

The Nascent Ecotourism Journey for Mt. Tambuyukon

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Abstract: The aim of this paper is to evaluate the nascent development of ecotourism, taking into account the natural and human resources within and adjacent to Mt. Tambuyukon which is within the gazetted Kinabalu Park area. Currently, there is a more challenging Class II trail starting from Monggis Sub-station. Hostel, chalet and a relatively easier Class I trail development are being undertaken at Sorinsim Sub-station. A mixed qualitative and quantitative research method was adopted. The qualitative approach was via a case study with key informants and was aided by observation. The quantitative data was for visitors to Mt. Tambuyukon and to a lesser extent for Mt. Kinabalu for comparative purposes. The findings revealed that the Class II trail should be maintained and not upgraded as it caters to ecotourists who are looking for a more arduous and challenging climb as opposed to the Class I trail for Mt. Kinabalu. The hostel, chalet, and trail development need to take into consideration the carrying capacity of Mt. Tambuyukon. Ecotourism development should not forsake the neighbouring communities as they can be the eyes and ears for Kinabalu Park. Kinabalu Park has taken positive initiatives in employing locals as staff members as well as appointing local guides and porters who are familiar with the surroundings of Mt. Tambuyukon. At this juncture, the adjacent local community of Kg. Monggis has yet to be integrated substantially with ecotourism development besides the above. Agrotourism and homestay programmes are viable alternatives based on existing agro activities but with high entry barriers. The pristine rivers within the Mt. Tambuyukon area have yet to be explored from an ecotourism perspective. This paper suggests that the “Tagal” system developed by Kg. Luanti Baru to be used as the model for riverine care cum community ecotourism.

Key words:

INTRODUCTION

Sabah, the second largest state in Malaysia, located at the Northern tip of the Borneo island has rich biodiversity and is predominantly hilly. The Crocker Range, which is almost parallel to the west coast, possesses two of the highest mountains in Malaysia. Mount Kinabalu, at the northern edge of the Crocker Range, dominates much of Sabah's skyline at 4,085 metres. 12 kilometres north of Mount Kinabalu is Mount Tambuyukon with a height of 2,579 metres, thus making it the third highest peak in the country (Sabah Forestry Department Online 2010, Sabah Parks Online 2010).

Sabah Parks has been tasked with preserving all the gazetted parks in Sabah. These parks have a geographical, geological, biological or historical significance or a combination thereof. Kinabalu Park, one of the six parks under Sabah Parks, houses Mount Kinabalu and Mount Tambuyukon. A Mount Tambuyukon Scientific Expedition was carried out during October 2-16, 2009 with one of the main thrusts focusing on Cultural and Socioeconomic Studies with the following sub-themes: Threats and Conservation strategies, Traditional Knowledge and Ecotourism Potential (Clarence George Dol 2009). One of the outcomes of this expedition and also the focus of this paper from an ecotourism perspective is on the lesser known mountain, i.e. Mount Tambuyukon and also the most immediate neighbouring village of Kampung Monggis. In addition, Mount Tambuyukon is also part of the Tourism Area Concept Action Plan (New Sabah Times Online 2010).

Research Methodology:

The research methods adopted in this paper were a combination of case study and observation. For case study, the primary foci of attention were key informants from Kinabalu Park, local community from Kampung Monggis and pertinent secondary literature. Observation covers the physical and ecotouristic aspects of Mount

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Kinabalu and Poring Hot Spring in general and Mount Tambuyukon in particular and also the village folk in Kampong Monggis with particular emphasis on ecotourism and the socioeconomic perspective.

Analysis and Discussion:

The following is an analysis and discussion of Mount Tambuyukon from an ecotouristic perspective, taking into consideration the physical and resource attributes of Mount Tambuyukon and the human capital of the immediate village, i.e. Kampung Monggis.

