

SUSTAINABLE ECO-CULTURE TOURISM IN ROYAL BELUM-TEMENGGOR FOREST COMPLEX, PERAK: EMERGING PROSPECTS AND CHALLENGES FOR ORANG ASLI

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ABSTRACT: First part of this paper provides an overview of the concept of sustainable eco-culture tourism (ECT) including the highlight of three main pillars of sustainable ECT namely; natural and cultural resources, local host community and tourist. The discussion also looks further into the main principles of sustainable ECT. Second part of the paper will explain the process undertaken in conducting a fieldwork and survey of local communities in two selected villages namely Kampung Semelor (Temenggor) and Kampung Sungai Tiang (Royal Belum) conducted in June 2014 to identify possible prospects and/or potentials of ECT project for sustainable development and conservation of biodiversity of Royal Belum-Temenggor Forest Complex (RBTFC). Initial findings indicate a positive response from local communities regarding ECT project especially on economic and social prospects. These include income generation potential, new jobs creation in tourism and tourism-related sectors, wider engagement in training programs and promoting local traditional culture and local 'forest-water-based' activities for tourism. Some challenges during ECT project also highlight some issues on poverty, unsolved conflict between people and wildlife and the contest for resources among members of a growing community. The paper concludes with brief outlook on the development ECT project in the rich mega biodiversity area of RBTFC.

1.0 INTRODUCTION

Eco-culture tourism (ECT) has brought a multitude of definitions for individuals from varied backgrounds. In author's opinion, ECT brings the meaning of an individual or a certain human group travel to enjoy the nature's beauty and also the unique cultural diversity of human populating the earth, where the relationship between both elements (nature and the local community's culture) happens symbiotically. A harmonious and supportive relationship between these aforementioned two elements indirectly shows the importance of the eco-culture tourism in achieving a sustainable development. Furthermore, the implementation is also potentially viable to contribute to the simultaneous goal achievement of preservation and development of the community. The same prospect has been shared by studies done by Swarbrooke (1999), Tsaur *et al.* (2006), Sharples (2007), Twining-Ward (2007), Sebele (2009), Irshad (2010), Bernardo (2011), Kamarudin (2013) and more who all claimed that eco-tourism is one of the branches of sustainable tourism.

Thus, a survey was done on the indigenous people community in Royal Belum-Temenggor Forest Complex (RBTFC), Perak to identify the community's perception on the potential planning for sustainable eco-culture tourism projects. In addition, the survey which had been done there identifies potential challenges for sustainable ECT to be developed by local communities as well as by other tourism stakeholders in future.

2.0 SUSTAINABLE ECO-CULTURE TOURISM (ECT)

Natural resources (managed or not), community (local host) and tourism (tourists) are the stakeholders for a certain tourism development (Kamarudin, 2013). Ideally, the success of eco-culture tourism (ECT) activity relies completely on strength and the dynamic relationship between these three stakeholders. However, in relation with tourism and sustainable development, a planner cannot help but to understand a bigger frame and a complex relationship between the three stakeholders, and also to account for the relationship between the three stakeholders of sustainability which is economy, social and environment as mentioned by researchers like Briassoulis (2001), Twining-Ward & Butler (2002) and Kamarudin (2013) (refer to Figure 1).

