Chapter-III

Performance review relating to Statutory corporation

Bihar State Road Transport Corporation

Executive summary

3

Bihar State Road Transport The Corporation (Corporation) provides public transport in the State through its 20 depots. The Corporation had fleet strength of 414 buses as on 31 March 2009 and carried an average of 0.18 lakh passengers per day. The Corporation did not hire buses for its operations. There are about 96 per cent routes where only private operators provide the services exclusively. Pursuant to Hon'ble Supreme Court's order (January & March 98) a scheme was framed by the State Government for revival of the Corporation. The Scheme envisaged the financial package of Rs. 113 crore spread over programmes for eight years and was effective from April 1998. It stipulated, inter-alia. (i) raising on road buses to 800, (ii) retrenchment /removal of surplus staff (iii) exploring non-traffic income, and (iv) maintaining the indices of operational parameters as per norms. The State Government provided Rs. 107.35 crore upto 2004-05 for various defined purposes. However, the Corporation failed to achieve its targets under the scheme. The performance audit of the Corporation for the period from 2004-05 to 2008-09 was conducted to assess efficiency and economy of its operations, ability to meet its financial commitments, possibility of realigning the business model to tap nonconventional sources of revenue, existence and adequacy of fare policy and effectiveness of the top management in monitoring the affairs of the Corporation.

Finances and Performance

The Corporation did not prepare its annual accounts for the period 2003-04 onwards. As such the accumulated losses, borrowings, assets and liabilities as at 31 March 2009 could not be ascertained. However, provisional data for working results during 2004-05 to 2008-09 depicts that the Corporation suffered a loss of Rs. 80.75 crore, earned Rs. 16.92 per kilometre and spent Rs. 60.69 per Kilometre in 2008-09. Audit noticed that with a right kind of policy measures and better management of its affairs, it is possible to increase revenue and reduce costs.

Poor and declining service

Percentage of average passengers carried by the Corporation per day to population showed a declining trend from 0.03 (2004-07) to 0.01 (2008-09). The vehicle density of Corporation buses per lakh population declined from 0.54 in 2004-05 to 0.49 in 2008-09. This showed a very poor capacity to meet the transportation needs of the state as well as a decline in service by the Corporation. This was mainly due to its operational inefficiency leading to non-availability of adequate funds to replace/add new buses.

Vehicle profile and utilisation

Corporation buses consisted of only own fleet of 414 buses out of which 111 (26.81 per cent) were overage i.e. more than eight years old. There were no overage buses in 2004-05 due to addition of 111 new buses in the year at a cost of Rs. 12.20 crore. The acquisition was primarily funded through financial assistance received under the Scheme.

2008-09 the Corporation's fleet In utilisation at 33.81 per cent and vehicle productivity at 237 KM per day per bus were much below the All India Average of 92 per cent and 313 KM respectively, whereas its load factor at 69 per cent was above the AIA of 63 per cent. However, the Corporation could not achieve its own targets of 71 per cent fleet utilisation, 270 KM vehicle productivity and 90 per cent load factor though the same were fixed after taking into consideration the local factors and constraints. Its 54 per cent routes were unprofitable due to high cost of operation. Corporation's performance on preventive maintenance was poor showing average delay of 3979 KMs in engine oil change and 11838 KMs in break inspection over and above the prescribed limit.

Economy in operation

Manpower and fuel constitute 51.81 per cent cost. of total Interest, depreciation and taxes account for 39.33 per cent and are not controllable in the short term. Thus, the Controllable expenditure has to come from manpower and fuel. Though the Corporation succeeded in reducing the manpower per bus from 6.86 in 2004-05 to 5.57 in 2008-09 but manpower cost per effective KM was much higher than the AIA during 2006-09. The Corporation did not attain its own fuel consumption targets resulting in excess consumption of fuel valued at Rs. 8.58 crore during 2004-09.

Revenue maximisation

The Corporation did not have any Roadways Magistrate having judicial powers to impose penalties on ticketless passengers.

Corporation's staff at Headquarters conduct enroute checking of buses. During 2004-09, only 6443 checkings were conducted and Rs. 10.90 per checking was recovered from ticketless passengers which evidences inadequate and ineffective system of checking. This is one area for the Corporation to plug leakage of revenue. Further, the Corporation has about 5.95 lakh square meters of land. As it mainly utilises ground floor /land for its operation, the space above can be developed on public private partnership basis to earn steady income which can be used to cross subsidise its operations. The Corporation has framed policy in this regard but did not strive for large scale tapping of such fund.

The Corporation could not auction its over 1,000 condemned buses during 2005-09 for want of necessary directives from the Transport Department, Government of Bihar, which came in October 2009 to facilitate auction of the Corporation buses. Accordingly, the Corporation has taken up auction of buses afresh

Need for a regulator

The Corporation fixes fare under the power delegated to it by the State

Government. However, there is no scientific basis for calculation of fare. No uneconomical routes have been identified by the Transport Department for the Corporation and the latter did not form norms for providing services on uneconomical schedules. Thus, it would be desirable to have an independent regulatory body (like State Electricity Regulatory Commission) to fix the fares and specify operations on uneconomical routes.

