IMPACT OF TOURISM ON LOCAL COMMUNITIES IN THANJAVUR CITY WITH SPECIAL REFERENCE TO BRIHADISVARA TEMPLE

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Abstract: This study explores the people's perception towards the impact of tourism with reference to Brihadisvara temple deemed as the most famous and significant cultural tourism spot in Thanjavur city. Brihadishvara temple is an old cultural centre and tourist spot build around 1010 AD by a famous Tamil king Raja Raja Cholan located in the Thanjavur city of Tamil Nadu. The objective of the study is to find people demographic as well as their perception towards impact of tourism in the vicinity of Brahadisvara temple. A pretested questionnaire has been prepared to collect the data from randomly selected 448 samples of people who are visiting the temple through personal interview. Factor analysis has done for the collected data by using of SSPS 20. The study concludes that the study area has both of negative as well as positive impacts due to tourism. Factor analysis on the perception of local communities towards the impact of tourism also concludes that local communities have a perception that there is an economic enhancement due to tourism in the study area this implies that tourism has a positive impact. Possible suggestion is that local community people should get awareness and education programs regarding the sustainable tourism in order to obtain positive benefits and to minimize the negative impacts of tourism on environment. Community empowerment and their capacity building are highly important inthis context.

Key words: **Thanjavur city, Brihadisvara temple, Factor analysis**

Introduction:

Tourism is taken into account in concert of the most important and quickest developing sectors of the globe. Its high growth and development rates bring significant volumes of foreign currency inflows, infrastructure development, employment generation, regional development; economic multiplier factor effects and introduction of latest management and academic expertise actively have an effect on numerous sectors of economy, which can be completely affected to the social and economic development of the country (Mirbabayev & Sagazatova, 2005). According to Mirbabayev & Sagazatova (2006) tourism provides about 100 percent of the world's financial gain and employs almost one out of tenth of the world's manpower. Many of us emphasize the positive aspects of tourism as a supply of interchange, the simplest way to balance foreign trade, an "industry while not chimney". However there are varieties of positive and negative sides of tourism's economic impacts on communities. Tamil Nadu is a land of magnificent temples that has remained intact exposing the marvel and glory of the Dravidian culture, art, architecture and spiritual values. The state holds a unique position with its distinguished culture, grandeur of temples, architectural styles, arts, custom and traditions of people. The entire state of Tamil Nadu is filled with religious resources and is well known as the land of temples for its grand architectural masterpieces. The most important cities and towns known for its temples are: Mahabalipuram, Kanchipuram, Chidambaram, Thanjavur, Madurai, Rameshwaram and Kanyakumari, etc. Out of all other temples, the Brihadisvara temple at Thanjavur is the most notable temple known for its rich cultural and architectural value.

This Chola temple is conceived as a representation of a 'cosmological world view', propagated in the Puranic religion and mythology. In southern India, the temple construction was established by the Pallava dynasty who ruled before Cholas. The Cholas took over the tradition of temple architecture and attained its zenith. The Dravidian style of architecture was taken to its height by the Chola dynasty. The most outstanding Brihadishvara temple complex at Thanjavur was built by Rajaraja I. It has the tallest sanctum tower, Vimana. This Temple is listed as monuments of national importance, under the protection of the Central Government. They are subject to the ancient monuments and archaeological sites and remains act (AMASR 1958 and AMASR 1959). It was recognized by UNESCO as world heritage site and inscribed in 1987 under criteria ii and iv.

Study Area:

Geographical location of the Thanjavur city is at $10^0 44"48'N$ to $10^0 49"41'N$ Latitude and $79^0 5"50' E$ to $79^0 10"13' E$ longitude situated at Thanjavur district of Tamil Nadu shown in the Fig.01. Total area of Thanjavur city is 36.61 sq. km.
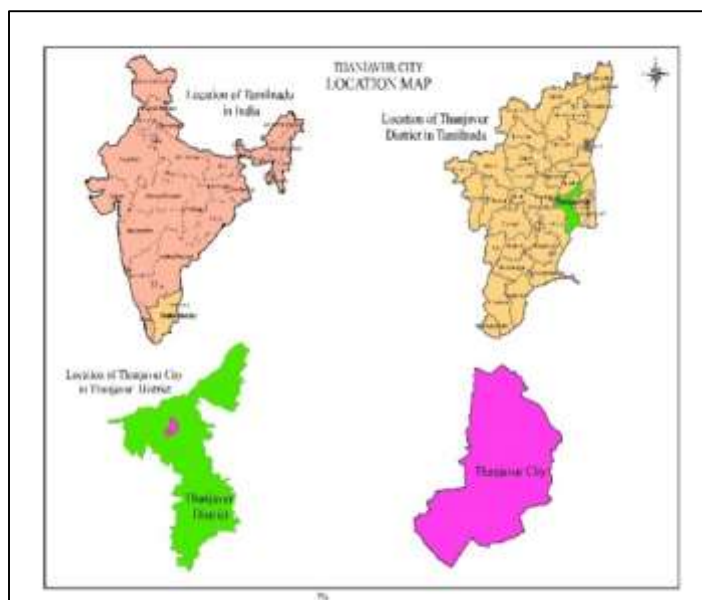
Fig. 01 Thanjavur City

