

ENVIRONMENTAL SUSTAINABILITY AND TOURISM ACTIVITIES IN BACKWATERS OF KERALA

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ABSTRACT

Kerala is one among the unique destinations of travel lovers. Its unique attraction makes Kerala as the most popular tourist destination in the world. Lakes, beaches, backwaters and houseboats are the unique selling point of Kerala's tourism industry. Most of the travelers are enchanted by the backwaters. It becomes the most enjoyable and not-to-miss tourist products in Kerala for the holiday, leisure trips of domestic and international tourists. The main objective of this study is to identify factors that encourage tourists to visit backwater regions of Kerala and host community's perception of the impact of tourism on the environmental sustainability of Backwaters of Kerala. In order to accomplish the study objectives, a survey questionnaire was developed for this research. The questionnaire included questions regarding tourists' perception and attitude towards the backwater tourism, as well as consumer preference and the factors affecting tourism demand for backwater tourism. Descriptive statistics, T-test were conducted to accomplish study objective.

Keywords: *Backwater Tourism; Environmental sustainability; Community Perceptions*

INTRODUCTION

The word "Sustainability" has become an important nomenclature in the field of tourism industry because it is directly related to the available resources. It throws light to how this existing resource is used presently and how it will be utilized in the near future. Sustainable tourism has been developed to protect the natural beauty of the environment together with the creation of economic opportunities for local communities. It creates awareness among the people to conserve the environment, as sustainable tourism is booming in many parts of the world. As the number of visitors to a destination increases, so does the curiosity and interest in visiting and experiencing new places and a new culture. Some of these destinations and venues show how tourism activities, if not properly done, bring negative impact on the environment. Unethical practices of tourism activities may destroy the natural and cultural resources of the land that attract the tourists. Excessive use of the environment to accommodate tourism activities may cause the destruction of the ecosystem. Encroachment of builders, unsafe practices and pollution due to waste and garbage and so on may bring negative impact on tourism.

It is very challenging to evaluate adverse impacts of the tourism activities on the ecosystem because the environmental impacts arise not only due to increase in a number of visitors but also due to various operations of tourism industry such as transportation, pollution, waste generation, etc. Even though it is tough to evaluate the adverse problems of the industry, it is the responsibility of each and everyone who is involved in the tourism sector to protect the natural and cultural resources for sustainable tourism development.

Implementation of environment-friendly programme creates a sustainable environment. It is better to practice solid waste management, energy saving measures and recycling methods to reduce the negative impact on the destination or natural environment. Nowadays customers are very well aware of the various responsibilities of the industry that would protect and conserve the natural ecosystem in which the industry operates. It is also essential to look into the changing customer preferences in choosing the most appropriate, eco-friendly and sustainable products that would strengthen the environment and ecosystem. Habitats and sustainable products enliven the industry.

Different components like local community, visitors or tourists, and tourism industry in a destination must contribute to further sustainable development. When the products are more environmentally sensitive, to the business it means more profit, growth and attention of the public because nowadays people are looking for the best natural and uncontaminated virgin products. The tourism enterprises do not often use sustainable practices to achieve the goals of the organization, but they consider it after they are financially stable or secure to reduce the risk of financial problems.



Natural resources that are very crucial for protecting the environment and encouraging local livelihoods, like fresh water, are also affected by various tourism activities. Recognizing these links is important to promote sustainable tourism in the coming future. At the same time sustainability of the environment, nature protection through local awareness can have a positive effect on the destination. Legitimate tourism management practices promise both social and environmental benefits to the local community. It also needs the collaboration of sustainable development components as public and private agencies with the support of local authorities.

The important factor to be remembered here is that if we want our economy to be developed unparalleled, so as to wipe off the poverty totally and to improve the livelihoods of local community, not only in this era but also forever, then we must make use of the available natural resources and cultural environment on which our tourism activities rely. Community participation in various tourism activities would lead us to attain sustainability in a destination. It will maintain a balance between economic sustainability and environmental sustainability. In such a way sustainable tourism promotes environment-friendly tourism activities that would conserve the natural environment.

As the growth of the tourism activities depends upon the sustainability of the environment, tourism has a major role to play in the conservation of natural resources. But unfortunately, waste is the major challenge and problem to the backwater regions of Kerala especially at Kumarakom and Kuttanad in the districts of Kottayam and Alappuzha respectively. These destinations, in one way or other, greatly seek to improve the life of the local communities through tourism, but waste disposal comes as a major threat to accomplish this goal in these destinations. Huge quantities of waste dumped, unbalanced and unscientifically spoil the pristine beauty of these tourist spots.

