

The Impact of Ecotourism in Taman Negara National Park, Malaysia: Tourist Perception on Its Environmental Issues

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Abstract: Taman Negara National Park, Malaysia (TNNP) is widely known for its famous ecotourism destination in Malaysia. Many developments have taken place over the last decades. However uncontrolled development has caused serious environmental damages in the area and concerns visitors. The paper is designed for relevant stakeholders and TNNP management in order to refine their policy inputs to improve tourist perception of TNNP in accordance with the 2030 Agenda. The main objectives of the study are to explore visitor's perception on environmental issues in TNNP, the main issue and how it affects their number of tourist revisit. Three methods employed in the study are surveys, interviews and document analysis. The study received favourable feedback and valuable input from respondents. Contamination of Kuala Tahan River was identified as the main environmental issue in TNNP. As a result, majority of visitors will not revisit TNNP if environmental issues in the area remain unsolved.

Key words: Perception, ecotourism, national park, environmental pollution, sustainable development, Malaysia.

Introduction

Sustainable tourism (ecotourism) has become a “prominent ingredient” in today's development. Ecotourism is defined as “environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations” (IUCN, 1980; Thompson, 1995). It is undoubted that ecotourism can significantly benefit the socio-economic growth in one's country.

In the context of Malaysia as a tourism destination, Taman Negara National Park (TNNP) ranks one of the popular destinations for its ecotourism spot among

both local and foreign visitors. Visitors who come to Malaysia are attracted by its natural beauty especially its national park (Backhaus, 2005). Mohamed (2008) also reported that 25% of foreign visitors coming to Malaysia are involved in the tourism sector. However, due to rapid growth of ecotourism development in the area, authors are very disappointed with the current status of TNNP—too much of uncontrolled logging, deforestation and massive development. Most of the developers are interested to gain more profit than concerning its impact on the environment (Mohamed, 2008).

Preserving the environment is a very crucial element of ecotourism that has to be considered despite promoting TNNP as an ecotourism place of visit to the world. Thus, this study provides evidence from a

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case study in TNNP on the impact of environmental degradation towards visitors perception and the relationship of visitors revisiting TNNP.

Methodology

Study Location

The study took place in Taman Negara National Park (TNNP) in Jerantut District and the surrounding of Kuala Tahan area, Pahang, Malaysia. TNNP is located in the central part of Peninsular Malaysia (4°38'N 102°E) and is one of the oldest tropical rainforests in the world that has been recognized and listed in the Association for Southeast Asian Nations (ASEAN) Heritage Parks (Wildlife and National Park, 1987; ASEAN, 1988). Due to uncontrolled development in the area, there is a need to investigate tourist perception towards the environmental degradation in TNNP.

Data Collection and Analysis

Data collections employed in this case study are based on qualitative research of visitors' perceptions through surveys, interviews and document analysis. The visitors' (respondents) perceptions were conducted by using structured questionnaires and interviews through a random sampling ($n = 300$) in TNNP and the surrounding of Kuala Tahan area, Pahang, Malaysia. Different ethnic groups and variety of age ranges were observed in the study location.

The structured questionnaire survey form consists of four sections. The first section of the survey was on demographic profile of the respondents. In the second section, respondents were asked to identify their number of visit to TNNP. The third part of the survey requires respondents to evaluate their perspective towards the environmental pollution in TNNP using Likert scale of 1 to 5, where 1 being "strongly disagree" and 5 being "strongly agree". In section four, respondents were asked to identify the main environmental issues in TNNP and evaluate how it affects the number of tourist revisit. The collected data were analyzed using descriptive statistics (percentage) using Statistical Package for the Social Sciences (SPSS) software.

Result and Discussion

Demographic Analysis

A total of 300 respondents were interviewed in TNNP and the surrounding of Kuala Tahan. Based on the demographic profile in Table 1, 52.33% were male and the majority of the respondents were in the age group

Table 1: Demographic profile of respondents

<i>Item</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Gender</i>		
Male	157	52.33
Female	143	47.67
<i>Age (Years)</i>		
20 - 25	124	41.33
26 - 30	59	19.67
31 - 35	28	9.33
36 - 40	40	13.33
41 - 45	25	8.33
45 - 50	14	4.67
51 - 55	10	3.33
<i>Marriage Status</i>		
Single	177	59
Married	103	34.33
Divorced	20	6.67
<i>Ethnicity</i>		
Malay	120	40
Chinese	53	17.67
Indian	15	5
Others	112	37.33
<i>Monthly income (US Dollar)*</i>		
≤ 225.94	15	5
226.16 - 677.81	84	28
678.04 - 1129.69	64	21.33
> 1129.91	19	6.33
No information provided	118	39.33
<i>Education level</i>		
Primary	19	6.33
Secondary	75	25
Tertiary	206	68.67