Review of literature:

The tourism industry generates substantial economic benefits to both host and guest countries. Especially in developing countries, one of the primary motivations for a region to promote itself as a tourism destination is the expected economic improvement. As with other impacts, this massive economic development brings along both positive and negative consequences (UNEP, 2003).

Tosun (2002) has conducted a comparative study on host perceptions of impacts and investigates resident perceptions of tourism impacts on a Turkish town. Personal interviews were conducted with household heads and results compared with Fijian and American case studies. Comparative figures suggest that the Turkish residents were generally less supportive of the tourism industry and had fewer positive perceptions of its impacts when compared to the other two cases.

Methodology:

The study is carried out around Brihadisvara temple a most famous tourism place in Thanjavur city. The demographic details of the sample have been given in percentage, the characteristics of the ordinal data regarding people's perception towards the impact of tourism has also given in percentage. Factor analysis for the collected data has been carried out after getting the Bartlett's Test for sphericity, chi-square value of less than 0.05 which confirms the sufficient common variance in the factors and Kaiser-Meyer-Olkin value of above 0.5.

Findings and discussion:

The proceeding sections discuss the findings gathered through the study to meet the research objective to answer to the research problem.

Socio - Economic characteristics:

Socio Economic details	Characteristics	Percent
Age	Less Than 30 Years	14.5
	31-40 Years	25.0
	41-50 Years	29.2
	51-60 Years	11.2
	Greater Than 61 Years	20.1
Gender	Male	61.4
	Female	38.6
Duration of living	More Than 20 Years	75.2
	Less Than 20 Years	19.6
	Less Than 10 Years	5.1
Occupation	Not Employed	21.4
	Public Service	13.2
	Private Service	24.1
	Self Employed	41.3
Income	10000 And Below	55.8
	10001 – 20000	28.8
	20001- 30000	10.5
	30001 – 40000	4.5
	40001 And Above	.4

	Everyday	11.4
	Once In A Week	15.8
Temple Visit	Once In A Month	47.5
	Rarely	23.4
	Never	1.8

As shown in Table above, it is observed that the respondents Age are considered into five category, 14 percent of the respondents are less than 30 years of age, 25 percent of the respondents are between 31 to 40 years of age group, 29.2 percent of the respondents are aged between 41 –50, 11 percent of the respondents are aged between 51 –60 and 20 per cent of the respondents are above 61 years of age. This result indicates that most of the samples collected from middle age groups consist of 65.4percent of the total respondents. The result indicates that samples collected from 65.4 percent of total repondents are from the middle age group, as they are the one dircetly or indircetly participate or witness the activities of tourism business and most of the below 30 years and above 61 years have only the experience to share due to their social and health conditions. The gender composition of the respondents was near, male (61.4%) and female (38.6%) more or less an equal number of respondents has been chosen for the study as they both are equally responsible for the family's socio – economic condition.   Thanjavur is an agriculture based land and major portion of the people living in the city and working for the livelihood are the decedents of those who involved in agriculture, as a result the city is the native to most of the city dweller. Hence a large number of the respondents were living in the place more than 20 years (75.2 %) followed by lesser than 20 years (19.6 %) and lesser than 10 years (5.1 %).Nearly half of the respondents were self-employed (41.3%), Public service (13.2%), private service (24.1%) and the rest (21.4%) were unemployed. Majority of the respondent's income below Rs. 10000 (55.8%) followed by this Rs. 10001 to 20000 (28.8%), Rs. 20001 to 30000 (10.5%), 30001 to 40000 (4.5%) and above income Rs. 40001 (0.4%). Most of the respondents had visit the temple once in a month (47.5%).