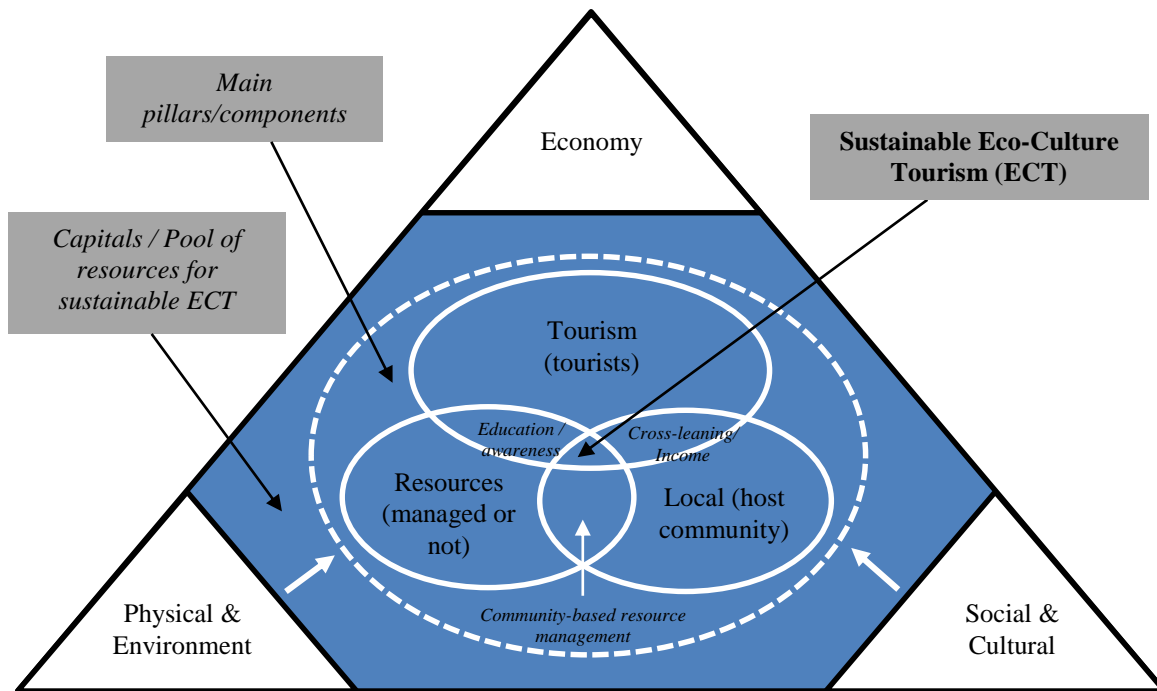


Figure 1: Proposed conceptual model for sustainable eco-culture tourism. Source: Adopted from Kamarudin and Ngah (2007) and Kamarudin (2007)

Figure 1 shows the proposal of a conceptual framework for the sustainable eco-culture tourism (ECT) development by mentioning the inter-related relationship between the three stakeholders. To realise the theoretical framework, this study suggests that these three stakeholders be strengthened through:

Local Community Active Participation

An indicator to identify the suitability of a certain tourist activity is based on the host community behaviour (Lepp, 2007). This is due to the fact that a community's positive attitude is estimated to effectively encourage community and local stakeholders. According to Carter (1994), Sebele (2009) and Benardo (2011), community participation usually excels in management, when it is done on a small scale and involves participation of the local population, based on these assumptions:

- i. *Cost effective*: There must be a significant consideration for the basic infrastructure such as water, electrical supply, telecommunication and roads which are important aspects to be considered. This is due to the rising cost, in return would influence operational costs, payment rates and operators' overall income. Thus, using a small development scale, the costs are lower compared to a bigger-scaled conventional tourism activities development.
- ii. *Avoiding the debt burden*: A small scale development can help to prevent involved population to carry a debt (especially debts involving the loans for a certain tourism project). It is also acts as a safer and practical way for local operators, as the investments is small and the debt risk is lower compared to bigger-scaled investments which naturally need a huge amount of money or initial investment.
- iii. *Helping the marketing of local products and talents*: As the ownership and operation are by the local population, a collective joint venture can be formed where local products and talents such as crafts and porter service/tourist guide can be "sold" and in return would avoid a reliance on outside product and workforce.
- iv. *Controlling the profit flow and distribution*: The profit generated through tourism activities would be directly channelled to the local development, without being 'stolen' and redistributed to non-relating third parties or outside areas.

Sensitivity towards Resource Management – Environment and Cultural

The use of phrase 'eco-culture' itself means that the social (cultural) and ecological aspects have to be identified, planned and sustainably managed for a certain tourist activity. A tourism development which only focuses on its economic agenda (which is to increase the number of tourists), without any control or maintenance will destroy the natural resources and quality as well as potentially to undermine a host community's unique cultural values (Wall and Matheison, 2006; Twining-Ward, 2007; Manyara and Jones, 2007).

Thus, a set of maximum limit must be studied and enforced in order to ensure ongoing tourism activities and accepted by the tourists; at the same time ensuring the environment's quality and its resources will not be facing destruction due to over exploitation (Weaver, 2006; Graci and Dodds, 2010). Small scale of eco - cultural tourism activities offers a limited space; perfect for a limited number of tourists and the facilities' preparations are only done to cater for a small group. On the other hand, an overly large planning is seen as more to change the natural environment into something more modern to the point of the place losing its own natural resources and unique cultural heritage (Stone and Stone, 2011; Kamarudin, 2013).

Tourists' Role and Behaviour

The number of tourists is an important indicator to measure the achievement as well as competitiveness of an eco-cultural tourism industry (Twining-Ward, 2007; Kamarudin, 2013). A hit point of tourists number could mean that the operators involved has benefited from a high income return, thus has ensured the longevity of their business. However, one could easily miss looked the long term risks on nature as well as the community's cultural values (Matarrita-Casante *et al.*, 2010; Stone and Stone, 2011). There have been related cases of a few tourists who feel that the maintenance of the tourists' environment and amenities are the responsibilities of the operators, since the tourists have 'paid for the services' and thus gives them the right to enjoy their holidays as to their pleasure (Logar, 2009).

These mentalities should be corrected through education and increase the consciousness to develop respect towards the hosts' culture and society culture; in addition to increase the awareness and sensitivity to the need for keeping the nature intact at the tourists' locations.