*Note: Exchange rate: 1 USD = 4.43 MYR according to the exchange rate of Central Bank of Malaysia retrieved on 3 April 2017. Website: <http://www.bnm.gov.my/>.

of 20-30 years (61%). Moreover, 'Single' marriage status demonstrates the highest percentage (59.00%) of respondents followed by 'Married' status of 34.33%. This information illustrates that the TNNP is more favourable among young adults due to the activities

offered in TNNP. In terms of ethnicity group, Malays records the highest compared to other group with 40%. It was also observed that 83% of respondents were in the categories earning more than USD 678.04 a month and most respondents with at least tertiary education (69.67%) were observed to be more likely to visit TNNP.

TNNP Visiting Profile

In terms of visiting profile, only 27.67% of respondents had visited TNNP and high percentage of 72.33% respondents only visited TNNP once. Data indicates that there may have been some issues why more than half of the visitors only visited TNNP once. Hence, good impression of TNNP should be highlighted and ensure tourism related activities are provided at a satisfactory level to all visitors. In addition, it was also found that the respondents are mostly Malaysian with 62.67% while only 37.33% were observed as international visitors.

Feedback of the Survey

Respondents were given a survey form and were interviewed in order to collect their perception of environmental issues in TNNP. From the survey, six main issues related with environmental pollution were identified during the study: (i) unsatisfactory water quality of Kuala Tahan River, (ii) litter/garbage waste near the river is visible, (iii) food stalls in Kuala Tahan are less clean, (iv) surrounding temperature is quite warm, (v) disturbance of biodiversity system and (vi) occurrence of river erosion.

Based on the evaluation data, 91.60% of the respondents agreed (and strongly agreed) that the water quality of Kuala Tahan River was unsatisfactory. In the context of visible scattered litters and garbage waste near the river, only 17.4% of respondents disagree with the statement and the remaining said it was visible. According to 83.70% of respondents, food stalls in Kuala Tahan were less clean. Only 1.70% strongly disagree with this issue. The predominance of respondents (97.5%) agreed that the surrounding temperature is quite warm while only 2.5% of the respondents neither agree nor disagree. In terms of issues related to the disturbance of biodiversity system in TNNP, 52.50% strongly agree with this issue and only 2.50% of respondents disagree. Majority of the respondents (91.30%) opined the occurrence of river erosion in TNNP while only 6.30% of respondents disagree with the statement. Meanwhile, 2.40% of

the respondents neither agree nor disagree with the statement.

Visitors Perspective towards TNNP Environmental Pollution

In the context of the *water quality of Kuala Tahan River*, respondents believed it was a result from logging activities in the river upstream. In addition, they added that the use of gasoline for passenger boats, wastewater from nearby foodstalls and garbage waste also contributes to the deterioration of the river. Besides having to bear with the unaesthetic view and smell, it may also illustrate to visitors that TNNP management is not being responsible for the issues they have created. Most of the respondents expressed their disappointment towards TNNP management. Moreover, some of the respondents feel that there is no need to use boats for tourism purposes in TNNP. Similar case was observed near the floating restaurant. An interview with the floating restaurant operators disclosed that they are uncertain which agency is responsible to haul the garbage. They further added that tourist themselves also throw rubbish everywhere. Massive influx of tourists at once can cause negative impact towards the environment especially those who have no concern on taking care of the environment (Mohamed, 2008). Deterioration of the river will damage the good reputation of the national park. Respondents who visited more than once claimed that the river has been seriously polluted compared to their first visit. Respondents added that immediate measures should be taken to solve the problem as this can lead to other issues such as health issues, skin problems and ecosystem disturbance.

The second environmental issue was the *visibility of garbage waste near the river*. According to some respondents, the irresponsible manner can encourage the breeding ground for rats, mosquitoes and other animal-borne diseases causing serious effects towards human. Most of the respondents pictured their visit as if they were visiting a landfill. Respondents also questioned the role of related agencies on their responsibility of handling the waste. Improper waste management will disturb the quality of the air, water, soil and biological aspects that will have impact on living creatures and this will also affect the lives of the communities in the vicinity.