Characteristics of perception of local communities towards Impacts of Tourism

S. No	Impacts Of Tourism	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
1	Tourism has led to an increase in infrastructure for local people	0.0	4.2	19.0	56.5	20.3
2	Tourism development increases the availability of recreation opportunities in the local community	1.3	10.5	59.2	25.0	4.0
3	Tourism increases quality of life	2.5	9.8	47.8	36.2	3.8
4	Tourism encourages a variety of cultural activities by the local people	1.1	8.9	26.3	52.5	11.2
5	Tourism improves relationship with the family and community	11.4	54.0	21.2	13.4	0.0
6	Tourism has created jobs to the local people	1.1	1.1	13.6	77.0	7.1
7	Tourism has given economic benefits to the local people and business	1.1	1.1	13.2	77.9	6.7
8	Tourism causes congestion and is unpleasant to the local community	33.0	47.8	4.0	9.6	5.6
9	Tourism increases crime in the local community	68.1	24.8	1.6	5.6	0.0
10	Tourism weakens social bonds and family structure	56.7	35.9	6.3	1.1	0.0
11	Prices of goods and services in the region have increased because of tourism	14.1	0.0	31.3	38.6	16.1
12	Tourism benefits a small group of people in the region	2.5	6.7	36.4	54.5	0.0
13	The construction of hotels and other tourist facilities has destroyed the natural environment in the region.	38.8	43.8	8.0	6.0	3.3

The positive and negative impact of tourism on local people is observed from the table. Majority of the local people states that tourism has controlled to increase the infrastructure of them (76%) and the tourism development increases the availability of recreation opportunities in their community (29%).Also it increases their quality of life (40%). 63% of them approved that the tourism encourages verity of cultural activities like crafts, arts ,and music. 84 % of the folks accepted that tourism has created jobs and opportunities to them and it has given economic benefits to their business (83%). 81% of the samples distressed about the tourism causes congestion and its unpleasant to their local community. Majority of them denied the statement that tourism increases crime (93%), tourism weakens social bonds and family structure (92%), hotels and other tourist facilities have destroyed the natural environment in the region (82%). More than half of the samples (54%) approved that price of goods and services in the region have increased because of tourism. As the study has found the majority of the sample statement are shown positive impacts. This has proved that majority of the people living around the temple and the nearby cultural sites are some or the other way connected to the growth of the temple. Though they believe that the cost of the goods and services have increased because of tourism, they also have the balanced feel of having gained through tourism.

Analysis of perception of local communities towards Impact of Tourism

Bartlett's Test for sphericity, chi-square measure ($\chi^2_{(df=78, N=448)}$ = 1660.565, p = 0.000) confirms the sufficient common variance in the factors. Kaiser-Meyer-Olkin measure of sampling adequacy indicated (Value = 0.638) which is greater than 0.5 shows that the results of factor analysis will be effective shown in the Table. Fig. shows the scree plot which confirms the four factors could be considered for further analysis as no much value addition after the fourth factor. Eigen values more than one with varimax rotation has been considered for performing of factor analysis. The communalities are greater than 0.50 for the variables pointing out that the data is suitable for further analysis. Four factors are obtained that explained 62.03% of total variation in the data shown in the table. Factor loading greater than 0.40 has been selected for each factor; each of the factors with corresponding factor loading is selected for appropriate nomenclature. The selection of the name of each of the factors is based on a theoretical basis.

Table KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.638
Bartlett's Test of Sphericity	Approx. Chi-Square	1660.565
	Df	78
	Sig.	.000

Table Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.847	21.897	21.897	2.847	21.897	21.897	2.788	21.449	21.449
2	2.062	15.864	37.761	2.062	15.864	37.761	1.912	14.704	36.153
3	1.907	14.669	52.430	1.907	14.669	52.430	1.735	13.344	49.497
4	1.249	9.609	62.039	1.249	9.609	62.039	1.630	12.542	62.039

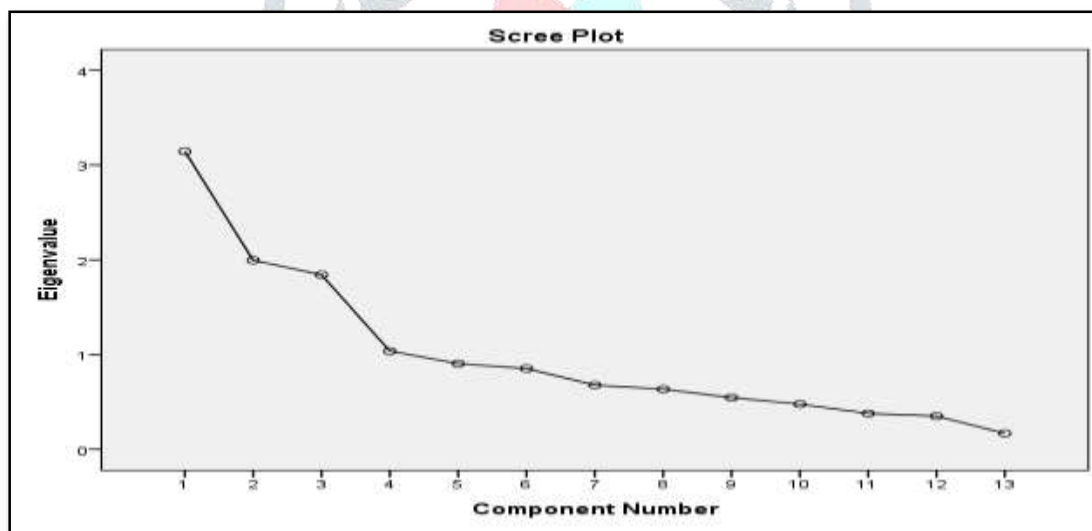Fig. Scree plot for factor analysis of perception towards the impact of tourism

