

IMPACT OF PRIVATIZATION ON THE PERFORMANCE OF ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

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ABSTRACT

Movement of human being and material from one place to another is an essential need of mankind. Rapid growth of population an extension of economic activities stimulates the demand for transportation. Therefore, goods transport system is an essential pre requisite for the mobility and for overall development of economy. Transport system in the economy has become as blood circulation system of the human body. In general, we cannot imagine the modern economy without transport service. Transport facility is provided by different modes viz airways, railways, waterways and road ways. Road transport is the best modes of transport among all with various special features like connectivity, convenience, availability, accessibility, affordability, reliability, cost effectiveness and easy adoptability as well as flexibility of operation according to the needs of the individuals. India is the developing economy with vast area in the pre independence scenario it was absolutely Impossible to the private sector to extend the passenger transport busses according to the demand of commuters. Hence, there was a rational demand for the nationalization of passenger transport system and run under the hands of public sector.

KEYWORDS: *Transport, Development, Facility, Sectors, Service, Demand, Economic Activities.*

Introduction

India is the seventh largest country in the world in terms of geo graphical area with an extent of 3,287,263 square kms. It has 1.21 billion population (as per 2011 censuses) recorded as second most popular state in the world next to China. Every sixteenth person in the planet lives in India. Near about 72% of Indians live in the rural areas at about 5.92 lakhs villages. Theses villages are physically scattered an spread over through over the country. Movement of human being and material from one place to another is an essential need of mankind. Rapid growth of population an extension of economic activities stimulates the demand for transportation. Therefore, goods transport system is an essential pre requisite for the mobility and for overall development of economy. Transport system in the economy has become as blood circulation system of the human body. In general, we cannot imagine the modern economy without transport service.

Transport facility is provided by different modes viz airways, railways, waterways and road ways. Road transport is the best modes of transport among all with various special features like connectivity, convenience, availability, accessibility, affordability, reliability, cost effectiveness and easy adoptability as well as flexibility of operation according to the needs of the individuals. India is the developing economy with vast area in the pre independence scenario it was absolutely Impossible to the private sector to extend the passenger transport busses according to the demand of commuters. Hence, there was a rational demand for the nationalization of passenger transport system and run under the hands of public sector. In this way, "Road Transport Corporation Act" was enacted by the Independent India in the year 1950. It provided a legal framework for the formation of Road Transport Corporation in India which stood as the milling stone for the development of passenger transport system. As per this act, central and state governments put serious efforts to provide capital contribution to the state transport undertakings to promotes the effective transport system for the economic development with the convenient travelling of public.

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History of APSRTC

The Andhra Pradesh Road Transport Corporation with a fleet of 22,683 busses has grown as the biggest public transport service provider in the world in terms of operation of large number of busses. APSRTC has been placed in the Gennis book of world records for its largest fleet. Origin of Andhra Pradesh State Road Transport Corporation (APSRTC) dates back to June, 1932 when the operation of passenger road transport service was a part of the Nizam State Railway with 27 busses with each seating capacity of 16 passengers, the service began with a capital investment of Rs.3.93lac and a staff strength of 166. Substantial expansion of the bus service took place between 1936 and 1939.

During 1950, under the federal financial integration of the railways the Nizam State Railway merged with the Indian Railways. As a result of this merger, the road transport operations in the Hyderabad state were managed by the Indian Railways on an agency basis till October 31, 1951. The services were operated by a separate road transport department of the Government of Hyderabad State between November 1, 1951 and November 1, 1956, when the Andhra Pradesh State was formed. Almost 2 years after the formation the state Road Transport Corporation rules were enacted in 1958 by the state Legislative Assembly as per the terms of the Central RTC Act. The Andhra Pradesh State Road Transport Corporation (APSRTC) was formed with fleet of 609 busses.

During the period 1958 to 1961, the corporation took over routes from private operators by way of nationalization in Krishna and West Godavari districts. By 1965-66, APSRTC increased its fleet to 2,060 with a total strength of 15,783. During 1973-74 the corporation nationalized the routes in Kurnool, Ananthapoor, Kadapa and Chittoor districts. The city bus services in Visakhapatnam and Vijayawada were taken over by the corporation in 1978 and 1989 respectively. The process of nationalization continued till 1987 -1988. By then almost all the intra-state routes in the districts were nationalized, except a few fair weather routes.

