CHAPTER 7
TOURISM AND TRANSPORTATION

7.1  Tourism

Kuttanad has a most prominent place among all tourist destinations in the God’s Own Land. For all discerning travellers with an eye on scenic beauty it is indeed the most sought after tourist destination. Currently some 200,000 tourist are estimated to be heading for Kuttanad annually. More than three quarters of them are of foreign origin. The tourist season in Kuttanad runs through the months of October to March. A pleasant climate prevails in Kuttanad throughout this season.

7.2  Economic Aspects of Tourism in Kuttanad

Tourism in Kuttanad has a variety of economic impacts. Tourists contribute to sales, profits, jobs, tax revenues, and income in Kuttanad. The most direct effects occur within primary tourism sectors-lodging, restaurants, transportation, amusements and retail trade. Through secondary effects, tourism affects most sectors of the economy. An economic analysis of tourism activity normally focuses on change in sales, income and employment in a region resulting from tourism activity.

A simple tourism impact scenario can be illustrated as follows. Suppose a region attracts an additional 100 tourists, each spending $100 per day. This translates to $10,000 of new spending per day in the area. If this is
sustained over a 100 day season, the region would accumulate a million dollars in new sales. The million dollars in spending would be distributed to lodging, restaurant, amusement and retail trade sectors in proportion to how the visitors spend the $100. Perhaps 30 per cent of the million dollars would leak out of the region immediately to cover the costs of goods purchased by tourists that are not made in the local area (only the retail margins for such items should normally be included as direct sales effects). The remaining $7,00,000 in direct sales might yield $3,50,000 in income within tourism industries and support 20 direct tourism jobs. Tourism industries are labour and income intensive, translating a high proportion of sales into income and corresponding jobs.

7.3 Tourism: Claims of Secondary versus Tertiary Sector

The tourism industry, in turn, buys goods and services from other businesses in the area, and pays out most of the $350,000 in income as wages and salaries to its employees. This creates secondary economic effects in the region. The study might use a sales multiplier of 2.0 to indicate that each dollar of direct sales generates another dollar in secondary sales in this region. Through multiplier effects, the $700,000 in direct sales produces $1.4 million in total sales. These secondary sales create additional income and employment, resulting in a total impact on the region of $1.4 million in sales. These secondary sales create additional income and employment, resulting in a total impact on the region of $1.4 million in sales, $650,000 in income and
35 jobs. While hypothetical numbers used here are fairly typical of what one might find in a tourism economic impact study. A more complete study might identify which sectors receive the direct and secondary effects and possibly identify differences in spending and impacts of different subgroups of tourists (market segments). One can also estimate the tax effects of this spending by applying local tax rates to the appropriate changes in sales or income. Instead of focusing on visitor spending, one could also estimate impacts of construction or government activity associated with tourism.

There are several other categories of economic impacts that are not typically covered in economic impact assessments, at least not directly. For example:

Changes in prices-tourism can sometimes inflate the cost of housing and retail prices in an area, frequently on a seasonal basis.

Changes in the quantity and quality of goods and services- tourism might lead to a wide array of goods and services available in an area.

Changes in property and other taxes-taxes to cover the costs of local services may be higher or lower in the presence of tourism activity. In some cases, taxes collected directly or indirectly from tourists may yield reduced local taxes for schools, roads, etc. In other cases, locals may be taxed more heavily to cover the added infrastructure and service costs.
7.4 Economic dimensions of “social” and “environmental impacts”

There are also economic consequences of most social and environmental impacts that are not usually addressed in an economic impact analysis. These can be positive or negative. For example, traffic congestion will increase costs of moving around for both households and businesses. Improved amenities that attract tourists may also encourage retirees or other kinds of businesses to locate in the area.

7.5 Transportation in Kuttanad

Kuttanad region is a low-lying zone of marshy and peaty lands, intersected by a myriad of waterways and has a complex network of rivers and rivulets, lakes, islands and sea inlets called the kayal or backwaters. The central part of the backwaters in the State is dominated by a sizeable stretch of open water body called the Vembanad lake. Because of the natural conditions prevailing in Kuttanad, water transport has an important role in its transport system. Everyone living in the area, irrespective of their economic conditions, has to depend on water transport for movement.

The main regular users of water transport in Kuttanad are farmers, agricultural labour, coir workers, fishers, fish and other vendors, sand miners, students and teachers, general laborers and others employed in various services in the area etc. Those residing in huts and small houses along the narrow canal embankments have to use water transport more often, since for anything and everything they have to cross the waters. A number of these
families own their own small boats of varying size and facility depending on their economic status. In recent times, tourists (both foreign and Indians) have become users of boats in this region to roam around through the backwaters.

