
Sustainable Perspectives on Coastal Tourism: A Case Analysis of Alappuzha

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Abstract

Tourism stands as a paramount contributor to contemporary economic prosperity, playing a pivotal role in the overall development of nations. Notably, coastal tourism has gained substantial prominence in recent times, further accentuating its significance. This study meticulously examines the dichotomy of positive and negative ramifications associated with coastal tourism. In an era dominated by environmental concerns, the imperative to shield and preserve the environment emerges as a focal point for the sustenance of all life forms. The study underscores the critical challenges posed by environmental degradation, pollution, inadequate access to potable water, and the pervasive issue of plastic overuse, collectively posing substantial threats to life on Earth. The findings accentuate the gravity of these challenges, emphasizing the need for concerted and earnest efforts in their resolution. It is posited that the crux of the matter lies in the conscientious management of waste, presenting itself as the singular solution to alleviate environmental predicaments. As the study delves into the intricate dynamics of coastal tourism, it advocates for a serious and dedicated approach to address these environmental concerns, fostering a comprehensive understanding of the issues at hand. Consequently, a judicious and effective waste management strategy emerges as the linchpin for mitigating these challenges and steering towards a sustainable future, where the symbiotic relationship between tourism and the environment can coexist harmoniously.

Key words: Environment, Coastal, Tourism, Positive impact, Negative impact.

Introduction

Tourism stands out as one of the world's largest industries, yet providing a precise and comprehensive definition proves challenging due to its intricate connections with various life sectors such as economic, social, cultural, environmental, and political (The Economist, 1991). Globally, the influx of tourists, both in terms of physical presence and financial impact, continues to rise steadily.

In the coastal economy of Kerala, fisheries play a crucial role, deeply rooted in India's caste-bound communities with a longstanding tradition of fishing as a subsistence occupation. The extensive coastline and productive continental shelf bestow upon fisheries the potential to drive rural economic growth in India. The inshore sea area within the state's territorial limits (22 km) covers approximately 13,000 sq.kms, representing the most productive segment of the Arabian Sea. Despite Kerala's reputation for the highest quality of life in the country based on human development indicators, the state's fishing community has largely been excluded from the overall development narrative.

Alappuzha, once the business hub of Kerala and famously referred to as the "Venice of the East," has evolved into a prominent tourist center with expansive backwaters. Alappuzha is also known as a hub for lake tourism with many rivers and lakes around it. In addition to backwater tourism, Kerala experiences a thriving array of other tourism forms, including beach tourism, farm tourism, home-stay tourism, and health tourism.

Review of Literature

The concept of planning for sustainable tourism development, as outlined by UNWTO in 1994, involves conserving natural, cultural, and other tourism resources to ensure their ongoing use for future generations while also providing benefits to the present generation. This approach is crucial because many tourism developments rely on attractions and activities associated with the natural environment, historical heritage, and cultural characteristics of specific regions. If these resources undergo degradation or destruction, the tourism areas will lose their appeal, resulting in unsuccessful tourism endeavors.

According to Hughes G. (1995), sustainability emerged as a prevalent term in the 1990s, and Pigram J.J. (1995) highlights that a recurring theme in tourism research during that decade was a strong emphasis on sustainability. Despite ongoing debates about the meanings of sustainability in the context of tourism, these discussions influence both the case study and broader considerations of literary and heritage tourism. While revisiting this extensively explored terrain may not offer any significant insights, it is beneficial to present some overarching concepts and operational definitions at a macro level to guide the ensuing discussion.

The Meenakumari Committee Report (2014) New Delhi underscores the importance of considering the requirements of coastal states and devising a comprehensive plan that integrates production targets for these states. It emphasizes that coastal states should recognize the larger Exclusive Economic Zone (EEZ) beyond 12 nautical miles as a shared resource. The report warns against expansive production strategies by individual states, as such isolated approaches could result in the depletion of these shared resources. Consequently, the report advocates for collaborative efforts between the Union Government and State governments to establish agreed-upon management policies and measures for the sustainable exploitation of these resources.