Lakes, beaches, backwaters and houseboats are the unique selling point of Kerala's tourism industry. Most of the travelers are enchanted by the backwaters. It becomes the most enjoyable and not-to-miss tourist products in Kerala for the holiday, leisure trips of domestic and international tourists. Snake boat race, Houseboat experiences, Coir industry, Marine products, etc., attract the tourists from all over the world. The inflow and outflow of national and international tourists create positive and negative impacts on the nature of the backwater regions. Houseboat tourism which provides economic and socio-cultural benefits to the local communities is booming up in the backwater regions of Kerala. But on the other hand, people living in the area become the victims of this ever threatening problem of the poor waste management system. This directly or indirectly affects the ground water, pure drinking water and the eco-friendly life of the human being that one is bound to lead.

LITERATURE REVIEW

The principle of sustainable development is based on the three pillars of sustainability; on the association of economic, environmental and social aspects of every TPD (Tourism Development Programme) (Varvazovska & Prasilova, 2015). Globally human activities are under stress to strive towards sustainability (Kevin, 2012). This movement towards greater sustainability is influencing all aspects of our lives on a daily basis including our holiday and travel decisions. Sustainable tourism is considered as the most appropriate form of tourism development on certain reception areas, specifically those which preserved the most natural and cultural authenticity standards (Butowski, L. 2012). Sustainable development is actually finding a solution for the better living of local community without causing any problem to the natural environment (Slocum, 2010).

Csoban and Gathy (2005) highlights on the twelve aims which are developed by the WTO for the sustainable tourism in a destination which include Economic Viability, Local Prosperity, Employment Quality, Social Equity, Visitor Fulfillment, Local Control, Community Wellbeing, Cultural Richness, Physical Integrity, Biological Diversity, Resource Efficiency and Environmental Purity. These aims create an opportunity for the local community to participate in various tourism advancements boosting up the level of harmonization between government organization in relation with tourism industry which takes the lead role in promoting the tourism in a destination, and finally a full-fledged sustainable development.

Sustaining the community becomes an essential element of sustainable tourism (Taylor, 1996). To achieve long lasting outcome, communities need to be active participants rather than passive observers (Muganda, Sirima, Moshy, & Mkumbo, 2012). Apart from the tourism service providers and visitors, the local residents also have a same duty and responsibility to take care of their environment. Local community's relation with the tourists generates economic growth, conservation of environment and benefits for local communities.



Tourism development includes a broad range of activities involved in construction, maintenance and working of various facilities such as hotels, resorts, restaurants, houseboats and scenic area, provided in any tourism destination. The different activities undertaken generate waste material affecting the surrounding ecosystem (Kariminia, Ahmad, & Hashim, 2012). This effect is considerably higher in a pristine environment like backwater destinations. The major issues facing the wetlands of Kerala are mainly related to pollution, eutrophication, encroachment, reclamation, mining and biodiversity loss (K, P Periya, & Kallevettankuzhy K, 2008). Less fuel/running cost, no oil or diesel contamination into backwaters, no untreated sewage into a backwater, reduction in noise pollution are the ways to achieve the dream for a green and pleasing future in Kerala backwater and to save the same for the next generation (Mathen, 2012).

THE PURPOSE OF THE RESEARCH

The main objective of this study is to identify factors that encourage visitors to visit backwater regions of Kerala and host community’s perception of the impact of tourism on the environmental sustainability of Backwaters of Kerala. To achieve the purpose of the study two objectives of the study was constructed

1. To identify the factors which encourage tourists to visit the Backwater regions of Kerala
2. To determine the host communities perceptions of the impact of tourism towards the environment in the Backwater regions of Kerala

MATERIAL AND METHOD

In order to accomplish the study objectives, a survey questionnaire was developed for this research .The questionnaire included questions regarding tourists’ perception and attitude towards the backwater tourism, as well as consumer preference and the factors affecting tourism demand for backwater tourism. Some responses were designed according to the Likert five-point rating scale. The questionnaires were then subject to expert validation in the field. This was followed by data collection. The responses for each item in the questionnaire were coded for item analysis. This was done to validate the scientific reliability of the questionnaires. Cronbach’s alpha was used to determine the alpha score. The result of the reliability analysis was 0.726 and 0.733 for tourists and local community respectively, which indicated a high degree of internal consistency among the scale items. Descriptive statistics, T-test were conducted to accomplish study objective. The research universe or target population consists of the tourists both domestic and international and local community (Host population). A sample was determined to be representative of the target population, and questionnaires were committed to 150 tourists and local communities. Questionnaire forms were written in two languages; i.e., English and Malayalam (Local language).

FINDINGS AND DISCUSSION

Table 1 shows the demographic characteristics of the tourists who participated in the study. The results indicate that the maximum respondents were female with a count of 78 constituting 52% followed by male with a count of 72 constituting of 48%. With regard to age, maximum respondents come under (30-39) with a count of 129 constituting 86% followed by (40-49) and (20-29) with a count of 12 and 9 constituting 8%, 6%, respectively.

