



THE SOCIO-ECONOMIC IMPACTS OF ECOTOURISM IN TAMAN NEGARA PAHANG ON THE LOCAL COMMUNITY GROUPS WITH DIFFERENT ECONOMIC STATUSES

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Abstract:

Ecotourism conserves the natural environment and raises the community's living standards. The socio-economic impacts, however, may vary due to different economic statuses among the local community groups. Hence this study examines the socio-economic impacts of ecotourism in Taman Negara Pahang on the locals and indigenous people with different incomes, education, and occupations. This qualitative research employed semi-structured interviews to understand better the socioeconomic benefits and challenges of tourism development in the national park. It was found that the locals were highly dependent on tourism economic activities, and their living standards improved. Nevertheless, most indigenous people still lived in poverty because they were incompetent with limited communication skills and hospitality knowledge. Besides, tourism seasonality has caused irregular business revenue, low return on investment, and underutilisation of facilities in the off-peak season. Conversely, the tourism operators and locals may gain maximum business revenue and additional income in the peak season. This paper draws the attention of government agencies and local community groups to the importance of educational attainment and appropriate capacity-building programs based on different needs to ensure an equitable distribution of ecotourism socio-economic benefits. Their involvement in such events may also help to overcome the challenges of tourism seasonality through proper planning and implementation in the national park.

**Keywords:**

Ecotourism, Indigenous People, Locals, Socio-Economic Impacts, Seasonality

Introduction

According to Chape et al. (2008), the increased use of natural resources with population development and human-induced climate has altered the temperature and sea level, threatening natural ecosystems and biodiversity and reducing human living space. Population growth has significantly threatened the Earth's life-support systems (Bradshaw & Brook, 2014; Chape et al., 2008). Hence, environmental concerns have been raised and discussed since Earth Day's creation in 1970. However, demand for infrastructure and superstructures increased, putting pressure on natural and cultural spaces. Consequently, people were concerned about natural resource depletion without proper protection or conservation.

A national park is the most common protected area for natural resources protection (Ahmad Puad et al., 2006; Holden, 2008). It promotes education and recreation, besides protecting the natural biodiversity and its underlying ecological structure, supporting environmental processes (International Union for Conservation of Nature [IUCN], 2021). National parks consist of topographical, hydrological, wildlife, and flora resources. They have become popular tourist destinations because the tourists learn about nature and wildlife and gain health benefits while spending leisure time with family and friends.

Tourism in the national park promoted the local economy and provided employment opportunities and sustainable livelihood. Many studies revealed that tourism plays an essential role in generating income for the local community living in and around the national parks (Chidakel et al., 2021; Jaafar et al., 2013; Kandel et al., 2020; Mabibibi et al., 2021). The community supported tourism development in Đerdap National Park and Tara National Park, Serbia, because it improved their knowledge and financial sources (Brankov et al., 2019). According to Chidakel et al. (2021), despite high leakage, tourism was a significant source of income for the local household and the gateway community at South Luangwa National Park, Zambia. In addition, other tourism returns, such as taxes and multiplier effects, also contributed to park infrastructure development and management capacity.

Tourism must protect the environment and natural attractions to ensure that people will continue to travel (Goeldner & Ritchie, 2012) and ensure the sustainability of economic growth (Connell et al., 2009). Therefore, achieving sustainability became the underlying principle for tourism development to reduce environmental stress (Roday et al., 2009), particularly leading to the concept of ecotourism (Goeldner & Ritchie, 2012). Ecotourism refers to "responsible travel to natural areas that conserves the environment and sustains the well-being of local people and involves interpretation and education" (The International Ecotourism Society [TIES], 2015). Notable, Ruhanen et al. (2015) discovered that ecotourism and its environmental aspects had remained a popular research subject from 1987 until 2012.

