Communities’ Perceptions towards Ecotourism Competitiveness- Sama Jaya Nature Reserve, Malaysia

Kim Mee Chong*
Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

Tze Horng Tan
Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

May Chiun Lo
Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

Abang Azlan Mohamad
Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

Yin Chai Wang
Faculty of Computer Science & Information Technology, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

Abstract
The term “ecotourism” can be defined as responsible travel to natural areas that conserves the environment and improves the well-being of local people (The International Ecotourism Society, 1990). The aim of this study is to explore the factors influencing communities’ perceptions in ecotourism competitiveness. The factors to be discussed include community knowledge, community support, economic impacts, environmental impacts, social-cultural impacts and stakeholder’s involvement. 113 respondents comprising of local communities from Sama Jaya Nature Reserve took part voluntarily in this research. Partial least square structural equation modelling is applied by using SmartPLS 3.0 to analyse the collected data on path modelling and bootstrapping. Interestingly, all of these factors demonstrate significant influence on ecotourism competitiveness except social-cultural factor. It is postulated that these findings are of beneficial to the tourism implementers and decision makers in developing the right tourism development paradigms in the area. Findings implication and future research directions are also discussed.

Keywords: Community; Ecotourism; Stakeholder.

1. Introduction
This research investigates local community’s perception of Sama Jaya Nature Reserve in Kuching, Sarawak. There are a few numbers of Totally Protected Areas (TPAs) in the state of Sarawak. Most of these areas are open to public and tourists. Out of the these TPAs, 13 of the national parks are open to public and there are also 5 wildlife sanctuaries and 14 nature reserves in Sarawak with the total land size of 2,593 hectares. These destinations become the key attractions for niche tourism in Sarawak for avid ecotourists around the world. Sama Jaya Nature Reserve is one of TPAs uniquely located in the urban city of Kuching. It consists of approximately 38 hectares of kerangas virgin forest. Kerangas, in the Iban and Malay language, refers to the soils in the lowlands and hills which are unsuitable for agriculture activities (Kueh, 2009). It was gazetted on 23rd March 2000 as a Totally Protected Area (TPA) under the (Sarawak) National Parks and Nature Reserves Ordinance (1998). The stated objectives of Sama Jaya Nature Reserve are to promote the multiple-use of forests through encouraging outdoor recreation, nature conservation education and nature-based tourism (Kueh, 2009). In the context of ecotourism, it is asserted that local communities play an vital role in ecotourism development. The residents’ involvement and engagement are crucial in the process. The empowerment of the communities therefore should be encouraged as they are dependent on the local environmental resources (Lo et al., 2012). There are six dimensions for communities perception, include community knowledge, community support, economic impacts, environmental impacts, social-cultural impacts and stakeholders involvement.

2. Materials
2.1. Research Question
The research question was developed from the literature review of local scholars (Lo et al., 2012; Lo et al., 2013; Lo et al., 2015). The findings of these scholars has emphasised on the significance of competitiveness in tourism destinations in Malaysia. In fact, the tourism destination’s competitiveness has attracted interest from scholars around the world (Tubey and Tubey, 2014). The main problem with rural destination is that the rural community’s levels of knowledge and skillfulness on average are found to be much lower than in the city. This
hinders efforts to bring in development into the region and may severely damage destination, for example, the locals destroy parts of their heritage or give up their traditional lifestyle for modern global trends. Hence, rural destinations might run the risk of destroying their heritage if tourism development is not managed carefully. Moreover, rural tourism in Malaysia is now facing fierce competition from other celebrated destinations. As such, the research question is whether the rural tourism destination has the competitiveness to be profitable and sustainable in the long run?

2.2. Community Knowledge

Blamey (2001) points out that should local community believe that they will benefit from ecotourism development, they are more likely to protect and sustain the nature resources. Thus, the right knowledge of ecotourism and its positive impacts on the local communities are crucial to the sustainability of ecotourism in the local areas. It is when the locals understand this win-win situation that they will more willing to protecting the local landscapes and take care of the ecological resources. H1: There is a positive relationship between community knowledge and ecotourism competitiveness.