Inadequate monitoring

The fixation of targets for various operational parameters and an effective Management Information System (MIS) for obtaining feed back on achievement thereof are essential for monitoring by the top management. The Corporation has a system of monthly meeting of Administrator with departmental heads, divisional managers and depot superintendents for reporting on their performances. However, the meetings were not held at regular intervals. The MIS system of the Corporation was not adequate and the monitoring by its top key management of operational parameters and service standards was largely ineffective. Despite being pointed out by the CAG, the Corporation could not remove the deficiencies with respect to maintenance of books of accounts.

Conclusion and recommendation

The Corporation is incurring losses mainly due to its high cost of operations. The Corporation can reduce its losses by generating funds through tapping nonconventional sources of revenue. This review contains five recommendations to improve the Corporation's performance viz. increasing its percentage share in passenger transport, maintaining the indices of fuel consumption, load factor, IPEKM, fleet utilisation, vehicle productivity etc. as per norms, disposing off condemned buses, considering devising a policy for tapping nonconventional sources of revenue on a large scale and considering creating a regulator to regulate fares and also services on uneconomical routes.

Introduction

3.1.1 In Bihar, public road transport is provided by Bihar State Road Transport Corporation (Corporation), which is mandated to provide an efficient, adequate, economical and properly co-ordinated road transport. The State also allows private operators to provide public transport. The State has reserved certain routes exclusively for the Corporation and allowed private operators also to operate on these routes for short distances. There are about 96 *per cent* routes where only private operators provide the services exclusively. Power to fix fares was delegated (1998) to the Corporation by the State Government. The fare structure in respect of private operators is controlled by the State Government.

3.1.2 The Corporation was incorporated on 1 May 1959 by Government of Bihar under Section 3 of the Road Transport Corporations Act, 1950 as a wholly owned Corporation of the State Government. The Corporation is under administrative control of the Transport Department of the Government of Bihar. The Corporation had a fleet strength of 414 buses as on 31 March 2009. The Corporation do not hire private buses for its operations. The Corporation carried an average of 0.18 lakh passengers *per* day during 2008-09. The turnover of the Corporation was Rs. 29.34 crore in 2008-09, which was equal to 0.03 *per cent* of the State Gross Domestic Product (Rs. 1,12,424 crore). The Corporation employed 2,307 employees as on 31 March 2009.

3.1.3 Performance reviews on the working of the Corporation were included in the Report of the Comptroller and Auditor General of India for the years 1990-91, 1999-2000 and 2005-06 (Commercial), Government of Bihar. None of these reports has been discussed by COPU so far.

Scheme for revival of the Corporation

3.2.1 Pursuant to Hon'ble Supreme Court's orders (January/March 1998) a Scheme was framed by the State Government for revival of the Corporation. The Scheme envisaged the financial package of Rs. 113 crore spread over programmes for eight years and was effective from April 1998. It stipulated inter alia, (i) raising the strength of on road buses to 800, (ii) retrenchment/removal of surplus staff (iii) exploring avenues for generation of non-traffic income and (iv) maintaining the indices of fuel consumption, staff bus ratio, load factor, income per effective kilometer, fleet utilisation, tyre use, etc. as per norms. The State Government provided a financial assistance under the package to the extent of Rs. 107.35 crore upto 2004-05 for various defined purposes. The State of Jharkhand contributed (March 2009) its share of financial liability of Rs. 8.62 crore in the revival package in compliance of Hon'ble Supreme Court's order dated 12 August 2008. However, the Corporation failed to achieve its targets under the Scheme as discussed in the succeeding paragraphs.

Organisational set-up

3.2.2 Section 38 (1) of the Road Transport Corporations Act, provides that if the State Government is of the opinion that a Corporation established by the Government is unable to perform the duties imposed upon it, the State Government may, with the previous approval of the Central Government, supersede the Corporation for a specified period.

Accordingly, the State Government dissolved the Board of the Corporation and appointed an Administrator (October 1999) who is assisted in day to day management of the affairs of the Corporation by Chief of operations, administration, Chief Mechanical Engineer and Financial Advisor cum Chief Accounts Officer (FA &CAO).

During the period from April 2004 to November 2009 the post of Administrator was held by eight persons. The average tenure of each Administrator was only around eight months. Moreover, from February 2004 till date *i.e.* November 2009, no full time Administrator was appointed by the State Government. Moreover, post of FA&CAO was lying vacant since February 2002 and State Government appointed the officer only in August 2009.

With effect from 01 March 2009 the Corporation stands bifurcated between the State of Bihar and Jharkhand. Therefore, the working results for 2008-09 are not comparable with earlier years data.

Scope of Audit and Audit methodology

3.3.1 The present review conducted during February 2009 to August 2009 covers the performance of the Corporation during the period from 2004-05 to 2008-09. The review mainly deals with operational efficiency, financial management, fare policy, fulfillment of social obligations and monitoring by top management of the Corporation. The audit examination involved scrutiny of records at the Head Office, Central Workshop, four Divisional Offices and six out of the twenty depots¹ selected on the basis of geographical location of the divisions and volume of operation in terms of buses held. Operating income of the selected depots constituted 31 *per cent* of the total operating revenue of the Corporation.

3.3.2 The methodology adopted for attaining the audit objectives with reference to audit criteria consisted of explaining audit objectives to top management, scrutiny of records at Head office and selected units, interaction with the auditee personnel, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft review to the Management for comments.