In 1975, the APSRTC took over the task of operating busses on the Tirupathi and Tirumal ghat roads for the convenience of pilgrim traffic. When APSRTC launched the pilgrim service, it took over the busses which were earlier maintained by TTD and absorbed the displaced employees. The corporation also entered into agreements with all neighboring states Karnataka, Maharashtra, Tamilnadu, Pandichery, Goa, Madhya Pradesh and Orissa to operate bus services on the respective inter- state routes. Inferences from this table are that:

- APSRTC has been unable to hold down real costs despite potential scale economies, though whether this is due to exogenous factors or not requires additional enquiry.
- APSRTC's revenue realization has deteriorated by around 1.5 percent over the past 7 years. Inadequate surplus generation leads directly to inadequate resources for fleet expansion.

On all APSRTC routes a floor equal to private bus capacity on the date of nationalization is prescribed. APSRTC capacity on these routes cannot fall below this. Since APSRTC is obliged to provide services to all major villages, additional uneconomical routes are added annually. APSRTC is required to issue concessional or free travel passes to specified groups (handicapped, veterans, etc), mainly students. The total subsidy bill in 2000-01 was Rs 202 crore or about 8 percent of costs. Approximately 7000 buses of a total of over 19000 buses ply on loss making routes (including all intra-city buses). Due to poor enforcement, APSRTC is unable to sub-contract off-peak routes to small vehicle operators as there are no takers. The State Transport Undertakings are not viable enough for expansion of its operations. Planning Commission adapted the following strategies in lieu of reform process.

- The Government has to encourage the entry of private sector in the bus transport system to improve the productivity and efficiency
- STU's will have to compete with private sector by improving their operational and functional performance.
- The incremental demand for passenger bus transport will have to be met by the private sector.
- There will be no budgetary support to provide capital to STUs except in difficult areas.
- Fares should be revised once or twice year to meet the increase in input costs.
- STU's will have to generate sufficient resources for expansion of its fleet by making profits.

Review of Literature

- **Nagaraju (1967):** Behavior of the nationalized road transport of Hyderabad was analyzed in this study.

- **Patnakar (1978)**, suggested productivity oriented planning and offers compressive solutions to brightening the facilitate.
- **Dr.Jaishankar (1979)**, efficiency is denoted as "competence" or ability in the extension of services without waste of time energy etc.
- **M. Varaprasad (2006)**" analyzed the impact of liberalization on APSRTC from 1980-2000.
- **Gangappa(2008)**, he analyzed operational performance, cost structure, cost-fare relationships and financial performance of the selected city services.

Need for the Present Study

Most of the earlier studies have concentrated, on financial and physical performance of APSRTC in the view of policy aspects concerned with their respective study periods. But the physical performance of APSRTC, according to the guiding principles of the corporation in the frame work of corporate philosophy is not analysed. The present research effort is made to fill that gap with the following objectives.

Objectives of the Study

- To evaluate the physical performance of APSRTC during the period of (2001-2012) (Graphs 1-11)
- To evaluate the economic performance of APSRTC during the period of (2001-2012) (Graphs 18-20)

Source of Data & Methodology

The period of study is from 2001 to 2012. The study is mainly depends on secondary data such as records, documents, and annual reports, rules, and manuals of APSRTC Head Office Regional Office, Zonal Offices and Depots of the selected region.

Table 1: Indicators of Physical Performance

Parameter	Unit	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Effective fleet (Avg)	Nos	18946	19249	19157	19012	19208	19499	19350	19663	20376	21606	22265	22780		19946
Fleet Utilization	%	99	94.87	99.24	99.28	99.42	99.19	99.32	99.43	99.52	99.58	99.45	96.13	99.51	
Volume of Operations	Kms in Cores	217.8	208.7	223.6	226.7	232.5	238.4	244.7	253.5	267.5	211.7	217.5	287.2	297.8	
Vehicle Utilization	Kms/ Day	315	297	320	326	332	335	347	352	360	357	364	354	363	364
Passengers Carried Per Day	Nos/ Lacks	110.3	102	112.3	111.3	117.1	117.5	126.3	130.8	140	134.1	127.1	136.7	141.6	153.6
Occupancy Ratio (OR)	%	61	61	63	60	62	65	68	70	72	69	67	70	69	
Accident Rate	No/ Lac KM	0.1	0.09	0.1	0.1	0.1	0.11	0.12	0.12	0.11	0.1	0.11	0.09	0.09	0.08
Break Down Rates	No/1000 0 Kms	0.24	0.19	0.16	0.13	0.12	0.13	0.13	0.12	0.09	0.08	0.1	0.08	0.07	0.07