2.3. Community Support

Gunn (1988) asserted that tourism planning should be integrated with other social and economic development, and this could be modeled as an interactive system. It is believed that if local needs are to be met, sustainable tourism requires the involvement and support of local communities (Hall, 2000); (Chandana et al., 2008). According to Wan and Li (2013), the purposes of sustainable tourism development involve finding an optimum solution of enhancing local communities’ social and cultural as well as the nature environment features and contributing to the social and cultural well being of its local people. Acquiring the communities’ involvement and support have the advantage of developing a sense of ownership over decision making and generating more positive attitudes towards tourism development (Murphy, 1983). The importance of community support is evident in (Jamal and Getz, 1995) proposition that the collaboration theory could be applied in effectively solving conflict or conveying shared vision where the stakeholders acknowledge the potential advantage of the collaboration process. Additionally, it is crucial to note that environment degradation has been reported as one of the important concerns of local communities (Wan and Li, 2013). Unarguably, this requires the community support in local ecotourism development. Wan and Li (2013) believe that such collaboration provides a dynamic, process-based mechanism for solving planning issues and coordinating tourism development locally. H2: There is a positive relationship between community support and ecotourism competitiveness.

2.4. Economic Impacts

When an area became a tourist destination, the local economy will invariably benefits from such development as new employments are created and visitors will increase the revenues of local shops and restaurants. The revenues created could then be invested in improving of local services, be it developing better transport and infrastructure or providing more facilities for local communities and tourists, such as shopping malls, leisure centre or other attractions. This is known as the ‘multiplier effect’ (Vanhove, 2005). The multiplier concept is the term used for calculating the benefit tourism income to a specific area. As such, tourism is regarded as a “powerful force of change in the economy,” chiefly based on its positive economic impacts on communities (Eshliki and Kaboudi, 2012). Scholars’ findings also supported that the higher the personal benefits from tourism are, the more willing the local communities to support local tourism (Long, 2011; Muresan et al., 2016; Wang and Pfister, 2008). H3: There is a positive relationship between economic impacts and ecotourism competitiveness.

2.5. Environmental Impacts

Boonzaaijer (2010) states that conservation and utilisation of natural resources is indivisible from people’s world view and value system. It is asserted that values inform people’s ideas related to valuable or useful resources, right behaviour and their priorities regarding issues such as grazing, creation of job, tourism and access to natural resources as well as access to sacred sites (Boonzaaijer, 2010). Black and Cobbinaah (2016) studies show that the natural areas have attracted tourists in developing countries. There is a clear relationship between conservation, development and tourism. A study by Scherf and Edwards (2007) revealed that the private sector/government/non-government organisation management model is regarded as a more traditional approach to controlling and operating tourism within and adjacent to protected areas. To sustain a tourism destination, its development should be planned effectively and carried out consistently, taking into considerations of the local communities’ values and environment. The support and participation of local communities with the authorities concerned are vital to the success of sustaining the environment as well as local tourism industry (Nunkoo and Gursoy, 2012). H4: There is a positive relationship between environmental impacts and ecotourism competitiveness.

2.6. Social-cultural Impacts

According to Muresan et al. (2016) social-cultural benefits gained from tourism activities can be regarded as personal benefits of tourism development. It is proposed that the greater the benefits the community perceived from tourism, the more likely they are to support sustainable tourism development, and the more likely they are to transform their community into a tourism destination. From the social perspective, it is generally acknowledged that tourism is positively perceived as the revival of traditional customs and improvement of recreation for local
community (Zhu et al., 2017). However, previous studies have shown that tourism also had negative features namely increased crime rates, increased pressure on infrastructure and social services as well as the creation of conflicts and contradictions between the tourists and community (Andereck et al., 2005; Ap and Crompton, 1993; McCool and Martin, 1994). From the cultural dimension, tourism contributed some positive features to the community such as increased opportunities of cultural exchange, through understanding and the growth of cross-cultural communication. On the other hand, some findings also suggested that tourism would result to some negative alterations to traditional cultures and detriment of local customs (Besculides et al., 2002; Lee et al., 2010; Simpson, 2008). H5: There is a positive relationship between social-cultural impacts and ecotourism competitiveness.