3.0 PRINCIPLES OF SUSTAINABLE ECO-CULTURAL TOURISM

Development and planning of tourist activities at a certain area depends on how strong the location's attraction factors are (Swarbrooke, 1999; Twining-Ward, 2007; Bernardo, 2011). The attraction factors can be identified either through the location's natural landscape or the unique lifestyle of the inhabitants (Twining-Ward, 2007; Graci and Dodds, 2010). There is no clear guide to state that; in order to ensure a successful development of a sustainable tourism, a location need to have a multitude of attraction factors (Kamarudin, 2007). Although, the location has one attraction, as long as it's affective with a full committed and understanding management; it would reap a sustainable success.

Prosser (1994) sees that sustainable tourism should stress on the education aspect; with the aim to correct local community's view especially towards their village leaders or administrators that by introducing tourism activities as a mean to manage and protect the environment actually can: (a) give benefits toward the local economy, and (b) as a motivation for the community to respect and protect the environment as a sustainable lifestyle. To ensure proper steps to educate involved parties in the planning and management of a sustainable eco-tourism, a few principles are suggested as shown in Table 1.

Table 1: Proposed Principles of a Sustainable Eco-Tourism

<ol style="list-style-type: none"> 1. The development of tourism should help the conservation of environment, cultural heritage as well as developing a source of income for the local people (through job opportunites). 2. Encourage a better and more economic landuse planning for long term profit. 3. Opening opportunites for active participation of local community to voice opinions/share ideas and suggestions on a certain action. 4. Planning, design and location must be as parallel as possible to the need of encouraging the quality of local environment. 5. Must put moral and ethic responsibility as a core belief that drives the action and attitudes which in turn, will shape the environment and cultural aspect of a certain location. 6. There is a need to include an action to educate all levels and all parties where the locals, government agencies, non-government agencies, industry (operators) and tourists through channeling of information either before, after or during the trip. 7. There is also a need to show a symbiotic relationship (as per conceptual proposal); i.e. the control on the tourism would in as much consider the local people's aspiration. This control is mde in order to ensure the profit is distributed equally and fairly to its rightful receiver (local community). On the receivers' end of the bargain, these people should in turn actively contribute to efforts done to conserve and encourage resource maintenance.

(Continued)

Table 1: Continued.

8.	To encourage a good understanding and involves smart sharing between multiple players; either before and during the tourism activities (government agencies, non-government agencies, industry (operators), scientists and local people).
9.	To involve an acceptance and agreement on the limitations which is bearable by a certain tourism resource to maintain sustainability.

Source: Adopted from Lane (1994); Swarbrooke (1999); Edgell (2006); Daengnoi and Richards (2006); Bernardo (2011) and Kamarudin (2007 & 2013).

4.0 DATA COLLECTION FROM TWO COMMUNITIES

The study has selected two *Orang Asli* settlements as case study subjects: Kampung Semelor of Temenggor forest complex and Kampung Sungai Tiang of Royal Belum state park (refer to Figure 2 for the locations of these villages). There was a lack of information about these two villages, mainly due to the lack of records, written document, and publications to date on the communities and their settlements. However, some information was gathered during interviews with the chief of villages and the visit to JAKOA Gerik office (Research Fieldwork, 2014). Table 2 lists the profile of the two villages.

Table 2: Profile of Kampung Semelor and Kampung Sungai Tiang

Village (or <i>Kampung</i>)	Population			Number of families
	Male	Female	Total	
Semelor	85	74	159	30
Sungai Tiang	191	218	409	83

Village (or <i>Kampung</i>)	Sub Ethnic		Religion				TOTAL
	Jahai	Temiar	Islam	Christian	Bahai	Animism e	
Semelor	-	159	80	-	-	79	159
Sungai Tiang	409	-	49	47	43	-	409

Source: (JAKOA Gerik, 2014; Census Book for Kampung Semelor, 2014; Research Fieldwork, 2014)

Primary data and information for this study were gathered using both quantitative (via questionnaire-guided surveys) and qualitative approaches (via unstructured interviews and field observations). Meanwhile, secondary data and information were gathered from reviews of village census books and unpublished census records from JAKOA Gerik. All of the information was gathered during the site visit in June 2014.

Thirteen respondents have agreed to participate in the questionnaire-guided surveys i.e. three respondents from Kampung Semelor and ten respondents from Kampung Sungai Tiang. Two different approaches were adopted when conducting the survey on the local communities, and decisions were made based on different scenarios faced during the visit to each village. For Kampung Semelor, researchers held a meeting with the respondents in the village community hall (*Balai Sewang*). As for Kampung Sungai Tiang, researchers have to conduct 'door-to-door' interview sessions as it was impossible to meet respondents collectively during the time allocated for the field survey. The questionnaire-guided interviews were carried out by two experienced research assistants.