This study intends to investigate the impacts of ecotourism in Taman Negara Pahang on the local community groups: the locals and indigenous people. Should any tourism-related issues be addressed, and if the economic principle of ecotourism is achieved. Through this research, locals and indigenous people will be able to understand how they can benefit from ecotourism

and other impacts of tourism development in the national park. In addition to the issues around economic prosperity, this research reveals that attention should be given to social sustainability, which may contribute to economic sustainability but still receives less attention from relevant authorities.

Literature Review

Cook et al. (2018) stated that ecotourism was the first effort to reduce the negative impacts of tourism on the environment, involving travel to fragile areas, learning about different cultures and environments and participating in low-impact sports activities. Hence, it is also known as responsible tourism. Low-impact, rural, wilderness, nature-based, sustainable, and responsible tourism are commonly used to describe ecotourism and related activities. Although the terms ecotourism and sustainable tourism tend to be used interchangeably, the earlier focuses on travellers' responsibility than societal responsibility as compared to the latter (Goeldner & Ritchie, 2012).

Dong et al. (2021) found that locals would likely support the Nanling National Park if the ecosystem were well-conserved. According to Kandel et al. (2020), ecotourism generated significant revenue for the locals living in the buffer zone near Chitwan National Park, Nepal, and enhanced biodiversity conservation. Similarly, it also alleviated rural poverty, improved the locals' living standards, and enhanced general economic development, especially for those near Kakum National Park, Ghana (Obour et al., 2017). Due to this reason, the people enjoyed better living conditions, felt politically empowered and became more positive about ecotourism in Kaziranga national park, India (Das & Hussain, 2016).

However, ecotourism in national parks was not without drawbacks. Due to low-income distribution, high living costs and lack of community participation, ecotourism did not directly benefit the community, nor did it support the conservation in Volcanoes national park, Rwanda (Sabuhoro et al., 2017). The same issue has extended to Chitwan national park. The ethnic groups still illegally gathered forest products for sale because they did not receive equal economic benefits from ecotourism (Kandel et al., 2020). Relatively, Stone & Nyaupane (2016) found that the community had become wealthy due to ecotourism, and they requested more land development in Botswana's Chobe National Park. Eventually, conflict arose between humans and wildlife.

As for the Malaysian national parks, Jaafar et al. (2013) indicated that the local community received significant economic benefits from the tourism development in Kinabalu National Park despite some sustainability issues. Undoubtedly, much research related to ecotourism and its economic impacts were also carried out in Taman Negara Pahang (Abdullah et al., 2010; Aziz et al., 2012; Khatijah et al., 2018; Mukrimah et al., 2015; Nurul Fatanah et al., 2012; Stecker, 1996; Zaiton et al., 2013; Zuriatunfadziah et al., 2009). Statistically, it was proven that ecotourism helped improve the local economy (Abdullah et al., 2010; Aziz et al., 2012; Mukrimah et al., 2015). The tourism operators and locals supported ecotourism, realising the benefits they gained from such activities in the national park. Zanisah et al. (2009) found that tourism caused more costs than benefits to the Batek community instead of offering limited economic benefits. This paper consists of 6 sections. It starts with an introduction, followed by a literature review, methodology, results, and discussions, and ends with a conclusion.

Methodology

Study Area

Taman Negara Pahang is in the centre of Peninsular Malaysia. Together with Taman Negara Kelantan and Taman Negara Terengganu, they become Taman Negara. It was the oldest national park, more than 130 million years old, and the largest protected area with an area of 4,343 km square in Malaysia (Department of Wildlife and National Parks (DWNP), 1987). Taman Negara Pahang was the most popular among them. DWNP (1987) stated that Taman Negara National Park was established for several reasons. Firstly, it protects the unique flora and fauna and preserves objects and places of aesthetic, historic and scientific interest. Secondly, it promotes educational and recreational use for the enjoyment of visitors. Lastly, it raises awareness and appreciation of Malaysian tropical rainforest heritage.