Cancellations	%	3.13	7.86	2.03	2.05	2.01	3.04	1.76	2.18	1.76	3.99	2.54	5.21	1.89	1.81
Non Revenue Kms	%	1.18	1.15	1.28	1.19	1.07	1.09	1.08	1	1.06	0.9	0.93	0.93		
H.S.D Oil (KMPL)	Kms/ Ltr	5.08	5.07	5.24	5.37	5.29	5.27	5.26	5.24	5.25	5.28	5.17	5.13	5.15	5.15
Lub Oil (KMPL)	Kms/ Ltr	2019	2469	3119	3748	4238	4540	4391	4423	4419	3924	3337	3337		
Average tyre Life	Kms/ Tyre	147000	152000	153000	166000	178000	185000	182000	177000	168000	169000	168000	170000	171000	174000
Employees	Nos	128796	126418	122358	119319	117400	115946	115529	113340	113370	115898	120566	123615	122287	133715
Staff Bus Ratio	Nos /Bus	6.99	6.79	6.68	6.54	6.31	6.31	6.16	6.13	6.04	6.01	6.04	6.01	5.94	5.86
Employee Productivity		44	43	47	49	51	53	55	57	59	59	60	58	60	61

Table 2: Indicators of Economic Performance

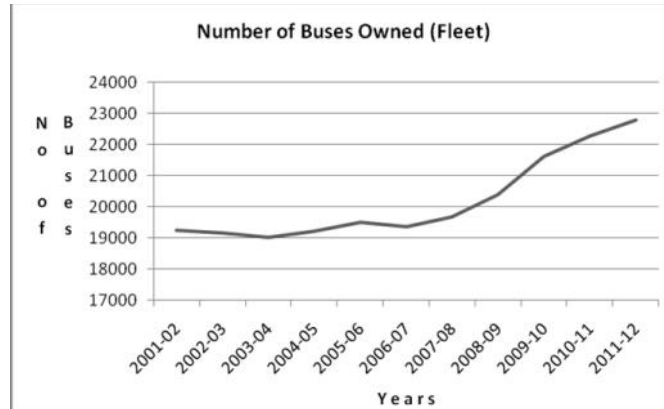
S. No	Parameter	Unit	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Gross Traffic Earnings	Rs. (Cores)	2449	2388	2667	2786	2949	3199	3667	3891	4251	4427	5208	5717	6528	6352
2	Traffic (EPK)	Ps	1124	1145	1193	1229	1269	1344	1498	1535	1589	1597	1799	1991	2192	2422
3	Traffic Earning per Bus	Rs	3541	3399	3815	4004	4207	4495	5192	5407	5716	5707	6545	7045	7957	7858
4	Gross Income (Earnings)	Rs (Cores)	2540	2576	2880	3021	3216	3676	4187	4458	5040	5206	6146	6677	7639	7441
5	Gross EPK	Ps	1166	1234	1288	1333	1383	1544	1711	1759	1884	1878	2122	2324	2565	2837
6	Gross	Rs (Cores)	2750	2848	3062	3163	3441	3719	4299	4322	4929	5721	6463	7263	7720	8343
7	Gross CPK	Ps	1263	1365	1369	1396	1480	1562	1757	1705	1843	2064	2232	2528	2592	3181
8	Gross Profit/Loss	Rs (Cores)	-210	-271.1	-181.7	-142	-224.9	-42.79	-111.8	135.7	110.8	-514.6	-317.4	-585.3	-80.7	-902.7
9	Profit/Loss Per Km	Ps	-96	-130	-81	-63	-97	-18	-46	54	41	-186	-110	-204	-27	-344

Performance Analysis

For assessing the performance of APSRTC, we have analyzed some of the physical indicators like fleet utilization, vehicle utilization, occupancy ratio, HSD Kms per litre, staff Strength, Bus-staff ratio,

