



**ECONOMIC IMPACT OF KONNI ECOTOURISM ON THE PATHANAMTHITTA DISTRICT:
EVIDENCE FROM KONNI, KERALA, INDIA**

Dr.D.Mahila Vasanthi Thangam,

Associate Professor and Head, Division of Commerce and International Trade, Karunya Institute of
Technology and Sciences, Coimbatore

Dr.Rinoy Babu Manakkalethu,

Associate Professor, CSI College of Advanced Studies, Punnakkad, Pathanamthitta

Mr.T.Augustus Immanuel Pauldurai,

Assistant Professor of Commerce and International Trade, Karunya Institute of Technology and Sciences,
Coimbatore

Dr.Nisha Malini,

Assistant Professor of Management Studies,
Karunya Institute of Technology and Sciences, Coimbatore

Ms.R.Usha,

Guest Lecturer in Commerce, Government Arts and Science for Men, Krishnagiri

Abstract

Tourism is one of the fast-growing industries, significantly contributes to the world GDP. Along with the increasing growth of tourism, 'ecotourism is crucial. Kerala is known as "Gods own Country," Pathanamthitta is considered the hub of pilgrim centres in Kerala. Konni is one of the popular ecotourism centres in Pathanamthitta. This study is an exploratory research, carried out using secondary data for a period 15 years from 2006 to 2021 to analyze the economic impact of Konni ecotourism on Pathanamthitta District. Ordinary Least Square regression result indicates that the net income from Konni ecotourism Centre has a positive and significant influence on Pathanamthitta District's Net State Domestic Product. One percent increase in net income for the Konni ecotourism centre will bring up district level income of Pathanamthitta by 27 percent. If the working of tourist attractions are planned and controlled effectively, Konni ecotourism centre could be a model one.

Keywords: *GDP, Economic development, Ecotourism, Konni, Tourism management,*

Introduction

Tourism is one of the fast-growing and widespread industries and significantly contributes to the world GDP. Tourism means the short-run population movements across places, mainly for entertainment and exploration. Along with the increasing role and growth of tourism, the term 'ecotourism is crucial. The word ecotourism emerged in the late 1980s as a reaction to global

ecological and sustainable practices. Ecotourism has been defined as tourism management and nature conservation simultaneously. It aims to balance the needs of ecology and the occupational requirement of the native people. According to the International Tourism Society (TIES)¹, ecotourism is responsible travel to the natural areas that conserves the environment, sustains the well-being of the local people, and creates knowledge and understanding through interpretation and education of all involved. India has promoted ecotourism by realizing the necessity of sustainable development in recent years. Some of the major ecotourism destinations in India are Thenmala and Periyar National Park in Kerala, Coorg in Karnataka, Galgibaga beach in Goa, and Chilika in Odisha, Sundarbans National parks in West Bengal, Kaziranga National Park in Assam, Namdapha in Arunachal Pradesh, and Nanda Devi in Uttarakhand.² The state of Kerala adds more tourist centers to its ecotourism sites as it provides twine benefit to the state, i.e., more income with minor environmental damage.

Pathanamthitta district is considered the hub of pilgrim centers in Kerala. It came into existence in 1982. According to the census 2011; the district has two revenue divisions, five Taluks and 68 Villages. The district is surrounded by Idukki and Kottayam on the south, Alappuzha and Kollam on the West, and Tamil Nadu on the East. Achancoil, Manimala and Pampa are the major rivers flowing through the district originating from Western Ghats. The Districts Forest area stretches over 1533.79 sq.km, around 60.43 percent of its geographical location. Evergreen forest, semi-evergreen forest and moist deciduous forest are the three main classifications in the district. Around 30.82 percent of the total area is the net sown area, and 6.16 percent is put to non-agriculture use. Moreover, Pepper, rubber, tapioca, banana, coconut, etc., are the major crops cultivated in the district. According to the 2011 census, the Pathanamthitta district ranked 1st in literacy (96.93 percent). The Rural population (1065799) outnumber the district's urban population (131613)³.