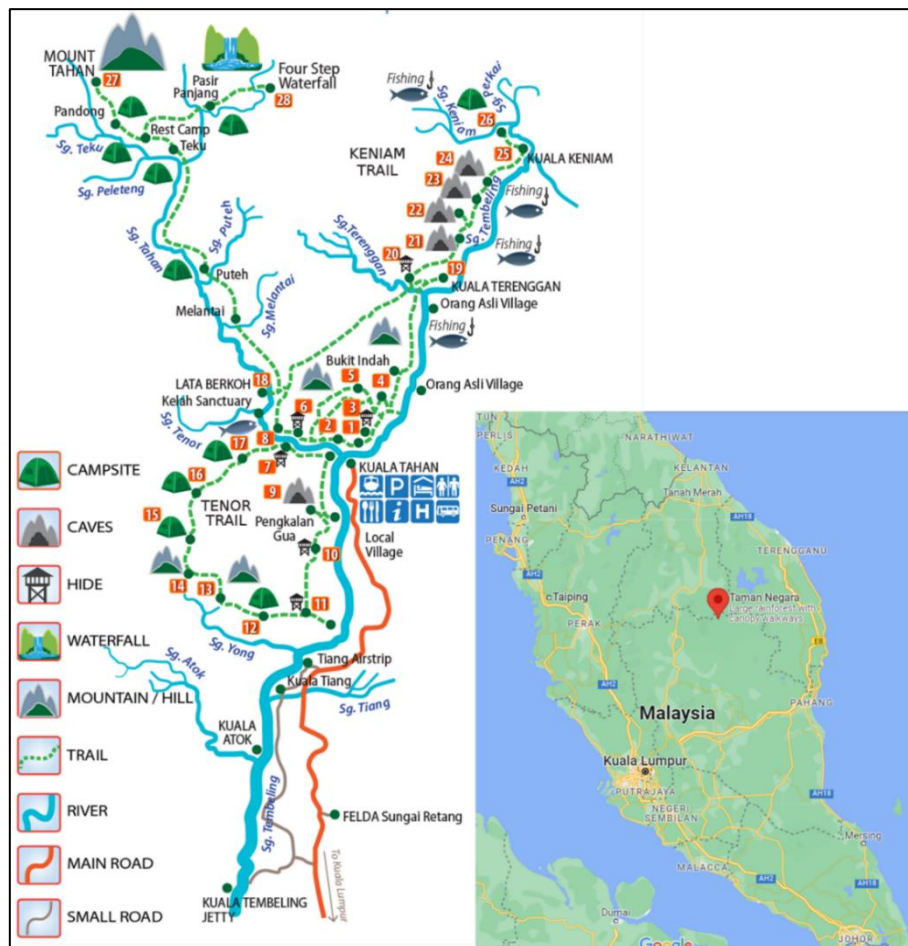


Figure 1: Attractions in Taman Negara

Source: tamannegara.asia (2014)

Taman Negara was declared the ASEAN Heritage Park in 1984 (UNESCO World Heritage Centre [WHC], 2015). It was also a famous and popular national ecotourism destination (Ochs, 2016; Tan, 2014). According to Azlizam et al. (2018), the popular attractions in the Taman Negara Pahang were Gunung Tahan, adventure activities, streams and rapids, canopy walkway, nature trails, and diverse flora and fauna. Gunung Tahan is the highest peak in Peninsular Malaysia, soaring up to 2,187 meters, making it one of the most challenging and adventurous

activities. In addition, the national park was gaining popularity as one of the best bird-watching sites in the country (Malaysia Tourism Promotion Board [MTPB], 2019; Tourism Malaysia, 2018). In addition to experiencing natural attractions, visiting aboriginal settlements was fun and exciting. The indigenous people shared their knowledge during the tourist visits by demonstrating traditional weapon hunting, fire making, and bamboo blow piping.