Physical Aspects of Mount Tambuyukon:

The existing infrastructure found in Mount Tambuyukon in relation to ecotourism is Monggis sub-station with a Class II summit trail. The development of chalet, hostel and Class 1 trail development has yet to be completed in Sorinsim Sub-station. The Class II summit trail from Monggis Sub-station to Mount Tambuyukon as opposed to the Class I summit trail in Mount Kinabalu means that the climb up Mount Tambuyukon is much more arduous and challenging. Although there are various definitions with regard to Class I and Class II summit trails, a Class II summit trail has generally a greater level of difficulty as compared to a Class 1 trail. For adventurous mountaineers or hikers, a more difficult trail would inevitably be a more challenging cum exhilarating climb. Currently the climb up Mount Tambuyukon has an expedition facet as it involves a duration of generally either 5 days and 4 nights or 4 days and 3 nights as opposed to a minimum of 2 days and 1 night or a more leisurely 3 days and 2 nights for Mount Kinabalu. Product differentiation in the form of a more challenging climb together with an expedition characteristic can be the hallmark for Mount Tambuyukon. Via product differentiation, the maintenance of the Class II summit trail in Mount Tambuyukon rather than an expansion to a Class I trail would be more ecologically friendly. The trail need not be widened and terracing or steps would not be required, thus minimizing erosion and loss of fauna, especially endemic fauna, which might cross its path.

Mountaineers and Day Visitors to Mount Tambuyukon:

Table 1 highlights an increasing number of local mountaineers climbing Mount Tambuyukon from 2004 to 2008. This is in part due to the higher level of awareness with regard to Mount Tambuyukon and is reflected in the blogosphere amongst local mountaineers. Serious local mountaineers would have climbed Mount Kinabalu and are in the search for new mountains to conquer. Those ardent nature lovers climbing the summit trail will be able to enjoy the presence of several unique species of pitcher plants growing gregariously along the trail. Pitcher plant species found along the trail are *Nepenthes burbidgeae*, *Nepenthes edwardsiana*, *Nepenthes kinabaluensis*, *Nepenthes lowii*, *Nepenthes rajah*, *Nepenthes villosa* and *Nepenthes tentaculata*. For foreign mountaineers, the number indicates an increasing trend for the period 2004 to 2006 and is followed by a reversal for the period 2007 to 2008. This illustrates to a large extent the lack of awareness and promotion of Mount Tambuyukon amongst foreign mountaineers. As shown in Table 2, the number of local day visitors shows an encouraging increase for the period 2004 to 2007 but saw a sharp decline in 2008. However, there are no foreign day visitors to Mount Tambuyukon.

Tables 1 and 2 show that on a comparative basis, the level of awareness for Mount Tambuyukon amongst foreign tourists, inclusive of mountaineers, is relatively low. It is not surprising as many Malaysians included are not aware of the existence of Mount Tambuyukon and it being the third highest mountain in Malaysia. Table 3 highlights the vast difference in terms of numbers for mountaineers and day visitors. This carries the implication that the development of Mount Tambuyukon as an ecotourist destination needs to take into consideration the creation of surrounding attractions as discussed later.

Carrying Capacity:

The mountaineering capacity for both Mount Kinabalu and Mount Tambuyukon is determined by the accommodation capacity at Laban Rata for Mount Kinabalu as well as the accommodation capacity at Monggis and Sorinsim (yet to start) Sub-stations. However, the mountaineering capacity which is dependent on the accommodation capacity is often equated to the carrying capacity. The main problem of overcapacity in relation to carrying capacity is soil erosion, especially during the rainy season. Carrying capacity should be determined via a scientific study, thus allowing for an orderly development of the tourism infrastructures in the Kinabalu Park. This in turn would fulfill the twin objectives of preserving the Kinabalu Park as well as maintaining its UNESCO's World Heritage Site status. The World Heritage Status was inscribed in 2000 for its diverse biota and high endemism covering an area of 75,370 hectares (UNESCO Online 2010).

Surrounding Attractions:

The rich biodiversity in Mount Tambuyukon has yet to be tapped for nature lovers who may not want to be involved in an arduous Class II summit trail climb. Ecologically low impact jungle treks can be built to cater to this target segment as in the case of Bukit Lagong in Selangor (Er, A.C., Raja Zaharaton Raja Zainal Abidin and