¹ Names of selected units

⁽i) Divisions: Bhagalpur, Gaya, Muzaffarpur and Patna

⁽ii) Depots : Ara, Aurangabad, Bankipur, Bhagalpur, Gaya and Muzaffarpur

⁽iii) Central Workshop, Patna.

Audit Objectives

3.4 The objectives of the performance audit were to assess:

3.4.1 Operational Performance

- the extent to which the Corporation was able to keep pace with the growing demand for public transport;
- whether the Corporation succeeded in recovering the cost of operations; and
- whether adequate maintenance was undertaken to keep the vehicles roadworthy.

3.4.2 Financial Management

- whether the Corporation was able to meet its commitments and recover its dues efficiently; and
- the possibility of realigning the business model of the Corporation to tap non-conventional sources of revenue and adopting innovative methods of accessing such funds.

3.4.3 Fare Policy and Fulfillment of Social Obligations

- the existence and adequacy of fare policy; and
- whether the Corporation operated adequately on uneconomical routes.

3.4.4 Monitoring by Top Management

• whether the monitoring by Corporation's top management was effective.

Audit Criteria

3.5 The audit criteria adopted for assessing the achievement of the audit objectives were:

- all India averages for performance parameters;
- performance standards and operational norms fixed by the Association of State Road Transport Undertakings (ASRTU);
- physical and financial targets/ norms fixed by the Management;
- manufacturers' specifications, norms for life of a bus, preventive maintenance schedule, fuel efficiency norms, etc.;
- instructions of the Government of India (GoI) and Government of State and other relevant rules and regulations;
- procedures laid down by the Corporation, and.
- orders of the Hon'ble Supreme Court.

Financial Position and Working Results

Accounts of the Corporation for the period 2003-04 onwards are in arrears **3.6.1** Rule 29 of the Bihar State Road Transport Corporation Rules, 1959 provide for preparation of annual accounts within six months from the close of the financial year. The Government of Bihar made available a sum of Rs. 15.14 lakh to the Corporation as loan for preparation of its final accounts for the period 1997-2002 which were finalised in December 2004 at a cost of Rs. 13.51 lakh. The, accounts for the year 2002-03 were prepared in June 2009 after a gap of nearly 54 months. However, accounts of the Corporation for the period since 2003-04 are in arrear and in the 56 months period since December 2004, the Corporation has not been able to prepare final accounts for the years 2004-09 due to delay in appointment of professional accountants and indecision on the part of management to pursue and settle issues with the appointed firm.

3.6.2 The details of working results like operating revenue and expenditure, total revenue and expenditure, net surplus/ loss and earnings and cost *per* kilometre of operation are given below.

(Provisional	figures)
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(Amount : Rs. in crore)

Sl.No.	Description	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Total Revenue	54.84	60.73	53.92	55.47	31.20
2.	Operating Revenue ²	51.30	58.48	51.31	51.84	29.34
3.	Total Expenditure	109.05	110.74	115.07	107.44	111.95
4.	Operating Expenditure ³	71.32	74.21	80.72	71.57	75.46
5.	Operating Profit/ Loss	(-) 20.02	(-) 15.73	(-) 29.41	(-) 19.73	(-) 46.12
6.	Profit/ Loss for the year	(-)54.21	(-)50.01	(-)61.15	(-)51.97	(-) 80.75
7.	Fixed Costs					
	(i) Personnel Costs	25.81	24.17	33.12	27.51	47.20
	(ii) Depreciation	5.60	5.60	5.60	5.40	5.40
	(iii) Interest	37.73	36.53	34.35	35.87	36.49
	(iv) Other Fixed Costs	7.20	4.47	4.68	8.36	3.33
	Total Fixed Costs	76.34	70.77	77.75	77.14	92.42
8.	Variable Costs					
	(i) Fuel & Lubricants	25.80	31.48	32.47	24.69	14.88
	(ii) Tyres & Tubes	1.65	2.25	1.79	2.60	1.86
	(iii) Other Items/ spares	2.17	3.18	1.86	1.92	1.80
	(iv) Taxes (MV Tax,	3.09	3.06	1.20	1.09	0.99
	Passenger Tax, etc.)					
	Total Variable Costs	32.71	39.97	37.32	30.30	19.53
9.	Effective KMs operated (in Lakh)	380.13	381.97	340.34	291.15	184.45
10.	Earnings per KM (Rs.) (1/9)	14.43	15.90	15.84	19.05	16.92
11.	Fixed Cost per KM (Rs.) (7/9)	20.08	18.53	22.84	26.50	50.11
12.	Variable Cost <i>per</i> KM (Rs.) (8/9)	8.61	10.46	10.97	10.41	10.59
13.	Cost <i>per</i> KM (Rs.) (3/9)	28.69	28.99	33.81	36.90	60.69
14.	Net Earnings per KM (Rs.) (10-13)	(-) 14.26	(-) 13.09	(-) 17.97	(-)17.85	(-) 43.77
15.	Traffic Revenue ⁴	51.30	58.48	51.31	51.84	29.34
16.	Traffic revenue <i>per</i> KM (Rs.) (15/9)	13.50	15.31	15.08	17.81	15.91
17.	Operating Loss Per KM (Rs)	5.26	4.12	8.64	6.77	25.00
18.	Contribution per KM (Rs.) (16-12)	4.89	4.85	4.11	7.40	5.32