The indigenous people also started to engage in tourism activities besides being a tourist attraction. There were eight indigenous people settlements in and around the national park area. Kampung Kanopi, Kampung Yong, Kampung Atok, Kampung Keniam, Kampung Terenggan, and Kampung Sat were located in the park, while Kampung Dedari and Kampung Teresek/Tabung were located in the opposite area across Sungai Tembeling. These people practised a hunter-gatherer lifestyle. Hence, harvesting activities such as hunting, fishing and gathering forest produce were among the important economic activities to earn a living. One of the reasons they were involved in tourism was that they were restricted from accessing forest produce due to the status of the national park as a protected area which has affected their traditional lifestyle. Since the 1960s, they became porters for climbers of Gunung Tahan and worked closely with the nature guides to assist the tourists in the forest. Some became nature guides and boat operators as they gained experience and communication skills.

Methods

The study was exploratory research that employed a qualitative research method, allowing the researcher to gather a large amount of information about the research subjects in words, oral or written (Veal, 2018). A qualitative research method explores, explains and uncovers local phenomena than general conditions. Hence, the findings cannot be generalised to the broader population. Instead, it can provide credible and influential evidence for policymakers (Hammond & Wellington, 2013). An in-depth interview which has been widely recognised and employed in leisure, recreation, and tourism research (Sirakaya-Turk & Uysal, 2017), was employed for data collection in this study. It was known as an informal, unstructured or semi-structured interview (Chua, 2016; Veal, 2018), where this study used a semi-structured interview. Conversations were held between the researcher and informants to understand better an issue, event or people (Hammond & Wellington, 2013; Sirakaya-Turk & Uysal, 2017). The informants expressed their thoughts, feelings and perspective (Hammond & Wellington, 2013), which allowed the researcher to gather ideas and detailed information from different viewpoints (Chua, 2016).

Sixteen open-ended questions were prepared on occupation, employment status, work experience, individual or household income sources, business revenue, and other economic impacts of tourism in the national park. The informants must grow up or permanently lived in Kampung Kuala Tahan and have engaged in tourism economic activities for at least 10 years. Hence, they were selected through purposive to ensure they fulfilled the requirements. Eleven informants participated in the study, 10 locals and 1 indigenous people. The interviews were conducted at their workplace or home, each taking 30 to 50 minutes. All interviews were recorded and transcribed, and data analysis was done manually. The researcher went through all transcripts and assigned a word or short phrase to identify a primary topic in a passage of the qualitative data. Accordingly, the coding was used to generate several themes that best represented the responses of the informants. Lastly, the researcher integrated the themes and responses into the text of the report.

Results

The interviews took place at Taman Negara Pahang and Kampung Kuala Tahan with 11 informants. Nine informants were brought up in the village or national park, while the other 2 informants stayed there for more than 10 years. Every informant agreed that the tourism development and increased tourism demand in the national park diversified the local economy. Generally, tourism offered employment with additional income and improved the living standards of the local community groups, which were less dependent on agriculture to earn a meagre income. Tourism-related job opportunities were always available, and tourism economic activities were the crucial sources of income for most locals, especially the young generations. However, they needed to deal with the tourism seasonality phenomenon, which caused unstable income.

Immediate Job Opportunities

Tourism-related jobs were always available, especially over the weekends, public holidays and school holidays. Working in the tourism industry was the fastest way to earn money (I3 and I9), especially for the young generations. Hence, it has always been the first choice among the locals when they needed a job (I1, I3, I5, I6, I7, I9 and I10). This can be seen in the following statement:

I have many siblings. My parents were sick. There was no other alternative, so I worked and brought tourists. It was the fastest way (to make money) [Informant I3].

The informant started assisting in boat operations on weekends during school time. After finishing school, he became a full-time boatman to bring tourists from Kuala Tembeling Jetty to the national park. He became a waiter at Mutiara Taman Negara Resort for a more stable income three months later. The young generations in the village started to work part-time on weekends during school time. They mainly assisted in boat operations and restaurants. Due to the geographical location of the national park, boat services were in great demand. As boat operations did not require a minimum education, it was a popular job among the boys from Kampung Kuala Tahan and the indigenous people to earn a living. Informant I7 commented:

Those with primary school education can still navigate a boat... They work part-time to serve tourists when they need money... It is easy to make money [Informant I7].

