

# POSITIVE AND NEGATIVE IMPACTS OF ECOTOURISM: A CASE STUDY OF

# PONMUDI IN THIRUVANANTHAPURAM DISTRICT, KERALA

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#### ABSTRACT

The character of the environment, the growth of local economy and the status of society and culture. The three dimensions are taken into account the impact of ecotourism. Several tourist spots in our country still needed to be designed with several parameters of ecotourism for making then better to the modern world. The present study focus to examine the positive and negative aspects of Environmental, Economic and Socio-Cultural impact of ecotourism. The environment of any place has a vital role in growth and development as a tourism destination. The planet's natural resources are consumed or contaminated by its human being. Human survival needs drinkable water, breathable air, usable biological diversity and natural ecosystems these are the world's primary reservoirs for each of these' (Buckley, 2012). Similar is the positive and negative impacts molded with economical growth and local cultural elements. Tourism must create a positive growth to the local economy in consideration with the complimentarily of local culture. Ponmudi is a hill station in Thiruvananthapuram in Kerala which is located 55.5 Kms from Thiruvananthapuram city with an altitude of 1100mts. Locally called Varayadumotta, this peak is a part of the Western Ghats range that runs parallel to the Arabian Sea. Ponmudi is a tourism destination in South Kerala as a hill station, which offers pleasant climate round the year, calmness of biota with stays and trekking. The methodological framework is created with analyzing the level of perception of tourists outside India, outside Kerala and locals with three major dimensions as Environmental, economic and socio-cultural. Questionnaire surveys are carried with 100 samples to examine the positive and negative impacts. Data analysis has been carried with Excel and SPSS software and interpreted with suitable graphs and charts. Results are discussed with both qualitative and quantitative methods to project the status and potentiality of ecotourism development.

KEYWORDS: Ecotourism, Stakeholders, Ecotourism Impacts, Ponmudi and Likert Scale

## **INTRODUCTION**

Ecotourism is not a matter of pleasure instead it's an activity that makes environmentally responsible travel to natural areas, in order to enjoy and appreciate nature with accompanying cultural features, both past and present that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local peoples. This activity should be distinguished because of its emphasis on conservation, education, traveler responsibility and active community participation. The negative impacts created by tourism are a damage to natural flora or fauna. The principles of ecotourism are to be deal with meticulous, low-impact visitor behavior, sensitivity towards local cultures and biodiversity, support for local conservation efforts, sustainable benefits to local communities, local participation in

decision-making and educational components for both the traveler and local communities. Ecotourism today has sharpened its aspects in the goals of responsible tourism by making maximum participation in responsible positions for the local as well as tribal hosts in India. These communities can only teach the society about the values of nature in connection with sustaining their livelihoods. The jeep drivers of Silent Valley National Park, Kerala; The Honey shop sellers of Thenmala and Thirunelli in Wayanad districts in Kerala, the artists, Performers, Cuisines and Religious rituals rendered by the tribal communities in different pockets in India are clear examples of developing goals of ecotourism. It is so important to note that cultural components inculcated in an ecosystem can very well be applied to an urban ecosystem whether it can be the historic site or a cultural component in the city with museums or theatres.

Increase in tourism activity to sensitive natural areas without appropriate planning and management can threaten the integrity of the ecosystem and local cultures. The major aim here is to make tourism more beneficial to local communities by giving prime consideration to waste management (Brand Kerala Magazine, Jan, 2018). Environmental protection and raising the standard of living among the local population should be carried and for achieving better goals of ecotourism in developing countries.

#### Study Area

Ponmudi is a hill station located 55km North East of Thiruvananthapuram city at an altitude of 1100 mts above sea level. 18 kms of travel from Kallar cascades to Ponmudi. Further there is a change in elevation with 22 hair pin bends, which creates a mystic journey for any traveler with wilderness, rounded pebbles, cool water & air by offering a popular spot for backpacking and trekking, fifty-nine per cent of the 483 bird species in Kerala are found at Ponmudi with 16 species of birds endemic to the Western Ghats, 15 are at Ponmudi, together with 332 species of butterflies in the Western Ghats, 195 are found here and 37 butterfly species endemic to the Ghats, 24 are found at Ponmudi. The spot puffin, a rare butterfly, has been sighted at the Kulachikarai-Panayam-Merchiston area in Ponmudi (Indian-express daily, 4 May 2015).