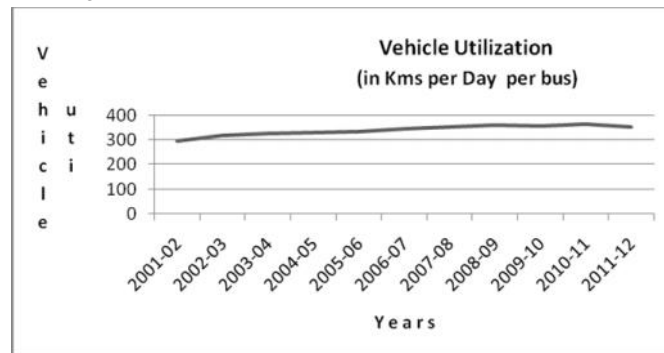
employee productivity etc. This has been followed up by assessment of economic indicators, where we have explained total & item-wise expenditure trends, followed by composition of expenditure and further, this has been followed up by summary indicators like Earnings per kilometer, (EPK), Cost per kilometer (CPK) and Profits per kilometer (PPK). Let us now proceed in the sequence indicated above:

Indicators of Physical Performance



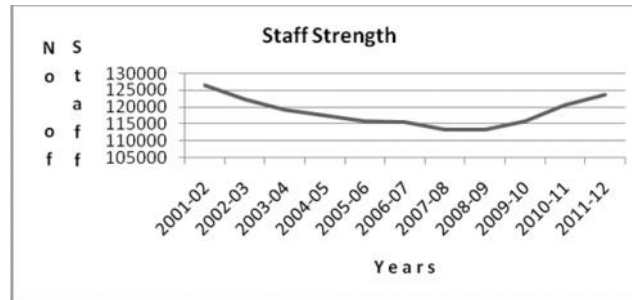
Graph 1

For any Transport Corporation, the number of buses that it owns determines the volume of its activity. The larger the number of buses it owns and the larger the number of routes and trips, the larger will be its receipts and expenditure and service rendered to the society. This is why, when we are analysing the performance of APSRTC over time, the year to year trend in the average number of busses owned by it needs to be analysed. Graph 1, which is presented above, indicates the trend in the number of buses owned by APSRTC over the study period. It can clearly be noticed that up to the year 2006-07, the number of buses operated did not vary very much or, the number was quite stable, but from 2007-08 on words there has been a steep rise in the number of buses owned year after year, and other things remaining constant, this will give rise to both receipts and expenditure.



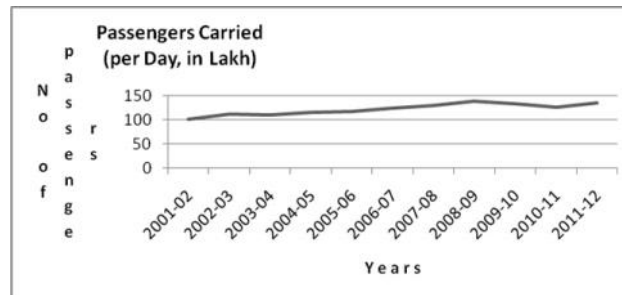
Graph 2

From the earlier graph, we have noticed that the number of buses at least during the last five or six years are increasing while the total number of kilometres did not show a corresponding increase during the same years (Graph 1), and this is expected to result in each bus being plied for lesser number of kilometres as compared to earlier. But Graph 2 above, shows a contradictory story. The graph indicates that the number of kilometres run per day by each bus on an average, instead of showing a decline in number of kilometres that each bus could run, the graph shows that there was no such drop in the per day kilometres run by each bus during the concerned period. The reasons for this will have to be probed and explained. We are saying this because, except for the last year, the fleet utilization was stable at over 99% and the number of busses was increasing while the total number of kilometres was decreasing, then, the number of kilometres run by each bus per day should show a decrease.



Graph 3

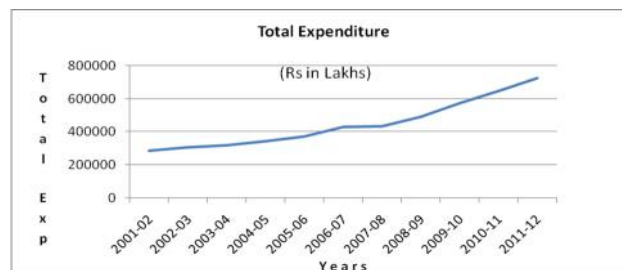
Other than the number of buses owned and utilized and how efficiently they are being used, we need to look at the number of workers and how efficiently they are being used also. Human resource management in other words, is also an important factor in any business that is to be run efficiently. Graph 3 which is presented above, gives us the trend of number/strength of staff employed by APSRTC. The graph indicates that there was a continuous decline in the number of staff employed by APSRTC upto the year 2008-09 and the number began to increase 2009-10 and continued to rise during the next two years also, but during the year 2011-12 also, it has not yet quite returned to the number that existed in the initial year of study (2001-02).