Tourism development in Taman Negara Pahang offered various employment and business opportunities to local community groups and helped diversify income sources. Since the national park is a protected area that allows only limited development, many tourism facilities and services, including transportation, food, accommodation, travel agencies, and souvenir shops, were established in the opposite village, Kampung Kuala Tahan.

The boat was the main transportation to Taman Negara Pahang before the road network was established in the 90s. Hence, the high demand for boat service results in available job opportunities. Furthermore, the task was relatively simple and did not require minimal education and skills. Therefore, assisting in job operations has always been the first choice among the boys who wanted to earn a pocket since school days or income as soon as they finished school. Otherwise, helping at the floating restaurants would be another option for

teenagers. Although these jobs may not offer good pay, it was the fastest way to provide income.

A Major Source of Income

The locals mainly worked at the DWNP or were involved in agriculture before the tourism industry developed. Besides, boating was vital for transporting tourists to the national park before the road network was developed in the early 90s. Thus, providing boat services was an important business offered by the locals. Later, the road network development changed local economic activities. The locals set up dining and lodging facilities such as guest houses, inns, hostels, floating restaurants and eateries in the opposite village, Kampung Kuala Tahan, to cope with the tourism demand. I4 and I1 highlighted the importance of tourism development to the locals:

Tourism helps a lot, considering number one. Without tourism, it would be a bit difficult, especially for young people [Informant I4].

We have been exposed to this industry since we were small. We know nothing about other fields [Informant I1].

Limited development in the national park led to the evolution of economic activities in Kampung Kuala Tahan from agriculture to tourism. Moreover, the road access facilitated local industry and commerce in the village. In the late 90s, the locals started setting up accommodation facilities in the village, such as hostels, guest houses and motels, and floating restaurants opposite the national park, followed by travel agencies, retail and souvenir shops to cope with the increased tourism demand. Eventually, the younger generation was no longer in agriculture but in tourism, providing better income.

The informant stated that the locals handled almost all tourism activities in the area. Other than providing tourism facilities, some locals worked as ground operators and offered various activity packages to the tourists visiting the national park. They received direct income from managing recreational activities such as river cruising, visiting Orang Asli settlement, night jungle walks, mountain climbing, and rapid shooting. Kampung Kuala Tahan was a “goldmine” (I2 and I3). People from nearby villages, namely Kampung Pagi, Kampung Keniyam and Kampung Sat, also visited the village or national park to look for jobs or business opportunities. As tourism offered better income, the work was more accessible and fun; the young generation would serve the tourists rather than work in agriculture. Notably, it was common to have several family members engaged in the tourism industry at one time.

I have 9 family members, including 7 siblings. My father works with the government (DWNP Taman Negara Pahang), my sister and I work at Han Rainforest Resort, and both of my brothers started working as nature guides after finishing school [Informant I9].

Nature guides were another popular profession among the locals. They planned for trips and delivered their local environmental information to the tourists for better exposure and optimal enjoyment while carrying out activities in the park. The nature guides needed to ensure the safety of tourists in the wilderness area; hence, they were relatively well paid for their

professional services. To ensure sustainable income, the Ministry of Tourism, Arts and Culture Malaysia (MOTAC) has always encouraged all qualified locals and indigenous people, including the existing mountain guides and porters, to take the nature guide course to improve their skills and service quality. There were 117 qualified nature guides, but only 76 remained active (MOTAC of Pahang, 2016). Others did not stay active, especially the indigenous people who could not meet the license renewal conditions due to financial difficulties.

There were around 20 qualified nature guides from Kampung Atok, but they did not have money to renew their license and continue working as nature guides. We need to spend much money, but the government cannot always help us [I11].