Joy Jacqueline Pereira 2011). There were 415,360 visitors to Kinabalu Park in 2004 of which 43,430 were climbers (Sabah Tourism Board 2006). This meant that 10.5 percent were climbers whereas the rest were visitors who came to enjoy the invigorating fresh, clean air, to escape from the hustle and bustle of urban life and to visit the surrounding attractions like the Tropical Garden, Orchid Garden, Bamboo Garden, camping, sulphur bath, slide cum swimming pools, canopy walkway, Ethnobotanical Garden, Kipungit Trail and the Lagganan Trail cum Lagganan Waterfall and Butterfly Farm in Poring Hot Spring, which is located 40 kilometres Northeast of Kinabalu Park’s headoffice. Likewise, surrounding attractions at Mount Tambuyukon must also be created to cater for non-mountaineers with reference to Tables 1 to 3 and the statistics above. From an ecological standpoint, the surrounding attractions must be based on the physical and resource attributes of Mount Tambuyukon and its immediate neighbours to minimise the ecological impact. These attractions can either play a complementary or supplementary role.

The existing two trails leading to Mount Tambuyukon i.e. an old trail from Kampung Monggis and a new trail built by Kinabalu Park from Monggis sub-station can be the starting point for building a one day jungle trek. The old trail is more gradual in nature and a jungle trek can be built as an extension to cater to a more sedentary form of trekking. Another possibility is to built a jungle trek as an extension of the new trail to meet the demands of a more vigorous form of trekking. Guided jungle trekking as in the case of Bukit Lagong can be packaged into a one day affair for group or individual tours under the supervision of Kinabalu Park or approved tour operators to avoid encroachment or pilferage of flora and fauna. In addition, the network of pristine rivers that emanate from Mount Tambuyukon, namely Kopuakan River and Sorinsim River, has yet to be exploited from an ecotourism perspective. Kopuakan River traverses very closely to Monggis Sub-station and Kampung Monggis. River cruises, white water rafting (during rainy season) on the rivers or abseiling the Kikulat Waterfall are possibilities.

Table 1: Number of Mountaineers Ascending Mount Tambuyukon for the Period 2004-2008.

Year	Number of Local Mountaineers	Foreign Mountaineers		
		Nationality (ies)	Number of Mountaineers	Total Number of Mountaineers
2004	16	France	2	2
2005	21	Phillipines	1	3
		Switzerland	2	
2006	38	Singapore	8	27
		United Kingdom	2	
		Germany and Switzerland *	2	
		U.S.A.	4	
		Ireland and Germany*	9	
2007	45	China	2	
		UK and Slovakia*	8	14
		UK, Italy and Australia*	4	
		UK	1	
		Canada	1	
2008	95	U.S.A.	2	11
		Brunei and UK*	5	
		Japan	4	

Note: * Statistics gathered were on a collective basis and not separated according to nationality.
Source: Sabah Parks (Monggis Sub-station), 2010.

Table 2: Number of Local Day Visitors to Mount Tambuyukon for the Period 2004-2008.

Year	Number of Local Day Visitors
2004	80
2005	249
2006	171
2007	508
2008	379

Source: Sabah Parks (Monggis Sub-station), 2010.

Table 3: Percentage of Mountaineers to Day Visitors for Mount Tambuyukon.

Year	Number of Mountaineers	Number of Day Visitors	Percentage of Mountaineers to Day Visitors
2004	18	80	22.5
2005	24	249	9.6
2006	65	171	38.0
2007	59	508	11.6
2008	106	379	28.0

Source: Sabah Parks (Monggis Sub-station), 2010.

Local Community and Its Involvement with Ecotourism:

Sabah Parks in general and Kinabalu Park in particular have embarked on recruiting staff from the neighbouring communities. For Kinabalu Park, part of the workforce comes from the immediate communities.

In addition, licensed guides and porters are also recruited from Kampung Monggis and the surrounding villages. Our research indicates that news with regard to conservation efforts by Kinabalu Park flow through the formal (village headman or members of the Village Security and Development Committee) and informal networks via staff members of Kinabalu Park quite effectively. Currently there is no physical buffer between Kinabalu Park and the immediate surroundings. However the surrounding villages of Kinabalu Park can act as a security cum intelligence buffer in lieu of a physical buffer. The immediate villagers can help or if the surrounding circumstances are too dangerous to act, they can report incidences of poaching, illegal logging, illegal collection of wild plants like orchids and pitcher plants, pillaging and fire to Kinabalu Park for action to be taken. Cases of foreigners and Malaysians caught and prosecuted for pillaging gaharu from Mount Tambuyukon and Poring respectively were reported (Leong Siok Hui 2010). Prolonged droughts intensified by El Nino events have resulted in forest fires breaking out in 9 locations in Kinabalu Park (Encyclopaedia of Earth Online 2010). For the immediate villages to be deployed as an effective buffer, the socio-economic activities of the surrounding villages must be integrated and be in concert with the ecotourism efforts carried out by Kinabalu Park. However, for this to happen, the resources of the immediate villages have to be taken into consideration.

