

# Recommendations for Ecotourism Development in Kerala Context

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**ABSTRACT:** Ecotourism is a form of responsible tourism that tries to inform tourists while collecting money for economic growth, environmental Conservation, and promoting respect for other cultures and human rights. The concept travels to mix community, Conservation, and long-term development. The growth of ecotourism significantly aids Kerala's growth as a top international travel destination. Kerala's tourist industry has a positive economic impact attributed to ecotourism. Kerala has a wide variety of tourist attractions, including health care, ecotourism, history tourism, and religion. Despite the lack of suitable services and infrastructure, ecotourism hotspots should be on the travel itineraries of both local and international tourists. To promote economic, social, and environmental qualities at ecotourism locations and in local communities in Kerala, this study examines how to make suggestions for ecotourism development. Information from ecotourism destinations in Kerala was collected using information collection and observation techniques, and the materials were then assessed following ecotourism concepts and principles. The study contributed to the ecological debate's conclusion and the chances for Kerala's ecotourism industry to flourish. Recommendations are presented to improve ecotourism that is both responsible and economical.

**KEYWORDS:** Ecotourism development techniques, Local community involvement, Conservation of eco-sensitive areas, Economic development.

## I. INTRODUCTION

The origins of the term 'ecotourism' are not entirely clear. One of the first to use it appears to have been Hetzer (1965), who identified four pillars or principles of responsible tourism: minimizing environmental impacts, respecting host cultures, maximizing the benefits to local people,

and maximizing tourist satisfaction. Ecotourism developed within the womb of the ecological movement in the 1970s and 1980s.

Ecotourism is a purposeful journey of taking care of the ecosystem, understanding the nature and culture of a particular area also developing economic opportunities that make the Conservation of natural resources beneficial to the local people. Ecotourism is conducive to enriching and enhancing the standing tourism based on natural heritage and the local population and is in keeping with the carrying capacity of the sites. Developing countries are more about improving the living standards of the regional/rural people. But for the developed countries, it is more about the nature experience given that the standard of living in the countryside is relatively high.

## NEED OF THE STUDY

Growing Kerala into one of the top tourist destinations in the world requires the development of ecotourism. This will increase the sector's contribution to Kerala's economy. The state has a wide range of attractions it can provide visitors with, such as heritage, religious, natural, cultural, healthcare, etc. However, the equipment and other infrastructure are inadequate.

## AIM

The objective is to formulate suggestions for Kerala's ecotourism industry.

## OBJECTIVES

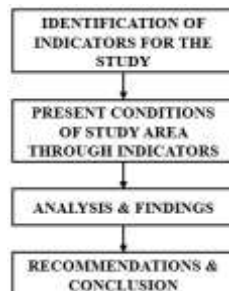
The research has four objectives

- To study ecotourism development.
- To identify the various indicators of ecotourism development.
- To study & analyze the present conditions of ecotourism in Kerala
- To propose recommendations for ecotourism development.

### LIMITATION

The study area is limited to ecotourism spots in the Western Ghats of Kerala.

### II. METHODOLOGY

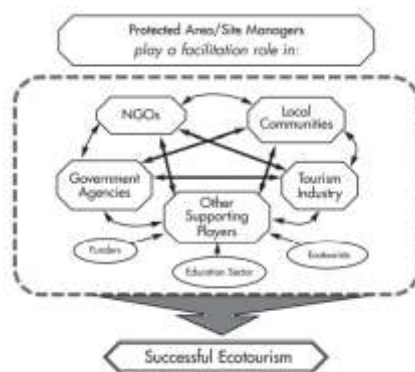


### III. LITERATURE REVIEW

The goal of ecotourism, sometimes known as nature tourism, is to lessen the harmful effects of tourism on the environment. The notion of combining community, Conservation, and tourism promotes sustainable development. The emphasis on untainted and pure natural areas promotes natural and environmental awareness, lessens the adverse effects of tourism on the environment, increases job and income prospects for locals, and encourages Conservation by offering financial incentives.