The status of the national park as a protected area restricted indigenous people from hunting, fishing and collecting forest produce for sale, which affected their income sources. However, they had fewer opportunities to engage in tourism economic activities than the locals. The indigenous people mainly provided guiding and boat service to the tourists. Besides, the unique culture of these exotic people as a tourist attraction also enabled them to earn extra income. Kampung Dedari was the first indigenous people settlement opened for tourists in the 80s. During the tourist visits, they demonstrated forest survival skills, such as using bamboo blowpipes, hunting weapons, and the traditional way to make a fire. In return, they received RM5 from the nature guide for each tourist who visited the settlement. Unfortunately, sometimes they were not paid accordingly.

Based on the below comment, tourism development may have improved their standard of living, yet they could still live well without tourism if they could remain with their traditional lifestyle.

Our life used to be difficult. Since tourists are visiting, life is pretty good now. However, without tourism, we can still live like last time [Informant I11].

The local authorities (Jerantut District Council and Jerantut District Land Office) and the MOTAC of Pahang provided various training programs to the tourism employees to improve their skills and knowledge and update them on the recent development of the industry. They were essential in ensuring tourism products and service quality to enhance tourist satisfaction.

Tourism Seasonality

The tourism activities in Taman Negara Pahang were affected by the seasonality phenomena. Part of the national park will be temporarily closed due to heavy monsoon rains from November to February. Some recreational activities, such as mountain climbing, jungle trekking, canopy walk, and other water-based activities, will be suspended for safety reasons. As a result, tourist arrivals dropped, and the income and business revenue of the tourism employees and operators were reduced.

*The income difference during peak and low seasons is too much [I3].
Our income is not stable. It is hard to make a life plan when we do not have a fixed income [I1].*

The informant [I1] claimed that tourism employees needed to carefully plan their finances due to unstable income, such as property purchases and pay for the instalment, especially when tourist arrivals were reduced. In contrast, others commented that they could save enough money when earning more income during the peak season to cover their living during the low season [I3]. Besides, when the locals earned more, they also spent more. Along with the tourist spending on groceries, local retail businesses were also affected by seasonal tourist arrivals [I4]. Finally, the informants commented that tourism was sensitive to global issues, such as the economic crisis in 1998, September 11 attacks in 2001, and Mount Kinabalu in Sabah earthquake in 2016, which affected tourist arrivals to the park. According to (Tohidy Ardahaey, 2011), any changes could affect tourism easily.

Discussions

Tourism in Taman Negara Pahang has improved the local economy by changing the economic activities in Kampung Kuala Tahan from agriculture to tourism in the 80s. The finding is consistent with past studies (Chidakel et al., 2021; Jaafar et al., 2013; Kandel et al., 2020; Mabibibi et al., 2021), showing that tourism development generated significant economic benefits for the locals. In the lines of earlier literature (Aziz et al., 2012), the result found that restaurants or eateries, chalets or camping sites, and transportations (boats) were the leading businesses involving locals besides nature guides. While the job required minimum education and skills, it offered better income than others. Therefore, working as a nature guide was popular among locals with minimum qualifications.

The locals preferred joining tourism as it was the fastest and most straightforward way to earn money and solve financial problems compared to the times that relied on the agricultural industry. Ecotourism may have increased incomes among locals and improved their living standards, but not indigenous people who still practised traditional lifestyles by hunting and gathering forest produce and lived in poverty. Despite prior evidence showing that tourism growth provided more understanding of educational opportunities and better living standards (Cook et al., 2018), limited communication skills and knowledge in hospitality had prevented them from deriving optimum benefits from the industry. They could not compete with other tourism employees and thus limited their involvement in tourism economic activities. As a result, they did not earn enough to cover their living expenses. This is supported by (Kandel et al., 2020), who concluded that the economic benefits from ecotourism were not distributed evenly among the local community groups with different economic statuses.

