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# CONTENTS

<b>Sr. No.</b>	<b>TITLE &amp; NAME OF THE AUTHOR (S)</b>	<b>Page No.</b>
1.	MANAGEMENT EDUCATION: CURRENT SCENARIO IN HARYANA <i>DR. MARKANDAY AHUJA, DR. ANJU AHUJA &amp; JASPREET DAHIYA</i>	1
2.	ROLE OF NATIONAL SECURITIES DEPOSITORIES LIMITED (NSDL) IN THE GROWTH OF DEPOSITORY SERVICES IN INDIA <i>DR. DEVINDER SHARMA &amp; BHUSHAN AZAD</i>	7
3.	HERFINDAHL-HIRSCHMAN INDEX (HHI), VALUE CO-CREATORS AND COMPETITIVENESS OF THE INDUSTRY IN INDIA <i>BALAJI GOPALAN &amp; DR. REVATHI IYER</i>	13
4.	PERCEPTION, TOURIST SATISFACTION AND DESTINATION LOYALTY TOWARDS SALALAH, SULTANATE OF OMAN <i>MAYA MADHAVAN &amp; DR. A.P. GEORGE</i>	16
5.	DETERMINATION OF DIVIDEND POLICY OF PUBLIC LISTED COMPANIES <i>DR. D. UMAMAHESWARI &amp; T. VALLI</i>	20
6.	A STUDY ON EMPLOYEE ATTITUDE TOWARDS PERFORMANCE APPRAISAL IN MIRA ALLOYS STEELS PVT. LTD. KURUMBAPALYAM COIMBATORE <i>DR. M. PRAKASH, S. SUGANYA &amp; K. SINDUJA</i>	22
7.	THE IMPACT OF CRUDE PALM OIL SUPPORTING FUND POLICY ON FARMER'S LEVEL PRICE FOR FFB <i>SUNGGU SITUMORANG, AMZUL RIFIN &amp; BUNGARAN SARAGIH</i>	26
8.	CORPORATE AND SELF HELP GROUP COLLABORATION: A PANACEA FOR RURAL MARKET DEVELOPMENT: A FOREWORD <i>DR. RAVINDRA KUMAR B &amp; VENKATESH. R</i>	32
9.	CORPORATE GOVERNANCE PRACTICES OF LISTED COMPANIES IN INDIA – SPECIAL REFERENCE TO S&P BSE SENSEX COMPANIES <i>SANTHOSH T R &amp; DR. REJI M A</i>	38
10.	A STUDY ON SPENDING AND SAVING PATTERN OF YOUNG GENERATION USING BEHAVIOUR ANALYTICS <i>DR. PAPPU RAJAN.A &amp; DR. FELICITA.J</i>	44
11.	IMPACT OF WORK LIFE BALANCE ON WORKING WOMEN JOB SATISFACTION <i>GUDDATI ARCHANA</i>	49
12.	TO STUDY THE INTERRELATIONSHIP BETWEEN GOLD, US DOLLAR AND S&P SENSEX <i>DR. SULOCHNA &amp; RAHUL BERRY</i>	54
13.	CASE STUDY ON AWARENESS OF OMBUDSMAN SCHEME IN INDIA <i>SUBHRO SEN GUPTA, NIDHI SRIVASTAVA &amp; ABHINAV KATARIA</i>	57
14.	AN EMPIRICAL ANALYSIS ON ASSET QUALITY OF PUBLIC SECTOR BANKS IN INDIA: NON- PERFORMING ASSETS TO ADVANCES <i>DR. C. PARAMASIVAN &amp; G. SRIVIDHYA</i>	64
15.	EVALUATION OF FINANCIAL SOUNDNESS INDICATORS OF INDIAN LIFE INSURANCE INDUSTRY: LIC OF INDIA Vs. PRIVATE LIFE INSURANCE COMPANIES <i>DR. JAYANT D. CHANDRAPAL</i>	68
16.	TQM AND QUALITY PERFORMANCE AT WORKING IRON AND STEEL FIRMS OF HYDERABAD-KARNATAKA REGION <i>K C PRASHANTH</i>	76
17.	PRODUCT PLACEMENTS AS A MARKETING TOOL: FROM TRADITIONAL TO SOCIAL MEDIA <i>BIMALDEEP KAUR</i>	82
18.	RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER TRUST, SATISFACTION AND LOYALTY IN E-RETAILING <i>DR. ADIL RASOOL</i>	89
19.	TAX SPEND DEBATE: TIME SERIES EVIDENCE FROM INDIA <i>MASROOR AHMAD</i>	101
20.	SUCCESS STORY OF INDIGO: A LESSON TO INDIAN AIRLINES INDUSTRY <i>DR. SUMIT AGARWAL, DR. GARIMA BHARDWAJ &amp; DR. SHALINI SRIVASTAVA</i>	107
21.	A REVIEW OF MAJOR TRAINING TRANSFER STUDIES OF THE PAST <i>ANA RIZVI &amp; DR. SURENDRA KUMAR</i>	111
22.	A STUDY ON FINANCIAL PERFORMANCE ANALYSIS OF "KARASSERY SERVICE CO-OPERATIVE BANK LTD" <i>R. BUVANESWARI &amp; RIYAS. K</i>	115
23.	A STUDY ON CONSUMPTION BEHAVIOUR OF FAIRNESS CREAM BETWEEN WORKING WIVES AND NON WORKING WIVES IN SINGANAILLUR TALUK <i>DR. P. KANNAN &amp; E. SAKTHI PRIYA</i>	121
24.	EMOTIONAL INTELLIGENCE: A STUDY OF THE CONCEPTUAL FRAMEWORK <i>VAISHALI JOSHI, HANSIKA KHURANA &amp; JASLEEN KAUR ANEJA</i>	124
25.	PHYSICAL AND FINANCIAL PERFORMANCE OF APSRTC AND MSRTC <i>DR. T. MADHU SUDANA</i>	127
26.	DYNAMICS OF SIKKIM ECOTOURISM AND ITS GROWTH <i>TENZING DORJEE BHUTIA</i>	132
27.	FUTURE ASPECTS OF PLAIN PACKAGING OF TOBACCO PRODUCTS IN INDIA <i>ANKIT KUMAR KATIYAR</i>	137
28.	DEMONETIZATION AND ITS IMPACT ON INDIAN ECONOMY IN INDIA <i>DR. S. P. KIRAN &amp; DR. YOGESH H. S.</i>	140
29.	PENSION SYSTEM IN INDIA: POLITICAL AND ECONOMIC ISSUES <i>TEAVASPREET KAUR</i>	143
30.	TO STUDY THE NATIONALIZE PLASTIC MONEY PAYMENT GATEWAY SYSTEM: RUPAY <i>DR. SHEETAL KHANDRE</i>	149
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	<b>155</b>

