

Pros and Cons of Houseboat Cruise in Kerala with Particular Reference to Kumarakom

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ABSTRACT

This study investigates the dual impacts—economic and environmental—of houseboat tourism in Kumarakom, Kerala. Drawing on responses from 150 participants across three key stakeholder groups (local residents, tourists, and tour operators), the research examines both the benefits and challenges associated with this form of ecotourism. A structured questionnaire was employed, and data were analyzed using chi-square statistical techniques. The findings indicate that while houseboat tourism fosters job creation, community identity, and infrastructure development, it also poses significant environmental concerns such as water pollution, reduced fish yields, and invasion of local privacy. These contradictory outcomes necessitate stricter policy regulation and environmentally responsible tourism practices. This paper contributes to the discourse on sustainable tourism by offering recommendations for balancing ecological preservation with economic gain.

Keywords: Houseboat cruise, Tourism, Backwater, Kerala.

INTRODUCTION

Kerala backwaters are a network of brackish lagoons and lakes lying parallel to the Arabian Sea coast (known as the Malabar Coast) of Kerala state in southern India, as well as interconnected canals, rivers, and inlets, a labyrinthine system formed by more than 900 kilometres (560 mi) of waterways, and sometimes compared to American bayous. The network includes five large lakes linked by canals, both manmade and natural, fed by 38 rivers, and extending virtually half the length of Kerala state. The backwaters were formed by the action of waves and shore currents creating low barrier islands across the mouths of the many rivers flowing down from the Western Ghats range. In the midst of this landscape there are a number of towns and cities, which serve as the starting and end points of backwater cruises.

The backwaters have a unique ecosystem: freshwater from the rivers meets the seawater from the Arabian Sea. A barrage has been built near Thanneermukkom, so salt water from the sea is prevented from entering the deep inside, keeping the fresh water intact. Such fresh water is extensively used for irrigation purposes. Many unique species of aquatic life including crabs, frogs and mudskippers, water birds such as terns, kingfishers, darters and cormorants, and animals such as otters and turtles live in and alongside the backwaters. Palm trees, pandanus shrubs, various leafy plants, and bushes grow alongside the backwaters, providing a green hue to the surrounding landscape.

The backwater regions of Kerala are one of the most popular tourist destinations in the world. The tranquil backwater cruises are a once in a lifetime experience. Alappuzha, known as the 'Venice of the East', is especially popular for its houseboat cruises where you can soak in nature at its finest form. Present day houseboats are huge, slow moving exotic barges used for leisure trips, and are in fact a reworked version of the Kettuvallams of olden times. The original Kettuvallams were used to carry tons of rice and spices.

A standard Kettuvallam can hold up to 30 tons of goods from Kuttanad to the Kochi port.

In Malayalam language Kettu refers to 'dwelling structures' 'Vallam' means boat. These are boats with a thatched roof cover over wooden hulls. The boat is made of planks of jack- wood joined together with coir. This is then coated with a caustic black resin made from boiled cashew kernels. With careful maintenance, a Kettuvallam can last for generations. A portion of the Kettuvallam was covered with bamboo and coir to serve as a restroom and kitchen for the crew. Meals were cooked onboard and supplemented with freshly cooked fish from the backwaters.

When modern trucks replaced this system of transport, people came up with a new way that would keep these boats, almost all of which were more than 100 years old, in the market. By constructing special rooms to accommodate travellers, these boats cruised forward from near-extinction to enjoy their present popularity. Today these are a familiar sight on the backwaters and in Alappuzha alone, there are as many as 500 houseboats. While converting kettuvallams into houseboats, care is taken to use only natural products. Bamboo mats, sticks and wood of the areca nut tree are used for roofing, coir mats and wooden planks for the flooring and wood of coconut trees and coir for beds. Nowadays, Solar panels are preferred for lighting.

Today, the houseboats boast of the same comforts of a good hotel including furnished bedrooms, modern toilets, cozy living rooms, a kitchen and even a balcony for angling. Parts of the curved roof of wood or plaited palm leaves open out to provide shade and allow uninterrupted views. While most boats are poled by local oarsmen, some are powered by a 40 HP engine. Boat-trains - formed by joining two or more houseboats together are also used by large groups of sightseers. Through the tourism and house boat services and products are available at the finger tips now. The study examines the positive and negative impact of house boat tourism in Kerala.