It is worth to highlight that the number of respondents present for the survey was very low and far from the initial target of 55 respondents (as suggested by a formula for a valid sample size). This low respondent rate could be contributed by the following two factors:

1. Lack of interest from the local people (and also due to timidity) to participate because they were clueless about the purpose of this study, and
2. Insufficient time allocated for the site visit and survey on the local community. The visit was very short (one day to cover each village), hence the researchers were unable to capture necessary tangible and intangible inputs from the communities. According to many ethnography studies, a longer stay is required for each case study to build a rapport with the community and potential respondents (Kamarudin and Ngah, 2007).

4.0 RESULT AND DISCUSSIONS

Perceptions towards eco-culture tourism prospect

Question regarding the potential of the rural tourism was also asked to analyse the respondents' level of awareness and their acceptance towards the idea of sustainable ECT. The results revealed that the majority of respondents (92%) see ECT as a potential industry to be focused by the local community for achieving a balance between local community development while maintaining conservation of surrounding natural and cultural resources. In comparison, only 8% of respondents mentioned "not sure" about the ECT due to lack of knowledge about ECT and its form, but did not totally reject the idea of planning the ECT for their community (Research fieldwork in 2014).

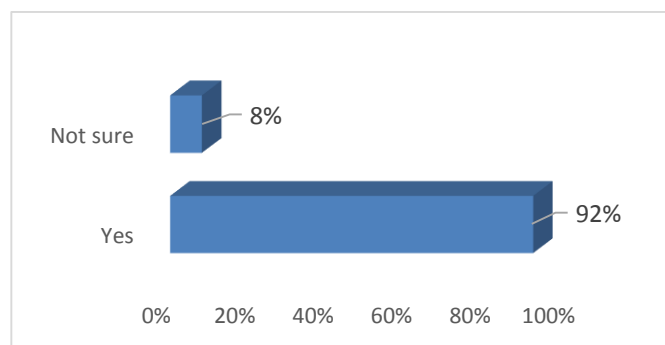


Figure 2: Respondents' perceptions on eco-culture tourism prospect (n=13).
Source: Research fieldwork in 2014.

Prior to the result as presented in Figure 2, a detailed analysis has been conducted to identify the underlying reasons for positive feedbacks and "buy-in" from the community. As a result, majority of respondents (84%) consider their village to have what is needed for tourism, in order to be developed including abundant of natural resources and unique culture, which might be further identified and developed as a potential ECT products and attractions (Research fieldwork in 2014). Another 16% consider the potential of their settlements to be tapped into existing tourism businesses that taken place in RBTFC especially by local tour boat operated in Pulau Banding jetty. In this light, the respondents' view the future ECT in Orang Asli villages could be integrated into the existing tourism businesses hence connecting the currently considered as "a missing link" between local tourism players, i.e. local tour boat operators and local host (Orang Asli).

The comparative analysis between villages also showing the same support pattern with all the respondents in Kampung Semelor that agreed with the idea of sustainable ECT (Figure 3). Similarly, 90% of respondents from Kampung Sg. Tiang also sharing the same perception. Only one respondent (10%) from Kampung Sg. Tiang stated "not sure" in answering the questionnaire as in his view, the local youth are currently did not receive suitable training to prepare them for future tourism projects (Research fieldwork in 2014). This feedback has given useful input which the relevant authorities and local communities to be considered in realising their goals for developing sustainable ECT in RBTFC in future.

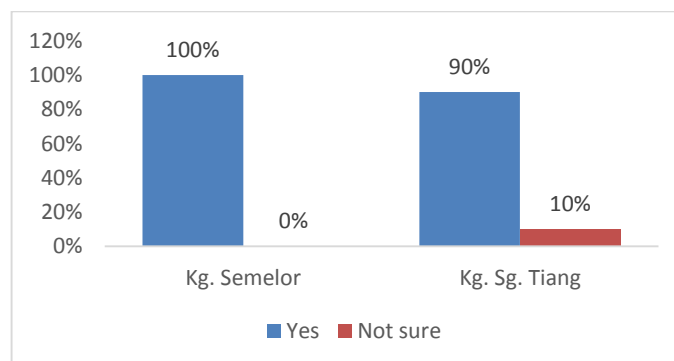


Figure 3: Respondents' perception on prospect of ECT (by villages) (n=13).
Source: Research fieldwork in 2014.

Detailed analysis which derived from interviews with local community leaders of both villages indicated the main interest for sustainable ECT laid on its economic and social prospects (Research fieldwork in 2014). These include income generation potential and new jobs creation in tourism and tourism-related sectors (69%), followed by the

prospect for promoting local traditional culture and local ‘forest-water-based’ activities for tourism (21%) and prospect for wider engagement in training programs (10%).