Statement of the problem

Kerala in India is known as "Gods own Country," remarks the beauty of its places and hospitality towards guests. The natural attractions in Kerala significantly contribute to its economic development. Thus, the Government and the community gained from tourism and related activities for decades. However, the tourist space does not grow as the growth in the tourist market (Mill and Morrison, 1992)⁴. So, effective management of tourist places are necessary to harness fruits from it with minimal or no damages. But the high density and ecologically sensitive zones in the State demands more pro-environment tourism plans for the State. It is visible from the increase in the number of ecotourism destinations in the recent past. It has proven that the ecotourism activities in the State have promoted grassroots development

after the introduction of ecotourism activity. But the desired goal of environmental protection in the ecotourism centers are still needed improvement. Effective planning and management of tourist places is necessary to protect the environment of the state. In this direction, the Government introduced more tourism sites under the ecotourism projects to ensure protection of such areas. But the studies on ecotourism sites in Kerala are confined to the experience of tourist and their perception regarding ecotourism sites. There is a dearth of studies which comprehensively discussed the impact of ecotourism on the economic, social and environmental situation of residents in particular region and focused on the cyclical behavior of ecotourism on the environment and economic betterment of the community and State. All the facts stated above have triggered the need for making in depth study on the Social, Economic and Environmental Impact of Konni Ecotourism on the Development of Pathanamthitta District. This article tries to explore the economic impact of ecotourism on the regional development of study area.

Review of literature

Masud et al. (2017)⁵ discovered the aspects that impact the community's contribution in managing community based ecotourism (CBETM) for sustainable development of Marine Protected Areas (MPAs) in Peninsular Malaysia. In order to achieve the result, they adopted a quantitative method with structural equation modeling for data analysis. They identified that ecological consciousness for maintainable growth, motivation to be involved with CBETM, and the apparent economic, social, and cultural influences of CBETM have a superior impact on the intention to participate in CBETM. The findings also help policy makers formulate the necessary management policies for ensuring community participation. Finally, the study promotes the practice of community-based ecotourism management to protect the marine environment from damage and to increase the socioeconomic uprightness of MPCs in Malaysia. Cobbinah (2015)⁶ in the study "Contextualizing the meaning of ecotourism" discovered that ecotourism is one of the most advocated perceptions in tourism studies. Even with the lack of accuracy, there is an extensive set of ecotourism ideologies that are widely endorsed, including environmental preservation and education, cultural preservation and involvement, and economic benefits. Based on these values, the study equated local understanding of ecotourism from the viewpoints of ecotourism-related agency staff and resident groups next to the Kakum Conservation Area, Ghana. Using a qualitative research approach, interviews were conducted with agency staff and community residents. It discovered a limited knowledge of ecotourism and local community misunderstandings about upkeep and eco-tourism. Francois (2011)⁷ in his study explained the significance and the role of the indirect economic impacts of tourism on growth and GDP, employment, and foreign trade. The report highlights the dominant role of calculations based on