Statement of the Problem

Houseboats and backwaters are the two major tourist attractions among the many attractive places in Kerala. The Kerala state launched the India International Boat Show, as the only boat exhibition of its stature in South Asia to convert Kerala into a hub of tourism centric activity. The backwaters mainly cover the four districts of the state - Kollam, Allappuzha, Kottayam and Kochi. Countless lagoons, lakes, canals, estuaries, and the deltas of forty-four rivers make up the 900 km backwater network of Kerala. The largest backwater body, the Vembanad lake flows through Alleppey and Kottayam districts and opens out into the sea at the Kochi Port. The Ashtamudi Lake, the second largest backwater stretch, offers the longest ride and is considered the gateway to the backwaters. The beauty of the backwaters permits

the houseboats to sail on the waters and give zeal to the tourists. These services bring in more business to the local people city corporation and the district. Regularly tourists visit Kerala and enjoy the zest of the backwaters on the house boats. Thus, this paper shows significance on the service provided by house boats on backwaters to develop the tourism marketing in Kerala. The present study focuses on the impact of backwater tourism in Kerala together with the pros and cons of it.

Objectives of the Study

1. To assess the perceived environmental impact of houseboat cruises among stakeholders.
2. To analyze the economic and social benefits derived from houseboat tourism.
3. To examine stakeholder awareness of ecological sustainability practices.

Hypothesis of The Study

1. H₀: There is no significant perceived environmental impact of houseboat tourism in Kumarakom.

2. H0₂: There is no significant difference among stakeholder groups regarding the perceived economic benefits of houseboat tourism.
3. H0₃: Houseboat tourism does not significantly affect local agricultural livelihoods.

REVIEW OF LITERATURE

Manoj Edward and Babu P. George (2008) in their article, "Tourism development in the State of Kerala, India: a study of destination attractiveness", have made an attempt to assess the destination attractiveness of Kerala, an emerging tourism destination in India. The study has revealed the strengths and weaknesses of Kerala from the demand side perspective, which suggests implications for destination marketing efforts. The analysis highlights the importance of specific destination attraction elements as core appeals of the destination. The analysis provides a solid theoretical rationale for the spectacular performance of Kerala tourism in the recent years across a number of fronts. The study is helpful to tourism decision makers in public and private sectors to understand the potential and development strategies of tourism in Kerala.

Siby Zacharias, James Manalel, Jose, M.C and Afsal Salam (2008) in their article, "Back Water Tourism in Kerala: Challenges and Opportunities", have studied the effect of back water tourism on the environment. The study concludes that there is an adverse effect on environment and house boats (Kettuvallom) are integral parts of backwater tourism.

J.Legy, Vasanthi S (2017) in their article titled a study on motivating factors of the tourists about the house boats services in Kumarakom, Aleppey district stated that the Tourism

department must take due care and diligence to overcome shortcomings if any. Tourism marketing involves tactical planning and accomplishment of various marketing strategies by adopting SWOC analysis. It must take into consideration the major other factors such as tourists, their likes and dislikes. The strengths and weaknesses of competitors, tourism objectives, communicative media and immediate risk factors to be taken as a vital need for the need of the hour for the tourists visiting Kerala. Hence marketing strategies must be designed on the recent trends to create customer values. Foreign tourists should be well honored and taken care by the State.

METHODOLOGY

This study used both primary and secondary data sources. Primary data were collected using a structured questionnaire targeting three distinct stakeholder groups: local residents, tourists, and tour operators. A stratified sampling method was employed to ensure equal representation from each group, with 50 respondents per group, totaling 150 participants. Inclusion criteria involved individuals directly interacting with houseboat tourism (residents living near backwaters, registered tour operators, and visiting tourists). Secondary data were sourced from published academic literature and tourism department reports. The data were analyzed using descriptive statistics and chi-square tests to explore associations between stakeholder perceptions and environmental impact.

Key variables included:

- **Perceived Environmental Impact** (ordinal variable: severe–none)
- **Perceived Economic Benefit** (nominal)
- **Cultural Impact** (nominal)

DATA ANALYSIS AND INTERPRETATION

Table No: 1

Effect of House boat cruise on environment

	Extend on effect on environment					
Respondent s	Severe effect	Major Effect	Moderate effect	Minor effect	No effect	Total
Local People	22	16	5	5	2	50
Tour Operators	17	26	2	4	1	50
Tourists	19	21	4	5	1	50
Total	58	63	11	14	4	150

#Source: Primary data

Among the total respondents 58 people (38%) responded that house boat cruise will have a severe effect on environment and 41% responded that it has major impact on environment. 11 respondents (7%) responded that there will be moderate impact 9% stated that there is only minor impact. Out of the total respondents only 5% stated that there is no effect.