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## PHYSICAL AND FINANCIAL PERFORMANCE OF APSRTC AND MSRTC

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**ABSTRACT**

Road transport is a critical structure for economic development of a country. It is the road transportation which is cheap and best mode of transportation for poor and middle class people in the country. The public sector bus based transport system provides an alternative mode of transportation. That is the reason why, public transportation systems have been developed by the different State Governments. These public transport organisations have to perform in a best way so as to satisfy both the public and the Governments. But, unfortunately most of the State Road Transport Undertakings are not working upto the expectations of the public and government. Therefore, it is important to assess the physical and financial performance of SRTUs properly from time to time and take measures to improve their performance. Therefore, the present study physical and financial performance of APSRTC and MSRTC during 2009-10 and 2013-14 has been done so as to identify the areas where the problem lies and suggest measures to improve their physical and financial performance. The present study has been undertaken to evaluate the physical performance of the APSRTC and MSRTC and to evaluate the financial performance of the APSRTC and MSRTC during the study period. This study is based on the data published in Annual Reports of ASRTU. It is concluded that though the physical performance of APSRTC is better than that of MSRTC, but financially it is lagging behind during the study period.

**KEYWORDS**

Andhra Pradesh state road transport corporation, association of state road transport undertakings, financial performance, Maharashtra state road transport corporation, physical performance.