5.0 ISSUES AND CHALLENGES FOR SUSTAINABLE ECT PROGRAM

This section discusses some potential issues and challenges in sustainable ECT programs using information from interviews with local community leaders and field observations. These issues and challenges should be highlighted and explained since they might affect or influence the outcomes of the sustainable ECT planning, development and management processes in future. The issues and challenges are discussed from three point of views including vulnerability of the communities (due to high level of poverty and instability of existing employment sectors), followed by issue of resource contest (and limited access to land and forest resources with growing population) and finally the conflict between human and wildlife.

Vulnerability of the communities

In accessing the resilience or vulnerability of a community, this study has adopted a set of indicators to measure economic capitals of a community. The list was proposed by a study on community resilient attitude conducted by Kamarudin *et al.* (2014) involving the Orang Asli community in RBTFC. The complete list of indicators and result from the survey of local communities is presented in Table 3.

Table 3: Status of local economic capitals of two communities (n=13)

Proposed Specific Indicators	Findings/Results	Remarks/Comments
1. Average household income	100% live in poverty (<RM600)	<u>WEAK</u> : High incidence of poverty.
2. Do households have more than one source of income?	<ul style="list-style-type: none"> 15% have more than one source of income 85% have only one source of income 	<u>WEAK</u> : High level of dependence on single source of income.
3. Has there been a need for households to develop multiple sources of income?	100% agreed that they need to develop multiple sources of income	<u>STRONG</u> : High level of perception on the need to develop multiple sources of income.
4. Has there been any significant change in the main employment sector in the last 20 years?	<ul style="list-style-type: none"> 63% maintain doing the same jobs for the last 20 years 37% change jobs 	<u>WEAK</u> : Most respondents remain in traditional/forest-related jobs (which offered a low, short term, and unstable income).
5. How stable are the existing employment sectors?	<ul style="list-style-type: none"> 54% said that they are unstable 37% said that they are stable 9% were not sure 	<u>WEAK</u> : Most respondents believe that their existing employment sectors could not offer stable employment
6. What are the prospects for ongoing/future economic development and employment sectors?	<ul style="list-style-type: none"> 69% mentioned about the lack of prospects 23% were still confident 8% were not sure 	<u>WEAK</u> : High level of dissatisfaction among respondents regarding the prospects of the employment sectors
7. Do households depend on money from relatives living and working outside of the community?	<ul style="list-style-type: none"> 23% said yes 77% are not receiving money from relatives outside 	<u>WEAK</u> : Low number of family members living and working outside of the villages.
8. Is the community receiving government welfare support/funds/subsidies? If yes, how important are they to the community?	100% said yes (i.e. welfare payment for low household income)	<u>WEAK</u> : High level of dependence on government welfare support (mostly financial). *NGOs are also directly involved in supporting these communities.

(Continued)

Table 3: Continued

Proposed Specific Indicators	Findings/Results	Remarks/Comments
9. Are there opportunities for new businesses to be developed? Is there any prospect for tourism-related activities?	<ul style="list-style-type: none"> 85% were optimistic with development of new businesses 92% were positive about the future prospects of tourism 	STRONG: High level of optimism towards planning and developing new form of businesses, in particular tourism-related activities.
10. What are the potentials tourism development activities might offer to your community?	<ul style="list-style-type: none"> 69% emphasized on job creation and income generation 31% were looking for training and conservation of local resources 	STRONG: Majority of respondents were aware of economic potentials offered by tourism.

Source: Kamarudin *et al.* (2014: 176-177); Research fieldwork in 2014.

As illustrated in Table 3, high incident of poverty and unemployment among members of community are the two major (and connected) economic issues and challenges for future sustainable ECT in the study areas. As presented in Table 3, nearly 100% of household are currently living under poverty i.e. monthly income below RM600 and 63% of respondents have maintained the same jobs over the last 20 years (i.e. indication of a lack of multiple sources of income). With regards to stability of a local employment sectors, 54% of respondents agreed that their current jobs could not offer stable income especially for the long run (Research fieldwork in 2014).

On the other hand, some positive feedbacks from the respondents are also gathered especially when they were asked about the future prospects in new forms of economic activities (tourism-related sectors in RBTF). As a result, majority (85%) of the respondents supported the prospect and idea of tourism development, mainly due to potential economic benefits from tourism sector development to improving their economic capital, and standards of living.

Regroupment schemes and the contest for resources (access to forest and land)

Based on field observation with specific focus on the level of physical and economic development of the Orang Asli communities, it can be initially concluded (but open to further and detail studies in future) that the regroupment schemes adopted by the government was failed to realise its fundamental objectives as mentioned in Table 4.

