



COST DIMINUTION FOR ENDURANCE AND PROFITABILITY IN STUs: THE CASE OF A.P.S.R.T.C.

ABSTRACT

The enactment of Road Transport Corporation (RTC) Act in 1950 paved the way for Indian public to recognize the 'Bus' as the most predominant mode of public transport which suits the pockets of middle income people in India. Even though the immediate post independence period aimed at rapid industrialization and development of rural areas in policy it remained a relegated fact in practice due to scant attention on transport development. This enabled the policy framers to prepare a well-defined long-term transport policy impressing the futuristic requirements of Public Transport. The Industrial Policy Resolution of 1956 which included the Passenger Road Transport Industry in Schedule 'B' in such industries to be nationalized and allowing the states to take initiative in establishing new undertakings, Planning Commission directions to form new State Corporations or convert the departmental transport undertakings into transport corporations, formation of different states on linguistic basis etc compelled the historic beginnings of state road transport undertakings in India. At present there are 72 State Transport Undertakings (STUs) in the country comprising 21 corporations registered under the Road Transport Corporations (RTC) Act, 31 companies registered under Companies Act of 1956, 8 Governmental Departments and 11 Municipal undertakings.



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INTRODUCTION

It is borne by the fact that these public sector passenger transport undertakings have been playing a significant role in the overall development of the country. As the mobility constitutes one of the premier needs of any society and this need is to be timely fulfilled for economic, social and cultural richness. It need not be overemphasized here that the movement of men, material goods to the potential employment centers, production centers and marketing places from the far away places is a must to fulfill the economic compulsions with the mobility and the role of STUs in fulfilling such compulsions has been significant. As the personalized transport and

paratransit modes are expensive and are generally not much with in the reach of common man, the public transport particularly bus system plays a key role in the mobility of a any region. A remarkable shift from railways to road ways in term of passenger traffic is a replica of emerging status of STUs in the daily life of Indian society. There is a contribution from these STUs in the attainment of various objectives of promotion of best possible system of transportation, balanced regional and urban development with committed and continued efforts. With their popular, cheap, efficient and stable passenger transport operations rightly supported simultaneous

development of other sectors, expansions of various kinds of services to the needy and development of interior and inaccessible places of rich resources of men and material. Their role in the form of honest tax payer supporting the state governments to carry their schemes and providing the employment opportunities at larger level is highly appreciable. The rural development schemes and value added rural transport operations of STUs have become twined with proposition of solutions to solve the various consequent insurmountable problems of rural India.

THE ROLE OF STUs AND THEIR PRESENT PERFORMANCE

When RTC Act came into force in 1950, the passenger transport industry was in its infancy with less than 20,000 buses running in the entire country. This touched the figure of 4,49,000 passenger busses by the end of 1995-96 which includes 1,13,000 busses of STUs busses alone have a volume of operation of 1072.88 crores effective kilometers (eff Kms) by carrying more than 10 crores passenger daily reveals the role of STUs in fulfilling the transport needs of public. There are more than 8 lakhs employees on their role at the rate of 8.06 per bus with man power productivity of 37.85 Kms and Rs.165/- as wage on average per employee per day. In spite of phenomenal growth and improvement in physical and operational parameters, steady erosion was witnessed with a disappointing financial performance. The total capital investment in these STUs touched the figure of 8187.37 crores (by the end of 1996-97) out of which the total government contribution (both central and state) was Rs. 3113.39 crores and total value of STUs fixed assets was Rs.5627.50 crores. The total revenue during the year 1996-97 was Rs.10088.48 crores against their total cost Rs.11502.52 crores resulting in a net loss of Rs.1413.04 crores after allowing a concessional travel to the various sections of the society. But by the end of 2010-11 the total revenue was Rs. 614569.42 lakhs against their total cost Rs. 646307.03 lakhs resulting net loss of Rs. 31737.61 lakhs. All these STUs paid Rs.1135.22 crores of taxes to the government exchequer during the year 1995-96 but it increased to Rs.39126.80 lakhs in 2010-11. The cumulative losses of all STUs touched the staggering figure of 6912.63 crores by the end of 1996-97 which was only Rs.2935.18 crores at the end of 1991-92.