**INTRODUCTION**

Road transport is a critical structure for economic development of a country. It influences the pace, structure and pattern of development. Each and every sector is being influenced by the developments in transportation which in turn influences the economic growth. India has one of the largest road networks in the world. Over explosion of population has been made the India to think in terms of development of multiple modes of transportation like roads, rail, air and water ways. It is the road transportation which is cheap and best mode of transportation for poor and middle class people in the country. The public sector bus based transport system provides an alternative mode of transportation. The public sector bus based transport system today competes with alternate modes as well as private providers of similar services. It is operating in a highly competitive market but at the same time has to discharge public sector obligations like providing connectivity to locations which may not be attractive to private operators or plying on uneconomic routes, with uneconomic fares, delay in revision of fares, burden of concessional travel, high levels of taxation under Motor Vehicle Tax and Passenger Tax, higher fixed costs and limited flexibility as regards manpower. These factors need to be kept in view while undertaking an objective evaluation of their performance. In order to improve the efficiency and performance of public sector bus mode transport system, there is a need to improve technology of vehicles, change fleet composition in favour of new and more fuel-efficient buses, strengthening of inspection and maintenance practices, etc. The strengthening of the bus based passenger transport system should be done in a manner so as to make it an attractive substitute to the personalised mode which is resulting in traffic congestion, pollution, increase in accident rate, etc. That is the reason why, public transportation systems have been developed by the different State Governments. These public transport organisations have to perform in a best way so as to satisfy both the public and the Governments. But, unfortunately most of the State Road Transport Undertakings are not working upto the expectations of the public and government. There may be several reasons for poor performance of these undertakings. An increase in personalised vehicles and private vehicles is one of the reasons for financial poor performance of these undertakings. Given the importance of public mode of transport in India, the state undertakings are expected to improve their physical performance so as to improve their financial performance. Therefore, it is important to assess the physical and financial performance of SRTUs properly from time to time and take measures to improve their performance. The present paper study the physical and financial performance of APSRTC and MSRTC so as to identify the reasons for poor performance and take necessary steps towards betterment of their performance. Before stating the objectives of the study, a brief profile of APSRTC and MSRTC has been presented.

**PROFILE OF APSRTC AND MSRTC**

Table 1 gives a brief profile of APSRTC and MSRTC during the study period. The average fleet held by the APSRTC has increased from 21255 vehicles in 2009-10 to 22145 vehicles in 2013-14. The total staff strength of APSRTC was 115898 in 2009-10 increased to 122109 in 2013-14. The total number of passengers carried was 48934 lakhs increased to 50381 lakhs in APSRTC during the study period. The total passenger kms performed decreased from 974778 lakhs to 882441 lakhs in APSRTC during the study period. The total number of Revenue Earning Kilometers has declined from 27716 lakhs to 26226 lakhs in APSRTC during the study period. The average fleet held by the MSRTC has increased from 15955 to 18055 buses during the study period (table 1). The total staff strength of the MSRTC was 101138 increased to 107885, the total passengers carried was increased from 23799 lakhs to 25630 lakhs, the total passenger kms performed decreased from 533655 lakhs to 528386 lakhs in MSRTC, the total number of Revenue Earning Kilometers has increased from 18473.2 lakhs to 20466 lakhs during the study period. Since, there is a similarity between these two organisations, the physical and financial performances of these organisations have been compared to identify the strengths and weaknesses of these organisations.

**TABLE 1: A BRIEF PROFILE OF APSRTC AND MSRTC DURING 2009-10 TO 2013-14**

S.No.	Indicators	SRTU	2009-10	2010-11	2011-12	2012-13	2013-14
1	Average Fleet Held (Number)	APSRTC	21,255	21,802	22,170	22,477	22,145
		MSRTC	15,955	16,212	16,801	17,497	18,055
2	Staff Strength (Number)	APSRTC	1,15,898	1,20,566	1,23,615	1,22,287	1,22,109
		MSRTC	1,01,138	1,03,565	1,04,566	1,00,052	1,07,885
3	Passenger Carried (Lakhs)	APSRTC	48934	46388	50014	51675	50381
		MSRTC	23799	25380	26004	26137	25630
4	Passenger Kms Performed (Lakhs)	APSRTC	9,74,778	9,73,944	10,01,924	10,17,168	8,82,441
		MSRTC	5,33,655	5,43,987	5,56,295	5,36,151	5,28,386
5	No. of Revenue Earning Kilometres (Lakhs)	APSRTC	27716	28958	28715	29783	26226
		MSRTC	18473.2	18973.3	19838.1	19931.2	20466

Source: Annual Reports of ASRTU.