In terms of its *food stall cleanliness*, majority of respondents are unhappy with the cleanliness state of the food stalls. Some are concerned with the food hygiene and would rather bring their own food instead of buying at food stalls. Moreover, if this issue is not resolved immediately, it can affect the economy of TNNP.

Respondents feel the issue regarding *warm surrounding temperature* in TNNP may be due to the uncontrolled logging and deforestation for ecotourism development purposes. Through authors' observation in study location, deforestation activity took place in many parts of TNNP especially near the TNNP entrance. As a result, majority of the respondents felt less comfortable during their stay.

In the context of *disturbance of biodiversity system* in TNNP, majority of the respondents express their anger towards the inefficient and poor management of TNNP. They added, the destruction of the environment may cause gradual loss of visitors in future. However, authors believed that TNNP management is not the only party to be blamed. Local communities and visitors should also take their role as a responsible community to preserve the environment and biodiversity ecosystem.

The last issue raised was on the *erosion of Kuala Tahan river bank*. Erosion can cause severe damage to the local homes and visitors accommodation that were built near the river banks. Based on the data collected, majority of the respondents noticed the condition of Kuala Tahan river bank. The information provides a clear picture that respondents were aware of the current surroundings. Respondents expressed their concern on their safety condition during their stay. Respondents also highlighted that they would not revisit TNNP again if no action is taken to solve the problem.

Conclusion

In terms of the study output, majority of the respondents felt that something is needed to be done in order to sustain TNNP as an ecotourism destination, solving the environmental issues related to anthropogenic activities, in particular. The conclusions of the survey found that respondents agreed that TNNP has suffered more environmental issues than its good. Therefore, to preserve TNNP as the world recognized rainforest, further action should be taken by the Department of Wildlife and National Parks (DWNP) Peninsular Malaysia and other relevant authorities to enforce tighter enforcement on the uncontrolled growing of development in TNNP. Good governance and political control over access by TNNP management must also be carefully addressed. However, to preserve the environment is the responsibility at all levels of community including the visitors. Authors believed that educating visitors, stakeholders and local communities on the importance of sustaining TNNP is crucial as

it will increase the level of awareness towards the rainforest and environment, in particular.

On the other hand, TNNP management should also consider in limiting visitors or increasing the entrance fee to enter TNNP at certain season especially during the peak season to avoid over crowded and avoid unnecessary environmental damage at once. In addition, TNNP management could also expose or introduce tourists to visit different areas in the national park—to avoid over crowds at one place at a time. Through this, TNNP management will be able to better plan strategies in sustaining the rainforest and control and minimize the environmental damages in TNNP.

More research on monitoring and minimizing the environmental degradation and water quality status of Kuala Tahan River (in particular) is needed. Nevertheless, in order to understand the perceptions at all levels of communities and to develop a refined framework or policy, more research of awareness and perception is needed.

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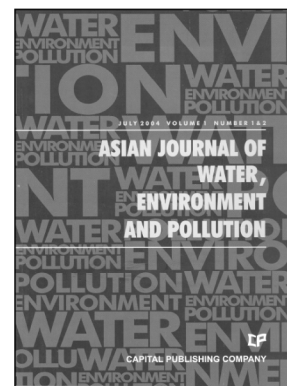
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Aims and Scope

Asia, as a whole region, faces severe stress on water availability, primarily due to high population density. Many regions of the continent face severe problems of water pollution on local as well as regional scale and these have to be tackled with a pan-Asian approach. However, the available literature on the subject is generally based on research done in Europe and North America. Therefore, there is an urgent and strong need for an Asian journal with its focus on the region and wherein the region specific problems are addressed in an intelligent manner. In Asia, besides water, there are several other issues related to environment, such as; global warming and its impact; intense land/use and shifting pattern of agriculture; issues related to fertilizer applications and pesticide residues in soil and water; and solid and liquid waste management particularly in industrial and urban areas.

Asia is also a region with intense mining activities whereby serious environmental problems related to land/use, loss of top soil, water pollution and acid mine drainage are faced by various communities.

Essentially, Asians are confronted with environmental problems on many fronts. Many pressing issues in the region interlink various aspects of environmental problems faced by population in this densely habited region in the world. Pollution is one such serious issue for many countries since there are many transnational water bodies that spread the pollutants across the entire region. Water, environment and pollution together constitute a three axial problem that all concerned people in the region would like to focus on.

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