ABOUT A.P.S.R.T.C

Andhra Pradesh State Road Transport Corporation (A.P.S.R.T.C.) which occupied a prime position among the major state transport undertakings in the country had its humble beginning in 1932 as a part of Nizam State Railways with 27 buses and 166 employees. Down

the years it has gained huge mileage and the present form of it was emerged in 1985 under the RTC Act. The Corporation has webbed its activity over 26,424 villages with its rural services and operating city services in 8 major cities with a mix of services like ordinary, express, metro express and metro liner. The corporation could be the trend setter for its innovative approach in introducing High-tech coaches, A.C.-2 tire coaches, Gramani services and metro liner /metro express buses on city routes. By the time the State of Andhra Pradesh was undivided the corporation has 22,333 buses with a fleet utilization of 98.30 per cent carrying 1.25 crores passengers per day on average and 7281 crores passenger kilometers as its volume of operation. It has rightly played the role of a state owned corporation which is fully aware of its social responsibility and the need to provide the necessary infrastructure in giving a face-lift to the state.

In spite of phenomenal growth and improvement in physical and operational parameters like fleet strength, fleet utilization, vehicle utilization, fuel efficiency, passengers carried, accidents rate and the corporation which offered a helping hand to the government to the various social welfare projects, it is of no exception that the corporation could travel through ineluctable route of mounting losses. Ever increasing social costs unrelated to business principles, mounting gap between economic fare and administered fare due to delayed fare revision, no freedom for price fixation, running services even on uneconomic routes, huge losses from the operation of city services, the burgeoning interest commitment, high tax burden etc. were added for this steady erosion. It is observed from the Table II that the corporation could get a total profit of Rs.316.79 crores and loss of Rs. 2296.06 crores during the study period which is an entirely a different picture while comparing it with an immediately preceding period of 10 years where the cumulative losses hindered the corporation. Huge losses for many years and low profits for some years in the olden days resulted the cumulative losses and the profits looks like a distant mirage in the corporation. This increasingly complex and hostile environment accentuated the need for reviewing the strategies and the search for strategic options.

OBJECTIVES

There has been an increasing tendency to assess the STUs as loss making units by judging them only on their financial performance and placing a blind eye on the growth and improvement of physical and operational parameters. Had there been no operations on unprofitable/unviable routes and governance by state

controlled pricing in an increasingly politicized environment, there would have been no scope to the proponents of privatization in finding fault with STUs abilities. However, this will also be impertinent in attributing these reasons for their losses when there is a lot of scope to overcome these barriers through the options of efficiencies and economics to gear up their viability. The purpose of this paper is to study the structure and trends of costs during the period 1990-91 to 2010-11 in A.P.S.R.T.C. and to emphasize the cost reduction, as much needed programme to improve the long term profitability of the under taking/ corporation.

THE STRUCTURE AND TRENDS OF COSTS IN A.P.S.R.T.C

Analysis of cost structure made out of the figures presented in Table 1 reveals that the personnel cost is the major principal component of total cost followed by material cost, taxes, interest, depreciation etc. It is observed that in many years during the study period the personnel cost significantly ranged between 36 to 42 percent of total cost. It includes the salaries and wages paid to the staff engaged in traffic operations, office & administration, maintenance bonus, provident fund contribution, gratuity, incentives, contribution to employees state insurance and other welfare expenses etc. The material cost could be ranged between 29 to 34 percent, the increase of it has been influenced by the increase in fuel. It comprises the expenditure incurred on the consumption of fuel, spare parts, tyres & tubes, batteries, lubricants and repairs to vehicles. The STUs are levied with the two principal taxes viz. motor vehicle tax (M.V.Tax) and passenger tax form a major part of operating cost. It ranges between 8 to 14 percent of the total cost. Motor vehicle tax is being levied for the purpose of registration, permit fees collected on specific routes which a vehicle is permitted to ply over a period of time. The passenger tax is not a tax on STUs/ operator but a direct charge on passenger travel which is actually paid by the passenger either directly or indirectly to the state government over and above the M.V.Tax. The other elements of total cost are the payment of interest to the central and concerned state governments for their loans, on borrowings from IDBI, LIC and public deposits and debentures. Depreciation on buses and other assets forms a minor portion of total cost which do not have much influence on the profitability.

While observing the trends of total cost and various components of it from Table 3, a steep increase is witnessed during the study period. The personnel cost index has increased from the base year level of 100 to a maximum level of 378.83 and the material cost touched

the figure of 510.42. The index of cost on taxes showed as 244.78 followed by miscellaneous & others 270.04 and depreciation (153.94). The annual growth rate is very high in the cases of taxes followed by Misc. & others and interest. The observed correlation between personnel cost and total cost with 0.997 followed by material cost 0.992 and taxes 0.88 reveals their significance in influencing the trends of total cost.