**REVIEW OF LITERATURE**

Satyannarayana, Y., (1976) in a comprehensive study of major State Transport Undertakings in India, analyzed itemized costs and performance of the STUs and ultimately suggested a management control system to harness the performance of the STUs. Krishna R. R. (1977) in his study on debt-equity ratio in road transport corporations in Tamil Nadu and found that the debt-equity ratio in almost all the selected road transport corporations in Tamilnadu has shown an upward trend during the period of study. He suggested that the STUs, which are under social obligation to ply buses on uneconomic routes in remote areas and to invest more funds to the corporation, should liberally be contributed in the form of equity or to convert a portion of their debt as share capital to strengthen its equity base and to reduce the imbalance in the capital structure. Walters (1979) in his study attempted to establish a relationship with respect to profitability and costs of buses of different sizes, and inferred that there was no evidence of scale of economies in large buses. Satyannarayana J (1985) undertook a study on the performance of the APSRTC by examining the cost-fare relationships and operational performance, capital structure and financial policies. Viswanatham, V. (1986), in his study on finances of public enterprises analyzed the performance of the APSRTC in terms of deployment of funds, physical and operational performance, cost-fare relationship which have a bearing on the finances and improving the overall performance of the corporation. He suggested that the corporation should attempt to make a proper study of the lose making routes and evolving a suitable machinery to ensure the financial health of the organization is not jeopardized. Srinivas Prasad and Mohd. Akbar Ali Khan (1996), in their study attempted to examine the financial implications of the social obligations entertained by the APSRTC. The study concluded that the net effect of the social obligations would be the increasing dependence of the corporation on the participating governments not only the increasing dependence of the corporation on the participating governments not only for financing the replacement and expansion but also the cost of meeting the social obligations. The study suggested various measures like quantifying the actual kilometers operated on bad surface roads to estimate the extent of losses of the APSRTC, which has been incurring losses due to the wide variations in the cost of operation on different types of roads. Reddy RVS (1999), in his study on social objectives and finances of STUs" suggested that the APSRTC as an instrument of social policy is required to provide transport sometimes even below the operating costs on purely social considerations to certain classes of consumers in certain inaccessible areas. He also made a comment that the presence of the social objectives in reducing the surpluses available directly affect the financial performance and indirectly influence the size of the internal finances available for financing the expansion programs of the corporation. Therefore, the study suggested that at least the amount of financial implications because of social obligations should be reimbursed by the government to facilitate an objective study of the corporation's performance and contribution to the society. Rama Chandraiah C., and A.K. Patnaik (2003), in their study on the state eroding public sector profitability- The case study of the APSRTC analyzed how several political and economic policies of the state are responsible for the erosion of financial performance of the APSRTC. According to them, the two main strategies used by the government to undermine the APSRTC are the positions of discriminatory motor vehicle tax on its own transport sector and ignoring illicit operations by the private operators. Dr. Shilpa Trivedi (2012) analysed the performance of GSRTC during 1996-97 and 2005-06 and concluded that high interest burden, unequal competition, poor performance of city services, operation on uneconomic routes, concession in Fares, uneconomic fare structure, high tax burden, high bus staff ratio, cancellation of scheduled trips, are the important factors contributed for the losses in GSRTC. Dr. Chalam and ali (2015) has analysed the financial performance in terms of revenue and cost structure of a PSRTC and analysed the social obligation impact on profitability during 2002-03 and 2011-12.

From the review of the earlier studies, it is opined that many of these studies have been conducted on the financial performance of the state road transport undertakings in general. Further, most of the studies were conducted on the financial performance without comparing the cost-revenue relationships of different variables to know the cause and effect of the situation to understand and to improve the performance of the undertakings. Therefore, based on this background the present study is an improvement over the earlier studies by analyzing the cost-revenue relationships and the impact of social obligations and running the busses in the uneconomical routes on the financial performance of the corporation.