**Table 1 Sustainable indicators of Tourism**

Social & Economic Indicators:	Environmental Indicators & Cross-cutting Indicators:
• Local satisfaction level with tourism/education of tourists.	• Energy saving measures
• Perception of sustainability	• Energy consumption from renewable resources
• Education of community	• Biodiversity and conservation – Local community involvement in conservation projects in area.
• Educating tourists	• Water conservation measures
• Training and skills development of staff members	• Water treated to international potable standards
• Cultural appreciation and conservation	• Storage treatment systems
• Level of tourist satisfaction	• Waste disposal (landfill, recycling, etc.)
• Number of local people (and ratio of men to women) employed in tourism	• Waste management
• Revenue generated	• Development controls – Evidence of a development planning process including tourism
• Revenue spent in area	• Partnerships and collaborations
• Perception of sustainability	



### [5] Ecotourism Partnerships Needed for Success

### IV. STUDY AREA ANALYSIS

The state of Kerala is located on the southernmost point of the Indian peninsula. The Arabian Sea forms its western boundary; Karnataka its northern and northeastern; and Tamil Nadu is its eastern border. Kerala is situated on the Malabar Coast, which the Western Ghats borders. Kerala is a tropical area in terms of geography.

There are 12 Wildlife Sanctuaries, and 2 National Parks in Kerala's the Western Ghats, which are critical ecotourism destinations. Kerala's Western Ghats offer a natural advantage for developing ecotourism because of its tropical forest environment. The Western Ghats of Kerala might be categorized as an actual ecotourism zone. Creating suitable location-specific plans for Kerala's sanctuaries in ecotourism development is necessary.

The ecotourism division of the Kerala tourism industry is responsible for establishing ecotourism hotspots. Sustainable tourist development should be made in an eco-sensitive location not to harm the ecosystem, and the area should be continuously monitored. The community living in the ecotourism destination should benefit from ecotourism.

Kerala is home to several ecotourism locations with incredible natural beauty, topography, vegetation, and wildlife. Kerala has fantastic ecotourism destinations, including hill towns, forests, sanctuaries, and parks.

Some of the ecotourism spots/projects in Kerala are:

- Eravikulam National Park
- Thommankoothu Eco-Tourism
- Pythalmala Eco-Tourism Project
- Periyar Wildlife Sanctuary
- Konni - Adavi Eco-Tourism Project
- Thenmala ecotourism
- Kallar – Ponmudi Eco-Tourism Project
- Nelliampathy Eco-Tourism
- Ecotourism Programmes on Kuruva Island
- Ecotourism Programmes at Muthanga Wildlife Sanctuary
- Aralam Wildlife Sanctuary
- Neyyar and Peppara Wildlife Sanctuaries
- Ecotourism Programmes in Marayoor
- Ecotourism Programmes in Jankikad
- Ecotourism Programmes at Muthanga Wildlife Sanctuary
- Ecotourism Programmes at Rajamalai
- Ecotourism Programmes at PanialyPorr in Kodanad

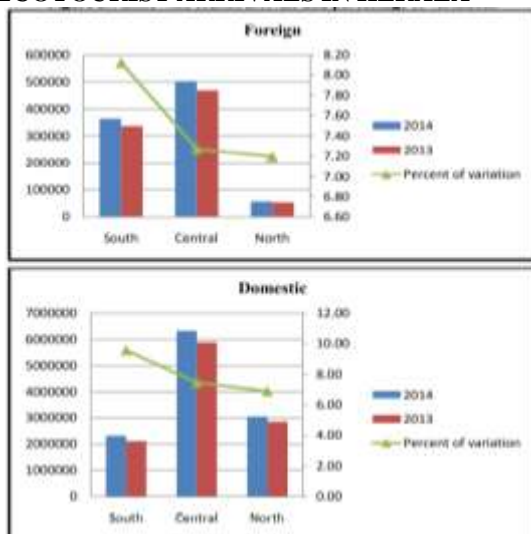
### TOURIST ARRIVALS IN KERALA

Year	No. of Domestic Tourist Visits	% of Increase	No. of Foreign Tourist Visits	% of Increase	Total no. of tourists	% of Increase
2008	7581250	14.28	588929	16.11	8180179	14.41
2009	7313037	4.25	557258	-0.96	8470295	3.43
2010	8596075	8.61	858285	18.31	9254340	9.25
2011	9381455	9.15	732985	11.18	10114440	9.29
2012	10078864	7.41	790986	8.28	10870050	7.48
2013	10857811	7.75	858143	8.12	11715954	7.78
2014	11899411	7.71	923388	7.6	12818777	7.71
2015	12485571	6.59	977479	5.86	13443050	6.53
2016	13172530	5.67	1038419	6.23	14210954	6.71
2017	14673520	11.39	1091870	5.15	15765390	10.94
2018	15904661	8.35	1096407	0.42	16701068	6.94
2019	18384231	17.81	1193771	9.52	19574004	17.2

#### Kerala tourism statics 2019

The tourist arrivals are higher in 2019, with a 17.2% increase than in 2018. The lowest increase was 3.43% in 2009 than 2008.