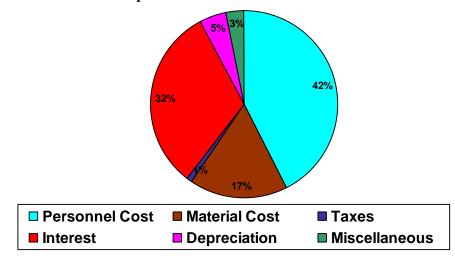
² Operating revenue includes traffic earnings, passes and season tickets, re-imbursement against concessional passes, fare realised from private operators under KM Scheme, etc.

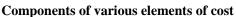
³ Operating expenditure include expenses relating to traffic, depreciation on fleet, repair and maintenance, electricity, welfare and remuneration, licences and taxes and general administration expenses.

⁴ Traffic revenue represents sale of tickets, advance booking, reservation charges and contract services earnings.

Elements of Cost

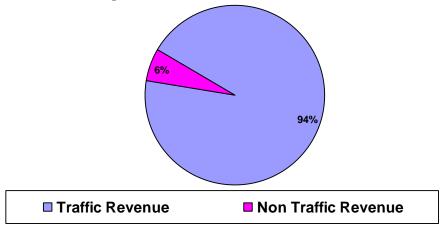
3.6.3 Personnel cost and material cost constitute the major elements of cost. The percentage break-up of costs for 2008-09 is given below in the pie-chart.





Elements of revenue

3.6.4 Traffic revenue and non-traffic revenue constitute total revenue. The percentage break-up of revenue for 2008-09 is given below in the pie-chart. Components of various elements of revenue



3.6.5 The working results show that the Corporation was not able to recover the cost in all the five years during 2004-09 and the loss for the year increased from Rs. 54.21 crore in 2004-05 to Rs. 80.75 crore in 2008-09. Subsequent audit findings show that the losses were controllable and there is scope for improvement in performance.

Audit Findings

3.7 Audit explained the audit objectives to the Corporation during an 'entry conference' held on 13 February 2009. Subsequently, audit findings were reported to the Corporation and the Government in September, 2009 and

discussed in an 'exit conference' held on 23 November, 2009 which was attended by the Transport Commissioner, Government of Bihar and the Administrator. The State Government/Corporation agreed with all the audit observations except for those on Body Building. The audit findings are discussed below:

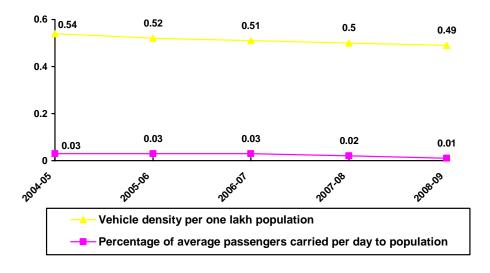
Operational Performance

3.8 The operational performance of the Corporation for the five years ending 2008-09 is given in the *Annexure-13*. The operational performance of the Corporation was evaluated on various operational parameters as described below. It was also seen whether the Corporation was able to maintain pace with the growing demand of public transport and recover the cost of operations. Audit findings in this regard are discussed in the subsequent paragraphs. These audit findings show that the losses were controllable and there is scope for improvement in performance.

Share of Corporation in public transport

3.9.1 Visualising the year 2020, the vision of the transport sector of Bihar seeks (i) to provide workable co-ordinated transport system and basic infrastructure to all categories of travellers/goods in the state as per allround requirements of transport, (ii) to establish definite, secured, dependable, skilled and effective multi-mix modern and capable technique so that basic infrastructural expenditure is reduced and developed services could be ensured and (iii) to make arrangement suitable for social and economic development of the State.

3.9.2 As has been stated earlier, the Corporation was bifurcated on 1 March 2009, it operated till then in both the States of Bihar and Jharkhand. The particulars of private operators functioning in Jharkhand, though called for, were not furnished by the State Government. Therefore, Corporation's share in public transport could not be worked out. The vehicle density and passengers carried per day to population is given below in the line graph.



It is evident from above that percentage of average passengers carried per day to population decreased from 0.03 in 2004-05 to 0.01 in 2008-09. The vehicle density per one lakh population also decreased from 0.54 in 2004-05 to 0.49 in 2008-09. The table below depicts the vehicle density of the Corporation.

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09 ⁵
Total Number of buses	637	637	637	637	637
held by the Corporation					
Estimated combined	11.85	12.16	12.47	12.79	13.12
population of Bihar &					
Jharkhand (crore)					
Vehicle density per one	0.54	0.52	0.51	0.50	0.49
lakh population					

3.9.3 The Corporation, however, has not been able to keep pace with the growing demand for public transport. This is due to inability of the Corporation to keep pace in terms of number of on-road vehicles and effective KMs operated. Based on the population totals figures for 2001 and one-tenth of the decadal growth rate of 25.81 *per cent* as projected yearly population totals, the effective per capita KM operated per year is given below.