**NEED/IMPORTANCE OF THE STUDY**

Public transport is one of the most cost effective and preferred mode of transport for passengers particularly in rural areas. It is vital to economic development and social integration of the country. Personalized mode of transport has contributed the number of road accidents, injuries and fatalities. The proliferation in the personalised mode of transport imposes negative externalities on the society in the form of traffic congestion, carbon emission and pollution, in efficient use of fuel, scarce road space, etc. therefore, there is a urgent need to promote investment in the road public transport system, to strengthen it to ensuring availability of adequate funds towards fleet modernisation of SRTUs; to upgrading the bus infrastructure / bus terminals, stops; to identifying routes for plying of stage carriages based on 'comprehensive route surveys; to promoting road safety and coordination with other modes. To achieve these objectives, the financial performance of SRTCs should efficient otherwise it is difficult to achieve those objectives. Keeping in view these, the present study is made to evaluate the physical and financial performances of APSRTC and MSRTC during 2009-10 and 2013-14. The reason for limiting study upto 20013-14 is that it is upto that year only Andhra Pradesh was united after that year only United Andhra Pradesh has been divided into Telangana State and Andhra Pradesh State.

**STATEMENT OF THE PROBLEM**

State Road Transport Undertakings (SRTUs) are an economical public transport service in India and provides easy mobility to sizeable population of this country. The performance evaluation of the SRTUs will be done generally through two parameters, such as physical and financial parameters. Both of these are interdependent and essential. Earlier, only physical performance was used to take into consideration for measuring the performance of SRTCs. But, after introduction of LPG policy, it is latter which has become so important and inevitable. Therefore, the present study physical and financial performance of APSRTC and MSRTC during 2009-10 and 2013-14 has been done so as to identify the areas where the problem lies and suggest measures to improve their physical and financial performance.

**OBJECTIVES**

The present study has been undertaken with the following objectives

1. To evaluate the physical performance of the APSRTC and MSRTC during the study period.
2. To evaluate the financial performance of the APSRTC and MSRTC during the study period.

**HYPOTHESIS**

The study is undertaken to prove the following hypotheses;

1. The physical performance of APSRTC is better than that of MSRTC during the study period.
2. The financial performance of APSRTC is better than that of MSRTC during the study period.

**RESEARCH METHODOLOGY**

The present is undertaken to evaluate the physical and financial performance of APSRTC and MSRTC during 2009-10 to 2013-14. The present study is based on the secondary data collected from the Annual Reports of Association of State Road Transport Undertakings (ASRTU).

**RESULTS AND DISCUSSION****SECTION – I: PHYSICAL PERFORMANCE**

The Physical performance of the STUs can be measured with the help of Fleet Utilisation, Fuel Efficiency, Staff/Bus Ratio, Staff Productivity, Occupancy Ratio, Passengers carried per bus, vehicle Productivity. The physical performance of APSRTC and MSRTC has been analysed by using all these parameters during the study period and presented in table 2.

TABLE 2: PHYSICAL PERFORMANCE OF APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicators	SRTU	2009-10	2010-11	2011-12	2012-13	2013-14	Average
1	Fleet Utilisation (%)	APSRTC	99.6	99.5	96.6	99.7	92.2	97.52
		MSRTC	94.3	94.7	94.6	92.7	91.5	93.56
2	Fuel Efficiency (Km/litre of HSD)	APSRTC	5.3	5.2	5.1	5.2	5.2	5.2
		MSRTC	5	4.9	4.9	4.9	4.8	4.9
3	Staff/Bus Ratio	APSRTC	5.45	5.53	5.58	5.44	5.51	5.502
		MSRTC	6.34	6.39	6.22	5.72	5.98	6.13
4	Staff Productivity (Kms/Bus/Day)	APSRTC	65.52	65.8	63.47	66.73	58.84	64.072
		MSRTC	50.04	50.19	51.84	54.51	51.97	51.71
5	Occupancy Ratio	APSRTC	68.8	66.6	74.4	62.1	67.9	67.96
		MSRTC	60.9	61.8	61.6	60.4	58.3	60.6
6	Passengers carried per bus/day	APSRTC	630.7	582.9	616.4	629.9	623.3	616.64
		MSRTC	408.7	428.8	422.9	409.3	388.9	411.72
7	Vehicle Productivity (Kms/Bus/Day)	APSRTC	357.25	363.9	353.88	363.03	324.46	352.504
		MSRTC	317.21	320.6	322.61	312.09	310.56	316.614

Source: Annual Reports of ASRTU.

