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## **SOCIO-CULTURAL-ECONOMIC IMPACTS OF PEAT SOIL ECOSYSTEM IN MUKAH, SARAWAK**

Shazali Johari<sup>1\*</sup>, Mohd Ibrani Shahrman<sup>2</sup>, Sulaiman Hj Husaini<sup>3</sup>, Ahmad Shuib<sup>4</sup>, Sridar Ramachandran<sup>4</sup>, Puvaneswaran Kunasekaran<sup>4</sup> and Poh Yee Thoo<sup>1</sup>

<sup>1</sup>*Faculty of Forestry, University Putra Malaysia, Malaysia*

<sup>2</sup>*Faculty of Human Ecology, University Putra Malaysia, Malaysia*

<sup>3</sup>*Sarawak Land Custody and Rehabilitation Authority, Malaysia*

<sup>4</sup>*Institute of Agricultural and Food Policy Studies, University Putra Malaysia, Malaysia*

*\*Corresponding author: zali\_johari@upm.edu.my*

### **SUMMARY**

Peat soil ecosystem serves important ecological, environmental and socio-cultural functions and could provide benefits to the local communities in perpetuity, if proper conservation practices are undertaken. The dependency of the local communities on the peat soil land affects their livelihood either directly or indirectly. The main objective of the study is to determine the socio-cultural-economic benefits derived in the peatland ecosystem in Mukah. A sample survey of the villagers living along the fringes of the peat forest ecosystem was undertaken to determine the types of socio-cultural-economic resources accrued to the local communities. The results of the study are significant at both local and state levels. At the local level, the peat land eco-system provides sources of income to the communities via the production of fishes, wildlife products, non-forest products and as a source of domestic water supply. Among the local Melanau communities who are involved directly in the cultivation of the sago in the peat land, it is found that their involvement helps to maintain their traditional and cultural practices in the form of the production of sago based products and traditional cuisines. The communities are proud to show the cultural and traditional qualities through various events and engagement. The peat land ecosystem also forms a buffer zone between the oil palm plantation and the community settlement of Mukah.

*Keywords: community welfare, peat land eco-system, income, traditional, cultural, cuisines*

### **INTRODUCTION**

Peat swamp plays an important role of water catchment and reservoir, conservation of biodiversity, genetic resources and as carbon sinks. Development of peat land for agricultural purposes must take into account the ecological make-up of the forest and maintenance of the peatland. Sago palm (*Metroxylon* spp.) grows naturally wild or semi-wild in mixed swampy land forest in Malaysia, Indonesia, Papua New Guinea, Philippines and the Pacific Islands. Sago palm forest has both marketed and unmarketed values.

Cultural resources usually drive the whole tourism business in rural areas which would contribute to positive socio-economic development (Butler and Hall, 1998). One of the most established definitions of cultural resources can be seen in the work of Pedford (1996). According to the scholar, the cultural resources are any living historical attributes such as rural customs and folklore, local and family traditions, values, beliefs, and common heritage. Arguably, culture is the main resource that indigenous people possess. Their unique customs and traditions are developed as attractions to lure tourists to the rural areas (Cohen, 2007; Liu, 2009 and Brown and Cave, 2010). Thus, it can be said that cultural resource is a must for any community as an identity to show their uniqueness to the outsiders.

The cultural uniqueness which is also regarded as the 'cultural otherness' is considered as an important selling point when it comes to tourism business (Hitchcock and King, 2003). From the tourists' perspective, Urry (1990) argued that tourists' motivation to travel is strongly encouraged by their 'gaze' to leave home and see something different compared to their daily life. The statement that indigenous tourism relies fully on the community uniqueness is also not supported. Indigenous tourism has strong relationship with environmental tourism, nature-based tourism, arts and heritage and adventure tourism (Harron and Weiler, 1992). Indigenous communities in many countries had settled in their traditional area since beginning times, before the habitation of other places in the nation. According to Ma'rof and Taufiq (2008) their cultures have blended, mixed and are restricted to the soil; and their world view depends on it.

Cultural aspect has been a popular research area highlighting the indigenous people and their unique and authentic lifestyle. In this area, commercialization of culture has brought tourism attractions to be targeted

especially on cultural celebrations. The culture of each community represents their identity. According to Butler (2007), the development of tourism strongly depends on their ethnicity, heritage and festivals. Butler and Hinch (1996) also mentioned that culture has emerged as a powerful attraction not only for tourists but also for entrepreneurs, government agencies and academic researchers.