#### Significance of Studying Ponmudi Ecotourism

- Only hill station in the district
- Nearness with the Airport (60kms)
- Local communities characterized with tribal settlements
- Nearness to Agasthyamalai Biological Reserve
- Covering of Wildlife Sanctuaries
- Increased tourist visits

## **OBJECTIVES OF THE STUDY**

- To evaluate the positive & negative impacts of Ecotourism development in Ponmudi
- To assess the Economic and Socio-Cultural impacts of Ecotourism development in Ponmudi

### MATERIALS AND METHODS

Secondary data regarding the basic aspect of the study area is been collected with varied cultural and physical statistics from KTDC, KITTS, District Panchayat office of Thiruvananthapuram and VithuraGrama Panchayat office.

The present investigation investigates the perception level of different tourists at an international and domestic level for analyzing the positive and negative impacts of ecotourism. This study has been carried out through an Interview with Questionnaire. With 100 respondents from Ponmudi, of which 20 are international tourists, 40 respondents from national and 40 from local tourists. The study considers three dimensions of ecotourism i.e. environmental, economic and socio-cultural with two broad views of impact as positive and negative. In this study, the perception level of tourists in Ponmudiisbeen carried out using Likert scale (Vishwanatha. S, 2015) which has been developed in 1932 by Rensis Likert to measure the attitude of the respondents. The Likert scale is a 5 point ordinal scale used to rate the degree to which the respondents agree or disagree with a statement. In this Likert scale items coded as follows; 1 - Very Low, 2 - Low, 3 - Medium, 4 - High and 5 - Very High

# **RESULTS AND DISCUSSIONS**

The Likert Scale Analysis shows an interesting response from tourists with diverging mannerism created in the three selected criteria of environmental quality, economic activity and socio-cultural influence.

In the below table 1, it has to be noted that low level of response (312 score) regarding the negative environmental impact on Ponmudi which clearly suggests the scope of ecotourism development. About 72 % of respondents are not accepting the fact that the Ponmudi hill station is not affected with any decreased impact for landscape change. The landscape character of this tourist spot still preserves with amble beauty that can accommodate ecotourism development in a wide manner as perceived by tourists. The controlled construction activities as managed by Forest department and tourism department proved a positive accreditation to Ponmudi in protecting the landscape characteristics, at the same time high level of response generated from tourists regarding positive environmental impact especially to preserve the available water resource. An urgent measure has to be initiated by the local authorities in protecting the bank sides of river Kallar for removing the dumping waste. At the same time the response level was negligible with 'very low' for in positive environmental impact regarding the need for increased environmental education and efforts. All tourists stressed the importance of environmental awareness with medium to high level rating (52% in environmental efforts).

Table 1: Perception of Tourists on Environmental Quality in Ponmudi

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Environmental Quality						
Perceived Positive Impacts	Scaling Items					
	1	2	3	4	5	
Increase environmental education and awareness	0	24	36	32	8	
Increase Environmental efforts	0	8	28	52	12	
Conservation of natural resource	4	0	28	64	4	
Improve environmental quality	4	4	28	56	8	
Preservation of water resources	0	0	8	72	20	
Total Score	8	36	128	276	88	
Denseland New Group to the	Scaling Items					
Perceived Negative Impacts		2	3	4	5	
Decreased water and air quality	40	52	4	4	0	
Destruction of natural habitat	40	52	4	4	0	

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Table 1 Contd.,						
Perceived Negative Impacts	Scaling Items					
	1	2	3	4	5	
Ecosystem damage	16	68	12	0	4	
Soil erosion and landslide	24	68	4	0	4	
Decreased landscape characteristics	8	72	16	0	4	
Total Score	129	312	40	8	12	

Source: Computed by author

From the table 2, the economic impact of ecotourism is also judged in positive and negative scaling. In general, the regional development assisted with a generation of job opportunities, local development, fund for conservation and the profit for local households is treated as positive impacts with the higher percentage of 48%, 56%, 52% and 68% respectively. Whereas the local market seems dull with 36%. The response was medium to low in the case of economic impact with the percentage of 48%, 44% and 40% shows that out migration, increased cost of living and expensive accommodation were considered as negative impacts. A high level response of 64% and 52% is generated from tourist as opinioned is needed for generating seasonality of employment and better economic activity of ecotourism as a business for local households. Tourists have focused the need for improving ecotourism and opportunity for the local people for their better livelihood. In the case of suggesting Ponmudi as an expensive tourist spot for accommodation and livelihood, the opinion provided proves the scope for further developing Ponmudi as a rich spot for ecotourism with maximum cherishment of local business.