### ECOTOURIST ARRIVALS IN KERALA



a) Foreign Eco Tourist Arrival;  
b) Domestic Eco Tourists

South zone: Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzha. Central zone: Kottayam, Idukki, Ernakulam and Thrissur. North zone: Palakkad, Malappuram, Kozhikode, Wayanad, Kannur and Kasargode.

The south zone has a high variance from the prior year, whereas the north zone has a low percentage. Although the six districts that make up the north zone have a rich biodiversity, tourists who want to get to the middle area tend to find it less challenging.

### ENVIRONMENTAL CONDITIONS OF ECOTOURISM SPOTS IN KERALA

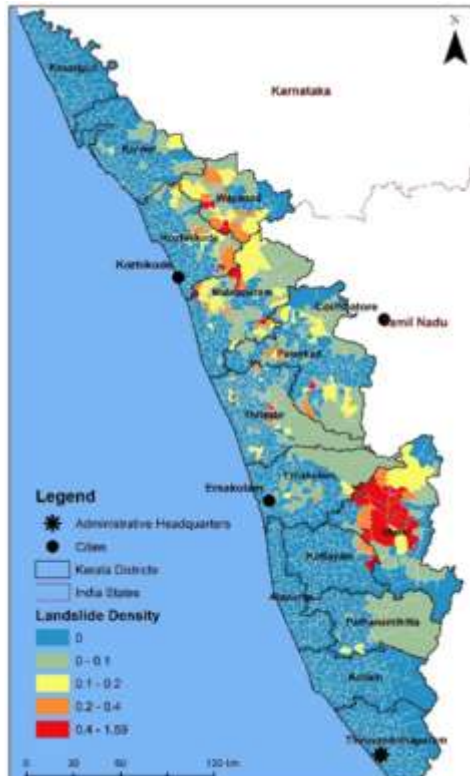
The richness of the flora and animals is excellent in this natural setting, especially regarding medicinal plants, and the splendour of the Western Ghats surrounds it. The economy is primarily supported by two industries: agriculture and tourism. Kerala's forest cover is eroding, with the Western Ghats' annual forest loss in Kerala estimated to be 0.28%. The expansion of plantations and agricultural land is to blame for the disappearance of forest areas.

The fastest change was observed in Kerala, which has a dense population. According to the Gadgil and Kasturirangan studies, which concentrate on protecting and conserving Western Ghats biodiversity, 123 villages in Kerala are under special protection. The Gadgil study divides these villages into 3 Eco-Sensitive zones, which stop forest encroachments, dam building, industrial operations, and poaching, hunting, agricultural activities using artificial fertilizers, pollution, and other things. The Idukki district had enormous plantation land growth, and the highest rate of open forest conversion to other land uses.



Plantation concentration in Kerala

Idukki has the most plantations, followed by Wayanad and Kollam.



**Landslide density concentration in Kerala**

The area with the most landslides in Idukki, followed by Wayanad, Malappuram, Palakkad, and Kozhikode.

Soil erosion, landslides, and flash floods are examples of natural hazards. The locations are served mainly by minor roads that are obstructed by landslides. Other dangers include garbage dumping and littering, fire, and unethical or unsustainable tourist activities. The community activities and the infrastructure, such as communications, transportation, etc., were excellent. Improvements to basic amenities include protecting and conserving the environment and ecosystems, better sanitation/waste disposal facilities, and amenities (living habits, education, welfare, and health, among others). Most destinations are plastic-free zones, and trash treatment facilities are available in places like Thenmala, Thekkady, and Ponnudi.

#### **SOCIAL CONDITIONS OF ECOTOURISM SPOTS IN KERALA**

Regarding the neighbourhood, ecotourism constantly offers employment possibilities. Increasing awareness and fostering positive relationships between visitors and locals. The decision-making and execution processes heavily

involve the local community. It is essential to analyze the socioeconomic situation of the community while developing strategies and action plans for the growth of ecotourism initiatives in Kerala.