Table 4: Objectives of regroupment schemes

<ol style="list-style-type: none"> To eradicate poverty or to reduce the number of hardcore poor among the Orang Asli. To modernize their way of life through provision of social services and basic facilities such as education, health, housing, water and electricity supply, etc. To regroup and recognise (<i>menyusun</i>) Orang Asli in suitable centres in their traditional areas. To guarantee the security of the Orang Asli from subversive and anti-national elements (JHEOA, 1992: Lampiran A).

Source: Nicholas (2000: 113).

It is acknowledged by the government and many Orang Asli researchers that the initial proposal for a resettlement policy adopted during the Emergency period (1948-1960) was derived from the military approach (Nicholas, 2000). In response to the urgent need at that time (i.e. to curb the communist insurgent and movement in remote rural areas), most of the early regroupment schemes were located along the spine of the central mountain range (or known today as the Central Forest Spine, CFS) (Kamarudin and Ngah, 2007). For this particular reason, this study draw a conclusion that other objectives especially the poverty eradication and community modernisation initiatives are becoming the afterthoughts agendas.

Pooling a large group of people into specific and planned settlements (most of it) is a big challenge at the time of Emergency. However, a bigger challenge during post-Emergency is how to sustain and enhance the livelihood of a growing Orang Asli population in all regroupment schemes. Relocation of different groups of people from their traditional territories into a centralise site under a single management had directly affect their livelihood through sharing of common resources, and later on becoming the contest for (limited) resources, in line with the growing number of population regroupment schemes.

Similar phenomena is now observed in Sungai Tiang of Royal Belum, although different labels are being used to indirectly describe the crucial issues of contest for resources and resources scarcity. These labels includes “internal/family members’ dispute regarding inheritance of land” or “because of frustration for being treated unfairly by their keen in the village”, etc. In case of establishment of “new Kampung”, people are moving out from their “original” regroupment area of Sungai Tiang and are now settled in new place or in this case, Desa Aman Damai, a new village on an island within the Royal Belum State Park. In this new village, the migrators and their families can start new life in new areas with abundant of resources to sustain their livelihood and source of income (Research fieldwork in 2014). This reverse situation is also indication of communities’ resilience attitude to survive (and eventually they are now reverted to original nomadic practice before by their ancestors).

People moving out from their settlement to reside in adjacent areas with less populated is an alarming issue, signalling a critical stage of resources scarcity and resources contest due to growing population, with limited economic sources. Responsible authorities should acknowledge this alarming situation and must come out with substantial future planning and effective solutions. Without proper future action plans, the migration of Orang Asli from their current regroupment schemes in search for new lands will continue (if not accelerate) and more pristine forest areas might be destroyed for settlements and other economic activities.

This is where the idea of sustainable ECT development can be promoted and adopted by the Orang Asli communities in RBTFC. As mentioned in Figure 1, sustainable ECT can function as “a double-edge sword” in encouraging the diversity in local economic activities and promoting conservation of natural and cultural resources. Experience from other rural communities which adopted the rural tourism projects such as the Misowalai community in Sabah and Kuala Medang in Pahang indicated tourism projects are capable to widen sources of income for its participants, securing local jobs especially for local youths and those who are reluctant to work outside their areas. In return, money from tourism activities is being challenged into community fund for maintenance of tourism facilities and strengthen conservation works (Kamarudin, 2013).

Growing conflicts between people and wildlife

Interactions between wild animals and people in RBTFC often resulted in negative impact, either for people (loss of economic resources such as agricultural projects) or for wild animals (loss of habitat) (Research fieldwork in 2014). Information from field observation also strengthen the authors’ notion i.e. when the growth of human population overlaps with established wildlife territory, tension and conflict of resources between people and wild animals will increase.

This phenomenon is observed during site visit to Sungai Tiang (in Royal Belum State Park) and Semelor (in Temenggor Forest Reserve) in June 2014. One of the primary concern among respondents’ especially local farmers was the wildlife threats to their agriculture projects. Local farmers’ clearing the forest land (formally part of wildlife corridor) for small scale rubber plantation and vegetable projects expansion resulted in a frequent “visit” by wild elephants and tigers to the conflict areas and destroyed the crops. In case of Kampung Semelor farmers where majority of them have re-planted the rubber trees for a second time this year is a clear indication of this issue/conflict (Research fieldwork in 2014). With this current rate of forest clearance for agriculture projects and deforestation (due to extensive logging projects in Temenggor areas – this is actually the largest contributor towards the conflict), there will be tough challenge for decision-makers and local stakeholders in reducing conflict between people and wildlife.

In addressing this issue, this study has put forward the idea of a community-based natural resource management through establishment of sustainable ECT project (as stated in Figure 1). The acknowledgement of the local community acts as the key in resource protection and conservation. Simultaneously, they (people) are also the ones who can gain the most benefits from the idea, mostly through tourism and tourism-related projects to sustain income without expanding the exploitation of forest areas for agriculture projects. However, this idea requires: (1) the plan to be well-planned and managed properly, and (2) people are empowered (through education and close guidance using best practices) to manage their relationship with wild animals.