2.7. Stakeholders Involvement

Tourism is inevitably a people-oriented industry. Therefore, the tourism main stakeholders’ interests, particularly in the local communities are pivotal in sustaining such initiative. Without these stakeholders’ supports, tourism development will not prevail healthily (Andereck et al., 2005); (Robin and Haywantee, 2011); (Stylidis, 2017). Stakeholders involvement has the advantage of creating a sense of ownership and positive attitudes towards tourism development (Murphy, 1983). However, if the local communities are not consulted in the planning process, they would feel antagonistic or indifferent towards such development. Their negative emotions and attitudes will affect tourists’ experience in the area. A study by Lopes et al. (2017) implies that the stakeholders believe that tourism is the key industry for enhancing the development of Boticas, a municipality located in the north-eastern region of Portugal. Nonetheless, the residents have doubts as to whether the tourism benefits will be channelled to them personally. That being said, (Morales et al., 2018) mention that the Social Exchange Theory (Andereck et al., 2005; Gursoy et al., 2002) should considered in such research as the exchange of resources between various parties in which actors exchange valuable objects, benefits and costs are produced among participating stakeholders. Saarinen (2006) believes that in relation to the benefits and costs, tourism researchers have dedicated great attention to examining the impact of tourism nowadays. According to Chalip (2006), there is an on-going debate over they type of strategies that are the most practical in assuring that all stakeholders related to tourism activities are acknowledged respectively before, during and after delivery of tourism activities. H6: There is a positive relationship between stakeholders involvement and ecotourism competitiveness.

2.8. Ecotourism Competitiveness

Scholars have questioned whether ecotourism truly embodies the principles of sustainability (Weaver D. B., 2001; Weaver D. B. and Lawton, 2002; Weaver D., 2015). Nevertheless, many scholars have agreed that there are three guiding principles for identifying ecotourism industry. According to Weaver D. (2015), the first qualifier for ecotourism is the main attraction must be the natural environment or a specific animal or plant in a particular location. Second element in ecotourism is it emphasised learning as the outcome of the interaction of ecotourists with the natural environment. Third element in ecotourism is sustainability. This sustainable element echoes the first two elements that the natural environment should not be undermined in the processing of appreciating and understanding of its offering’. It is argued that to achieve social, economic and environment sustainability in ecotourism is relatively doubtful. However, the demand for ecotourism to be socially and economically sustainable can only be considered sensible when local industry players make their efforts in ensuring their operations are sustainable by following the best practice principles (Weaver D. B., 2001). The ecotourism sustainability and competitiveness in ecotourism industry in Malaysia, therefore, should be analysed in business, social, economic and environment dimensions. The competitiveness of the ecotourism industry includes the identification of niche markets and the targeting of these tourists through an increasingly specialised array of products within the tourism industry. As this trend continues into the twenty-first century, extreme segmentation, based on the recognition of markets of one, will become the a normal part of product development and marketing strategies (Blattberg and Deighton, 1991). As such, ecotourism aims to improve the communities’ quality of life by optimising local economic benefits by protecting the natural and built environment and provide a high quality experience for visitors (Bramwell and Lane, 1993; Choi and Sirakaya, 2006). Past researches had mostly focused on the economic impacts of ecotourism and ignored the impacts on social-cultural and environment (Lo et al., 2012), as well as the local communities perception on ecotourism industry. Therefore, this research proposes an empirical views on the local communities towards the ecotourism impacts which include the factors on community knowledge and support, social and cultural factors, stakeholders involvement as well as the environmental and economical impacts. Therefore, the ecotourism competitiveness can be operationalised based on the principle of ecotourism sustainability, which includes the social-cultural, economic and environment dimensions.