Methodology

The study relies on both primary and secondary data. To gather primary data, the selection of respondents for the study follows the Stratified Random Sampling method, targeting a sample size of 50 during data collection. The primary data is obtained through a sample survey using a questionnaire designed to extract information on the significant environmental impacts of tourism in the Alappuzha district. Statistical analysis is conducted using the Statistical Package for Social Sciences (SPSS).

Secondary data is sourced from various entities, including the Kerala Tourism department, Kerala Institute of Tourism and Travel Studies, State Planning Board, local bodies in the study area, university libraries, publications from government institutions, and the internet, among other sources.

Objectives

- To study the positive impact of coastal tourism.
- To study the negative impact of coastal tourism.

Problem Statement

• Kerala stands out as a distinctive case in development due to its commendable achievements in social sectors such as health, education, and social welfare. However, the state grapples with a low per capita domestic income. The fisherfolk, a community integral to Kerala's economic productivity and nutritional support, faces significant poverty.

• A substantial portion of fishermen is currently living in impoverished conditions. The ongoing developmental initiatives in the tourism sector pose a threat to their livelihoods and traditional occupations. This study aims to shed light on the impact of coastal tourism on the fisherfolk, who constitute a vulnerable section of society.

Definition and Concepts

- Fisheries sector: The fisheries sector includes any activity concerned with taking, culturing, processing, preserving, storing, transporting, marketing, or selling fish or fish products.
- Coastal tourism: "Coastal and marine tourism includes those recreational activities which involve travel away from one's place of residence which have as their host or focus the marine environment and/or the coastal zone." The marine environment is defined as those waters that are saline and tide affected.
- Environmental impact: Environmental Impact Assessment (EIA) is the process by which the anticipated effects on the environment of a proposed development or project are measured. If the likely effects are unacceptable, design measures or other relevant mitigation measures can be taken to reduce or avoid those effects.

Environmental Impact of Coastal Tourism in Alapuzha

Table 1: Positive Impact of Tourism

Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Creates new business opportunities	9	14.1	14.1	14.1
Increase in Income and standard of living	10	15.6	15.6	29.7
Better Choice and accessibility of valid goods	5	7.8	7.8	37.5
Employment Opportunities	22	34.4	34.4	71.9
Improves Infrastructure	11	17.2	17.2	89.1
No positive impact	7	10.9	10.9	100.0
Total	64	100.0	100.0	

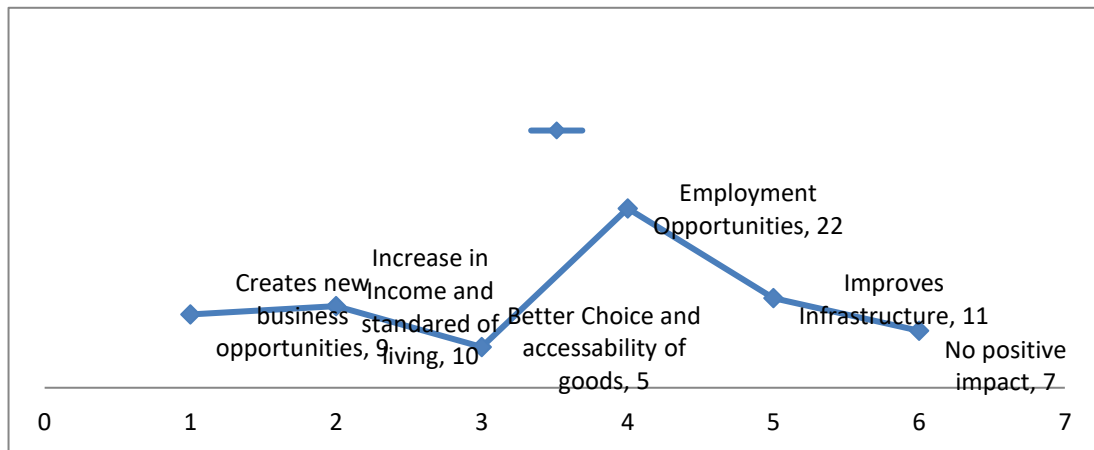


Figure 1. Positive impact of coastal Tourism

According to the data presented in Table 1, it is evident that there has been a rise in favorable economic outcomes attributed to tourism. This includes an increase in the generation of new employment opportunities (34.4%), enhanced availability of facilities and choices (7.8%), improvement in the standard of living (15.6%), appreciation in the value of local resources (60%), development of infrastructure facilities (7.2%), and a 10.9% portion expressing the view that coastal tourism has not yielded any positive impact on the local community.