Graph 4

Passengers carried, is another very important factor that would determine not only how viable the corporation is but also indicate the extent of service it is providing or the number of passengers that it could lend its services to. Earlier, we had noticed that the number of kilometers run by APSRTC buses, increased up to the year 2008-09 (please see Graph 2) and if passengers are also increasing during the same period, this should result in higher and higher traffic revenue given the prices of the tickets. We can say this with surety because we know that bus fares only go up from year to year and never do they reduce. The graph presented above (Graph – 4), indicates that passengers carried, increased up to the year 2008-09, and so as we said earlier, the revenue from passengers carried must also increase from year to year up to the year 2008-09. After this period, during the next two years (2009-10 & 2010-11), there was a drop in passengers carried even though the number of buses and staff employed, increased substantially during the same period (please see Graph – 1 and Graph - 5). During the last year of the study, 2011-12, thankfully, the number of passengers carried per day, recovered and showed an increase.

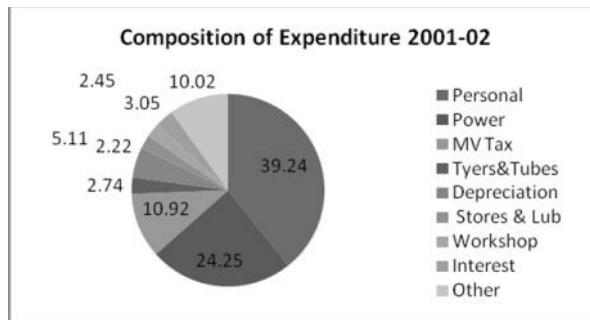
Economic Indicators



Graph - 5

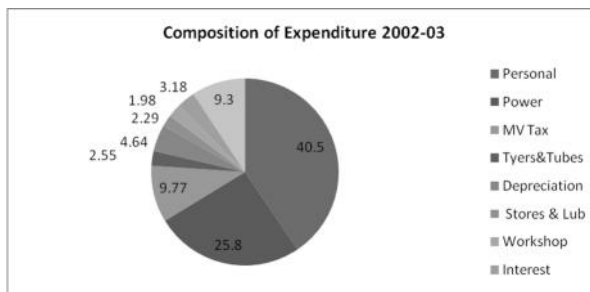
Based on the Total Expenditure trend line above (Graph – 5), we can divide the study period into two broad phases. The first from year 2001-02 to 2007-08 and the second from 2008-09 to 2011-12. During the first period, the increase in total expenditure was relatively lower than during the subsequent period, where we notice a relatively higher increase in total expenditure. Here we need to bring in the fact that Graph 1 and Graph 5 revealed that the number of buses and also the number of staff employed also increased during the last three or four years of the study, and these two factors may have led to increase in total expenditure increasing during the same period, it will be interesting to find out what were the other factors that led to higher expenditures, if any. We can understand in a better manner why the total expenditure trend line is behaving as it is, if we observe how the expenditures on each of its components are trending. Let us see how the expenditures on each of the heads of account that makes up the total expenditure.

Composition of Expenditure



Graph 6

Graph 6 deals with the year 2001-02 and it reveals that the largest expenditure was incurred on Personal (Rs. 111741 lakhs, 39.24% of total expenditure), followed by expenditure on Power (Rs. 69067 lakhs, 24.25%), M.V. Tax (Rs. 31086 lakhs, 10.92%), Others (Rs. 28542 lakhs, 10.02%), Depreciation (Rs. 14540 lakhs, 5.11%), Interest (Rs. 8692 lakhs, 3.05%), Tyres and Tubes (Rs. 7790 lakhs, 2.74%), Workshops (Rs. 6990 lakhs, 2.45%) and lastly, Stores and Lubricants (Rs. 6324 lakhs, 2.22%) in decreasing order.