The local community depends on the advantages of the trees; a healthy forest yields things like firewood, bamboo, honey, fruits, and edible plants. Locals now have more options for stable work than ever before, and their standard of life has increased. Jobs in the Conservation of forests and animals, handicrafts, traditional foods, and other small businesses. Communication difficulty with visitors and officials due to language barriers. Threats include movement fauna towards local settlement, landslides, soil erosion, flash floods, and drought.

Occasionally, people of the community, particularly the younger generations, are enthralled by foreign culture and blindly follow it, disregarding the elders' traditional beliefs. As a result, ecotourism becomes unappealing to a hardliner and senior community members who are hostile to any cultural intrusion that damages the group's socio-cultural fabric.

The livelihood of the dependent community and the sustainability of ecotourism destinations are correlated with the activities of ecotourism and visitor spending. Tourists are drawn here mostly to take in the wildness and natural beauty while taking a vacation from their hectic lives. To experience art and culture, take part in leisure activities, and get more knowledgeable about nature.

The Provided leisure activities, diversity of wildlife, facilities for children, shopping opportunities, availability of local handicrafts, convenience, access and telecommunication, safety factor (helpful police services), and interpretation of local/tribal culture activities. There may be communication issues with the local community, inadequate local level transportation, and availability problem of accommodation.

Overcrowding of tourists during peak seasons, overnight programs, and the possibility of increased trash littering. Sometimes there might be cultural conflicts where the visitors' practices may hurt the local communities' religious and cultural sentiments.

#### **ECONOMIC CONDITIONS OF ECOTOURISM SPOTS IN KERALA**

Low revenues from the sale of forest products and hospitality services, as well as low remuneration for staff members like guides. Interference from outside parties goes beyond

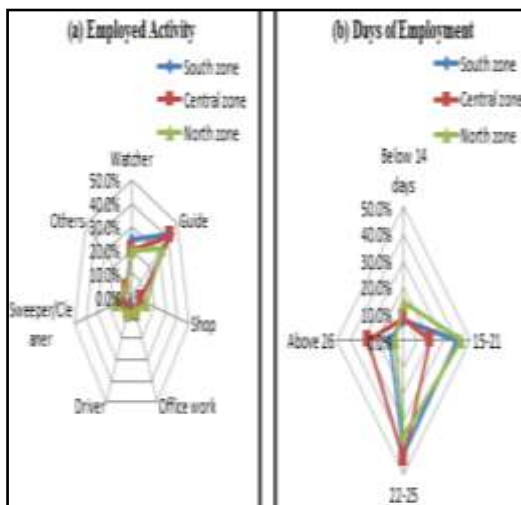


carrying capacity and other environmental harms, including trash, encroachment, and smuggling. Government engagement is low, and so money is insufficient. Indigenous populations participating in ecotourism operations sometimes struggle to comprehend and interact with the mainstream.

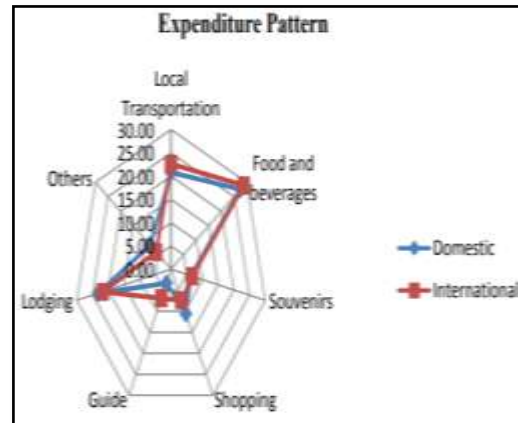
**Table 2 Zone-wise income percentage**

Zone	Percentage of income from tourism					Total
	0-24	25-49	50-74	75-99	100	
South zone	0.0	6.3	5.1	37.1	51.4	100.0
Central zone	1.2	2.0	4.8	34.4	57.6	100.0
North zone	.6	2.3	20.0	41.7	35.4	100.0
Total	.7	3.3	9.3	37.3	49.3	100.0

If community members were not allowed to work in ecotourism efforts, they would have been left with no alternative but to rely on forest resources, which would have led to resource exploitation and unemployment. Most community members living near tourist attractions choose to pursue vocations connected to tourism.