One significant observation is that the indices of personnel cost and material cost have increased relatively at faster rate throughout the period. However the index of material cost is well below the index of total cost in many years during the study period. The variation noticed in the proportion of personnel cost, taxes, interest and depreciation to the total cost had been more or less stable and material cost showed greater variation. Efficiency in material management and improvement in operational performance could be the reasons for the stable proportions even under the conditions of ever increasing prices of fuel and spare parts. Increased salaries due to pay revisions and more staff with high salaries engaged in non-traffic assignments on the one side and insignificant improvement in staff productivity on the other side led to high proportionate increase in personnel cost while comparing it with other cost items to the total cost. Cost on taxes and depreciation is also quite influencing the increase in cost with their proportionate increase for some years. The observation of these trends emphasizes the need for adopting strategies and efficacious effort to gain much better material efficiency and staff productivity.

COST REDUCTION

In any business the reduction in cost per unit of production is possible either by reducing the expenditure keeping the volume constant or by increasing productivity (volume of out turn) with no increase in expenditure. It is a continuous process of analysis, by various methods of all the factors affecting costs efforts and functions in an organizations it may be viewed as a real permanent reduction in the unit cost of goods manufactured of services rendered without inquiring there suitability for the use intended. While coming to the general setting of the passenger transport industry, the STUs have a tremendous scope to reduce the cost by achieving proportionately high volume of operation and low increase in cost of operation influenced by the inflationary trends rather than any other conditions which implies that the concentration should be more on internal factors of achieving high performance volume of operation and reduce cost through economies and savings un-affected quality of service (reliability punctuality comfort, safety

reduced travel time etc). Hence it is essential to consider the imperatives, ponderous problems of the business and should follow the following generic strategies by the STUs for the creating a defensible position in the long run and for out performing competition from the existing and future and private operators:

1. parts, lubricants and batteries which also form a major part of cost of materials consumed for operating a transport vehicle. Due attention should be given to formulate a system of evaluation of the performance of various makes of these items which facilitates optimal decision making for allocation and consumption. Hence performance based purchase decisions well supported by the advantages of economies in purchases at large scale under the existing ASRTU rate contracts will yield major cost benefits to STUs
2. Determination of controllable and non-controllable cost items, the rate, the level and the scope and their impact on total cost gives an idea to differentiate the cost hike adduced to either inflationary trends or to the internal organizational inefficiency. Such differentiation supports / provides the level of concentration and achievements needed on the factors of volume of operations when the later is observed.
3. The existence of standards, employee performance to attain and the recognition for it are the important elements for the achievement of any goal. All STUs need the establishment of various responsibility centres, which makes sure that a specified activity/end result is properly carried out by an individual /group with a standard performance at all levels of the organization. Such responsibility centres should be assigned to generation of additional revenue, adequate coverage of scheduled services, maintaining vehicles for effective operation, quality of service and reduction of ineffective operations (dead kilometers), etc. for a wide gap between revenues and costs. Every individual of the organization should be fixed with specific objectives, communicated and exacted to achieve what is being expected of him.
4. During certain crisis periods, the corporation could determine to curtail or not to increase the schedule of services. Even under the conditions of the low rate of occupancy ratio due to illegal passenger transport operations in some routes and fortify the unwillingness to increase the

number of services, results passenger shift from public transport to any other alternative modes of transport and thus the corporation would suffer by loss of revenue. Measures should be taken to increase the growth in service Kms over the years rather than curtailing the same gives hope to the passengers that adequate services are provided and impress them to feel STUs bus as ideal mode and results no further shift

5. The STUs buses are dominating in providing unique services to the passengers through the Deluxe, Hi-tech, Air-conditioned and sleeper coaches at premium price in long distance routes. It is of no exaggeration that even the low level income people have been imbued with travel by these unique services and patronized the corporation for such modernized services for all times. As long as STUs go ahead with creative pursuits and keep the passenger to perceive higher value for these unique services, they will be rewarded with higher revenues/margins.
6. Periodical performance review/appraisal among all the revenue centres (Depot) / operational unit both in physical and financial parameters and comparing them with the operational units of other STUs/corporations operating which are similar in size and comparable, focus the efficiencies and inefficiencies. When any negative variations are observed, the adoption of successful events/strategies of the efficient operational unit may be followed and the positive results can be extended for the entire organization is necessary.
7. Inadequate attention on purchasing of items which are essential for keeping the vehicle fit for operations, having no idea of accumulated cost on storing high value components for idle periods and irrational/faulty estimation of spare parts requirements for further operations results in high cost of inventory. Better practices and tight control over purchase, store keeping and issue of vital components on return basis and due concentrations even on items of low cost leads to cost reduction in the corporation.