- a) **Fleet Utilisation:** Fleet Utilisation is the ratio of the buses on road to the average fleet held by an Undertaking. Higher the fleet utilisation better will be the performance of the SRTC. The average fleet utilisation in APSRTC was better (97.52 per cent) than MSRTC (93.56 per cent) during the study period.
- b) **Fuel Efficiency:** Average kilometers run per liter of fuel reflect the fuel efficiency in operation. The average fuel efficiency of APSRTC was 5.17 which is better than that of MSRTC (4.89) during the study period.
- c) **Staff/Bus Ratio:** Staff/bus ratio indicates the number of staff available for each bus in the SRTCs. This ratio was 5.5 in APSRTC on an average and 6.1 in MSRTC on an average during the study period.
- d) **Staff Productivity:** The average revenue earning kms performed per worker per day could be considered as a parameter of staff productivity. The average staff productivity of APSRTC (64.07Kms/Bus/Day) was much higher than that of MSRTC (51.71Kms/Bus/Day) during the study period.
- e) **Occupancy Ratio:** Occupancy ratio relates the passenger kilometers performed to passenger kilometers offered. The occupancy ratio was also higher in APSRTC (67.96 per cent) than MSRTC (60.6 per cent) on an average during the study period.
- f) **Passengers carried per bus/day:** The number of passengers carried per bus per day was more in APSRTC (616.64) than that of MSRTC (411.72) on an average during the study period.
- g) **Vehicle Productivity:** The vehicle productivity captures the average number of revenue earning kilometers performed by a bus per day. A Higher kilometers performed on an average in APSRTC (352.5 Kms/Bus/Day) indicates better performance over MSRTC (316.6 Kms/Bus/Day) during the study period.

From the above analysis it was observed that the physical performance of APSRTC was better than that of MSRTC during the study period.

## SECTION - II: FINANCIAL PERFORMANCE

The financial performance of APSRTC and MSRTC has been analysed with the help of several aspects such as:

- total financial performance,
- per km financial performance,
- per bus/day financial performance,
- the proportion of cost elements in total cost and
- Cost element Per Revenue Earning Km

### a) Total Financial Performance

The overall financial performance of these STUs has been analysed by compared the total revenue, total cost and total profit/loss during the study period and presented in table 3.

TABLE 3: TOTAL FINANCIAL PERFORMANCE OF APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicator	(SRTU)	2009-10	2010-11	2011-12	2012-13	2013-14
1	Total Revenue (Rs. Lakh)	APSRTC	4,39,003	5,21,486	6,67,740	6,66,152	6,60,324
		MSRTC	4,34,164	4,97,967	5,60,025	6,09,579	6,73,626
2	Total Cost (Rs. Lakh)	APSRTC	4,81,462	5,48,367	7,26,271	6,69,865	7,44,593
		MSRTC	4,20,642	4,95,038	5,53,628	6,52,462	7,32,321
3	Total Profit/(-)Loss (Rs.Lakh)	APSRTC	(-)42,459	(-)26,881	(-)58,531	(-)3,713	(-)84,269
		MSRTC	13,522	2,929	6,397	(-)42,883	(-)58,695
4	Total cost to total revenue ratio	APSRTC	1.1	1.05	1.08	1.00	1.13
		MSRTC	0.96	0.99	0.99	1.07	1.09

Table 3 reveals that the total revenue of APSRTC has been increased from Rs.4,39,003 lakhs in 2009-10 to Rs.6,60,324 lakhs in 2013-14 registered a growth of 50.41 per cent, whereas the same has increased from Rs.4,34,164 lakhs to 6,73,626 lakhs in MSRTC registered a growth of 55.15 per cent during the study period. The total cost in APSRTC has increased from Rs. 4,81,462 lakhs in 2009-10 to 744,593 lakhs in 2013-14 registered a growth of 54.65 per cent, whereas the same has increased from Rs.4,20,642 lakhs to Rs.7,32,321lakhs in MSRTC registered a growth of 74.09 per cent during the study period.

The ratios of total cost to total revenue has been increased in MSRTC while it was steady in APSRTC during the study period. As result of abnormal increase in total cost in both SRTCs, the APSRTC incurred a net loss and the MSRTC also turned into a loss making firm during the study period.

### b) Per Km Financial Performance

To have clarity in financial performance, per km financial performance of these SRTCs, revenue, cost and profit per km has been analysed and presented in table 4.