Tourism Satellite Accounts and shows how multiplier-based investigation can give a total assessment of the economic influence of tourism, distinguishing between direct, indirect, and induced effects. The report describes how tourism is an important supplier to GDP and job formation in all countries and how the indirect economic impacts of tourism affect GDP, employment, and certain sectors. It also focuses on the sectoral influence of tourism on the supply of goods and services, as well as on investments and public spending. It also looks at the effect of tourism on the refurbishment of economic development and the drop in global macroeconomic inequalities. Ardahaey (2011)⁸ examined the direct, indirect, and induced economic impacts of tourism. As per the author, the overall economic effect of tourism is the sum of direct, indirect, and induced effects within an area, and any of these influences may be measured as gross output or sales, income, employment, or value added. The direct effects are production changes connected with the instant effects of fluctuations in tourism expenditures, like an increase in the number of tourists staying overnight in hotels, which would directly yield increased sales in the hotel sector. Indirect impacts are the production changes resulting from several rounds of re-spending of the hotel industry's receipts in other backward-linked industries (i.e., industries supplying products and services to hotels). Induced effects are the changes in economic activity resulting from household spending of income earned directly or indirectly as a result of tourism spending. He also identified that tourism is an activity that includes a large array of retail and service businesses. The author also pointed out that hotels and other related sectors are most affected by tourism. Lionetti and Gonzalez (2011)⁹ through their study, tried to explore the association between tourism and trade to govern the role of the tourism sector in the economic growth of Latin America and the Caribbean. According to them, most countries explored the various aspects of tourism in order to improve their country's economic potential. Their study has drawn several conclusions pointing to the discrepancies among the various geographical shares of the study area. That is there is no constructive causality relationship between tourism and trade in the considered geographical area. The growth of international trade will lead to a growth in business tourism that would finally lead to a surge in leisure tourism. Schellhorn (2010)¹⁰ examined the social and socioeconomic effects of tourist development in a mixed-race community of migrant settlers and locals on the island of Lombok, Indonesia. He analyzed the results of local development agency activities internationally. The study illustrated how minimal economic benefits are obtained from the wetu telu Sasak's indigenous legacy, despite the fact that the majority of the case study's tourist attractions are a part of that tradition. In particular, local women have difficulty in taking advantage of the new development prospects that tourism provides. Men and those entering migrant groups typically get the benefits. The

prevalent conditions of culture, education, ethnicity, gender, politics, history, geography, mobility, socio-economics, and tourist knowledge and skills all represent significant impediments. Stronza (2007)¹¹ made a study on “The economic promise of ecotourism for conservation.” The research tried to analyze the out-run of ecotourism on 37 natural resource use and livelihoods in a native community of 80 families of Peru. Household interviews and participant observation were used to route social and economic changes in the community as it partnered with a private tour company to erect and co-manage an ecotourism lodge. Effects of ecotourism were calculated between the same households before and after the lodge opened and among households with divergent levels of participation. The hypothesis that economic ease from ecotourism would offer incentives for people to change their livelihoods and change their uses of natural resources was verified. Research conclusions show the vague effects of ecotourism. When the fresh opportunities of earnings lead to greater market consumption and development of production, a considerable decline in farming and hunting may also be noted. The willingness to be involved in ecotourism projects with comparatively inadequate monetary benefits cannot be analyzed purely on economic standards. He observed that ecotourism is beyond the constraints of economic tools as it changes existing values and social relations. Kumar et al. (2020)¹² in their survey, examined the significance of tourism in regional enhancement and its Impact on India's Regional Development with special reference to Farm Tourism in Vazhakulam, Kerala, India, in order to encounter the developmental wants of the regional people through the support of local potentialities. Their study, especially confined to a particular area, revealed the various aspects of tourism and its contribution to regional development and thereby how local people are benefited. They identified that increased employment in the unorganized sector, improved transportation facilities, attention from government and various private fields, changes in mindset of local people are the resultant of farm tourism. Singh (2020)¹³ made an effort to investigate the state and prospects for ecotourism in Rajasthan. He also concentrated on the difficulties facing Rajasthan's ecotourism industry and management solutions. The paper's primary source of secondary data was gathered from a variety of published research articles, book chapters, Rajasthan government policies, reports, and tourism regulations as well as reports, articles, and websites from NGOs. The study's conclusions showed that there is a realistic ecotourism plan being implemented to address the lack of coordination between the public and private sectors and to raise locals' awareness of the value of environmental preservation. Hameed & Khalid, (2018)¹⁴ opined that ecotourism has a crucial role for conserving and nourishing heterogeneity of the world's cultural and natural environment. They found that it accommodates and entertain visitors with minimum intrusion or

