.573
	D_Attitude_Q2		<b>0.830</b>		
	D_Attitude_Q3		<b>0.890</b>		
	D_Attitude_Q4		<b>0.608</b>		
	D_Attitude_Q5		<b>0.695</b>		
Communities' Satisfaction	I_LS_Q1	<b>0.836</b>	<b>0.940</b>	0.924	0.858
	I_LS_Q1		<b>0.913</b>		
Environmental Management Practices	I_EMP_Q1	<b>0.784</b>	<b>0.865</b>	0.778	0.507
	I_EMP_Q2		<b>0.681</b>		
	I_EMP_Q4		<b>0.598</b>		
	I_EMP_Q5		<b>0.573</b>		
Influence of Resources	I_IR_Q2	<b>0.756</b>	<b>0.585</b>	0.740	0.652
	I_IR_Q3		<b>0.265</b>		
	I_IR_Q4		<b>0.959</b>		
	I_IR_Q5		<b>0.689</b>		
Environment	I_E_Q1	<b>0.820</b>	<b>0.647</b>	0.865	0.564
	I_E_Q2		<b>0.652</b>		
	I_E_Q3		<b>0.768</b>		
	I_E_Q4		<b>0.836</b>		
	I_E_Q5		<b>0.829</b>		
Future Aspiration	D_Aspiration_Q1	<b>0.717</b>	<b>0.594</b>	0.804	0.571
	D_Aspiration_Q2		<b>0.543</b>		
	D_Aspiration_Q3		<b>0.561</b>		
	D_Aspiration_Q4		<b>0.642</b>		
	D_Aspiration_Q5		<b>0.705</b>		
	D_Aspiration_Q6		<b>0.650</b>		
	D_Aspiration_Q7		<b>0.551</b>		

Note:

- a Composite reliability (**CR**) = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (summation of error variances)}.
- b Average variance extracted (**AVE**) = (summation of the square of the factor loadings)/{summation of the square of the factor loadings} + (summation of error variances)}.

Table 3. Summary Results of the Model Constructs

Model Construct	Measurement Item	Standard estimate	t-value
Attitude towards Tourism	D_Attitude_Q1	0.730	4.337
	D_Attitude_Q2	0.830	7.183
	D_Attitude_Q3	0.890	7.225
	D_Attitude_Q4	0.608	3.640
	D_Attitude_Q5	0.695	4.593
Communities' Satisfaction	I_LS_Q1	0.940	81.267
	I_LS_Q2	0.913	32.046
Environmental Management Practices	I_EMP_Q1	0.865	5.812
	I_EMP_Q2	0.681	3.229
	I_EMP_Q4	0.598	2.485
	I_EMP_Q5	0.573	3.101
Influence of Resources	I_IR_Q2	0.585	1.993
	I_IR_Q3	0.265	0.806
	I_IR_Q4	0.959	6.326
	I_IR_Q5	0.689	3.576
Environment	I_E_Q1	0.647	2.579
	I_E_Q2	0.652	2.458
	I_E_Q3	0.768	4.056

	I_E_Q4	0.836	3.767
	I_E_Q5	0.829	4.586
Future Aspiration	D_Aspiration_Q1	0.594	5.449
	D_Aspiration_Q2	0.543	6.060
	D_Aspiration_Q3	0.561	7.485
	D_Aspiration_Q4	0.642	8.436
	D_Aspiration_Q5	0.705	9.588
	D_Aspiration_Q6	0.650	7.327
	D_Aspiration_Q7	0.551	6.562

Table 4. Discriminant Validity of Constructs

Constructs	Attitude towards Tourism	Communities' Satisfaction	Environmental Practices	Influence of Resources	Surroundings	Future Aspiration
Attitude towards Tourism	<b>0.757</b>					
Communities' Satisfaction	0.141	<b>0.926</b>				
Environmental Management Practices	0.426	0.244	<b>0.688</b>			
Influence of Resources	0.507	0.254	0.457	<b>0.672</b>		
Environment	0.444	0.077	0.497	0.541	<b>0.751</b>	
Future Aspiration	0.304	0.589	0.324	0.418	0.233	<b>0.609</b>

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.