Cultural and language differences were the main barriers for the indigenous peoples to communicate with others. They learned the Malay language from the local nature guides working together to serve tourists. Although they were allowed to participate in capacity-building programs such as nature guides and hospitality courses organised by MOTAC, adequate financial support was equally crucial before they could adapt to the monetary system. Moreover, they were mentally unprepared to change without basic knowledge and unable to secure their life in modern society. Due to these reasons, only a few young indigenous people were willing to take up challenges and engage in tourism. In other words, the community may not develop a strong interest in working in tourism until they are mentally ready, well-equipped with essential skills and knowledge and truly understand the economic benefits of ecotourism to them.

Appropriate education enables them to understand and exercise their economic, social and cultural rights. Sustainable development goal 4 (SDG 4) states that “education enables upward socio-economic mobility and is a key to escaping poverty.” Hence, the attention of the Department of Orang Asli Development (JAKOA) was critical to addressing the underlying issues before the indigenous people could get involved in the tourism industry. The department needs to ensure that indigenous people have equal educational opportunities to achieve its mission of improving their socio-economic and quality of life without neglecting the unique history of the community, culture and traditional knowledge. The unique culture or lifestyle of the indigenous people was one of the popular attractions in the park. Instead of receiving a commission of RM5 per tourist from the nature guide, these people can be empowered to manage their place as a tourist attraction. This can ensure that payments from tourists are channelled directly to them while avoiding the issue of not receiving payments from intermediaries.

There were costs and benefits when dealing with the tourism seasonality in Taman Negara Pahang. Seasonal tourist arrivals caused unstable income for tourism operators and employees (Chidakel et al., 2021). Estimating expenses and obtaining private investment or financial aid was challenging when the income was unpredictable. During the off-peak season, the facilities and resources were underutilised, the businesses were unlikely to survive (Leung et al., 2018), and the income of freelance workers like nature guides was reduced. However, it could be the right time for buildings and facilities maintenance and conducting capacity-building programs for tourism employees. Consistent quality assurance of tourism products and services is essential to ensure tourists’ safety and comfort, leading to tourist satisfaction that would sustain tourism businesses. In contrast, tourism may generate much revenue for tourism businesses and create part-time jobs for locals, especially students and housewives, during peak season. They can earn additional income by working as waitstaff and housekeepers, while some locals assist in providing boat service to cope with the high tourism demand.

Conclusions and Recommendations

This study reveals an overview of the ecotourism impacts on the local community groups with different economic statuses. It is concluded that the locals heavily relied on tourism economic activities, and their living standards have improved. However, the indigenous people still lived in poverty because they were not competent enough due to limited communication skills and hospitality knowledge. While language and cultural differences were the main barriers to effective communication, limited education had stopped them from further understanding the benefits of ecotourism to their community. Hence, it reduces their interest in the tourism industry. The monsoon season, which caused tourism seasonality was a challenge for tourism operators. The off-peak season has caused unstable income and business revenue for tourism operators, low return on capital investment and underutilisation of facilities; however, it could be the best time to conduct capacity-building programs for the tourism employees and maintenance work on buildings and facilities to improve the quality of hospitality and tourism products. In contrast, during peak season, they offered great opportunities for tourism operators and locals to gain maximum business revenue and additional income. This article draws the attention of MOTAC, JAKOA and the local authority to plan for the needs to plan for education attainments for the indigenous people, appropriate capacity-building programs for different local community groups, and assist in maintenance work on buildings and facilities to obtain the optimum the economic benefits of ecotourism. Ecotourism may improve the socio-economy among local community groups and reduce issues arising from tourism seasonality

in Taman Negara Pahang with careful planning and the right timing of implementation by tourism stakeholders. Hence, future research is recommended to assess the perceptions and expectations of the local community groups on tourism development in their neighbourhood and the readiness of the indigenous people in park governance to achieve the ultimate goals of ecotourism in Taman Negara Pahang.

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