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Effective KM operated (lakh)	380.13	381.97	340.34	291.15	184.45
Estimated Population (Crore) (Bihar and Jharkhand)	11.85	12.16	12.47	12.79	13.12
Per Capita KM per year	0.32	0.31	0.27	0.23	0.14

The above Table shows the decline in service by the Corporation.

3.9.4 Public transport has definite benefits over personalised transport in terms of costs, congestion on roads and environmental impact. The public transport services have to be adequate to derive those benefits. In the instant case, the Corporation was not able to maintain its share in transport mainly due to operational inefficiencies as described later.

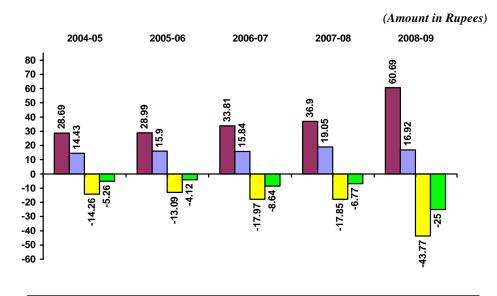
Recovery of cost of operations

3.10.1 The Corporation was not able to recover its cost of operations. During the last five years ending 2008-09, the net revenue showed a negative trend as given in the graph⁶ below:

The Corporation has not been able to keep pace with the growing demand for public transport

⁵ Upto February 2009.

Cost *per* KM represents total expenditure divided by effective KM operated.
Revenue *per* KM is arrived at by dividing total revenue with effective KM operated.
Net Revenue *per* KM is revenue *per* KM reduced by cost *per* KM.
Operating loss *per* KM would be operating expenditure *per* KM reduced by operating income *per* KM.



Cost per KM Earning per KM Net Earning per KM Operating loss per KM

The Corporation failed to replace its fleet on time or increase the fleet strength to meet growing demand 3.10.2 Above graph indicates the deteriorating performance of the

Orissa, Uttar Pradesh and Karnataka registered best net earnings *per* KM at Rs. 0.49, Rs. 0.47 and Rs. 0.34 respectively during 2006-07. (Source : STUs profile and performance 2006-07 by CIRT, Pune) e deteriorating performance of the Corporation over the period. Except marginal decrease in 2005-06 the operating loss per kilometre increased from Rs. 5.26 in 2004-05 to Rs. 25 per KM in 2008-09. The Corporation was not able to achieve the All India

Averages for cost (Rs. 19.94) and revenue (Rs. 18.22) *per* KM except in respect of revenue during 2007-08. The deteriorating performance has been impacting the ability of the Corporation to provide public transport services adequately as it is not able to replace its fleet on time or increase the fleet strength to meet the growing demand.

Efficiency and Economy in operations

Fleet strength and utilisation

Fleet Strength and its Age Profile

3.11.1 The Association of State Road Transport Undertaking (ASRTU) had prescribed (September 1997) the desirable age of a bus as eight years or five lakh kilometres, whichever was earlier. The table below shows the age-profile of the buses held by the Corporation for the period of five years ending 2008-09.

S.No.	Particulars ⁷	2004-05	2005-06	2006-07	2007-08	2008-09
1	Total No. of buses at the	549	637	637	637	637
	beginning of the year					
2	Additions during the year	111	NIL	NIL	NIL	NIL

7 Excludes hired buses.

3	Buses scrapped during the vear	23	NIL	NIL	NIL	NIL
4	Buses held at the end of the year (1+2-3)	637	637	637	637	414 ⁸
5	Of (4), No. of buses more than 8 years old	NIL	40	40	41	111
6	Percentage of overage buses to total buses	NIL	6.28	6.28	6.44	26.81

The above Table shows that the Corporation was not able to achieve the norm of right age buses during 2005-09. During 2004-05, the Corporation added 111 new buses at a cost of Rs. 12.20 crore. The expenditure was funded through the amount received under the Revival Package. To achieve the norm of right age buses, the Corporation was required to buy 111 new buses additionally which would have cost it Rs. 15.54 crore, worked out at the rate of Rs. 14.00 lakh per bus, as intimated by the Management. However, the Corporation failed to generate resources through its operations and non-conventional revenue avenues to finance the replacement of buses. It suffered loss of Rs. 270.49 crore before charging of depreciation during 2004-09. Thus, the Corporations' ability to survive and grow depends on its efforts to remove operational inefficiencies, cut costs and tap non-conventional revenue avenues so that it can fund its capital expenditure and be self-reliant.

The overage fleet requires high maintenance and results in extra cost and less availability of vehicles compared to underage fleet, other things being equal. This only goes on to increase operational inefficiency and causes losses which, in turn, affects the ability of the Corporation to replace its fleet on a timely basis.