#### 4.2 Assessment of the Structural Model

Table 5 and Figure 2 present the results of the hypotheses testing. The results have indicated that two dimensions namely, communities' satisfaction and influence of resources were found to have significant impact on attitudes of local communities on rural tourism development with standardized beta of 0.507 and 0.208 respectively and are significant at  $p < 0.01$  thus, H2 and H4 were supported.

The study also conducted a global fit measure (GoF) assessment for PLS path modelling, which is defined as geometric mean of the average communality and average  $R^2$  (for endogenous constructs; Tenenhaus et al., 2005) following the procedure used by Akter et al. (2011). Following the guidelines of Wetzels et al. (2009), the study

estimated the GoF values (see formula), which may serve as cut-off values for global validation of PLS models. The GoF value of 0.271 ( $R^2$  was 0.436, average AVE was 0.620) for the (main effects) model, which exceeds the cut-off value of 0.25 for medium effect sizes of  $R^2$ . As such, the study allows to conclude that this research model has better explaining power in comparison with the baseline values ( $GoF_{small}=0.1$ ,  $GoF_{medium}=0.25$ ,  $GoF_{large}=0.36$ ) (Akter et al., 2011). It also provides adequate support to validate the PLS model globally (Wetzels et al., 2005).

$$GoF = \sqrt{AVE \times R^2}$$

Table 5. Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	Coefficient	t-value	Supported
H1	Attitude towards tourism → Future aspiration	0.098	0.845	No
H2	Communities' satisfaction → Future aspiration	0.507	8.992	Yes
H3	Environmental Management practices → Future aspiration	0.059	0.607	No
H4	Influence of resources → Future aspiration	0.208	2.142	Yes
H5	Environment → Future aspiration	0.009	0.110	No