Many scholars agree that the cultural product has proven to be a medium in boosting tourism development (1993; Liu, 2009; and Brown and Cave, 2010). Besemenji *et al.* (2011) said that tourism emerged as a good way of preserving the customs and culture, but only if the right people are involved and if tourism does not become a business for some individuals. Tourism can also help in the promotion and presentation of Indian customs and cultures. This is the way to introduce their culture to the world and thus contribute to its preservation. However many author argued that commoditization is the only way to sell the community's culture to tourists (*i.e.*; Thompson, 2007 and O'Gorman, 2007). From the cultural tourism perspectives, Commoditization can enhance local economic growth and develop traditions by reducing poverty levels and increasing the inherent value (UNWTO, 2004). However, cultural commoditization has been criticized by several scholars. Cohen (1988) said that using indigenous culture as a mass tourism product can ultimately cause the loss of authenticity, inherent cultural value and significance. The Naxi indigenous community of China went through cultural commoditization and presented their uniqueness to outsiders with the help of the government but they are still in the belief that their culture is well preserved and not faded (Brown and Luo, 2012).

In Mongolia, the cultural festival is the main attraction for international tourists which is represented by local Mongolians (Thompson, 2007). Besides that, the Mongolians reveal their traditional semi-nomadic lifestyle on the mountains in comparison to the people who live in cities such as the capital, Ulaanbaatar (O'Gorman, 2007). In addition, Mongolia is also already well known for its remoteness and wilderness which provide an authentic tourism image. The environmental assets are also utilized by the community to portray an indigenous tourism product that creates a nomadic, exotic and mystic mood for tourists. The cultural strength of the community is also highlighted by organizing national indigenous festivals that symbolize historical traditions (Yu and Goulden, 2006). These efforts show that the indigenous community's culture is exposed to the outsiders as a one-off mega tourism event which can draw massive crowds.

On the other hand, tourism is also popular in northern Europe for its cultural development especially in Sweden and Finland (Pettersson, 2007). For both these countries, the municipal is controlled by the Sami constitution system (Viken, 2007). The Sami is a well-known indigenous group in northern Europe where other surrounding cultures determine the language and distinctive traits. As a community who is dominant with their culturistic indigenous product in northern Europe, the Sami are active in cultural tourism with a variety of tourism products such as Sami museum, cultural events, cultural sites and souvenirs. In terms of tourist attraction, indigenous tourism can provide a culturistic environment for international and domestic tourists. As a result, the focus of tourism will rely on culture to illustrate the people, lifestyle, food, language, custom and heritage. The main purpose of the study is to identify the socio-cultural-economic resources of the village communities living along the fringes of the peat land ecosystem in Mukah. The types of socio-cultural-economic impacts accrued to the local communities.

## METHODS

Mukah is a coastal town which serves as the administrative center of the Mukah District (2,536 square kilometres) in, Sarawak. It is located by the South China Sea, about 2 hours by road from the major city of Sibu. Mukah is also accessible by air from Kuching and Miri through MasWing Airlines. The duration of air travel is about one hour. There are also speed boats connecting the town of Dalat (about 30 kilometres from Mukah) to Sibu. Sago palms in Sarawak are grown in peat swamp of the coastal areas which can be easily found in Mukah.

Mukah-Socioculturally-Appropriate Multi-Facet Inventory (MSAMFI) is part of a trial web-based application system developed purposively based on a model partially adapted from Malaysian Career Facet Inventory (as initially proposed via the Development of the Career Factor Inventory CFI: Chartrand, Robbins, Morrill and Boggs, 1990). It was designed to assist Universiti Putra Malaysia's eco-tourism and socioeconomic researchers to gather Mukah, Sarawak's local economic credentials and imperative community development information parameters. The objective of the instrument aims to gauge and identify pertinent informed economic choices and feasible sago-plantation based factors for economic enhancement opportunities, in which will be scrutinized under the lenses of Item Response Theory model and Knowledge, Attitude & Practice Rating Scale (Ahmad Hariza, *et al.*, 2008)