Economic Activity							
Denosived Desitive Imposts		Scaling Items in %					
Perceived Positive Impacts	1	2	3	4	5		
Generating job opportunity	0	12	40	48	0		
Revenue for local development	0	4	40	56	0		
Market for local products	16	36	32	16	0		
Increased fund for conservation	0	4	44	52	0		
Increased profit for local households	4	0	12	68	16		
Total Score	20	56	168	240	16		
	Scaling Items in %						
Perceived Negative Impacts	1	2	3	4	5		
Seasonality of income and employment	0	4	28	64	4		
Expensiveness in accommodation	8	48	40	4	0		
Increased cost of living	8	44	36	12	0		
Only tourism based economic activities	0	0	4	52	44		
Out migration of local people	32	40	24	0	4		
Total Score	48	136	132	132	52		

Table 2: Perception of Tourists on Economic Activity in Ponmudi

Source: Computed by author

In the given table 3, the socio-cultural impact is been judged with the parameters of improving the infrastructure. Participation of local people, increasing the gender equity and better information access leads to the tourist opinioned with medium and low positive impacts, whereas sharing experience and culture with tourist supported high positive impacts. About 72% of the tourists have highly supported the fact that the development of tourism in Ponmudi is the only tourist oriented. Based on the opinion from tourists, it should be noted that the focus of participating the tribal communities is required for the better eco- tourism development, on the other hand, the response was low (60%) in the case of increasing gender equity in tourism development in Ponmudi. The risk and safety factor perceived by tourist might be one among the

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reason for this low level of response in considering gender equity in ecotourism development in Ponmudi.

Socio-Cultural Influence							
Perceived Positive Impacts		Scaling Items in %					
		2	3	4	5		
Improved infrastructure	0	24	64	12	0		
Participation of local people	4	4	48	44	0		
Increased gender equity	20	60	12	4	4		
Better information access	0	40	32	8	20		
Sharing experience and culture with tourists	0	0	36	44	20		
Total Score	24	128	192	112	44		
Perceived Negative Impacts		Scaling Items in %					
		2	3	4	5		
Too touristic oriented development	0	0	8	72	20		
Loss of cultural value and heritage	28	52	20	0	0		
People leaving primary work to tourism based jobs	0	40	40	20	0		
Children and youth abandon education for tourism purpose	4	36	36	16	8		
Decreased influence of local language and customs	32	44	24	0	0		
Total Score	64	172	128	108	28		

Table 3: Perception of Touri	ists on Socio-Cultural	Influence in Ponmudi
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Source: Computed by author

## CONCLUSIONS

Tourism is an important service and entertainment linked the economic activity of 20<sup>th</sup> century. Generally, ecotourism has been defined as a form of nature-based tourism. It involves travel to destinations where rich natural flora, fauna and cultural heritage are the main attractions. The present study of Ponmudi, a hill station in Southern Kerala offers the pleasant climate, calmness with great potentialities of promoting ecotourism. The study evaluated the positive and negative impacts of ecotourism development in Ponmudi and to assess the environmental, economic and socio-cultural impacts of ecotourism development in Ponmudi. To achieve these, 100 respondents were interviewed with a questionnaire, of which 20 are an international tourist, 40 respondents from national and 40 are from local tourists. Likert scale (5 point scale) is used to measure respondents attitude to a question. The analysis of collected data reveals that environmental quality in terms of conserve natural resources, improving environmental quality Ponmudi achieving good status. The low status observed in negative environmental impacts like ecosystem damage and natural hazards. In terms of tourist perception on economic activity such as generating job opportunity, revenue for the local government majority of the respondents has given a higher value. In contrast to that, seasonality of income and employment and concentrate only tourism-based economic activities are identified as the major negative impacts on economic activity and assigned high negative value. The perception against socio-cultural influence and communication, local people participation and gender equity need to be improved while less distortion observed on the loss of cultural value and heritage and leading primary work to tourism-based jobs. The study finally concluded that there will be a good scope for enhanced Ponmudi as an ecotourism destination for sustainable tourism development.

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