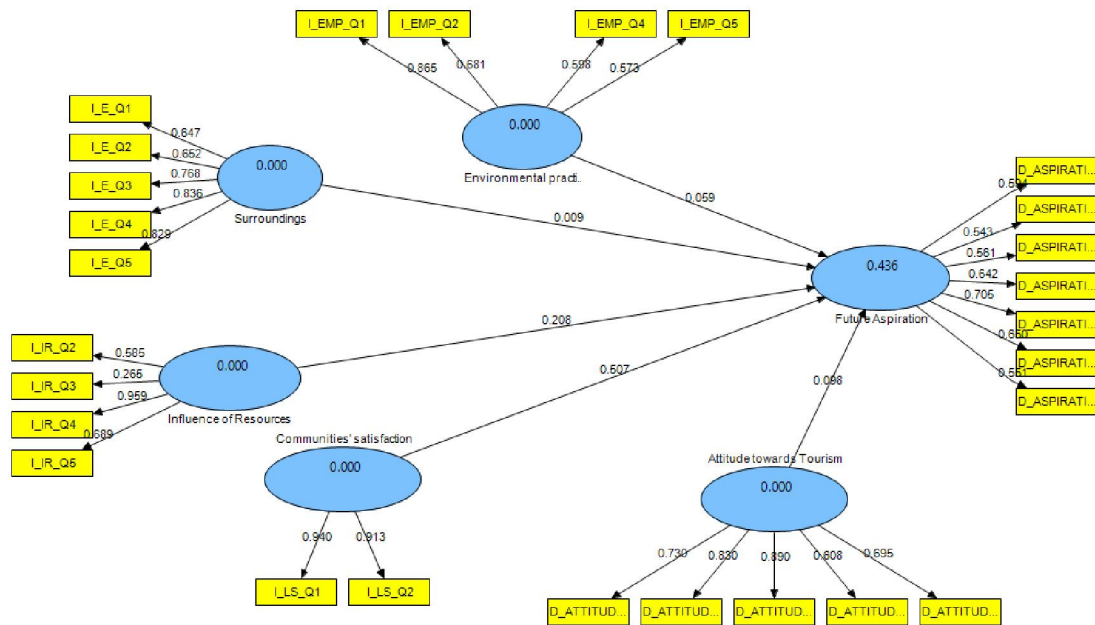


Figure 2. Results of the Path Analysis

## 5. Discussion

It was documented by past studies that proper planning is crucial for the sustainability of the tourism industry and to have significant impact on services offering as it helps to improve on the competitiveness of the rural destinations (Chau & Kao, 2009). One obvious example is how transformation of their existing residences into homestay has helped to generate more income for the local communities. It is believed that by having community-based tourism, the local communities will treasure the commercial value which is generated from their natural and cultural resources through tourism. As tourism business becomes more competitive than ever before, the issue of gaining cooperation and compliance from local communities becomes a critical issue. Past studies have envisaged that destination attractions are crucial for successful tourism development. Hence, understanding natural resources such as cultural components, heritage/ historical resources, supporting facilities/ services, infrastructure, hospitalities, sports/ recreation activities, transportation/ accessibility are important for tourism planning (Pearce, 1997) and hence stakeholders should maintain and develop the quality of these tourism resources in order for the destinations to stay competitive (Go & Govers, 2000). Statistics have shown that rural tourism activities have been growing rapidly in Malaysia which is

commendable but that has also put pressure on the environment. Hence, this study is timely as it investigates the impact of tourism on environment issues and communities' aspiration towards tourism development. As tourism business becomes more competitive than ever before, the issue of gaining cooperation and ensuring satisfaction from the communities becomes a critical issue.

Researchers in the past (e.g., Fernando & Long, 2012) have elucidated that the challenges faced by the tourism industry is that tourism destination by its nature is very different from conventional commercial products as it stresses on "experience" to attract tourists and that cooperation from industry stakeholders are very important. Interestingly, the statistical results have indicated that communities' satisfaction and natural resources are the main concern of the local communities on communities' aspiration towards tourism development. The results of this analysis are congruent with past findings where tourism has generated employment opportunities which are an important predictor of communities' satisfaction (Brown, 1993). As stated by Eshliki and Kaboudi (2012), communities' satisfaction is most important as it is they who will be affected positively or negatively by the development of tourism planning. In addition to that, it was found that local communities prefer to be involved in the decision