destruction to the environment and supports the native culture of its operation. According to them ecotourism maintains an equilibrium between necessities of tourism and ecosystem and support indigenous people for their livelihood. Also, they pointed that India is among the top five destinations out of 134 countries for individual travelers because of its geographical diversities in the form of Biosphere Reserves, Mangroves, Coral Reefs, Deserts, Mountains and Jungles, Flora and Fauna, Oceans, Lagoons, Waterways and Potholes etc. Poyyamoli, (2018)¹⁵ in his study, ecotourism policy and its various aspects is critically reviewed. According to his finding's various ecotourism destinations and culture in India are at the edge of degradation due to green washing mainly due to flaws of national ecotourism policy. As a remedial policy, the study suggested that ecotourism policy should confirm justifiable management of valuable natural and cultural resources through community collaboration and joint action at the local and regional level. He also emphasized the role and involvement of the resident people is the chief target in the economic growth of the ecotourism services. His study also demands for revised ecotourism policy for ensuring wide-ranging association with resident societies by identifying location specific traditional privileges that could support in adopting fruitful ecotourism stratagems. Das & Hussain, (2016)¹⁶ made a study on "Does ecotourism affect economic welfare? Evidence from Kaziranga National Park, India". The study assesses the insight of respondents to ecotourism and to inspect how involvement in ecotourism activities influences economic well-being. A ground study was made in the villages of the park revealed that respondents connected with ecotourism enjoy healthier living standards, constructive mind-set towards this business and feel politically empowered.

Though many articles discussed the factors influencing and address the problems faced by natives of tourist centers, no studies found regarding the Konni ecotourism and its economic impact on Pathanamthitta district, Kerala which has been conducted at micro level. Hence the researcher had made an effort on the topic entitled "Socio-Economic and Environmental impact of ecotourism on regional development: Evidence from Konni ecotourism destination in Pathanamthitta district." which will help the Government, NGOs and other local policy makers to take necessary steps to develop the ecotourism spot and to improve the socio-economic life of the natives of such areas.

Data Collection and Methodology

This study is an exploratory research and carried out on the basis of secondary data to analyze the economic impact of Konni ecotourism in Pathanamthitta District. The data about ecotourism has been collected from multiple sources such as the Kerala Economic Review, websites of Tourism and Forest department of Kerala. Websites of Government of Kerala and

Pathanamthitta and from the leading Ecotourism destination in the study area. Statistical tools viz: Descriptive statistics, Ordinary Least Square Test, Regression, Durbin-Watson statistics, one sample t test were applied to arrive at the findings

Results and Discussion

Konni is one of the popular ecotourism centers in Pathanamthitta District, famous for elephant watching, site seeing, boating, tree house stays, etc. Konni ecotourism area is on the bank of the Achankovil River. There are ten Panchayat located in Konni Taluk. In Konni taluk, there are other ecotourism sites, including Achencoil and Aranmula. The Maharaja of Travancore constituted Konni in 1897 and Achencoil in 1901 as reserve forests. The significant artificial attraction in the Konni ecotourism area is Elephant reserves, which are identified as key to the success of the ecotourism project. The Konni ecotourism centre is situated 500-1000 meters above sea level. The place is known for its elephant training Centre. The government considers ecotourism in Konni as a potential source of income. Table No:1 shows the Income and expenditure of Konni ecotourism centre from 2006-2021.

Table No: 1

Descriptive statistics of Income and expenditure of Konni ecotourism centre from 2006-2021

Year	No. of Visitors	Collection (Rs.)	Expenditure (Rs.)	Net Income (Rs.)
2006-07	7698	94650	0	94650
2007-08	53978	709730	498753	210977
2008-09	55501	779230	668049	111181
2009-10	55641	783354	323589	459756
2010-11	50312	881015	738030	142985
2011-12	55692	1058520	671019	387501
2012-13	68471	1502355	915463	586892
2013-14	86147	2129175	1097360	1031815
2014-15	126432	3581845	1282788	2299057
2015-16	174486	5317140	1743584	3573556
2016-17	227523	6335975	2231098	4104877
2017-18	213512	5266210	2309993	2956217
2018-19	184315	4826900	2890414	1936486
2019-20*	NA	NA	NA	NA
2020-21*	NA	NA	NA	NA
Total	1359708	33266099	15370140	17895950
Average	104592.92	2558930.69	1182318.46	1376611.54