### 7.6 Public transport

Public passenger transport in the inland waters of Kuttanad is the monopoly of the State Water Transport Department (SWTD). Half the stations and half the fleet of SWTD are in the Kuttanad region. SWTD also has its own boat building, repairing and maintenance workshop cum yard at Allepey. 930 people are employed for operating the fleet.

The fare charged by SWTD is slightly higher than the fare in the ordinary buses of public transport services in the State. The SWTD also provides concession tickets to students traveling in its boats and about 25 per cent of the seats in every passenger boat are reserved for women. It is very reasonable and vendors, including women fish vendors who travel to the interior markets, make use of it to the maximum.

The SWTD is wholly dependent on government funds and subsidy to continue running its boat operations. Due to paucity of funds, the department is unable to buy new boats or do proper maintenance and repairs and as many as 23 boats are lying idle and in decaying conditions in its workshop. A recent evaluation of the department has suggested that it diversifies its activities to dredging, cargo transportation, tourism, boat building etc. to overcome the present crisis.
There are a few boat passenger associations too working in this area, which become active whenever there is any important issue that affects passengers adversely such as fares increases or accidents. Passengers perceive the age of the boats, the lack of proper maintenance, their slow speed and the heavy rush during peak times and peak seasons, and lack of proper waiting sheds and jetties to be the major problems. They feel the government has been negligent in not providing better boats and in not maintaining the water channels.

The diesel price hike has plunged the SWTD in danger and dismay for the increased demands outweigh the scope of expansion and modernisation. 30 percent of the fleet provided by SWTD are to be modernised immediately and about Rupees 100 crore project has been envisaged in strengthening the water transport networks within the state of Kerala.

There are five main unions working among the employees of SWTD, four of which are closely associated with the major political parties in the State. According to the employees of the SWTD, the priority issues being faced by the water transport sector are: the silting of water channels; the lack of new boats and spare parts necessary for maintenance, the spread of the Water Hyacinth (African weeds), the low revenue and consequent negligence of the government, the occasional overcrowding, non-cooperation of passengers to comply with safety guidelines and the absence of regular checking and inspection on the fitness of boats by any competent authority.
7.7 Private Water Transport

There are two types of private boats seen in the inland waters of Kuttanad – traditional and mechanised boats. The traditional boats include small canoes, medium canoes, cargo canoes and houseboats.

The small canoes (cheru vallom) are owned and operated by households, living in small islands and along the canal banks, especially the agricultural labourers, women who use them to collect drinking water or buy groceries from shops and children going to school. They are used by small vendors who move through the backwaters selling fish, vegetables, household articles, provisions etc. to the households settled along the narrow banks. In a few places they are available as hiring boats “taxi-valloms”, using small outboard motors. There is no new construction of these new small canoes anywhere in Kuttanad, because old ones are available for sale, especially from areas where roads and bridges have come up recently.

Medium canoes, “Edatharam Vallom”, are plank built and are generally used here for carrying materials rather than people. The cargo canoes, Kettu valloms, were the major means of inland cargo transport in Alleppey district about half a century ago. They have a special roof covering to protect the goods from rain and sun and a collapsible portion which can be opened up and used only when goods are loaded or unloaded. The use of medium and cargo canoes has been changing over time. Medium canoes were owned by farmers and played a major role in the paddy cultivation and harvesting. But with the decline
in cultivation and with new roads coming up, ownership has shifted to a few businessmen who rent them out to farmers, to other users for sand mining and transporting, carrying drinking water, transporting construction material etc. The canoes are required to be registered with the Canal Department and the owners have to pay a small license fee every year. Sand mining is prohibited in many areas and carrying sand in canoes are less risky as the law enforcing authorities and police often check lorries at roads and not canoes in rivers.

There are only a handful of cargo canoes in Kuttanad used mostly to transport fertiliser from the warehouses in Allepey to the interior villages, and operated by elderly men who are unable to find other employment. Most of the cargo canoes have been bought by tour operators and business men in Alleppey to convert into “houseboats” for the use of tourists. The demand for houseboats has considerably raised the resale value of these canoes.

