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## A STUDY OF KADAMBA TRANSPORT CORPORATION LIMITED

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**Abstract:**-The present paper aims to study the operational performance of KTCL and quality of service rendered to the commuters in comparison with private operators. In Goa a variety of mass transport facilities are available, including ferry and railway services. However, road transport plays an important position in the overall transport system of the State. The public transport in the state is handled by KTCL, a government undertaking and private operators simultaneously. The Corporation is rendering concessional services to various section of the society and thus discharging social obligation of the Government of providing economic mode of transport in the State.

**Keywords:** Cost structure, Financial of performance, operational efficiency, quality of service. Passenger-kilometers.

### INTRODUCTION

Road transport has come to occupy a pivotal position in the overall transport system of the State of Goa. Transport system is also essential for movement of working people and goods. For prosperity of a region an efficient system of transport is necessary.

Goa is said to be a paradise of India with many beautiful places of attraction. Goa is a small State with an area of 3702 square kilometers and a population of 14, 58, 545 having a literacy rate of 79.90 (male 79.60 per cent and female 76.60 per cent) according to 2011 census. The State is divided into two districts, eleven talukas and has fifteen towns.

A variety of mass transport facilities are available in Goa, including ferry and railways services, but road transport plays an important position in the overall transport system of State of Goa. No mode of transport other than road can adequately and effectively meet the demand for transport arising out of growing economic, social, cultural, health, and religious needs of the public. Ferry and railway services have physically constrains.

### PRESENT SCENARIO OF PUBLIC TRANSPORT IN THE STATE

The public transport system is a popular mode of travel, whatever the region because it is affordable, it is convenient and it is quite user friendly, especially in Goa. Goa has become as busy as any other progressive State in the country with progress made in various fields of industry, education and tourism. All these have led to the need for streamlining of public transport service. Goa is the twenty-fifth state of India. After attaining statehood lots of changes have been taken place in the State. Most of the settlement is now concentrated in urban areas. About 65 per cent of the working population in Goa depends on public transport; very few private sector companies have their own vehicles for their employees like hotels and pharmaceuticals companies.

Roads transport especially bus service plays an important role in economic and commercial development of the State. In Goa, economic activities are mostly concentrated in four major urban centers namely Panjim, Mapusa, Margao, and Marmugao. Public transport runs from 6.00 am to 9.00 pm in Goa. The government sponsored Kadamba Transport Corporation does run a few buses after dark up to 10 pm from one commercial center to another, especially connecting cities such as Panjim, Mapusa, Vasco, Margao and Ponda. The shuttle bus service by Kadamba Transport Corporation in Goa is useful and convenient for blue collar job holders and daily commuters. In Goa bus transport system is operated partly by Kadamba Transport Corporation which is undertaking of Government of Goa and partly by private bus operator. Bus operators

make use of large buses and mini buses. Certain trunk Routes like Panjim-Vasco, Panjim-Margao, Margao-Vasco are nationalized, where only buses operated by the Kadamba Transport Corporation ply and on the rest of the routes the mini buses and large buses of KTCL and private operators ply simultaneously. Mini buses also cater as feeder service, for instance from the market to Kadamba bus stand and vice-versa. The bus service in Goa happens to be the most popular means of transport with high accessibility and low cost.

Goa's vehicle population is expanding speedily. A large part of Goa's economy depends on tourist traffic inflow from all over the world, especially during the period between October and April. Talukas like Tiswadi, Bardez, Salcete, and Marmugao have a very high tourist influx whereas Talukas like Pernem, Bicholim, Sanguem and Quepem have practically no direct tourist influx. The routes connecting Mapusa, Panaji, Vasco and Margao are relatively well served whereas the other sectors are served by skeleton services. The State is considered as an ideal location for national and international conferences because of its salubrious topical climate, natural beauty, pristine beaches and the mix of churches, temples and greenery which is incomparable. Along with the growth of industry there is development of trade and commerce. All this has led to movement of people from one end to another within a small State along with a need for better and reliable communication.

#### **LITERATURE REVIEW:**

Some of the studies conducted on public transport are Bagade M.V (1991) on 'a model for achieving urban mobility', Patankar P.G. on 'Indian Road Transport Scenario in 2001', Raghunathan, Raghuram G., Gopal Krishnan C. (1991) 'Passenger transport in India – a customer's perspective'. Nadkarni S. (1997) 'a study of mini bus operations in Goa.