SD	76248.86	2218802.33	904021.01	1411712.96
Maximum	227523	6335975	2890414	4104877
Minimum	7698	94650	0	94650

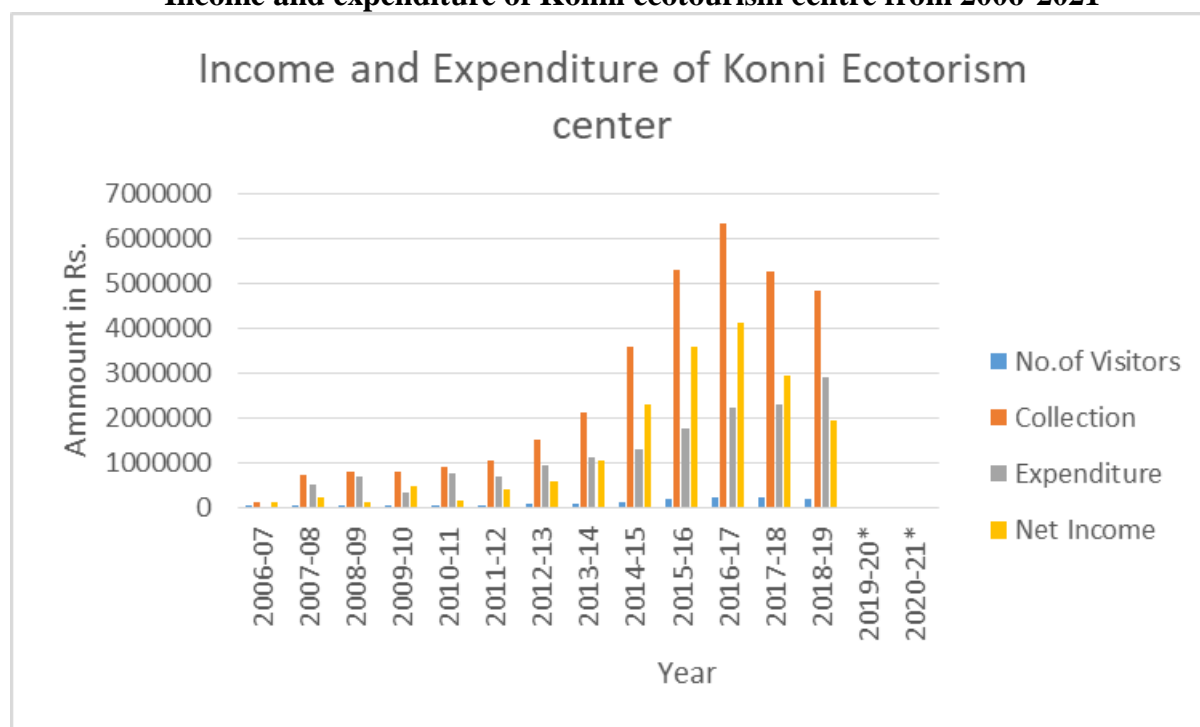
Source: Konni Forest department statistics

*COVID-19 period

As such, the total income centre during the last decade shows an increasing growth (Table No: 1 and Exhibit No: 1) and which was Rs.95650 in 2006-07 which is found to be the least amount and rose to Rs. 6335975 in 2016-17 which is the highest amount in the study period which is due to the highest number of visitors (227523) in that period. As a result, the net income also found to be the highest during this period (Rs.4104877). From this it is found that there is positive association among these variables. The decline in revenue collection, net income during 2017-18 and 2018-19 due to decline in number of visitors during that period was due to the recession due to floods. But the expenditure shows an ever increasing trend from 2006-07 (Rupees Zero) to till 2018-19. One of the notable facts is that there is expenditure for the maintenance of ecotourism activity that does not exceed the Centre's collection. The data for 2019-20 and 2020-21 is not available due to Covid-19 and its resultant global lockdown where Kerala was not exempted.