**Houseboats** are the most vibrant forms of ‘water transport’ prevailing now in Kuttanad area is the houseboat, thanks to growth of tourism. They provide employment and good wages to about 1000 people. The department also gives wide publicity to promote this houseboat tourism. Local businessmen, young entrepreneurs from paddy farming families who find tourism a more attractive source of income, own almost all the houseboats. Though houseboats provide a good income to many, the environmental costs of the sewage and effluents discharged by them in the backwaters are of concern.
Most of the **private mechanised boats** plying in Kuttanad are of the same type and they vary only in size: Small and Medium and Large. Traditionally these small and medium motorised boats were owned by rich agricultural land owning families and used for personal mobility. They were made of teak wood, had seating capacity for about 10 to 30 people, were fitted with a diesel engine of 10 to 40 HP, and require registration and annual license from the Canal Department and a fitness certificate, once in two years. The boat drivers are required to obtain driving license from the department. At Alleppey town, about a 100 of these small private boats, owned by tour operators, some farmers or private businessmen are available for hire. About 20 boats are driven by the owners themselves and it is their main source of income. Apart from the tourists, the local people also hire these boats for private functions like marriage etc. They are also seen tugging two or three medium type traditional canoes (carrying heavy construction materials) tied one after the other with ropes. In a few interior villages of Kuttanad, some small mechanised boats, owned by local people, operate as taxis for local people.

There are about 50 large sized private mechanised boats operating in Kuttanad area. All are passenger boats with the capacity to carry 100-300 passengers and are fitted with engines of 60 to 120 HP mostly of Leyland make. They have no provision to do any cargo transport. These are used as tourist boats and are mostly owned by tour operating firms. Some tour operators have also hired these boats from others who are unable to run tour operating business on their own.
Human activities create stress to biotic system which is otherwise termed pollution. Tourism, one of the highest human interventions creates stress to the Vembanad ecosystem. Kerosene is causing threat to lake and paddy fields around it.

The life of the people of Kuttanad is centred around the canals and backwaters. The breaching of canals in rainy season due to fast movement of boats is noticed. The regular movement of ferry services and tourist boat services makes the situation critical. The safety of weak embankments against the wave generated by boat movement and flood waves is a matter of concern.

Kuttanad is the deltaic formation of rivers. The rivers drain their waters into this unique wetland system. These rivers also carry with them wastes from the upstream. On their course, they carry untreated municipal sewage, biomedical wastes, domestic wastes, industrial wastes, farm wastes, leaching from septic tanks etc. The people of Kuttanad depend on these waters for their daily needs. All the rivers flowing to Kuttanad is highly polluted with human faecal contamination. This is particularly seen in the Pampa river during Sabarimala pilgrimage season.

7.8 Travel and Tourism

Chi-square test for independence of attributes is used to study whether there is any significant difference between the major environmental issues in the upper Kuttanad, lower Kuttanad and north Kuttanad region.
Table 7.1: Environmental Challenges due to Travel and Tourism in Kuttanad

<table>
<thead>
<tr>
<th>Region</th>
<th>Shrinkage of backwaters</th>
<th>Increase in flood</th>
<th>Increasing salinity</th>
<th>Contamination of water resources</th>
<th>Decreasing availability of drinking water</th>
<th>Increase in pests</th>
<th>Aggressive growth of water weeds</th>
<th>Reduction in fish population and variety</th>
<th>Improper discharge of waste</th>
<th>Increasing incidence of diseases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Kuttanad</td>
<td>4</td>
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<td>8</td>
<td>8</td>
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<td>9</td>
<td>6</td>
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<td>Lower Kuttanad</td>
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<td>5</td>
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<tr>
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<tr>
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<td>18</td>
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<td>22</td>
<td>21</td>
<td>25</td>
<td>19</td>
<td>12</td>
<td>13</td>
<td>181</td>
</tr>
</tbody>
</table>

Source: Survey

The test statistic, $\chi^2 = 2.407704$

Degrees of freedom = 18

P-value = 0.999995
Since the P-value is large, the effect of the major environmental issues is similar in all the three regions. 6.62% of the Kuttanad region has shrinkage of backwaters due to the effect of travel and tourism, 8.84% of the Kuttanad region has the increase in flood due to the effect of travel and tourism, 9.95% of the Kuttanad region has the increasing salinity due to the effect of travel and tourism, 12.71% has the contamination of water resources due to the effect of travel and tourism, 12.16% has decrease the availability of drinking water due to the effect of travel and tourism, 11.6% has the increase in pests due to the effect of travel and tourism, 13.81% has the aggressive growth of water weeds in the Kuttanad region due to the effect of travel and tourism, 10.5% has the reduction in fish population and variety due to the effect of travel and tourism, 6.63% has the improper discharge of waste due to the effect of travel and tourism and the remaining 7.18% has the increasing incidence of diseases due to the effect of travel and tourism.

The major environmental issues in the Kuttanad region due to travel and tourism are aggressive growth of water weeds and contamination of water resources.

The other major environmental issues in their order of significance are decreasing availability of drinking water, increase in pests, reduction in fish population and variety, increasing salinity, increase in flood, increasing incidence of diseases, shrinkage of backwaters and the improper discharge of waste.