Fleet Utilisation

3.11.2 Fleet utilisation represents the ratio of buses held by the Corporation to

Andhra Pradesh,	Tamil Nadu
(Kumbakonam) and	Tamil Nadu
(Coimbatore) registe	red best fleet
utilisation at 99.4,	98.4 and 98.3
per cent respectively d	uring 2006-07.
(Source: STUs	profile and
performance 2006-07 l	by CIRT, Pune)

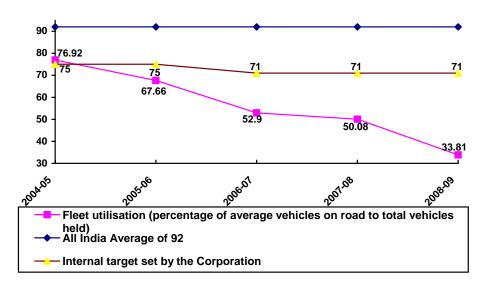
the buses on road. The Corporation had set a target of fleet utilisation of 75 *per cent* during 2004-06 and 71 *per cent* thereafter. Against this, the fleet utilisation of the Corporation varied from 76.92 *per cent* in 2004-05 to 33.81 *per cent* in 2008-09 as compared to the All India Average⁹ of

92 per cent, as indicated in the graph given below.

The fleet utilization declined from 76.92 *per cent* in 2004-05 to 33.81 *per cent* in 2008-09

⁸ Remaining 223 buses were transferred to Jharkhand in March 2009.

⁹ All India Average is for the year 2006-07 which has been used for comparison for the period under review.



3.11.3 From the above it is evident that there is a sharp decline in utilisation. As observed in Audit it was mainly due to the following controllable reasons:

- Shortage of crew (driver/ conductors).
- Want of tyres and mandatory spares.
- Overhauling, Engine defects, etc.
- Seizure of buses for want of valid road permits.
- Breakdowns on account of inadequate servicing/ maintenance.

Analysis of the fleet utilization in respect of the existing seven divisions of the Corporation, revealed that due to cancellation of 280.76 lakh scheduled kilometer on account of breakdown, shortage of crew, tyres and mandatory spares, overhauling, engine defects etc., the Corporation was deprived of contribution of Rs. 14.95 crore during 2004-05 to 2008-09.

Lack of permits

3.11.4 A mention was made in paragraph no. 3.3.18 of the Report of the Comptroller and Auditor General of India (Commercial), Government of Bihar for the year ended 31 March 2006 regarding unauthorized plying of buses. The matter was reviewed further and it was observed that the deficiencies with respect to obtaining road permits for the buses of the Corporation continued to persist. The Corporation provided domestic as well as inter-state services to its passengers. The number of schedules operated ranged from 183 to 216 during 2004-09. However, the Corporation did not have the required valid/operative domestic and inter-state road permits for a large number of its buses. Out of 414 buses held as on 31 March 2009, the Corporation had valid/operative permits for only 89 buses. The Corporation had not applied for permits for 259 buses, whereas application in respect of 66 buses were applied for /pending with the concerned authorities. Further, in test check of nine divisions of the Corporation, it was observed that during 2004-08, 31 buses of the Corporation plying on different routes were seized by the

State/other state transport authorities for want of valid road permits. The Corporation had paid penalty of Rs. 8.27 lakh to get these seized buses released. Besides, due to non-plying of the seized buses, the Corporation suffered loss of contribution amounting to Rs. 18.62 lakh. Thus, for want of valid permits, the Corporation suffered a total loss of Rs. 26.89 lakh.

3.11.5 From the above, it can be concluded that the Corporation was not able to achieve an optimum utilization of its fleet strength, which in turn impacted its operational performance adversely. Neither fleet utilisation was effectively monitored at depot level nor was any effective measure taken by the Corporation to improve the performance.

Vehicle productivity

3.12. Vehicle productivity refers to the average kilometres run by each bus *per* day in a year. The vehicle productivity of the Corporation vis-à-vis the overage fleet for the five years ending 2008-09 is shown in the table below.

S.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Vehicle productivity (KMs run <i>per</i> day <i>per</i> bus)	226	230	265	257	237
2.	Overage fleet (percentage)	Nil	6.28	6.28	6.44	26.81

Due to non-induction of new buses in the fleet during 2005-09, the overage

Tamil Nadu (Villupuram), Tamil Nadu (Salem) and Tamil Nadu (Kumbakonam) registered best vehicle productivity at 474, 469 and 462.8 KMs per day respectively during 2006-07. (Source : STUs profile and performance 2006-07 by CIRT, Pune) fleet percentage increased from Nil in 2004-05 to 26.81 in 2008-09. It is evident from above that increase in overage fleet did not impact vehicle productivity much. Compared to the All India Average of 313 KMs *per* day, the vehicle

productivity of the Corporation has been on lower side for all the years under review. The Corporation failed to achieve even the targets of 280 KMs and 270 KMs per day fixed by it during 2004-06 and 2006-09 respectively.

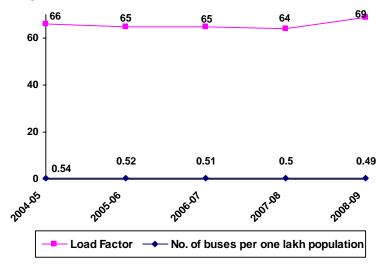
The reasons for shortfall in productivity were non-operation of all the routes, deficient route planning and cancellation of schedules, etc. No effective measures were taken by the Corporation to improve vehicle productivity.