Nomenclature of the attitude of local communities towards tourism

Economic enhancement is the combination of six items which includes the creation of jobs, an increase in business, quality of life, increase the availability of recreation opportunities, encouragement of a variety of cultural activities and an increase of infrastructure due tourism activity with percentage of the variance is 21.897 and very high mean value of 21.81. Environmental degradation which includes the combination of three items like increase of congestion, unpleasant deterioration of environment due to infrastructure development and increase in the prices of commodities due to tourism with 15.86 percent of variance and mean value of 7.54.

Table Perception of local communities towards the impact of tourism identified through factor analysis

Factor loading	Factors	Primary representation	Eigen values	% of Variance
.762	Tourism has created jobs for the local people	Economic enhancement	2.847	21.897
.735	Tourism has given economic benefits to the local people and business			

.723	Tourism increases the quality of life			
.590	Tourism development increases the availability of recreation opportunities in the local community			
.586	Tourism encourages a variety of cultural activities by the local people (eg. Crafts, arts, music)			
.578	Tourism has led to an increase in infrastructure for local people			
.794	Tourism causes congestion and is unpleasant to the local community	Environmental degradation	2.062	15.864
.721	The construction of hotels and other tourist facilities has destroyed the natural environment in the region			
.498	Prices of goods and services in the region have increased because of tourism			
.875	Tourism increases crime in the local community	Negative Social issues	1.907	14.669
.700	Tourism weakens social bonds and family structure			
.816	Anything else that needs to be changed for the betterment of the temple and local community?	Improvement of tourism	1.249	9.609
.712	Do you think that it is necessary for another heritage site also to be recognized by UNESCO			

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Negative social issues are the third factor with the combination of two variables which includes an increase in crime and weakens the social bonds and family structure due to tourism with 14.66 % of the variance and mean value of 2.96. The fourth factor is an improvement of tourism which includes the two variables the betterment of temple and local community, and another heritage site should be recognized by UNESCO with 9.60 % of the variance and mean value of 2.95.

Table Dimension of perception of local community towards the impact of tourism through factor analysis

S. No	Dimension - Impact of tourism	N	Minimum	Maximum	Mean	Std. Deviation
1	Economic enhancement	448	10.00	30.00	21.8125	2.83169
2	Environmental degradation	448	4.00	14.00	7.5491	2.23703
3	Negative Social issues	448	2.00	8.00	2.9643	1.23830
4	Improvement of tourism	448	2.00	5.00	2.9599	.92543

Factor analysis on the perception of local community towards the impact of tourism implies that tourism has a positive impact of economic enhancement confirmed by high mean value (21.81) followed by the negative impact of environmental degradation (7.54), negative social issues (2.96)and Improvement of tourism (2.95) has low mean value.

Conclusion:
This research takes an effort to identify the major impacts on the local community through tourism development with special reference to Brihadisvara temple. The study could identify the both of negative and positive impacts of tourism. The identified positive impacts are infrastructure developments, income generations, direct and indirect employment opportunities and increased the value of local properties. The study also concludes that the negative impacts like increased prices, economic dependence of the local community on tourism and economic inequality, changing living styles. The community perception regarding tourism was positive. Similarly the hotel industry has generated both positive and negative impacts in the area. However, the negative impacts are at a minimum level when compare with the positive impacts. Factor analysis of the perception of local communities towards the impact of tourism concludes that local communities have a perception that there is an economic enhancement due to tourism in the study area this implies that tourism has a positive impact. Followed by environment degradation, and negative social issues are the negative impact of tourism in the study area. Local communities give low priority to the improvement of tourism. It is suggested that local people should get awareness and education programs in order to obtain positive benefits and to minimize the negative impacts of tourism. Community empowerment and their capacity building are highly important in this context.

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