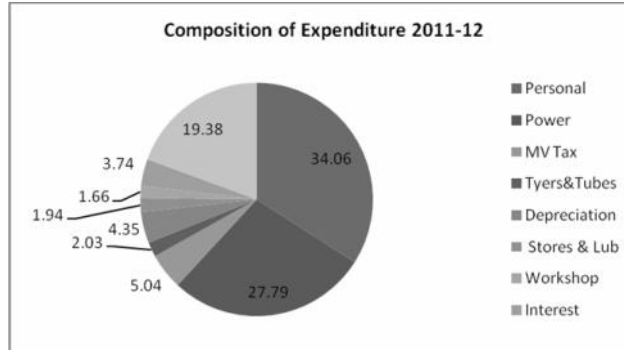


Graph 7

Graph 7, provides information on the composition of expenditure during the year 2002-03 and the ranks based on expenditures were found to be as follows:

- Personal (Rs. 123982 lakhs) 40.50%
- Power (Rs. 78979 lakhs) 22.80%
- M.V. Tax (Rs. 29898 lakhs) 9.77%
- Others (Rs. 28459 lakhs) 9.30%
- Depreciation (Rs. 14208 lakhs) 4.64%
- Interest (Rs. 9735 lakhs) 3.18%
- Tyres and Tubes (Rs. 7821 lakhs) 2.55%
- Workshops (Rs. 7004 lakhs) 2.29%
- Stores and Lubricants (Rs. 6073 lakhs) 1.98%

What we find here is that the ranking order has not changed, and it is identical for the years 2001-02 and 2002-03.

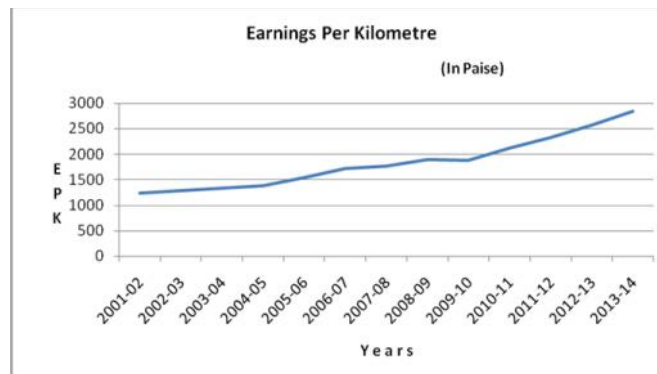


Graph 8

Graph 8, above, reveals the shares in expenditure during the year 2011-12. Up to 5th rank there is no change, the rankings are similar to the years 2005-06 and 2008-09 the only change that can be noticed in the composition of expenditure during the year 2011-12 is that expenditure on Tyres and Tubes, which was at 6th rank during the years 2005-06 and 2008-09 was relegated to rank 7th and expenditure on interest which occupied the seventh rank during the years 2005-06 and 2008-09 rose to the sixth rank.

- Personal (Rs.247376 lakhs) 34.06%
- Power (Rs.201857 lakhs) 27.79%
- Others (Rs.140767 lakhs) 19.38%
- M.V. Tax (Rs.36572 lakhs) 5.04%
- Depreciation (Rs.31621 lakhs) 4.35%
- Interest (Rs.27185 lakhs) 3.74%
- Tyres and Tubes (Rs.14714 lakhs) 2.03%
- Stores and Lubricants (Rs.14102 lakhs) 1.94%
- Workshops (Rs.12077 lakhs) 1.66%

In conclusion, we can say that there has not been very much of variation in the composition of expenditure, although as expected, the total expenditure on each of the components has increased year after year. Five major components of expenditure during the complete span of the study period have been, expenditure on Personal, Power, MV tax, others and Depreciation, in that order. All these together contributed to around 85% or more of total expenditure while the remaining four items contributed to 15% or less of the total expenditure. In fact, Depreciation can also be considered to be less important as it constitutes 5% or less of the total expenditure.



Graph 9

Now, let us analyse the income of the Corporation. Graph -9 above reveals that Earnings per Kilometre have shown an increasing trend over the period of study. Up to the year 2009-10 the increase was less steep, while after that, the increase in income is relatively higher. The income has more than doubled over the period of observation. The true picture will emerge only when we compare earnings per kilometre with cost per kilometer.

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