Capacity Utilisation

Load Factor

The load factor was below the standard occupancy fixed by the Corporation **3.13.1** Capacity utilisation of a transport undertaking is measured in terms of Load Factor, which represents the percentage of passengers carried to seating capacity. The schedules to be operated are to be decided after proper study of routes and periodical reviews are necessary to improve the load factor. The load factor of the Corporation ranged from 64 *per cent* in 2007-08 to 69 *per cent* in 2008-09. Though this is higher than the all India average of 63 *per cent*, it is much below the standard occupancy (Load Factor) of 90

Bus productivity remained very low in comparison to all India average during review period *per cent* of seating capacity fixed by the Corporation during 2004-09. The main reason for low occupancy ratio was permission granted by the State Government to run private buses on the same route, leakage of passenger revenue due to ticketless travelling, plying of buses on uneconomical routes and frequent breakdown of buses. The line graph indicating load factor and number of buses per one lakh population over period of five years ending 2008-09 is given below:



It was observed that neither routes were planned taking into account passenger load nor was any survey of different routes conducted to assess demand. There is no policy in the Corporation to fix route wise receipt targets for the crew and offer them incentives with a view to improve capacity utilisation.

Moreover, the posts of Roadways Magistrate in the Corporation having judicial powers to impose penalties on the ticketless passengers have been lying vacant since the last 17 years. However, Central flying squads were engaged which do not have any authority to impose penalty on ticketless passengers but were able to recover requisite fare from them. A sum of Rs. 70,226/- could be recovered from the total 6443 checkings conducted during 2004-09 which worked out to only Rs. 10.90 per checking. Thus, in absence of Roadways Magistrate and poor performance of the existing flying squads it is evident that the system of checking loss of revenue through checking of buses en-route is not adequate and effective.

Neither any analysis was done nor any effective measures were taken by the Corporation to improve load factor.

3.13.2 The table below provides the details for break-even load factor (BELF) for traffic revenue as well as total revenue. Audit worked out this BELF at the given level of vehicle productivity and total cost *per* KM.

S.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Cost per KM (Rupees)	28.69	28.99	33.81	36.90	60.69
2.	Traffic revenue per KM at 100 <i>per cent</i> load factor	20.45	23.55	23.20	27.83	23.06
3.	Break – even Load Factor considering only traffic revenue ¹⁰ (<i>Per cent</i>) $(1/2)$	140	123	146	133	263

The break-even load factor is quite high and is not likely to be achieved given the present load factor and the fact that the Corporation is also operating in uneconomical routes.

Route Planning

3.13.3 Appropriate route planning to tap demand leads to higher load factor. Some routes are profitable while others are not. The position in this regard is given in the Table below.

Particulars	Total No. of routes	No. of routes making profit	No. of routes not meeting total cost
2004-05	50	18	32
	(100)	(36)	(64)
2005-06	50	23	27
	(100)	(46)	(54)
2006-07	50	22	28
	(100)	(44)	(56)
2007-08	50	25	25
	(100)	(50)	(50)
2008-09	50	23	27
	(100)	(46)	(54)

(Figures in bracket indicate the percentage under the above heads for each year).

3.13.4 Though some of the routes now appearing unprofitable would become profitable once the Corporation improves its efficiency, there would still be some uneconomical routes. Given the scenario of mixed routes and obligation to serve uneconomical routes, an organisation should decide an optimum quantum of services on different routes so as to optimise its revenue while serving the cause. However, no such exercise was carried out by the Corporation.

Cancellation of Scheduled Kilometres

3.14.1 A review of the operations indicated that the scheduled kilometres were not fully operated mainly due to non-availability of adequate number of buses, shortage of crew and other factors like breakdowns, accidents, shortage of tyres, etc. The details of scheduled kilometres, effective kilometres, cancelled kilometres calculated as difference between the scheduled kilometres and effective kilometres are furnished in the Table below.

¹⁰ Calculated at capacity of 55 seats per bus

					(III Lui	MI IMIS)
S.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Scheduled kilometres	574.32	591.85	624.60	614.19	576.14
2.	Effective kilometres	380.13	381.97	340.34	291.15	184.45
3.	Kilometres cancelled	194.19	209.88	284.26	323.04	391.69
4.	Percentage of cancellation	33.81	35.46	45.51	52.60	67.99
Cause	wise analysis*					
5.	Want of buses	111.49	88.90	95.56	111.51	131.09
6.	Want of crew	17.19	7.93	12.43	14.28	16.29
7.	Others	37.85	47.67	48.47	46.23	47.32
8.	Contribution <i>per</i> KM (in Rs.)	4.89	4.85	4.11	7.40	5.32
9.	Avoidable cancellation (want of buses and crew)	128.68	96.83	107.99	125.79	147.38
10.	Loss of contribution (8X9) (Rs. in lakh)	629.25	469.63	443.84	930.85	784.06
(Con	tribution per KM is the traff	fic revenue n	ninus total v	ariable cost	divided by e	ffective

(In Lakh KMs)

(Contribution per KM is the traffic revenue minus total variable cost divided by effective <u>KMs)</u>

* Based on information received from existing seven divisions of the Corporation and excluding the four divisions of Jharkhand which used to be part of the Corporation upto February 2009

3.14.2 It can be seen from the above table that the percentage of cancellation

Tamil Nadu (Salem), State ExpressTransport Corporation (Tamil Nadu)and Tamil Nadu (Villupuram)registered least cancellation ofscheduled KMs at 0.45, 0.67 and 0.78per cent respectively during 2006-07.(Source: STUs profile and performance2006-07 by CIRT, Pune)

of scheduled kilometres increased from 33.81 to 68.04 during 2004-05 to 2008-09 and remained on the high side. Audit analysis revealed that 61.08 *per cent* to 67.33 *per cent* of cancellation was due to want of buses and 5.49 *per cent* to 10.32 *per cent* was for want of crew during

2004-09. Due to cancellation of scheduled kilometres for want of buses and crew, the Corporation was deprived of contribution of Rs. 32.58 crore during 2004-05 to 2008-09.