There is a long way to go to achieve effective positive impact of coastal tourism.

Table 2: Negative Impact of Coastal Tourism

Variables		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase price of land and housing	18	28.1	28.1	28.1
	Water Shortage	2	3.1	3.1	31.3
	Exclusion of locals from natural resources	15	23.4	23.4	54.7
	Degradation of Moral life	28	43.8	43.8	98.4
	Increase of price of goods and services	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

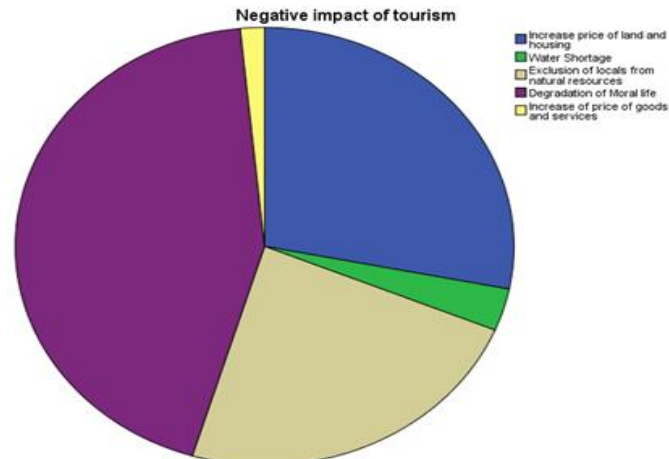


Figure 2: Negative impact of coastal tourism

Table 2 clearly indicates that 100% of the respondents strongly expressed concerns about the adverse environmental and socio-cultural impacts of tourism. The significant environmental and socio-cultural consequences highlighted in the table encompass air, water, and noise pollution, garbage disposal, sand dune destruction, heightened crime rates, increased alcoholism, prostitution, overcrowding, loss of open spaces, undesired lifestyle changes, nudity, drug use, and erosion of local cultural values.

- In terms of opinions, 43.8% believed that coastal tourism contributes to the moral degradation of the locality, while 28.1% were confident that it has led to a substantial increase in land and housing prices.
- Additionally, 23.4% expressed the view that locals have been restricted from accessing natural resources freely. A minor percentage of 3.1% reported water shortages, and a smaller segment of 1.6% argued that there has been an escalation in the prices of goods and services.

The stability of our environment hinges on the earth's natural systems. These systems, represented by natural resources that supply energy and materials, play a crucial role in the production of goods and services to meet human needs. The conventional interpretation of natural resources is limited to those considered valuable to humanity under practical technological, economic, and social conditions. Coastal resources and wetlands hold particular significance for impoverished communities globally. However, the current surge in tourism is contributing adversely to environmental degradation, particularly through pollution. This issue is further elaborated below.

Environmental Impact

If not handled with scientific precision, issues such as pollution, overcrowding, and unregulated developmental activities pose a potential threat to coastal tourism. The haphazard development of resorts has already led to, and is expected to continue causing, adverse effects on the coastal environment. The prevalence of integrated resort development is anticipated to rise significantly in the future. Most respondents (60.9%) acknowledge that coastal tourism has contributed to an escalation in solid waste, while 17.2% believe it has led to water pollution. A smaller portion of respondents express concerns about air pollution (12.5%), and 9.4% argue that there has been no discernible negative environmental impact from coastal tourism.