6.0 CONCLUSION

In a post-modern world where our societies are becoming more concern with our way in dealing with development and exploitation of resources to fulfil our endless needs, finding a way to balance between development action and conservation interest are very much needed. It is highly recognized by various researchers and international bodies that a properly planned and managed tourism project can actually contribute towards achievement of sustainable development of local communities and their stakeholders. This is where the idea to propose eco-culture tourism projects for sustainable development and conservation of RBT areas is coming into discussion. In light, this paper discussed the conceptual model of sustainable ECT and the extent to which this model of ECT could be harmoniously

inserted into the conservation paradigm of RBT in general and for sustainable development of Orang Asli in particular. Thus, the indigenous area could preserve the beauty and biodiversity of the forest while diversify their source of income (continuous and stable income generation and maintaining jobs without have to migrate or finding jobs outside the area).

Results of survey from local stakeholder in two selected villages regarding their perceptions on ECT program are also presented in this paper. The needs and opinions from communities are important aspects in this study in order to respect them as the owner of the land, as well as an acknowledgement for the community with long relations with the areas, hence to avoid future difficulties or misunderstandings when the communities are about to carry out the idea of rural tourism. As expected, the communities have viewed the idea of ECT positively, however, information from field observation acknowledged some challenges for ECT, which could be explored further through a more comprehensive studies. It is proposed that all stakeholders such as government, non-governmental agencies and tourism sectors vitally, should continue their strong support and continuous commitment towards implementation of sustainable ECT projects for development of local communities and conservation of pristine forest and its natural resources in RBT.

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REFERENCES

- Bernardo, J. C. (2011). Framework for the Development of Community-based Rural Tourism and Successful Models of CBRT in Asia. Paper presented at *the Conference on Planning and Developing Community-Based Rural Tourism*. Philippines, 12-14 Jan.
- Briassoulis, H. 2001. Sustainable development and its indicators: Through a glass darkly. *Journal of Environmental Planning and Management*, 44 (3), pp. 409-427
- Cater, E. 1994. Ecotourism in the Third World – Problems and Prospects for Sustainability. In E. Cater, & G. Lowman (Eds.), *Ecotourism: A Sustainable Option?* (pp. 19-37). West Sussex, England: John Wiley & Sons Ltd.
- Daengnoi, J. and Richards, P. (2006). *Community-based tourism and the responsible ecological Social Tours Projects (REST), Thailand*. Thailand: REST.
- Davison, G. W. H., E. Soepadmo, and S.K. Yap (1995), “The Malaysia Heritage and Scientific Expedition to Belum Temengor Forest Reserve, 1993-1994”, *Malayan Nature Journal* 48: 133-146, 1995.
- Edgell, D. L. (2006). *Managing Sustainable Tourism: A Legacy for the Future*. New York: The Haworth Hospitality Press.
- Graci, S. and Dodds, R. (2010). *Sustainable Tourism in Island Destinations*. London: Earthscan.
- Irshad, H. (2010). *Rural Tourism – an overview*. Agriculture and Rural Development report. Government of Canada.
- Jabatan Kemajuan Orang Asli (JAKOA) (2014). Maklumat dan data banci penduduk Orang Asli daerah Gerik, Perak. Laporan tidak diterbitkan.
- Kamarudin, K. H. (2005), “*Merangka Strategi Pembangunan Mapan Komuniti Orang Asli: Suatu Penilaian Tahap Kemapanan Komuniti Temiar di Rancangan Pengumpulan Semula (RPS) Legap & Pos Kuala Mu, Daerah Kuala Kangsar, Perak*”, Diss. Universiti Teknologi Malaysia, Faculty of Built Environment.
- Kamarudin, K. H. (2007), “Potensi Pelancongan Eko-Budaya Orang Asli: Tinjauan ke atas komuniti Jahai di Kelantan”, *Proceedings of 2nd International Conference on Tourism and Hospitality: Planning and managing heritage for the future*”, Universiti Utara Malaysia.
- Kamarudin, K. H. (2013). "Local Stakeholders' Participation in Developing Sustainable Community-based Rural Tourism (CBRT): The Case of Three Villages in the East Coast of Malaysia", *Proceedings of International Conference on Tourism Development, 'Building the Future of Tourism', Penang, Malaysia, 4-5 February 2013*, Sustainable Tourism Research Cluster.
- Kamarudin, K. H. (2013). Criteria and Indicators for Sustainable Community Based Rural Tourism (CBRT) Development: the case of three villages in East Coast (ECER), Malaysia. Oxford Brookes University: Unpublished PhD Thesis.
- Kamarudin, K. H. and Ngah, I. (2007). *Pembangunan Mapan Orang Asli*. Johor: Penerbit UTM.
- Kamarudin, K. H, Ngah, I, Razak, K. A., Ibrahim, M. S. and Harun, A (2014). “Resilience in a community: the story of Orang Asli of Royal Belum-Temenggor Forest Complex, Perak, Malaysia”, *Proceedings of Rural Research and Planning Group (RRPG) 5th International Conference and Field Study in Malaysia 2014, 26-28 August 2014*, Institute for Rural Advancement (INFRA), Bangi, Selangor, 2014.
- Kerjala, M. K. and Dewhurst, S. M. (2003). Including Aboriginal Issues in Forest Planning: a case study in Central Interior British Columbia, Canada. *Landscape and Urban Planning*, 64, 1-17.