CONCLUSION

The STUs at this stage require a qualitative change in their approach towards improving their performance in physical, quality as well as continual economy in costs if they have to exist in an environment of ever increasing competition from other operators who

have commercial objectives only. A well-built programme around performance-based purchase decisions, responsibility consciousness, growth-oriented operations, timely introduction of unique services, better inventory controls, ascertaining the necessity for an item of expenditure, periodical performance review and appraisal etc. keep the corporation ahead in achieving potential savings. The existence of sound organizational aspect of effective reporting system, the structure with optimum levels, computer-based Management information system, effective functioning of monitoring system for both finance and operations, etc. gives enormous strength to follow needful operational strategies to implement the programmes aim at integrated cost reduction effectively. STUs as large organizations with better infrastructure

facilities can no longer offer a wide range of services with the existing practices and scant attention on much required above aspects and hence the continuous efforts on cost reduction should be geared in to action.

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APPENDIX

Table I: Structure of total cost of A.P.S.R.T.C (1990-91 to 2010-11)							(Rs. In Lakhs)
Year	Personnel cost	Material cost	Taxes	Interest	Depreciation	Misc & others	Total cost
1990-91	31598.20 (232.40)	24962.41 (183.60)	7505.97 (55.20)	2335.18 (17.20)	9318.05 (68.50)	3574.53 (26.30)	79294.34 (583.20)
1991-92	37275.73 (250.60)	31336.95 (210.70)	7930.52 (53.30)	2755.15 (18.50)	11230.43 (75.50)	3079.77 (20.70)	93608.55 (629.30)
1992-93	43383.54 (276.20)	36613.66 (233.10)	8201.21 (59.50)	3094.98 (19.70)	12120.25 (77.20)	3337.31 (21.20)	106750.95 (686.90)
1993-94	51024.00 (311.30)	40534.00 (247.30)	12465.00 (76.10)	2711.00 (16.50)	12781.00 (78.00)	4975.00 (30.40)	124490.00 (759.60)
1994-95	57011.00 (339.20)	44610.00 (265.40)	12678.00 (75.40)	2259.00 (13.40)	13535.00 (79.90)	5492.00 (32.70)	135585.00 (806.00)
1995-96	64433.00 (364.80)	48572.00 (275.00)	18415.00 (104.30)	803.00 (4.50)	15030.00 (85.10)	6735.00 (38.10)	153988.00 (871.80)
1996-97	70257.00 (385.20)	54933.00 (301.10)	25044.00 (137.10)	763.00 (4.20)	13835.00 (75.80)	8089.00 (44.30)	172921.00 (947.70)
1997-98	83106.00 (424.30)	65891.00 (336.40)	28188.00 (143.90)	1425.00 (7.30)	13587.00 (69.20)	5126.10 (26.56)	197323.10 (1007.66)
1998-99	91298.00 (445.70)	67563.00 (329.80)	29744.00 (145.20)	2366.00 (11.66)	15757.00 (79.60)	6427.00 (31.84)	213155.00 (1043.80)
1999-00	101890.53 (473.60)	78915.69 (366.80)	33802.26 (157.10)	4509.88 (21.00)	16359.30 (76.00)	7368.42 (35.57)	242846.08 (1130.07)
2000-01	106746.51 (490.10)	92311.47 (423.90)	36870.17 (169.70)	6315.12 (29.00)	15988.22 (73.40)	7400.80 (35.91)	265632.29 (1222.01)
2001-02	115167.19 (551.90)	90170.72 (432.10)	33576.75 (160.90)	8691.61 (41.70)	14539.86 (69.70)	9444.41 (48.91)	271590.54 (1305.21)
2002-03	127677.32 (571.10)	99880.60 (446.70)	32247.80 (144.20)	9734.96 (43.50)	14192.69 (63.50)	8151.85 (39.32)	291885.22 (1308.32)