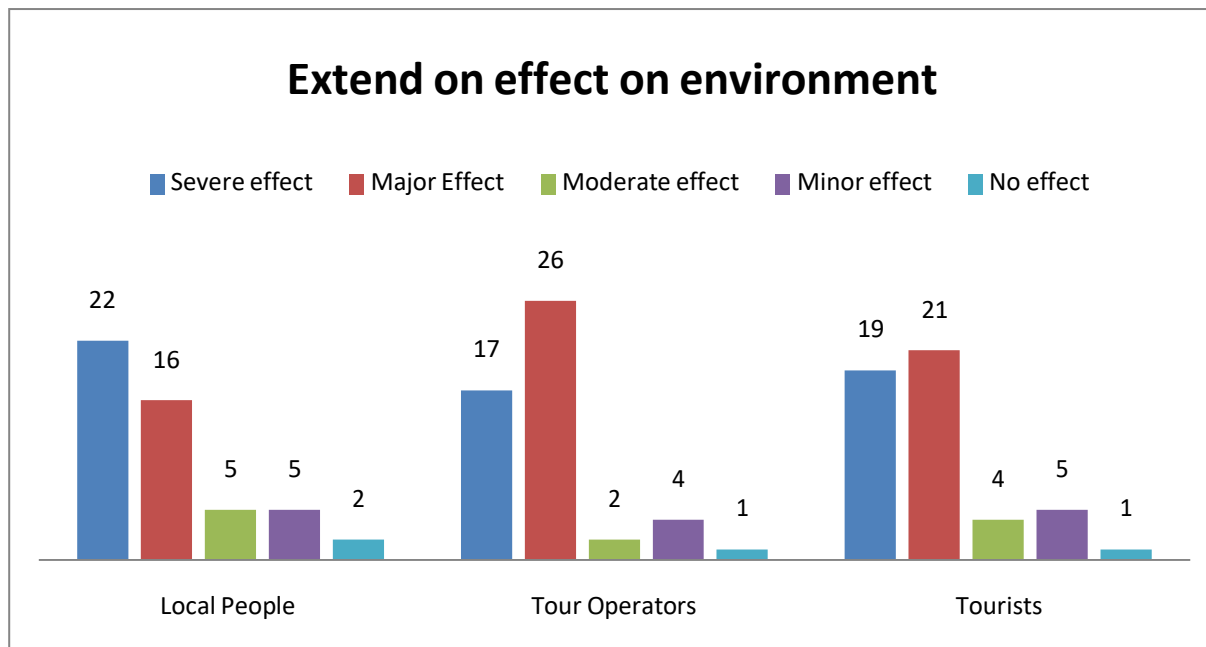


Figure No: 1

Effect of House boat cruise on environment

#Source: Primary data

The chi-square test ($\chi^2 = 6.39$, $p = 0.603$) (Table 2) indicates that there is no statistically significant difference in perceptions of environmental impact across the three stakeholder groups. However, over 79% of all respondents still perceive moderate to severe environmental effects, suggesting a common concern despite the lack of statistical variation. This result underlines the need for environmental regulation regardless of stakeholder role. The chi-square test results are given in the table below.

Table no: 2 Chi – Square test results

Results	
Chi-Square Test Statistic	6.3931
p-Value	.60329
The result is not significant at $p < .05$. Reject the null hypothesis	

#Source: Primary data

Hence the P value is greater than .05 we are rejecting the null hypothesis and accepting the alternative hypothesis that is house boat cruise has effect on the environment

Pros of House Boat cruise

- 1. Increased Job opportunities** – Employment related to boat cruise such as tour guide or managerial positions, chef, and together with artists to perform within the cruise will be increased.
- 2. Increased spending**- Increased spending in the community generated from visitors or tourism businesses can directly and indirectly promote the viability of local businesses.
- 3. Economic diversification** - Tourism operators can play a role in highlighting the broad prosperity that tourism can bring to a community and will contribute to a greater understanding and respect for the value of tourism.
- 4. Infrastructure** - Infrastructure including roads, parks, and other public spaces can be developed and improved both for visitors and local residents through increased tourism activity in a region.
- 5. Social benefits** - Community identity and pride can be generated through tourism. A positive sense of community identity can be reinforced and tourism can encourage local communities to maintain their traditions and identity.
- 6. Environmental benefits** - Providing financial or in-kind support for the conservation of the local environment and natural resources will enhance the reputation of any tourism business.