Table1: Profile of Respondents

Description		n	%
Gender	Male	72	48.0
	Female	78	52.0
Age	20-29	9	6.0
	30-39	129	86.0
	40-49	12	8.0

Table 2 shows the mean values and standard deviations for factors that attract tourist to backwater regions. The main factors that attract tourist to backwater regions were to get relieved from work stress (\bar{x} = 4.79) and to relax



themselves in a natural environment ($\bar{x} = 4.60$). They will have a chance to have common activities as indicated by the Mean score 3.97. They also have a chance to avoid urban sophistication as indicated by the Mean score 4.30.

Table 2: Factors that attract tourist to backwater regions

Factors influencing backwater visit.	N	Mean	Std. Deviation
Relaxing with natural location	150	4.60	0.492
Chance to have common activities	150	3.97	0.543
Chance to avoid urban sophistication	150	4.30	0.540
Relief from work	150	4.79	0.406
Proud of traveling	150	3.52	0.775
Freedom	150	3.93	0.598

Tourists are of the opinion that house boat experience ($\bar{x} = 4.11$) and Photography ($\bar{x} = 4.01$) were the best things they liked the most in their travel to backwater regions. Other activities of their interest were shown below (Table 3)

Table 3: Current activities in backwater region

Description	N	Mean	Std. Deviation
Scenery viewing	150	3.93	1.180
House boating	150	4.11	0.886
Boating	150	3.61	1.048
Local cuisine	150	3.79	0.872
Culture	150	3.05	0.763
Agri-farm	150	2.85	0.814
Local art(Traditional art)	150	3.03	0.806
Shopping	150	2.00	0.948
Boat race	150	2.30	1.225
Photography	150	4.01	1.017

Table 4 shows the demographic characteristics of the local communities who participated in the study. The results indicate that maximum respondents were female with a count of 87 constituting 58% of total respondents followed by male with a count of 63 constituting of 42%. With regard to age maximum respondents comes under (20-29) constituting 42.7% followed by (30-39), (60 and above), (40-49), (50-59), 1(<20) constituting 24.7%, 16%, 8%, 4.7% and 4% respectively.

Table4: Profile of Respondents (Local communities)

Description		n	%
Gender	Male	63	42.0
	Female	87	58.0
Age	<20	6	4.0
	20-29	64	42.7
	30-39	37	24.7
	40-49	12	8.0
	50-59	7	4.7
	60 and above	24	16.0

The second objective of this study is to identify local community's perception of the impact of tourism activities towards Backwater region. Table 5 shows the findings. Data obtained indicate on the negative impact of tourism activities. Backwater regions face various problems due to tourism related activities, and it is affecting the fish wealth, sewage or fuel spillage, rubbish from pleasure boats and mushrooming of houseboats creates water pollution, plastic waste contributes environmental degradation. Since the result of all variable is significant at 5% level that is p value is less than 0.05, and the calculated t-value is greater than the critical t value it is clear that local community faces various problems due to tourism related activities.

Table5: Local communities perceptions on the impact of tourism activities

Items	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Fish wealth in the lake is also affected by the dumping of waste from houseboats	18.649	149	.000	1.247	1.11	1.38
Chemical fertilizers and effluents from houseboats provide nutrients to water hyacinth	13.058	149	.000	0.820	0.70	0.94
Unplanned construction of tourist facilities destroyed the beauty of nature	16.706	149	.000	1.187	1.05	1.33
Sewage or fuel spillage and rubbish from pleasure boats create water pollution	21.914	149	.000	1.313	1.19	1.43
The mushrooming of houseboats cause water pollution	13.726	149	.000	0.933	0.80	1.07
Plastic waste is contributing environmental degradation	7.253	149	.000	0.720	0.52	0.92



CONCLUSION

Kerala is one among the unique destination of travel lovers. Lakes, beaches, backwaters and houseboats are the unique selling point of Kerala's tourism industry. Improper disposal of waste material, solid waste and littering can degrade the physical appearance of the destination. Increasing negative impact and loss of natural environment would cause the present generation an irreparable future. Tourism has a vital role to play in the conservation of natural resources. Proper nurturing of Backwater regions would improve the sustainability of the environment. Government agencies, voluntary organizations, individuals and communities involved in the effort of preservation and conservation of the backwater regions are to be coordinated to maintain sustainable tourism. The people here become the ambassadors of tourism and become the part and parcel of promoting sustainable tourism in the backwater region. We need to awake and make people conscious of the importance of keeping the environment clean, tidy and eco-friendly. Each and every citizen should think that it is his/her duty and responsibility to keep the surrounding godly.

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