TABLE 4: PERFORMANCE PER KILOMETER IN APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicator	(SRTU)	2009-10	2010-11	2011-12	2012-13	2013-14
1	Revenue/Km (paise)	APSRTC	1583.94	1800.84	2325.41	2564.95	NA
		MSRTC	2350.24	2603.14	2822.98	3058.41	NA
2	Cost/Km (paise)	APSRTC	1737.13	1893.66	2529.24	2592.05	NA
		MSRTC	2277.05	2576.67	2790.73	3253.17	NA
3	Profit/Km(paise)	APSRTC	(-)153.19	(-)92.83	(-)203.83	(-)27.10	NA
		MSRTC	73.2	26.47	32.25	(-)194.75	NA
4	Cost to revenue ratio	APSRTC	1.1	1.05	1.09	1.01	NA
		MSRTC	0.96	0.99	0.98	1.06	NA

Table 4 reveals that the revenue per km in APSRTC has increased by 61.93 per cent but cost has increased by 49.21 per cent only during the study period. In MSRTC the revenue per km has increased by 30.13 per cent and cost per km increased by 42.87 per cent. There is an increasing trend in the ratio of cost to revenue in MSRTC as against decreasing trend in APSRTC during the study period.

TABLE 5: PERFORMANCE PER BUS PER DAY IN APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicator	(SRTU)	2009-10	2010-11	2011-12	2012-13	2013-14
1	Revenue/Bus/Day (Rs)	APSRTC	5658.66	6553.2	8251.81	9285.98	8169.37
		MSRTC	7455.28	8345.59	9132.28	9518.87	10221.83
2	Cost/Bus/Day (Rs)	APSRTC	6205.94	6891	8975.12	9384.09	9211.92
		MSRTC	7223.09	8260.71	9027.97	10125.01	11112.48
3	Profit/Bus/Day (Rs)	APSRTC	-547.28	-337.8	-723.31	-98.11	-1042.55
		MSRTC	232.19	84.88	104.32	-606.15	-671.47
4	Cost to revenue ratio	APSRTC	1.1	1.05	1.09	1.01	1.13
		MSRTC	0.96	0.99	0.99	1.06	1.09

**C) PER BUS/DAY FINANCIAL PERFORMANCE**

Table 5 reveals that in APSRTC Revenue per Bus per Day has increased by 44.36 per cent whereas cost per bus per day increased by 40.44 per cent during the study period. As against this in MSRTC revenue per bus per day has increased only by 37.11 per cent whereas cost per bus per day increased by 53.85 per cent during the study period. As a result, the cost to revenue ratios has showed a steady trend in APSRTC, while showed increasing trend in MSRTC during the study period. Due to this trend, the MSRTC has converted to loss making company from profit making company during the study period.

TABLE 6: PROPORTION OF COST ELEMENT IN TOTAL COST IN APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicator	(SRTU)	2009-10	2010-11	2011-12	2012-13	2013-14	Average
1	Staff Cost as % of Total Cost	APSRTC	45.84	43.21	36.95	37.2	40.19	40.678
		MSRTC	37.26	39.87	36.63	40.61	38.25	38.524
2	Fuel/Lubricant Cost as % of Total Cost	APSRTC	31.81	34.38	27.79	30.32	33.78	31.616
		MSRTC	33.16	33.09	32.76	31.71	35.03	33.15
3	Tyres & Tubes Cost as % of Total Cost	APSRTC	2.51	2.53	2.03	2.43	2.41	2.382
		MSRTC	1.92	2.06	2.83	2.62	2.59	2.404
4	Spares Cost as % of Total Cost	APSRTC	3.52	3.63	3.6	3.17	1.47	3.078
		MSRTC	2.61	2.97	2.27	2.11	1.9	2.372
5	Interest as % of Total Cost	APSRTC	2.38	2.66	3.74	4.77	2.07	3.124
		MSRTC	1.27	0.46	0.44	0.04	0.02	0.446
6	Depreciation as % of Total Cost	APSRTC	4.67	4.56	4.22	5.54	5.31	4.86
		MSRTC	5.69	4.44	6.36	5.62	5.57	5.536
7	Tax as % of Total cost	APSRTC	5.8	5.96	5.95	1.88	6.09	5.136
		MSRTC	13.47	12.72	15.31	13.99	13.62	13.822
8	Other cost as % of Total cost	APSRTC	3.47	3.07	15.72	14.7	5.59	8.51
		MSRTC	4.62	4.4	3.39	3.31	3.02	3.748

**d) Proportion of the Cost element as percentage of Total Cost**

From the table 6, it was observed that though the proportion of Staff cost declined during the study period it was higher on an average in APSRTC. But in MSRTC though it was increasing during the study period still it was lowered on an average.