Cons of House Boat cruise

- 1. Drinking Water** - Sewage and plastic waste is being dumped into the waterways. Over 80 per cent of households living along or near the backwaters rely on its water for daily drinking and cooking. However, less than half of these residents reportedly treat the water before consuming it and many have no alternative water supply.
- 2. Fish catches down** - Local fishermen state that fuel, sewage and plastic are affecting fish and prawn catches.
- 3. Agricultural impacts** - Livelihoods within the agricultural sector are also being severely hit. Paddy fields are directly irrigated by the backwaters, which mean that oil, sewage and rubbish from the houseboats easily flows into these agricultural units. Furthermore, farmers attribute recent incidences of ill health to prolonged contact with polluted water.
- 4. Locals people's privacy and culture is being invaded.** Tourist boats are mooring wherever they want, and often near to private houses and even directly overlooking them. Locals also tell of inappropriate behaviour by visitors, including drunkenness, noise and explicitly sexual behaviour etc.

FINDINGS, SUGGESTIONS AND CONCLUSION

House boat cruise has a lot of pros or advantages such as it creates employment opportunities; From the study it was found out that there is a negative impact on environment due to houseboat cruise. Economic diversification, infrastructural development, social benefits etc. But even though there are a lot of advantages the major disadvantage is that it affects the drinking water, aquatic animals, environment pollution and also agricultural impacts. Majority of the respondents also stated that the locals are highly affected by these problems. So, proper control has to be taken by the boat owners in order to avoid such problems and for the effective functioning.

Suggestions

1. Effluent Treatment Plant consisting of treatment units namely biotank and disinfection facility shall be provided.
2. The final discharge shall be into the common ETP operated by DTPC
3. The final discharge shall be disinfected using U.V rays and the disinfected water let out into the lake
4. All the discharges including that from toilets & kitchen shall be collected in collection tanks of 1000 litres capacity per bed room and at the end of the day it shall be discharged in the dry land disposal facility.
5. Separate bins shall be provided for the collection of bio-degradable and non- biodegradable solid wastes and these waste shall be disposed scientifically.
6. Use eco friendly bags and container (plates, glass) in the house boat.
7. Dry land facilities for disposal of solid waste shall be provided
8. Maintenance of engine shall be conducted only in dry dock.

Conclusion

Houseboat tourism in Kumarakom presents a complex interplay between economic opportunity and environmental risk. While it has spurred job creation, infrastructure development, and local pride, its unchecked expansion threatens water quality, fish populations, and agricultural livelihoods. The results of this study underscore the urgency for environmental safeguards, community education, and sustainable tourism policies. A balance between ecological stewardship and economic benefit is essential for the long-term viability of Kerala's iconic backwater tourism. It is worthwhile to note that backwaters act as a nursery and supporting ground for many marine species which migrate into these water bodies during certain stages of their life cycle. Moreover, these water bodies provide a haven and breeding abode for a lot of migratory and local bird folks.

Tourism industry possesses the potential to bring large volume of foreign exchange in payment for goods and services and big capacity to generate employment opportunities especially in the developing regions of the world. It is to be noted that this industry has progressed in diverse styles and forms in different destinations. Alappuzha is well known as a backwater and beach tourist destination in Kerala. The progress of tourism industry in the district has brought great leap forward in many unnoticed villages, however, it has also led to the generation of many socio-cultural and environmental issues. So necessary steps has to taken in order to overcome it by the concerned authority for the growth of the industry and also to protect the environment.

REFERENCES

1. Dr.Manoj Sharma, Prof. (Dr) S.P.Bansal, 2010, Tourism Infrastructure Development— A sustainable Approach, Kanishka Publlishers, Distributors, 4697/5- 21A, Ansari Road, Daryaganj, New Delhi- 100 002.
2. J.Legy, Vasanthi , 2017, A study on motivating factors of the tourists about the house boats services in Kumarakom, Aleppey district, International Journal of Advanced Research in Management and Social Sciences, Vol. 6 ,No. 4 ,April 2017 ISSN: 2278- 6236, PP – 127 – 150
3. Joseph Jeemon,2017, The Economic benefits of Tourism in Alappuzha, the smallest district in Kerala, Journal of Emerging Technologies and Innovative Research, October 2017, Volume 4, Issue 10

- www.jetir.org (ISSN-2349-5162), PP , 565 – 584.
4. Siby Zacharias, James Manalel, Jose, M.C and Afsal Salam 2008, "Back Water Tourism in Kerala: Challenges and Opportunities", Conference on Tourism in India – Challenges Ahead, 15-17 May 2008, IIMK, PP 524 – 529
 5. https://sg.inflibnet.ac.in/bitstream/10603/210924/3/12_chapter1.pdf
 6. www.keralatourism.org.
 7. www.wttc.org
 8. www.tourismofindia.com