Exhibit No.1

Income and expenditure of Konni ecotourism centre from 2006-2021



Source: Konni Forest department statistics

Table No: 2 and exhibit no:2 shows the Income and Expenditure per visitor of Konni Ecotourism Centre for the study period 2006-07 to 2020-21.

Table No: 2

Descriptive statistics of per visitor Income and Expenditure details of Konni Ecotourism Centre

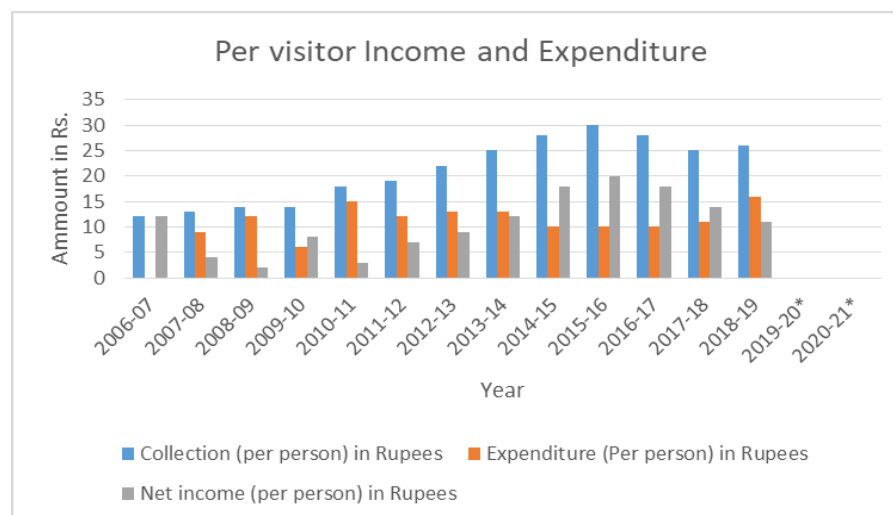
Year	Collection (per person) in Rupees	Expenditure (per person) in Rupees	Net income (per person) in Rupees
2006-07	12	0	12
2007-08	13	9	4
2008-09	14	12	2
2009-10	14	6	8
2010-11	18	15	3
2011-12	19	12	7
2012-13	22	13	9
2013-14	25	13	12
2014-15	28	10	18
2015-16	30	10	20
2016-17	28	10	18
2017-18	25	11	14
2018-19	26	16	11
2019-20*	NA	NA	NA
2020-21*	NA	NA	NA
Total	274	137	138
Average	21.08	10.54	10.62
SD	6.41	4.1	5.85
Maximum	30	16	20
Minimum	12	0	2

Source: Konni Forest department statistics

*COVID-19 period

Exhibit No. 2

Per visitor Income and Expenditure account of Konni Ecotourism Centre



The lowest per-person spending was the minimum of zero in 2006-07 period followed by Rs.6 in 2009-10 and the highest in 2018-19 (Rs.16).Likewise, the highest net income per person was highest in 2015-16 (Rs.20) when the collection was Rs. 30 per person which is the highest during the study period.Net Income is observed as the least in 2008-09 though the collection per visitor is Rs.14, which was consumed by expenditure which is observed as Rs.12 per visitor.

Determinants of revenue from Konni ecotourism centre

It is evident from the statistics of Konni Forest department on the net revenue (table no:2) that there is a simultaneous increase in the number of visitors and net income in the area. However, it is also visible that there is a continuous drop in the per person contribution to net income from 2016-17 onwards, which demands for further analysis of the relationship. So, a model was built to investigate the role of the number of visitors in increasing the net income in the Konni ecotourism centre, which is given as follows:

$$\ln Y_t = \beta_o + \ln \beta_{n_vist} + \varepsilon_t$$

where '*n visit*' indicates the number of visitors to the Konni ecotourism centre.