- Lane, B. (1994). What is rural Tourism? in B. Bramwell & B. Lane (eds.) *Rural Tourism and Sustainable rural Development*. Avon: Channel View Publications.
- Lepp, A. (2007). Residents' Attitude towards Tourism in Bigodi Village, Uganda, *Journal of Tourism Management*, 28, pp. 876 – 885.
- Lim H. F. and B.B. Jimi (1995), "Some Socio-Economic Aspects of the Aboriginal Communities in the Belum and Temengor, Hulu Perak, Malaysia", *Malayan Nature Journal* 48: 439-445.
- Logar, I. (2010). Sustainable tourism management in Crikvenica, Croatia: An assessment of policy instruments, *Tourism Management* 31 (2010), pp. 125-135. doi:10.1016/j.tourman.2009.02.005
- Loomis, T. M. (2000). Indigenous Population and Sustainable Development: Building on Indigenous Approaches to Holistic, Self-Determinant Development. *World Development*, Vol. 28 (5), pp. 893-910.
- Manyara and Jones (2007). Community based Tourism Enterprises Development in Kenya: An Exploration of Their Potential as Avenues of Poverty Reduction. *Journal of Sustainable Tourism*, 15: 6, 628-644.
- Matarrita-Cascante, D., Brennan, M. A. and Luloff, A. E. (2010). Community agency and sustainable tourism development: the case of La Fortuna, Costa Rica, *Journal of Sustainable Tourism*, 18 (6): 735-756.
- Nicholas, C. (2000). *The Orang Asli and the Contest for Resources: Indigenous Politics, Development and Identity in Peninsular Malaysia*. Copenhagen: International Work Group for Indigenous Affairs.
- Prosser, R. 1994. Societal Change and the Growth in Alternative Tourism. In E. Cater, & G. Lowman (Eds.), *Ecotourism: A Sustainable Option?* (pp. 19-37). West Sussex, England: John Wiley & Sons Ltd
- Pulido, J. S. and Bocco, G. (2003). The traditional farming system of a Mexican Indigenous Community: the case of Nuevo San Juan, Parangaricutiro, Michoacan, Mexico. *Goedema*, 111, pp. 249-265.
- Sebele, L. S. (2009). Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana, *Tourism Management* 31 (2010), pp. 136-146.
- Sharpley, R. (2007). Flagship Attractions and Sustainable Rural Tourism Development: The Case of the Alnwick Garden, England. *Journal of Sustainable Tourism*, 15(2), 125-143.
- Stone, L. S. and Stone, T. M. (2011). Community-based tourism enterprises: challenges and prospects for community participation: Khama Rhino Sanctuary Trust, Botswana, *Journal of Sustainable Tourism*, 19 (1): 97–114.
- Swarbrooke, J. (1999). *Sustainable Tourism Management*. Wallingford: CABI Publishing.
- Tsaur, S. H., Lin, Y. C. and Jo-Hui, L. (2006). Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism. *Tourism Management*, 27, pp. 640-653.
- Twinning-Ward, L. (2007). *A Toolkit for Monitoring and Managing Community-Based Tourism*. Hawaii: School of Travel Industry Management. (available online: <http://www.snvworld.org/en/Documents/Knowledge%20Publications/A%20toolkit%20for%20monitoring%20and%20managing%20community-based%20tourism.pdf>)
- Twinning-Ward, L. and Butler, R. (2002). Implementing STD on a small island: Development and use of sustainable tourism development indicators in Samoa, *Journal of Sustainable Tourism*, 10 (5), 363-387.
- Wall, G. and Mathieson, M. (2006). *Tourism: change, impacts and opportunities*. Harlow: Pearson Prentice Hall.
- Weaver, D. (2006). *Sustainable Tourism*. Oxon: Taylor and Francis Group.
- Wilson, G. A. (2012). "Community Resilience and Environmental Transition", Earthscan, 2012.
- Wong, S. L. (2003). "The Royal Belum: Malaysia's Crowning Glory", Perak State Parks Corporation, Perak.
- WWF-Malaysia, "A Proposal for a Management Plan for the Royal Belum State Park", WWF Publications, June 2007.