making process when it comes to natural resources use which could provide economic benefits to them in the long run (Mbaiwa & Stronza, 2011). This is further supported by past studies (e.g., Ritchie & Crouch, 1993; Mihalic, 2000) that destination resources are the critical attributes for sustaining the competitive and comparative advantage of tourism destinations. Hence, it is therefore advisable for rural destinations with a goal for sustainable development to preserve the natural beauty by minimizing artificial development and destruction. It is evidenced that the success of tourism in many countries are dependent upon the support of the local communities, thus it is vital that the impact of tourism is well understood, managed and not exceed the limits which are acceptable to the communities (Deery, Jago, & Fredline, 2012).

## 6. Conclusions

From the environmental perspective, this study utilized communities' perceptions to evaluate the communities' aspiration towards tourism development. The results have implied that communities' satisfaction and natural resources are the most important in ensuring positive communities aspiration towards the sustainability of tourism development. It is believed these findings are important to both researchers and practitioners and allow them to understand better the root concerns of the local communities when it comes to tourism development. The results have indicated that tourism industry stakeholders should recognise communities perception of tourism development in order to obtain cooperation from them to work together to reduce the gap between them. Policy makers also need to take into consideration the feelings and feedback of the local communities as ultimately, they are the custodian of their areas. This study has inevitably revealed patterns in local communities' perspective towards environment conservation and tourism and has provided avenues for future research and improvement in tourism development.

## 7. Suggestions and Future Research

This paper focuses on the impact of tourism on environment constructs and communities aspiration towards tourism development in rural tourism destinations in Malaysia. Even though the empirical research on this study was conducted in Malaysia, the content of evaluation and its variables can be applied to other rural sites in other countries. The findings from this study have demonstrated that the environment indeed play significant influences on tourism development from the perspectives of local communities. It is suggested that future research could

increase the number of indicators apart from what has been discussed in this study.