3. Methods

The measurements of the questionnaire were established based on a number of notable studies in the area of tourism. Questionnaires were distributed to 113 local communities who visited Sama jaya Nature Reserve. Visitors who stay nearby the park are especially targeted. The questionnaires were distributed and completed by visitors during and after their visiting, jogging, exercising and other activities. The questionnaire consists of 2 sections which included demographic questions and variables questions. The dependent variable is the ecotourism competitiveness whereas the independent variables are the economic impact, environmental impact, social-cultural impacts, community support, community knowledge, and stakeholders involvement. A Likert scale of 7 has been used.
throughout the research. Data entry is applied by using SPSS and SmartPLS 3.0 respectively. The measurement model assessment and structural model assessment are carried out to examine the results obtained.

4. Results

4.1. Assessment of the Measurement Model

All the constructs in this study have been demonstrating its good convergent validity as shown in Table 1. First, when assessing indicator reliability, it is critical to evaluate the extent to which an indicator is consistent with what it means to measure (Urbach and Ahlemann, 2010). Byrne (2010) states that the acceptable values for indicator reliability are those with loading values equal to and greater than 0.5. These are acceptable with the summation of loadings result in high loading scores and contributing to AVE scores of greater than 0.5. Most of the indicators have been maintained and some are eliminated when those indicators with low reliability which subsequently increase the result of AVE and CR (Henseler et al., 2009). Besides, the internal consistency reliability has been reviewed to measure the internal consistency of the data (Cronbach, 1971). The results have been investigated with the acceptable values of composite reliability greater than 0.60 in exploratory research. Next, the degree to which individual indicators reflect a construct converging in comparison to indicators measuring other constructs are examined by measure it convergent validity (Urbach and Ahlemann, 2010). In order to achieve adequate convergent validity, each construct should account for at least 50% of the assigned indicators’ variance (AVE≥ 0.50) (Bagozzi and Yi, 1988; Fornell and Larcker, 1981; Hair et al., 2014). Moreover, the discriminant validity has been measured to examine the correlations between the measures of potentially overlapping. The loadings of indicators on the assigned latent variable should be higher than the loadings on all other latent variables (Chin, 1998; Snell and Dean, 1992). To summarise, with the evidence of adequate reliability, convergent validity and discriminant validity, the measurement of the model has reflected a satisfactory result.

4.2 Assessment of the Structural Model

In order to test the hypothesis, bootstrapping analysis is carried out to generate results for each path relationship in the model as shown in Table 1 and Figure 1. The testing on the hypotheses showed that all the variables were supported except for social-cultural impacts (H5). The economic impacts, environmental impacts, community support, community knowledge and stakeholders involvement were all the important factors to Sama Jaya Nature Reserve ecotourism competitiveness.
5. Discussion

The findings suggest that five factors directly related to the local communities have a significant relationship with the ecotourism competitiveness including community knowledge, community support, economic impacts, environmental impacts and stakeholders involvement. This echoes to the principle of ecotourism sustainability that the social-cultural, economic and environmental factors are crucial in destination competitiveness. This implies Sama Jaya Nature Reserve has established itself as the local recreation and ecotourism site that are well known among the locals. It also reflected its uniqueness and competitiveness with are sustainable in the long run. The findings answered the research question that the rural tourism destination has the competitiveness to be profitable and sustainable in the long run. Sama Jaya Nature Reserve’s contributions to the nature environment and community well-being are highly recommendable. The social-cultural factor does not have a significant relationship with ecotourism competitiveness.

6. Conclusion

Ecotourism competitiveness is a prevalent issue in tourism destination worldwide. The effect of ecotourism activities on the local communities is not without its promises and perils. In this study, in sustainability view, the community’s culture is not affected by foreigners as the site is less visited by foreigners. Moreover, it reflects the lack of social-cultural activities conducted in the nature reserve. As such, it is envisaged that local communities can be consulted for further development of the nature reserve and with their support and involvement on the ecotourism, this site can be developed into a more vibrant and sustainable ecotourism destination. Despite rigorous research being carried out by the researchers, it is proposed that future research can be implemented at more other ecotourism destinations to improve the level of generalisability. It is also suggested to put in place a longitudinal study to compare the changes of communities’ perceptions over time. The findings of this study are of beneficial to the authorities in building appropriate and feasible tourism development paradigms in the area.

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