	(571.10)	(446.70)	(144.20)	(43.50)	(63.50)	(39.32)	(1308.32)
2003-04	131391.37	104063.88	33927.00	10512.63	11085.02	8849.69	299829.59
	(580.00)	(498.93)	(150.00)	(50.70)	(53.15)	(42.43)	(1375.21)
2004-05	135919.90	121802.72	36188.00	10289.92	11578.53	9387.36	325166.43
	(584.56)	(570.83)	(156.00)	(48.22)	(54.26)	(43.99)	(1457.86)
2005-06	143548.00	148808.15	27053.91	8459.75	13540.61	11115.10	352525.52
	(590.34)	(685.51)	(113.63)	(38.97)	(62.38)	(51.20)	(1542.03)
2006-07	174477.23	172471.17	26028.08	7613.00	16789.59	11867.05	409246.12
	(712.95)	(763.35)	(106.36)	(33.69)	(74.31)	(52.52)	(1743.18)
2007-08	164510.08	175751.22	27935.62	9124.70	17623.94	13054.02	407999.58
	(649.04)	(757.03)	(110.21)	(39.30)	(75.91)	(56.23)	(1687.72)
2008-09	177727.61	186704.99	30848.81	11687.35	19095.71	14016.87	440081.34
	(738.00)	(830.71)	(115.33)	(52.00)	(84.96)	(62.37)	(1883.37)
2009-10	239858.96	182180.28	33591.40	11463.25	22490.67	16689.25	506273.81
	(865.42)	(810.84)	(121.20)	(51.02)	(100.10)	(74.28)	(2022.86)
2010-11	254942.90	222303.76	39126.80	14580.80	25014.79	16847.80	572816.85
	(880.39)	(937.14)	(135.12)	(61.47)	(105.45)	(71.02)	(2190.59)

Source: Performance Statistics of C.R.I.T. Pune.

Note: Figures in brackets shows cost per eff. Km / paise.

Table II: Profit\Loss position of A.P.S.R.T.C.			
Rupees in lakhs			
Year	Total cost	Total revenue	Profit \ Loss
1990-91	79294.34	78102.37	-1191.97
1991-92	93608.55	90181.01	-3427.54
1992-93	106750.95	10372.86	-96378.09
1993-94	124490.00	125115.00	625.00
1994-95	135485.00	136755.00	1270.00
1995-96	153988.00	158495.00	4507.00
1996-97	172921.00	173553.00	632.00
1997-98	199085.00	194113.00	-4972.00
1998-99	215160.00	205296.00	-9864.00
1999-00	248509.97	233325.12	-15184.85
2000-01	275015.55	254020.73	-20994.82
2001-02	284771.83	257565.15	-27206.68
2002-03	306172.22	287998.09	-18174.13
2003-04	316322.00	312120.00	-4202.00
2004-05	344287.00	321579.51	-22707.49
2005-06	371915.66	367637.27	-4278.39
2006-07	429921.37	418738.94	-11182.43
2007-08	432189.14	445755.68	13566.54
2008-09	492874.91	503953.68	11078.77
2009-10	572081.87	520626.53	-51455.34
2010-11	646307.03	614569.42	-31737.61

Source : Performance Statistics C.I.R.T Pune

Table III: Indices of various cost components of A.P.S.R.T.C							
Year	Personnel Cost	Material Cost	Taxes	Interest	Depreciation	Misc &Others	Total Cost
1990-91	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1991-92	107.83	114.76	96.56	107.56	110.22	78.71	107.90
1992-93	118.85	126.96	107.79	114.53	112.70	80.61	117.78
1993-94	133.95	134.69	137.86	95.93	113.87	115.59	130.25
1994-95	145.96	144.55	136.59	77.91	116.64	124.33	138.20
1995-96	156.97	149.78	188.95	26.16	124.23	144.87	149.49
1996-97	165.75	164.00	248.37	24.42	110.66	168.44	162.50
1997-98	182.57	183.22	260.69	42.44	101.02	100.99	172.78
1998-99	191.78	179.63	263.04	67.79	116.20	121.06	178.98
1999-00	203.79	199.78	284.60	122.09	110.95	135.25	193.77
2000-01	210.89	230.88	307.43	168.60	107.15	136.54	209.00
2001-02	237.48	235.35	291.49	242.44	101.75	185.97	223.80
2002-03	245.74	243.30	261.23	252.91	92.70	149.51	224.33
2003-04	249.57	271.75	271.74	294.77	77.59	161.33	235.80
2004-05	251.53	310.91	282.61	280.35	79.21	167.26	249.98
2005-06	254.02	373.37	205.85	226.57	91.07	194.68	264.41
2006-07	306.78	415.77	192.68	195.87	108.48	199.70	298.90
2007-08	279.28	412.33	199.66	228.49	115.20	213.80	289.39
2008-09	317.56	452.46	208.93	302.33	124.03	237.15	322.94
2009-10	372.38	441.56	219.57	296.63	146.13	282.43	346.86
2010-11	378.83	510.42	244.78	357.38	153.94	270.04	375.92

Source : Performance Statistics of C.R.I.T. Pune.