Table No: 3
Determinants of revenue from Konni ecotourism centre
Ordinary Least Square Test Results

	<i>Coefficien</i> <i>t</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>
<i>const</i>	-1.35094	2.53073	-0.5338	0.6041
<i>ln_n_visit</i>	1.31161	0.223911	5.858	0.0001***
R-squared	0.757245			
Adjusted R-squared	0.735177			
F (1, 11)	34.31321***			
Durbin-Watson	1.417224			

*** <1%, ** <5% and * <10% level of significance.

Source: Secondary data

The Simple linear regression result in table no:3 explains a positive and significant relationship between the number of tourist visits to the Konni ecotourism centre and net income from the Konni ecotourism centre. An increase in the number of one visitor in the area will increase the

net income by Rs 131. It is visible that 75 percent of variations in net income are determined by variations in the number of tourists' visits. The F statistics provide strong evidence of the relationship between the number of visitors and net income. The Durbin-Watson statistics do not indicate the existence of spurious regression as its value is 1.417224 which is below 2. Thus, the model is acceptable.

Impact of Konni ecotourism on Pathanamthitta district- Ordinary Least Square Test

The role of ecotourism on development is a perennial subject while constructing policies on tourism. At the macro level, measuring the contribution of ecotourism development of Pathanamthitta has been explored by constructing a model in which Net state Domestic Product (NSDP) has been taken as a proxy for development. Moreover, income from the Konni ecotourism centre has been used as a proxy to represent the benefits from ecotourism. The model specified as:

$$NSDP_t = \beta_0 + \ln_net_income_t + \varepsilon_t$$

Table No: 4

**Impact of Konni ecotourism on Pathanamthitta district
Ordinary Least Square Test Results**

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>
const	9.90017	0.534672	18.52	0.0001***
<i>ln_net income</i>	0.274976	0.0396249	6.939	0.0001***
R-squared	0.814052			
Adjusted R-squared	0.797147			
F(1, 11)	48.15621 (0.000025)			
Durbin-Watson	1.928275			

*** <1%, ** <5% and * <10% level of significance.

Source: Secondary data

The Ordinary Least Square regression result (Table 4) indicates that the net income from the Konni ecotourism Centre has a positive and significant influence on Pathanamthitta District's Net State Domestic Product. One per cent increase in net income for the Konni ecotourism centre will bring up district level income of Pathanamthitta by 27 percent. The F value gives evidence of a strong, established relationship. The R square statistics indicate that the model fitted and the net income from the Konni ecotourism area explains 81percent variability in the

district level NSDP. The Durbin Watson (DW) statistics is less than 2, which shows no spurious regression.

The impact of Konni ecotourism on the economic development of Pathanamthitta district is tested using one sample t test. The null hypothesis is rejected as the p value (0.00) is less than the t value (93.587) which shows that 'ecotourism impacted the economic development of the study area.

Practical implications

1. Tourism today is seen as an industry contributing a great amount to the government coffers. The report reveals that domestic tourists visit Pathanamthitta district and Konni ecotourism spots more frequently than overseas visitors. Infrastructure needs to be updated in order to draw in foreign tourists and increase tourism revenue.
2. Expenditure per visitor is higher than the collection per visitor which erodes net income per visitor. The government and local authorities who are in charge of the Konni ecotourism spot should take appropriate steps to curtail the expenditure to improve the net income of the ecotourism spot. Introducing a cutting-edge system for giving tickets to visitors and teach staff members on GPS, computer programmes may be implemented.
3. Despite having many natural attractions, the Pathanamthitta district receives the least number of tourists among all other districts in Kerala. The Konni ecotourism centre is a popular tourist hub with spots such as an elephant training centre, waterfalls, Achencoil River, etc. The present research identifies that Konni ecotourism has considerably contributed to the development of Pathanamthitta. But it should be developed as a model centre for promoting ecotourism in the district.
4. Ecotourism sites' promotional and publicity activity should be well organized and competitive as the number of visitors, fees collections, revenue generation shows the decreasing trend from 2020-21 which may be due to Covid-19 and resultant lockdown. So the online promotion of the ecotourism centers by highlighting major natural and artificial attractions may be done continually. It is vital to have Eco tourists' information centers which are essential for providing visitors with accurate information and instruction. Efforts should be made to promote ecotourism properly in order to gain foreign exchange.