**a) Employed Activity; b) Days of Employment**  
 The trekking guides are the first to be assigned, followed by forest guards, destination cleaners, eco-shops, and office duties such as ticket collectors, peons, clerical occupations, and drivers. The Central zone has more than 25 days of employment every month, whereas the North zone has less than 14 days. The average family income in the Central site is Rs.4013/-, whereas the average income in the South zone is Rs.3819/- and the average income in the North zone is RS.3588/-, which is low.



**Expenditure pattern**

The food and beverages (28.18%). Lodging (22.47%) and transportation (21.68). Domestic tourists spend around 27.52 % of their money in the country. Food and beverages have 28.84% of international tourists spending.

### V. FINDINGS

- As a result of anthropogenic activity and natural disasters like landslides and soil erosion, forest areas and animals are disappearing daily.
- Government measures are required for local community engagement and the preservation of the environment.
- Must take precautions to protect both locals and visitors from potential risks, threats, and wildlife movement.
- No effective waste management system is in place.
- Local transportation and other essential services require improvement.
- Local community improvement is required since most of the population works part-time or for low pay.
- The intimate connection between the local community, visitors, and the natural environment generates economic growth that emerges from the Conservation and protection of the natural environment.
- Kerala tourism is more impacted by ecotourism. Due to accessibility issues, challenging terrain, lack of knowledge, inadequate promotion of the area, and other factors, ecotourism activities and the economy are lower in the northern zone.
- Local farmers employ artificial fertilizers, and agricultural encroachments are more prevalent in Wayanad, Palakkad, Idukki, etc.

## VI. RECOMMENDATIONS

More community engagement in environmental preservation and Conservation, such as hiring locals to serve as forest guards and patrol the area. Local people should be taught and made aware of the repercussions of environmental exploitation and how to lessen reliance on natural resources by giving job opportunities and small-scale financing that promotes local culture, such as handicrafts, apparel, and culinary cuisines, among other things.

To stop anthropogenic activities like deforestation, hunting, poaching, pollution, etc., hiring residents as security guards and conducting regular patrols is essential. It is enlisting women to freely roam the forest and collect plastics, much like Vasanthasena. Another recommendation is a waste management system that practices waste separation, zero waste creation, bio-composting of wet wastes, secure, sanitary waste disposal, and the proper disposal of electronic waste.

At the local level, provide hazard shelters in hazardous areas (particularly in ecotourism hotspots like Idukki and Wayanad, which have greater landslide density). Regular evaluation is advised, along with mapping, communication, a rescue and emergency team, community participation, and government engagement.

Forest products, handicrafts, and homestay marketing campaigns. Kerala tourism may be improved by developing new and efficient marketing strategies through branding, appeal, and product diversity. Mass media and social media spread information about ecotourism destinations and their amenities to draw both local and international visitors. Sensitize visitors and hosts to the importance of trash management and environmental protection.

Introducing into practice Public-Private Partnership projects and MSME household industrial ventures. With the assistance of the Eco-Development Committee, Vana Samrakshana Samithi, and Kudumbasree, local marketing, and product diversification may be strengthened, opening up job prospects.

Government initiatives are required to market the North Zone, such as the Swadesh Darshan Scheme of the Ministry of Tourism, which aims to ensure good accessibility, educate the local population and tourists, and run public awareness campaigns. The strategy to turn tourism into a vital engine of economic growth includes projects like the Swatch Bharath Mission, Skill India, and Make in India, among others

## VII. CONCLUSION

Ecotourism's purpose is to protect and promote the environment. It supports economic development, education, civic engagement, cultural exchange, and environmental protection.

Using the tourist potential guarantees that the area's natural balance is not adversely affected. Together, those involved in ecotourism must find relevant indicators—aside from visitor counts—that aid in planning, management, and the creation of a compelling argument for the inclusion of ecotourism.

Kerala is the study region, and it has lovely ecotourism locations like hill stations, the western Ghats, quiet valley, 14 animal sanctuaries, rainforests, and six national parks having potential for the growth of ecotourism.

By determining the socioeconomic and environmental circumstances of Kerala's ecotourism destinations, the research aims to understand the potential and chances for ecotourism growth. It also makes development suggestions for the sector.

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