## 8. Limitations and Implications

As with any research, this study has several limitations. This current study has relied primarily on samples drawn specifically from the local communities in rural tourism sites in Malaysia. Thus, it is not certain whether the results obtained can be generalized to other tourism destinations in other countries. Furthermore, this is not a longitudinal study, and like any other cross-sectional study, it can only provide a static perspective on fit. In addition, different cultural and international contexts may limit the generalizability of results. It is unclear whether the findings may have the same implications for tourism development in different cultural environment as the values of the local communities in this current study might not accurately represent the values of other countries'.

Despite these limitations, the present model and findings offer a rich agenda for practice. By investigating the communities' perspective, it has enhanced the understanding of tourism stakeholders on tourism development issues and practices. As expected, results of this study revealed the important link between communities satisfaction that can be obtained from tourism development. Hence, this study provides a basis for researchers who are interested in this field to further test the relationships among these constructs, especially in the rural tourism setting. This finding highlights the importance of environment as well as recognition of communities opinion as a valuable approach for the effective development of tourism. Without a doubt the research on rural tourism development are still limited in its ability to provide an unequivocal guideline and to advice on the best way to improve on tourism development. However, by drawing upon the diverse literatures, this study has inevitably and successfully developed some guidelines for scholars as well as policy makers on the effective implementation of tourism development.

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## References

1. Akis S, Peristianis N, Warner J. Residents' attitudes to tourism development: The case of Cyprus. *Tourism Management* 1996; 17: 481-494.
2. Akter S, D'Ambra J, Ray P. Trustworthiness in mHealth information services: An assessment of a hierarchical model with mediating and moderating effects using partial least squares (PLS). *Journal of the American Society for Information Science and Technology* 2011; 62: 100-116.
3. Angelkova T, Koteski C, Jakovlev Z, Mitrevska, E. Sustainability and competitiveness of tourism. *Procedia -Social and Behavioral Sciences* 2012; 44: 221-227.
4. Ap J. Residents' perceptions on tourism impacts. *Annals of Tourism Research* 1992; 3: 665-690.
5. Bagozzi RP, Yi, Y. On the evaluation of Structural Equation Models. *Journal of Academy and Marketing Science* 1998; 16: 74-94.
6. Bitner, MJ. The impact of physical surroundings on customers and employees. *Journal of Marketing* 1992; 56: 57-71.
7. Bohdanowic P. European hoteliers' environmental attitudes: Greening the business. *Cornell Hotel and Restaurant Administration Quarterly* 2006; 2: 188-204.
8. Bramwell B, Alletorp L. Attitudes in the Danish tourism industry to the roles of business and government in sustainable tourism. *International Journal of Tourism Research* 2001; 2: 91-103.
9. Brown, RB. Rural community satisfaction and attachment in mass consumer society. *Rural Sociology* 1993; 3: 387-403.
10. Butler CF, Menzies CR. Traditional ecological knowledge and indigenous tourism. In: Butler R, Hinch T, eds. *Tourism and indigenous peoples: Issues and implications*. Butterworth-Heinemann. Oxford. 2007: 15-27.
11. Céspedes-Lorente J, Burgos-Jiménez J, Alvarez-Gil MJ. Stakeholders' environmental influence: An empirical analysis in the Spanish hotel industry. *Scandinavian Journal of Management* 2003; 3: 333-358.
12. Cavus S, Tanrisevdi J. Residents attitudes towards tourism: A case study of Kusadasi, Turkey. *Tourism Analysis* 2002; 4: 259-268.
13. Chan ESW. Barriers to EMS in the hotel industry. *International Journal of Hospitality Management* 2008; 2: 187-196.
14. Chan ESW. Implementing environmental management systems in small and medium-sized hotels: Obstacles. *Journal of Hospitality and Tourism Research* 2011; 1: 3-23.
15. Chan ESW, Wong SCK. Motivations for ISO 14001 in the hotel industry. *Tourism Management* 2006; 3: 481-492.
16. Chau VS, Kao YY. Bridge over troubled water or long and winding road? Gap-5 in airline service quality performance measures. *Managing Service Quality* 2009; 1: 106-134.
17. Chin WW. The Partial Least Squares approach to Structural Equation Modeling. In: Marcoulides GS, eds. *Modern business research methods*. Lawrence Erlbaum Associates. Mahwah, NJ. 1998.
18. Chin WW. How to write up and report PLS Analyses. In: Esposito Vinzi V, Chin WW, Henseler J, Wang H, eds. *Handbook of Partial Least Squares: Concepts, methods and application*. Springer. New York. 2010: 645-689.
19. Chong W, Wong K, Lo J. Hong Kong hotels' sewage: Environmental cost and saving technique. *Journal of Hospitality & Tourism Research* 2009; 2: 329-346.
20. Clarke I, Schmidt RA. Beyond the services cape: The experience of place. *Journal of Retailing and Consumer Services* 1995; 3: 149-162.
21. Deery M, Jago BL, Fredline L. Rethinking social impacts of tourism research: A new research agenda. *Tourism Management* 2012; 1: 64-73.
22. Diedrich A, García-Buades E. Local perceptions of tourism as indicators of destination decline. *Tourism Management* 2008; 4: 512-521.
23. Doxey GV. A causation theory of visitor-resident irritants, methodology, and research inferences. *Sixth Annual Conference Proceedings of the Travel Research Association*. San Diego. CA. 1975: 195-198.
24. Dunlap RE, Van Liere KD. The "new environmental paradigm": A proposed measuring instrument and preliminary results. *Journal of Environmental Education* 1978; 9: 10-19.
25. Erdogan N, Baris E. Environmental protection programs and conservation practices of hotels in Ankara, Turkey. *Tourism Management* 2007; 2: 604-661.
26. Eshliki SA, Kaboudi M. Community perception of tourism impacts and their perception in tourism planning: A case study of Ramsar, Iran. *Procedia-Social and Behavioral Sciences* 2012; 36: 333-341.
27. Falkner B, Tideswell C. A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism* 1997; 1: 3-28.
28. Fernando IN, Long W. New conceptual model on cluster competitiveness: A new paradigm for