5. Government should conduct state level studies which compare the benefits of mass tourism and ecotourism so that more focused addition and promotion in the area can be done.

Conclusion

Ecotourism aims to maintain a balance between economic development, environmental conservation, locality development and recreation for the tourist. The outcome of research on ecotourism changes as the area of study changes. Ecotourism is not only the natives' livelihood but also brings income into the exchequer. The present research focused on the economic effects of ecotourism in the Pathanamthitta district by collecting evidence from the Konni Taluk. The study suggested that the locations require proper planning in order to provide the infrastructure needed for the growth of ecotourism. In order to promote and draw tourists from India and outside, it is necessary to identify new potential ecotourism development locations and make the necessary plans for their development. Only a concerted and honest effort from each stakeholder and city will result in a positive change in the rate of growth of ecotourism. In a nutshell, the Konni ecotourism Centre has a great potential to thrive. If the flow of tourists and the working of tourist attractions are planned and controlled effectively, the tourism centre could be presented as a model one.

References

1. TIES-<https://www.ecotourism.org/news/ties>
2. <https://www.tourmyindia.com/blog/best-eco-tourism-destinations-india/>
3. <https://pathanamthitta.nic.in/en/demography/>
4. Robert Christie Mill and Alastair M. Morrison (1992), "The Tourism System: An Introductory Text", Prentice Hall, Englewood Cliffs, NJ 07637, 1992
5. Masud, M. M., Aldakhil, A. M., Nassani, A. A., & Azam, M. N. (2017). Community-based ecotourism management for sustainable development of marine protected areas in Malaysia. *Ocean and Coastal Management*, 104-112.
6. Patrick Brandful Cobbinah (2015), "Contextualizing the meaning of ecotourism", *Tourism Management Perspectives*, Volume 16, October 2015, Pages 179-189
7. François Vellas (2011), "The Indirect Impact of Tourism: An Economic Analysis," Toulouse University – TED AFL Third Meeting of T20 Tourism Ministers Paris, France, 25 October 2011
8. Tohidy Fateme Ardahaey. (2011). "Economic Impacts of Tourism Industry ", *International Journal of Business and Management* vol 6. 10.5539/ijbm.v6n8p206.

9. Lionetti, S., & Gonzalez, O. (2012). "On the relationship between tourism and growth in Latin America". *Tourism and Hospitality Research*, 12(1), 15-24.
10. Schellhorn, Matthias. (2010). Development for whom? Social justice and the business of ecotourism. *Journal of Sustainable Tourism*. 18. 115-135. 10.1080/09669580903367229.
11. Stronza, Amanda (2007). "The Economic Promise of Ecotourism for Conservation", *Journal of Ecotourism*, vol 6 issue 3. Pp210-230,ISSN: 1472-4049 - <https://doi.org/10.2167/joe177.0>
12. Kumar C K, P., Kalappurackal, P. J., & Kurian, I. (2020). Tourism and its Impact on India's Regional Development-Enabling Regional Development through Farm Tourism in Vazhakulam, Kerala, India-A Case Study. *Tourism management and Regional Development*, 1-16.
13. Singh, Kuldeep. (2020). Scope of Eco Tourism through Strategic Approach: A Review study of Rajasthan (India). 6. 927-937. 10.1729/Journal.24358.
14. Hameed, B., & Khalid, A. (2018, June). Impact of Ecotourism in Ensuring the Sustainable Development of the Tourism Industry in India. *International Journal of Recent Research Aspects*, 5(2), 46-50.
15. Poyyamoli, G. (2018). Ecotourism Policy in India: Rhetoric and Reality. *Grassroots Journal of Natural Resources*, 1(1), 46-61.
16. Das,D.,&Hussain,I.(2016).Does ecotourism affect economic welfare? evidence from Kaziranga national park, India, *Journal of Ecotourism*,.15(3)
17. <https://youmatter.world/en/definition/ecotourism/#:~:text=Ecotourism%20Official%20Definition%20and%20involves%20interpretation%20and%20education>".