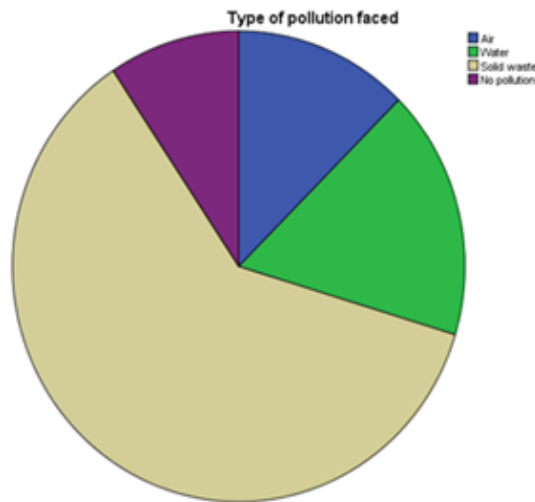


Figure 3. Environmental impact

Waste Management

Regarding the presented table, 81% of the surveyed population confirmed their practice of burning waste, while 12.5% opt for burying the waste, and 6.3% utilize alternative methods for waste disposal.

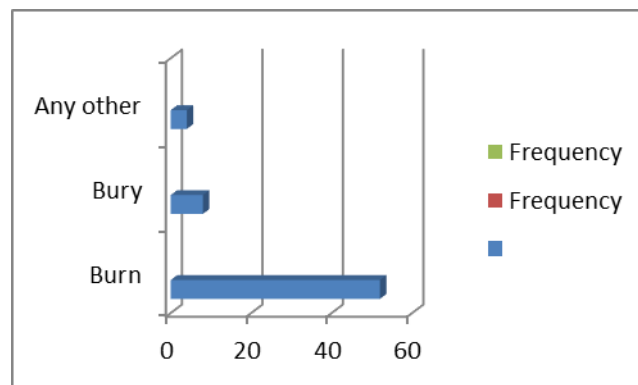


Figure 4. Waste management

- Improper management of waste, particularly the inadequate handling of excreta, liquid, and solid waste from households and communities, poses a significant health risk and contributes to the spread of infectious diseases. Neglected waste attracts flies, rats, and other pests that can further propagate diseases. Typically, it is the decomposing wet waste that emits unpleasant odors, creating unhygienic conditions and subsequently increasing health concerns.

- As per the analysis, 75% of respondents encounter mosquito-related problems due to improper waste management, 13% experience issues with humidity, and 12% believe they face no difficulties stemming from inadequate waste disposal practices.

Methods Used for Waste Reduction

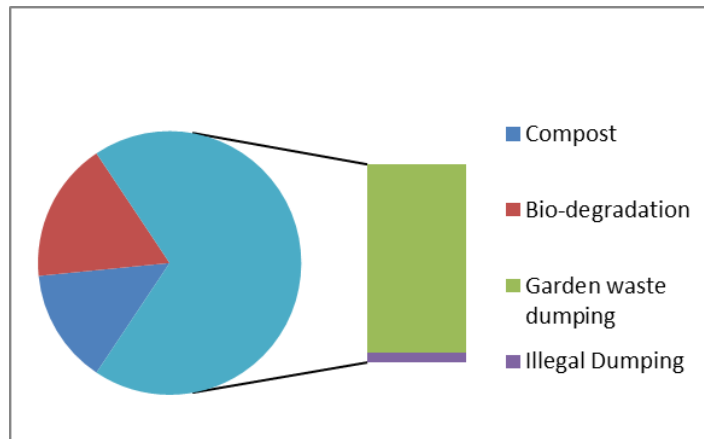


Figure 5. Methods used for waste reduction.

The challenge of waste management remains unaddressed in the context of contemporary developmental activities. Findings from the study in the coastal area indicate that the coastal residents lack access to modern waste management or reduction techniques. A majority of respondents (65.6%) dispose of waste in the garden, while 17.2% engage in bio-degradation, 14.1% express interest in composting, and a small percentage (3.1%) resort to illegal dumping. There is a clear need for increased awareness regarding waste disposal to effectively reduce waste in the coastal area amidst the ongoing developmental processes.