The proportion of Fuel cost, Tyres and tubes cost, depreciation cost and tax cost was higher in MSRTC on an average during the study period. but in APSRTC, the proportion of spares cost, interest cost and other cost were higher on an average during the study period.

TABLE 7: COST PER REVENUE EARNING KILOMETER IN APSRTC AND MSRTC DURING 2009-10 TO 2013-14

S.No.	Indicator	(SRTU)	2009-10	2010-11	2011-12	2012-13	2013-14	Average
1	Staff Cost per Revenue Earning Km	APSRTC	7.96	8.18	9.34	9.64	11.41	9.306
		MSRTC	8.48	10.27	10.22	13.21	13.69	11.174
2	Fuel & Lubricants Cost per Revenue Earning Kms	APSRTC	5.53	6.51	7.03	7.86	9.59	7.304
		MSRTC	7.55	8.53	9.14	10.31	12.53	9.612
3	Tyres & Tubes Cost per Revenue Earning Km	APSRTC	0.44	0.48	0.51	0.63	0.68	0.548
		MSRTC	0.44	0.53	0.79	0.85	0.93	0.708
4	Spares Cost per Revenue Earning Km	APSRTC	0.61	0.69	0.91	0.82	0.42	0.69
		MSRTC	0.59	0.76	0.63	0.69	0.68	0.67
5	Interest Cost per Revenue Earning Km	APSRTC	0.41	0.5	0.95	1.24	1.47	0.914
		MSRTC	0.29	0.12	0.12	0.01	0.01	0.11
6	Depreciation Cost per Revenue Earning Km	APSRTC	0.81	0.86	1.07	1.43	1.51	1.136
		MSRTC	1.29	1.14	1.77	1.83	1.99	1.604
7	Tax Cost per Revenue Earning Km	APSRTC	1.01	1.13	1.5	0.44	1.73	1.162
		MSRTC	3.07	3.28	4.27	4.55	4.87	4.008
8	Other Cost per Revenue Earning Km	APSRTC	0.6	0.58	3.98	3.81	1.59	2.112
		MSRTC	1.05	1.13	0.95	1.08	1.08	1.058

**e) Cost element Per Revenue Earning Km**

The staff cost, fuel cost, tyres & tubes cost, Depreciation cost and tax cost per revenue kilometer were lower in APSRTC, whereas spares cost, interest cost and other costs were lower in MSRTC, on an average during the study period.

**FINDINGS/TEST OF HYPOTHESIS**

1. Fleet utilisation, fuel efficiency, staff/bus ratio, staff productivity, occupancy ratio, passengers carried perbus/day and vehicle productivity were better in APSRTC than MSRTC during the study period. Therefore, the first hypothesis is accepted.
2. The financial performance overall, per kilometer and per bus per day was better in MSRTC than APSRTC, but as far as cost per revenue earning kilometer is concerned APSRTC is better, especially in staff cost per revenue earning kilometer, tyres & tubes cost per revenue earning kilometer, depreciation and tax cost per revenue earning kilometer parameters during the study period. Therefore, the second hypothesis has been rejected.

**RECOMMENDATIONS/SUGGESTIONS**

From the above findings it is suggested that the financial performance of APSRTC is to be improved so as to improve its profitability, especially cost is to be reduced and revenue is to be improved further. The MSRTC is also suggested to improve its both physical and financial performance.

**CONCLUSIONS**

From the above study it is concluded that though the physical performance of APSRTC is better than that of MSRTC, but financially it is lagging behind during the study period.

**LIMITATIONS**

Since the study is based on the average performance data published by the ASRTU in its annual reports, any mistakes in its data may leads to different conclusions.

**SCOPE FOR FURTHER RESEARCH**

Since this study is based on only few physical and financial parameters of study period, there is a lot of scope for further study by taking some more parameters into consideration.

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