#### **IMPORTANCE OF THE PRESENT STUDY**

Road based public transport plays a key role in the movement of people. The transport service is expected to meet commuters' requirements satisfactorily. In the State demand for mass transport is met by private transport and public transport. Public transport is undertaken by Kadamba Transport Corporation Limited, Government of Goa. Kadamba Transport Corporation Limited has been set up under the Companies Act, 1956. The entire share capital of the Corporation has been contributed by the State Government. The Corporation is thus wholly owned Government Company. Kadamba Transport Corporation Limited was established in year 1980 to provide regular, reliable, comfortable and safe transport services to the people as the private operators were unwilling to operate the low earning routes in the villages and as such one of the most important objectives of the Corporation is to connect interior villages with the urban centre in order to assist in socio-economic development of the rural areas

KTCL connects 84 rural villages to the major towns and cities in Goa. Presently it has a fleet of 392 buses employing 1900 employees with 4 depots, a central workshop and head office. They have inducted new buses which include semi low floor, Volvo, semi luxury, luxury and mini buses. KTCL plans to operate more services on long distant villages in the State there by enabling the villagers to get better prices for their agricultural products and have in the socio economic development of the State. Hence, it is interesting to study the operational efficiency and quality of services rendered by KTCL.

#### **The objectives of the study KTCL**

1. To analyze and compare the cost structure of KTCL.
2. To analyze and compare efficiency and financial performance of KTCL.
3. To study the quality and reliability of service rendered by KTCL.

#### **SCOPE OF THE STUDY**

The scope of the study is limited to comparison of cost structure, operational efficiency, profitability and quality of service rendered by KTCL. The study covers a period from 2008-09 to 2012-13.

#### **HYPOTHESES:**

1. Revenue earned by of KTCL reflect the infrastructure and concessional services render to various segments of the society in the State.
2. Quality of service rendered by KTCL in the State is better as compared to private operators.

#### **METHODOLOGY**

The study depends on primary source of data and secondary source of data. The primary data have been collected from commuters of public and private transport service. The required data and information have been collected from personal interview method. From surveyed passengers 40 per cent represent urban areas and remaining 60 per cent from rural areas. Regarding the frequency of travel it was noticed that 40 per cent travel daily, 22 per cent twice or thrice in a week, 38 per cent

once in a week. Secondary data have been collected from statistical hand book of Goa, transport journals, annual reports of Kadamba Transport Corporation Limited and other relevant sources.

#### FINANCIAL PERFORMANCE AND OPERATIONAL EFFICIENCY OF KTCL

The entire study is divided into four sections as stated below:

##### Section I

##### Analyses of cost structure of KTCL.

The cost structure of KTCL has been analyzed considering each element of cost separately. An element wise analysis of the cost will help to bring out the differences in different component cost. It will also help to understand contribution of each element of cost towards the total cost. The operating cost of transport service includes the cost on personal, fuel, insurance expenses; cost of repairs, depreciation, and taxes incurred in connection with the rendering of service. In transport operations, the cost can be recovered in terms of cost per vehicle kilometer. The cost per kilometer is computed by dividing the total cost of operation by the total effective kilometers. The total cost also is computed on the basis of passenger kilometers. The Table 1.01 shows the cost of material in percentage.

**Table 1.1**  
**The Cost of Material to Total Expenses (in percentage)**

Cost of material	2008-09	2009-10	2010-11	2011-12	2012-13
Diesel	32.97	28.12	24.75	26.45	24.76
Consumption of spare parts and loose tools	3.28	1.86	4.31	3.64	3.31
Repairs and maintenance	0.92	1.14	0.16	0.16	0.14
Insurance	1.23	1.10	0.91	0.82	0.85
Taxes	2.01	1.73	1.52	1.48	1.35

Source: Annual reports of KTCL

The percentage of diesel to total expenses shows a declining trend. It was 32.97 percent in the year 2008-09 whereas it decreased to 24.76 in the year 2012-13. Cost of loose tools and spare parts was lowest in the year 2009-10 (1.86 per cent) and highest in the year 2010-11 (4.31 per cent). Regarding repairs and maintenance, it was 0.92 per cent in the year 2008-09 whereas the same was reduced to 0.14 per cent in the year 2012-13. Table 1.02 denotes the percentage of employee benefits to total expenses.

**Table 1.2**  
**Employee benefits to total expenses of KTCL (In percentage)**

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
Salaries , wages, allowances, incentives and other related expenses	43.48	53.42	46.81	48.62	47.77
Contribution to provided fund	4.28	3.53	7.12	6.28	6.37
Staff welfare expenses	0.07	0.07	0.56	0.54	0.47

Source: Annual reports of KTCL

The expenses on salaries and wages range between 53.42 per cent and 43.48 per cent during the study period 2008-09 to 2012-13. It was highest in the year 2009-10. Table 1.03 deals with financial cost and other operating expenses to total expenses.

**Table 1.3**  
**Financial cost and other Operating expenses to total expenses of KTCL**  
**(In percentage)**

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
Interest expenses on borrowings	6.58	6.43	5.43	5.52	5.9
Other expenses	54.76	46.29	36.08	35.03	35.06

Source: Annual reports of KTCL

It is seen that the percentage of interest expenses on borrowings shows a declining trend. It was 6.48 per cent in the year 2008-09 whereas the same has been reduced to 5.9 per cent in the year 2012-13. Further, the share of other expenses to total expenses also shows a declining trend.