Clean Water Facility

- Access to safe drinking water and basic sanitation facilities is recognized as a basic human need and a pre-condition for economic and social development. A robust economy depends on water. So does a thriving ecosystem. A robust economy depends on water. So does a thriving ecosystem.
- As per the table shows 78% of the respondents have clean water facility whereas 21.9 % do not have access to the clean water facility. Though tourism do not affect the major population the later stages of the tourism development would lead to a higher rate of difficulty in access to the water

Table 4: Statistical Interpretation Correlation

Control Variables		Positive Impact of Tourism	increase in the rate of Tourists number
displaced due to tourism & Problem due to displacement	Positive Impact of Tourism	Correlation	1.000
	increase in the rate of Tourists number	Correlation	-.294*
			1.000

Correlation is significant at 0.05 level

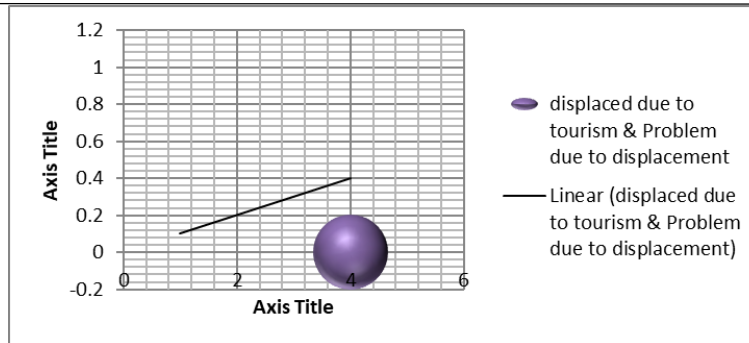


Figure 6.

The concept of sustainable development entails the conservation of natural, cultural, and other tourism resources for ongoing use in the future, simultaneously providing benefits to the present generation. This approach is crucial as the success of most tourism development relies on attractions and activities associated with the natural environment, historical heritage, and cultural characteristics of specific areas. If these resources undergo degradation or destruction, tourism areas will lose their appeal, resulting in unsuccessful tourism endeavors. The correlation between displacement due to tourism and the positive impact of tourism is 1.000 and -.294, respectively.

Summary Of Key Findings

Every development process, whether acknowledged or not, brings about both positive and negative impacts on the living conditions of the affected population. Tourism, particularly in third-world countries, has generated both positive and negative consequences, with variations based on the socio-cultural structure of each country. A notable 67% of respondents recognized the impact of coastal tourism on their living conditions, while 32.8% opposed this notion, asserting that coastal tourism did not affect their living patterns.

Unscientifically managed issues such as pollution, overcrowding, and unplanned developmental activities pose a threat to coastal tourism. The ongoing unplanned resort development has resulted in and is expected to continue causing negative impacts on the coastal environment, with a predicted significant increase in integrated resort development. Approximately 60.9% agreed that coastal tourism has led to an increase in solid waste, while 17.2% believed it also contributes to water pollution.

Access to safe drinking water and basic sanitation facilities is recognized as a fundamental human need and a prerequisite for economic and social development. The study revealed that 78% of respondents have access to clean water facilities, while 21.9% do not.

The sustainable development approach emphasizes conserving natural, cultural, and other tourism resources for continuous use in the future, while also benefiting the present generation. This approach is vital because tourism development heavily relies on attractions and activities related to the natural environment, historic heritage, and cultural patterns of specific areas. The correlation between displacement due to tourism and the positive impact of tourism is 1.000 and -.294, respectively.

Conclusion

This study concludes that the resource base of the Kerala coast can sustain a viable and sustainable tourism sector. Coastal tourism has yielded both positive and negative economic and environmental impacts. Major economic challenges to sustainability stem from low local participation, inadequate wages, poor demand for local inputs, income leakage, limited employment opportunities, displacement issues, seasonality, and uneven development across the state. Environmental concerns affecting the sustainability of coastal tourism include over-exploitation of natural resources, water pollution, waste dumping, and limited accessibility to natural resources. Sustainable development in coastal tourism in Kerala requires strategic planning, encompassing decentralized development, public-private partnerships, capacity building, responsible tourism, integrated coastal zone management, and a precautionary approach.

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