- tourism? *International Journal of Business and Management* 2012; 9: 75-84.
29. Ferreira, S. Moulding urban children towards environmental stewardship: The table mountain national park experience. *Environmental Education Research* 2011; 2: 251-270.
  30. Fons SMV, Fierro MJA, Patino GYM. Rural tourism: A sustainable alternative. *Applied Energy* 2011; 2: 551-557.
  31. Fornell C, Larcker DF. Evaluating Structural Equation Models with unobservable variables and measurement error. *Journal of Marketing Research* 1981; 1: 39-50.
  32. Forsyth T. Business attitudes to sustainable tourism: Self-regulation in the UK outgoing tourism industry. *Journal of Sustainable Tourism* 1995; 4: 210-231.
  33. Gefen D, Straub DW, Boudreau MC. Structural Equation Modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems* 2000; 7: 1-70.
  34. Go FM, Govers R. Integrated quality management for tourist destinations: A European perspective on achieving competitiveness. *Tourism Management* 2000; 1: 79-88.
  35. Gursoy D, Rutherford D. Host attitudes toward tourism: An improved structural model. *Annals of Tourism Research* 2004; 3: 495-516.
  36. Hall CM, James M, Baird T. Forests and trees as charismatic mega-flora: Implications for heritage tourism and conservation. *Journal of Heritage Tourism* 2011; 4: 309-323.
  37. Hipp J, Ogunseitan O. Effect of Environmental conditions on perceived psychological restorativeness of Coastal Parks. *Journal of Environmental Psychology* 2011; 4: 421-429.
  38. Honey M. *Ecotourism and sustainable development: Who owns paradise?* (2<sup>nd</sup> ed.). Island Press. Washington, DC. 2008.
  39. Howard MM. *The weakness of civic society in post-communist Europe*. Cambridge University Press. New York. 2003.
  40. Jurowski C, Uysal M, Williams DR. A theoretical analysis of host community resident reactions to tourism. *Journal of Travel Research* 1997; 2: 3-11.
  41. Kasim, A. Corporate environmentalism in the hotel sector: Evidence of barriers in Penang, Malaysia. *Journal of Sustainable Tourism* 2007a; 6: 680-699.
  42. Kasim A. Towards a wider adoption of environmental responsibility in the hotel sector. *International Journal of Hospitality and Tourism* 2007b; 2: 25-49.
  43. Kasim, A. Managerial attitudes towards environmental management among small and medium hotels in Kuala Lumpur. *Journal of Sustainable Tourism* 2009; 6: 709-725.
  44. Kauppila P, Saarinen J, Leinonen R. Sustainable Tourism planning and regional development in Peripheries: A Nordic view. *Scand. Journal of Hospitality Tourism* 2009; 4: 424-435.
  45. Kirk D. Attitudes to environmental management held by a group of hotel managers in Edinburgh. *International Journal of Hospitality Management* 1998; 1: 33-47.
  46. Kitnuntaviwat V, Tang JCS. Residents' attitudes, perceptions and support for sustainable tourism development. *Tourism and Hospitality Planning and Development* 2008; 1: 45-60.
  47. Klassen RD, Whybark DC. The impact of environmental technologies on manufacturing performance. *Academy of Management Journal* 1999; 6: 599-615.
  48. Knollenberg W. Stakeholders' attitudes towards sustainable tourism development in Coastal communities. A thesis presented to the Faculty in Sustainable Tourism, the Graduate School East Carolina University. 2011.
  49. Ko DW, Stewart WP. A Structural Equation Model of residents' attitudes for tourism development. *Tourism Management* 2002; 5: 521-530.
  50. Lee TH, Jan FH, Yang CC. Conceptualizing and measuring environmentally responsible behaviours from the perspectives of community-based tourists. *Tourism Management* 2013; 36: 454-468.
  51. Leonidou LC, Leonidou CN, Fotiadis TA, Zeriti A. Resources and capabilities as drivers of hotel environmental marketing strategy: Implications for competitive advantage and performance. *Tourism Management* 2013; 35: 94-110.
  52. Liu A. *Tourism in rural areas: Kedah, Malaysia*. *Tourism Management* 2006; 5: 878-889.
  53. Mbaiwa JE, Stronza AL. Changes in Residents attitudes towards tourism development and conservation in the Okavango Delta, Botswana. *Journal of Environment Management* 2011; 8: 1950-1959.
  54. Mensah I. Environmental management practices among hotels in the Greater Accra Region. *Hospitality Management* 2006; 3: 414-431.
  55. Michalska S. Aktywnosc społeczna i postawy obywatelskie mieszkancow wsi a rodzaje ich zyciowych orientacji. In: Podedworna H, Ruskowski P, eds. *Spoleczne aspekty zrownowazonego rozwoju wsi w Polsce*. Warszawa: Wydawnictwo Naukowe Scholar Spolka z o.o. 2008: 123-143.