## Section II

### Financial performance of KTCL

Profit is the motivation to run the business. Generation of revenue depends on operation of effective kilometers. The following table 1.04 denotes the financial performance of KTCL.

**Table 1.4**  
**Financial performance of KTCL (In percentage)**  
**Operating Revenue to Total Income**

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
Earning from passenger	73.55	65.15	64.25	60.84	58.07
Casual contract earnings	1.94	1.66	1.70	2.74	1.07
Pass issue collection	1.62	0.01	1.67	1.45	1.71
Mail receipts	0.01	0.02	0.01	0.01	0.007
Luggage receipts	0.35	0.29	0.31	0.21	0.17
Parcel income	0.38	0.39	0.33	0.32	0.31
Refund of tickets	0.18	0.19	0.16	0.30	0.41

Source: Annual reports of KTCL

The analysis of revenue from operation to total revenue reveals that the percentage of earnings from passenger fare to total revenue shows a declining trend. It was 73.55 per cent in the year 2008-09 whereas the same is decreased to 58.09 per cent in the year 2012-13.

## Section III

### Operational Efficiency of KTCL

The efficiency parameters of KTCL are identified, worked out and compared. The earnings per kilometer and different ratios of profitability have been calculated for the purpose of the study. Table 1.05 shows parameters of operational efficiency calculated on the basis of per kilometer.

**Table 1.5**  
**Parameters of operational efficiency**

(In Rupees)

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
Employee benefits expenses per km	11.70	15.16	18.79	22.60	24.58
Finance cost per km	1.70	1.82	1.87	2.25	2.6
Operating expenses per km	11.85	10.65	12.44	14.28	15.78
Diesel per km	8.53	7.94	9.10	10.11	11.14
Insurance per km	0.31	0.31	0.31	0.33	0.38
Repairs per km	0.24	0.32	0.26	0.28	0.52
Cost of Spares parts per km	0.84	0.52	1.48	1.48	1.48
Revenue from operation per km	16.84	17.03	19.96	22.28	22.36
Other income per km	4.87	7.74	9.04	11.78	14.33
Total income per km	21.71	24.77	29	34.06	36.69
Total expenditure per km	25.86	28.22	34.48	40.77	45.01
Loss per km	-4.15	-3.45	-5.48	-6.65	-8.32
Kms operated (in lakh kms)	284.28	296.78	286.2	274.38	258.29

Source: Annual reports of KTCL

Employee benefit expenses per kilometer show a rising trend. It was Rs. 11.7 per kilometer in the year 2008-09 whereas the same is increased to Rs. 24.58 in the year 2012-13. Diesel cost per kilometer also shows a rising trend. Revenue from operation per kilometer of KTCL has shown an upward trend

Further, total expenditure per kilometer in the year 2008-09 was Rs. 25.86 whereas the same is increased to Rs.45.01 per kilometer in the year 2012-13. Moreover, the total operating expenditure of KTCL is almost doubled over the period of 5 years. The total expenditure of KTCL exceeded over the total revenue earned, reflecting negatively on operational efficiency.

#### Section IV

##### Quality of service offered by KTCL

In this section, the information collected from the commuters of public transport as well as private transport has been analyzed to assess the quality of service rendered by KTCL. The aspects which influence the quality and reliability of service are punctuality, safety, comfort, accessibility, frequency and behavior of crew. However, the quality aspects of cancellation of trips, breakdown, late arrival and accident are the negative indicators of performance.

##### Passenger views on quality of service offered by KTCL:

The commuters' satisfaction is the key to successful traffic management. Quality of service is the vital factor to achieve commuters' satisfaction. The views of passengers collected using interview schedule include apart from demographic details of passengers, the details related to quality of service. In all 9 questions were asked to ascertain the opinion of passengers about quality of service offered by KTCL. Answers to these questions were recorded as 'Agree' 'Undecided' and 'Disagree'. Accordingly, the information collected from passengers has revealed that they are in favor of KTCL for the parameters of quality of service offered such as speed, punctuality, safety, comfort, behavior of crew and condition of vehicle. However, they feel that there should be more accessibility and frequency of buses operated by KTCL.

#### CONCLUSION

The analysis of financial statements of KTCL has showed that the rate of increase in expenditure is more as compared to the rate of increase in revenue. As a result KTCL has incurred loss every year during the study period (2008-09 to 2012-13).

The Corporation is rendering concessional services to various section of the society and thus discharging social obligation of the Government of providing economic mode of transport in the State. Moreover it is performing its operations in competitive environment along with private operators and of neighboring STU's. The analysis of parameter of quality of services offered by KTCL has showed that Kadamba buses are punctual, faster, comfortable and well maintained. This has been justified further by analyzing the information collected from the passengers, which has revealed that passengers are in favor of KTCL transport service. However, accessibility and frequency are two important aspects of quality of services which are required to be considered by KTCL. The study has also reveals that commuters are satisfied with the service offered by KTCL which is justified by their suggestion for nationalization of more number of routes.

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