Within the system, three categories of entries were constructed which consist of Mukah's socioeconomic background and its vital demographic pertinent parameters, in which were gathered via a multi-tiered platforms of a single-online network, performed with an adaptable infrastructure (hardware) of a customizable-computerized algorithm (software programs). An initial close-ended and partially open-ended questionnaire was integrated within the systems to be fully constructed as the test-bed for the Mukah-Socioculturally-Appropriate Multi-Facet Inventory (MSAMFI). The current study proposes to replicate Choi, Grady, & Dodd's (2010) analyses of a new stopping rule that attempts to address the efficiency and measurement precision problems associated with commonly used

stopping rules. As per aspired via the development of MSAMFI, precision measurement of its items were tested accordingly. According to the Choi et al.'s (2010) study, the predicted standard error reduction (PSER) stopping rule seeks to balance the dual concerns of measurement precision and testing efficiency by considering the predicted change in measurement precision that would result from the administration of additional items test system delivery and the complexities of the psychometrics involved in developing the initial version the Mukah-Socioculturally-Appropriate Multi-Facet Inventory (MSAMFI). Data were extracted and imported to a .csv format to be synchronized with the application of a series of statistical data analytical tools.

## RESULTS

To understand the perception of the community on the cultural attributes that they have, several questions within the domain of cultural resource were asked. Both tangible and intangible cultural resources that the community has were captured. The data was analyzed by interpreting the mean values of each item.

Table 1: Descriptive Statistics of Cultural Resources

Statements on Cultural Resources	Mean
1. 'Lamin Dala' (traditional house) is a unique cultural products that can be used as a tourism attraction of the Melanau community	4.63
2. Delicacies made of Sago such as 'Tebaloi' and 'Kuih Sepit' are important cultural attractions of the Melanau community	4.71
3. 'Tibou', a traditional giant swing is an important cultural attraction of the Melanau community.	4.69
4. 'Alu Alu' dance is a pride of the community that can be used as a cultural attraction.	4.77
5. 'Baban' and 'Terendak' attires are important cultural attraction of the Melanau community	4.70

Table 1 above reveals the findings of the analysis using descriptive statistics of five community resource items. Cultural resources have been the most important asset of the Melanau community to run tourism successfully. Traditional house, local delicacies, Melanau dance and attires are considered as treasures that determine the identity of the community. For this dimension, highest mean value of 4.77 reveals that 'Alu Alu' dance is a pride of the community that can be used as a cultural attraction. A mean value of 4.71 also explains that local delicacies made of Sago such as 'Tebaloi' and 'Kuih Sepit' are important cultural attractions of the Melanau community. Apart from that, the respondents were strongly agreeable that 'Baban' and 'Terendak' attires are important cultural attraction of the Melanau community. 'Tibou', a traditional giant swing is also considered as an important cultural attraction of the Melanau community with the mean value of 4.69. Lastly, 'Lamin Dala' (traditional house) is a unique cultural product that can be used as a tourism attraction of the Melanau community evident by the high mean value of 4.63. The higher mean values of all the items reveal that the community was also willing to defend and maintain their culture for tourism development. O'Gormon and Thompson (2007) also agreed that culture is the primary attraction of the indigenous community but the key challenge of the community is to protect their unique culture. Kaul is a traditional festival celebrated by the Melanau community living along the coast area in Sarawak. In the past, Kaul was held as a religious ceremony to appease the spirits of the sea, land, forest and farm making it the most important festival in the Melanau traditional calender.

The festival is a ritual of purification and thanksgiving as well as one of the propitiation for good fortune. Today, it is more of keeping a heritage alive. Its marks the beginning of the Melanau calender which begins at the end of the Northeast monsoon. Kaul takes place in third week of the month of April every year. The festival site is on the right bank of the Mukah river estuary. During the week-long festival, activities include stalls selling traditional foods, entertainment programs, and traditional games. The highlight will be the 'Serahang' (decorated flat round basket made from sago leaf which raise on a bamboo pole) procession lead by local Melanau community elders. Some of the activities not to be missed include playing the giant swing (Tibow) and enjoying Melanau traditional food served on the log (Keman Baw Bateng also known as 'Makan Beradat' in Malay)

## CONCLUSIONS

In a nutshell, the Melanau communities in Mukah believe that cultural resources that they possess are unique and can be portrayed to the outsiders for tourism business purpose. Culture is seen as a tool not only to create economic benefit, but also to sustain local traditions, beliefs, practices and rituals. Thus, it is important for the local authorities to include preservation culture in any economic and local community development programs. By doing this, the local community will not only enjoy the economic benefit but also the non-economic benefit of cultural sustainability.