56. Mihalic T. Environmental management of a tourist destination. A factor of tourism competitiveness. *Tourism Management* 2000; 1: 65-78.
57. Nunnally JC. *Psychometric theory*. McGraw-Hill. New York, NY. 1978.
58. Okech RN. Ecotourism development and challenges: A Kenyan experience. *Tourism Analysis* 2011; 1: 19-30.
59. Park J. The relationship between top managers' environmental attitudes and environmental management in hotel companies. Unpublished Master of Science dissertation. Virginia Polytechnic Institute and State University. Virginia. 2009.
60. Pearce D. Competitive destination analysis in Southeast Asia. *Journal of Travel Research* 1997; 4: 16-24.
61. Ramkissoon H, Smith LDG, Weiler B. Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A Structural Equation Modelling approach. *Tourism Management* 2013; 36: 552-566.
62. Reimer JK, Walter P. How do you know it when you see it? Community-based ecotourism in the Cardamom Mountains of Southwestern Cambodia. *Tourism Management* 2013; 34: 122-132.
63. Ritchie JBB, Crouch GI. Competitiveness in international tourism: A framework for understanding and analysis. Proceedings of the 43rd Congress of the Association International d'Experts Scientifique due Torisme on Competitiveness of Long-Haul Tourist Destination. San Carlos de Bariloche Argentina. 1993: 23-71.
64. Rueda-Manzanares A, Aragón-Correa JA, Sharma S. The influence of stakeholders on the environmental strategy of service firms: The moderating effects of complexity, uncertainty and munificence. *British Journal of Management* 2008; 2: 185-203.
65. Saarinen J. Traditions of sustainability in tourism studies. *Annals of Tourism Research* 2006; 4: 1121-1140.
66. Scheyvens R. Promoting women's empowerment through involvement in ecotourism: Experiences from the third world. *Journal of Sustainable Tourism* 2000; 3: 232-249.
67. Snepenger D, Snepenger M, Dalbey M, Wessol A. Meanings and consumption characteristics of places at a tourism destination. *Journal of Travel Research* 2007; 45: 310-321.
68. Stronza A. The economic promise of ecotourism for conservation. *Journal of Ecotourism* 2007; 3: 210-230.
69. Stronza A, Gordillo J. Community views of ecotourism. *Annals of Tourism Research* 2009; 2: 448-468.
70. Strzelecka M. Individual and community empowerment enhancement in sustainable tourism development in post-communist Poland. Dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Recreation, Sport and Tourism in the Graduate College of the University of Illinois at Urbana-Champaign. 2012.
71. Tatoglu E, Erdal F, özgur H. Resident perceptions of the impact of tourism in a Turkish resort town. 2012. Retrieved from <http://www.opf.slu.cz/vvr/akce/turecko/pdf/Tatoglu.pdf>
72. Tenenhaus M, Vinzi VE, Chatelin YM, Lauro C. PLS path modeling. *Computational statistics and data analysis* 2005; 1: 159-205.
73. Tzschentke N, Kirk D, Lynch PA. (2008). Going green: Decisional factors in small hospitality operations. *International Journal of Hospitality Management* 2008; 1: 126-133.
74. Ustad BH. The adoption and implementation of environmental management systems in New Zealand hotels: The managers' perspective. Unpublished Master of Science dissertation, Auckland University of Technology. 2010.
75. Walter P. Local knowledge and adult learning in environmental adult education: Community-Based ecotourism in Southern Thailand. *International Journal of Lifelong Education* 2009; 4: 513-532.
76. Walter P. Gender analysis in community-based ecotourism. *Tourism Recreation Research* 2011; 2: 159-168.
77. Weaver DB. Comprehensive and minimalist dimensions of ecotourism. *Annals of Tourism Research* 2005; 2: 439-455.
78. Wetzels MGM, Lindgreen A, de Ruyter K, Wouters J. (2005). The effect of corporate image and service delivery on customer evaluative judgments in service organizations: Analyzing an experimental study using Partial Least Square. In: Bliemel F, Eggert A, Fassott G, Henseler J, eds, *Handbuch PLS-pfadmodellierung: Methode, anwendung, praxisbeispiele*. Schaffer-Poeschel Verlag. Stuttgart. 2005: 225-240.
79. Wetzels M, Schroder GO, Oppen VC. Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly* 2009; 1: 177-195.

80. Yoon Y. Determinants of urban residents perceived impacts: A study of Williamsburg and Virginia Beach areas. Unpublished master thesis. Virginia Polytechnic Institute and State University. Blacksburg. 1998.
81. Yoon Y, Gursoy D, Chen J. Validating a tourism development theory with Structural Equation Modelling. *Tourism Management* 2000; 4: 363-372.

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