The immediate village of Kampung Monggis is mainly involved in agrarian activities. An offshoot or extension of this would be agrotourism. Agrotourism packages can be tied to planting and the more exciting harvesting activities of crops and fruits. In tandem, homestay programmes can be developed side by side with agrotourism. Homestay accommodation facilities will appeal to tourists, especially foreign tourists, who like to have an experience of living in a local setting. Thus far, there is no such activity in this village. However, the implementation of agrotourism and homestay programmes has to take into consideration the socio-economic characteristics of the villagers. In a mini –survey carried out by Kinabalu Park, the average educational level of the villagers is Standard 3 with household income of Ringgit Malaysia 500 and below. Each household has generally 20 acres of land (with land title). The older generations are relatively less educated with some illiterate as compared to the younger folk.

Kampung Monggis can be considered as an isolated, remote village with poor road access. On our trip to Kampong Monggis, we have to cross two rivers via 4WD without any bridges. As such, the village folk's exposure to agrotourism and homestay tourism is very limited. The relatively low income level would be a high entry barrier into tourism related activities. In addition, the fruit trees grown by the villagers are of varying quality. At times, for the purpose of crop cultivation, the slash and burn practice is adopted to clear vegetation. This can be hazardous especially during prolonged droughts as an uncontrolled fire can spread to the park.

Tagal Approach:

A leaf can be taken from Kampung Luanti Baru's community-driven tagal system to keep the Sungai Moroli clean, which incidentally was previously a dumping ground for rubbish. In essence, by keeping the river clean, fishes can breed and are 'tamed' to nibble the visitors who wade into the river. The nibbling provides a tingling sensation and is akin to a fish massage. Visitors have to pay a fee and the revenue is shared for the betterment of the village. Jungle trekking, chalet cum hostel facilities and homestay programmes have also sprung up in association with the "fish massage" touristic activity. The success of Kampung Luanti Baru can be used as a benchmark for Kampung Monggis to not only develop 'fish massaging' tourism but also as a socio-economic model with the twin objectives of uplifting the standard of living and at the same time accruing benefits for the environment. In essence, tangible mutual benefits bring about alignment in interest. Kampung Monggis has a good chance of success as the upper part of the Kopuakan River is located within Kinabalu Park, thus ensuring a clean supply of water as Kinabalu Park is a gazetted protected area.

Conclusion:

Mount Tambuyukon should not be a replication of Mount Kinabalu in relation to its ecotourism development pathway. The unique physical (Class II summit trail) and social economic attributes of Mount Tambuyukon should be given due consideration. Statistics have indicated that a relatively large proportion of visitors either to Mount Tambuyukon or Mount Kinabalu are not mountaineers. This carries the implication that surrounding attractions packaged in the form of jungle trekking, agrotourism, homestay, river-themed activities and 'fish massage' can be developed as either complementary or supplementary to mountaineering. However, ecotourism development should incorporate a major group of stakeholders i.e. the neighbouring villagers of Mount Tambuyukon. By having a community-driven focus, the neighbouring villagers can play the role of a buffer and at the same time partake in ecotourism endeavours for the betterment of the community.

Very often in the pursuit of ecotourism, the in-situ or nearby communities are a forgotten lot. For ecotourism to have a humane facet, the locals have to be integrated as much as possible. In the words of Sir Gerald Templer, this is to win the hearts and minds of the people (Barber 1971). Winning the hearts and minds of the locals, will help in no small measure, to protect and preserve the sanctity of Mount Tambuyukon as an ecotourism destination. The socio-economic circumstances of the villagers in Kampung Monggis require

assistance from the various government agencies to not only lower the entry barriers but also providing the building blocks for ecotourism to take-off in Mount Tambuyukon.

A good local benchmark to use in terms of environmental care, social economic betterment of the community and a shared vision is the Tagal system which has proven to be a success story in Kampung Luanti Baru.

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