## REFERENCES

3. Aref, F. Ma'rof Redzuan, & Gill, S. S. (2009). Dimensions of Community Capacity Building: A Review of its Implications in Tourism Development. *Journal of American Science*, 5(8), 74-82.
4. Aref, F., & Gill, S. S. (2009). Rural tourism development through rural cooperatives. *Nature and Science*, 7(10), 68-73.
5. Besermenji, S., Milić, N., & Mulec, I. (2011). Indians culture in the tourism of Ontario. Zbornik radova Geografskog instituta "Jovan Cvijić". *SANU*, 61(3), 119-136.
6. Butler, R., & Hinch, T. (2007). Tourism and indigenous people: issues and implications (2nd edition). *Life Science Journal*, 10(3), 42-56.
7. Brown, K., & Luo, T. (2012). Authenticity versus Commoditization: The Chinese Experience in the UNESCO Heritage Site of Lijiang. *International Cultural Tourism Conference: New Possibilities*, 13 (1), 123-141.
8. Cohen, E. (1998). Authenticity and commoditization in tourism. *Annals of Tourism Research*, 15(3), 371-386.
9. Cooper, D. R., & Schindler, P. S. (1998). *Business Research Methods*. Singapore: McGraw-Hill.
10. Hall, C., & Weler, C. (1992). *Special Interest Tourism*. London: Belhaven.
11. Harron, S., & Weiler, B. (1992). 'Review. Ethnic tourism', in Weiler, B. and Hall, M. (eds), *Special Interest Tourism*. London: Belhaven Press.
12. Hjalager, A. M. (1997). Agriculture Diversification into Tourism. *Tourism Management*, 17(2), 103-111.
13. Jabatan Hal-Ehwal Orang Asli (JHEOA). *Data Maklumat Asas Jabatan Hal Ehwal Orang Asli Malaysia*. Kuala Lumpur: Bahagian Penyelidikan dan Perancangan, 2004.
14. Jabatan Kemajuan Orang Asli (JAKOA). *Jabatan Hal Ehwal Orang Asli Report of 2010*. Kuala Lumpur: Jabatan Kemajuan Orang Asli, 2010.
15. King. V.T. (1993). *Tourism and Culture in Malaysia*. In Hitchcock, M., King. V.T. and Parnwell, M.J.G. (Eds.) *Tourism in Southeast Asia*. London: Routledge.
16. Liu, O. P. (2008). *Packaging Myths for Tourism: The Rungus of Kudat*. Bangi: Universiti Kebangsaan Malaysia Press.
17. Minichiello, V., Aroni, R., Timewell, E. & Alexander, L. (1991). *In-depth Interviewing; Researching People*. Cheshire, Melbourne: Longman.
18. Ministry of Tourism Malaysia. *Downloads - Statistics - MOTOUR*. [online] Retrieved from: <http://www.motour.gov.my/en/download/viewcategory/49-statistik.html> [Accessed: 19 July 2012].
19. Musa, G. (2000). *Tourism in Malaysia*. In C.M. Hall and S. Page (Eds.) *Tourism in South and Southeast Asia: Issues and Cases* Oxford: ButterworthHeinemann.
20. Nikkhah, H. A., Redzuan, M. R., & Abu-Samah, A. (2010). The Effect of Women's Sociodemographic Variables on their Empowerment. *Journal of American Science*, 6(11), 426-434.
21. Nowak, S. (1987). *Marriage and Household: Btsisi' Response to a Changing World*. PhD dissertation. State University of New York at Buffalo.
22. O'Gorman, K. D., & Thompson, K. (2007). Tourism and culture in Mongolia: the case of Ulaanbaatar Naadam. *Tourism and indigenous peoples: Issues and implications*, 161-175.
23. Suet Ching, C. (2010). *Mah Meri on Stage: Negotiating National Policies, Tourism and Modernization in Kampung Sungai Bumbun, Carey Island*. PhD theses. University of Hawaii, 14-17.
24. Thompson, K. A. (2007). *An Eye for the Tropics: Tourism, Photography, and Framing the Caribbean Picturesque*. Duke University Press Books, 23-56.
25. Tourism Malaysia Board. *Tourism Malaysia: A bit of culture*. [online] Retrieved from: <http://www.tourism.gov.my/en/master/webpage/experiences> [Accessed: 2 September 2012].
26. UNWTO (2004). *Sustainable Tourism Development*. [online] (Retrieved on 20 September 2012) Available at: <http://sdt.unwto.org/en>.
27. Zhang, G., & Lew, A. (2003). *Tourism in China*. New York: Haworth Hospitality Press.