No measures were taken by the Corporation to minimise cancellation of scheduled kilometre.

Maintenance of vehicles

Preventive Maintenance

3.15.1 Preventive maintenance is essential to keep the buses in good running condition and to reduce breakdowns/ other mechanical failures. The Corporation has Tata and Leyland make buses, for which the following schedule of maintenance has been prescribed by the Original Equipment Manufacturers (OEMs).

Cancellation of scheduled Kilometres led to loss of contribution of Rs. 32.58 crore during review period

Sl.No.	Particulars	Schedule
1.	Engine Oil change	
	Tata/Leyland make	Every <u>18000</u> KMs*
2.	Brake Inspection	
	Tata make	Every <u>18000</u> KMs
	Leyland make	Every <u>24000</u> KMs

* As adopted by the Corporation.

Test check of maintenance in six depots revealed that the norms of preventive maintenance including the maintenance schedule were not adhered to. The engine oil change and brake inspection in the buses of six depots were carried out on an average of 21,979 KMs and 29,838 KMs respectively which exceeded the prescribed limits. It was also observed that in Muzaffarpur and Patna divisions of the Corporation even free servicing of buses as offered by the manufacturer were not availed for which reasons were not on record. There was dearth of technical staff and the routine maintenance of buses was by and large in the hands of unskilled helpers.

Repairs & Maintenance

3.15.2 A summarised position of fleet holding, over-aged buses, repairs and maintenance (R&M) expenditure for the last five years up to 2008-09 is given below.

Sl.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09 (Upto February 2009)
1.	Total buses (No.)	637	637	637	637	637
2.	Over-age buses (more than 8 years old)	Nil	40	40	41	171
3.	Percentage of over age buses	Nil	6.28	6.28	6.44	26.84 ¹¹
4.	R&M Expenses (Rs. in lakh)	61.83	73.88	73.58	58.95	39.74
5.	R&M Expenses per bus (in Rs.) (4/1)	9706	11598	11551	9254	6239

The percentage of off-road buses to the buses held increased during 2004-09 Audit analysis revealed that there was increase in the percentage of off-road buses to the buses held during 2004-09. It was also observed that the percentage of buses remaining off-road for minor repair increased from 5.18 in 2006-07 to 11.12 in 2008-09 which shows neglect of proper maintenance of buses in these years.

The norms of preventive maintenance were not adhered to

¹¹ This figure would not tally with the figure given in the table under paragraph 3.11.1 since the figure here pertains upto February 2009.

Manpower Cost

3.16.1 The cost structure of the Corporation for the period 2004-09 shows that manpower and fuel constitute 51.81 *per cent* of total cost. Interest, depreciation and taxes –the costs of which are not controllable in the short term-account for 39.33 per *cent*. Thus, the major cost sharing can come only from manpower and fuel.

Manpower is an important element of cost which constituted 42.16 per cent of

Gujarat, Tamil Nadu (Villupuram) and Tamil Nadu (Salem) registered best performance at Rs. 6.10, Rs. 6.13 and Rs. 6.21 cost *per* effective KMs respectively during 2006-07. (Source: STUs profile and performance 2006-07 by CIRT, Pune) total expenditure of the Corporation in 2008-09. Therefore, it is imperative that this cost is kept under control and the manpower is utilised optimally to achieve high productivity. The Table below provides the details of manpower, its

cost and productivity.

Sl.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Total Manpower at the end of year (Nos.)	4367	4337	4164	3970	2307
2.	Manpower Cost (Rs. in crore)	25.81	24.17	33.12	27.51	47.20
3.	Effective KMs (in lakh)	380.13	381.97	340.34	291.15	184.45
4.	Cost per effective KM (Rs.)	6.79	6.33	9.74	9.45	25.59
5.	Productivity per day per person (KMs)	23.85	24.13	22.39	20.09	21.90
6.	Total Buses (No.)	637	637	637	637	414 ¹²
7.	Manpower per bus	6.86	6.81	6.54	6.23	5.57

From the above table, it is evident that manpower productivity was much

North West Karnataka State Road					
Transport, Karnataka State Road					
Transport and Himachal Pradesh					
registered best performance at 4.89,					
4.99 and 4.94 manpower per bus.					
(Source : STUs profile and performance					
2006-07 by CIRT, Pune)					

below the All India Average of 52 during 2004-09. The sharp increase in manpower cost during 2008-09 as compared to 2007-08 was due to payment of Dearness Allowance at existing rates together with arrears with effect from 1998. Cost per

effective KM increased to Rs. 25.59 during 2008-09 from Rs. 9.45 during 2007-08. The manpower cost would further escalate since recommendations of the Fifth and Sixth Pay Commission have not yet been implemented by the Corporation. Manpower per bus was less than the norms of 7.08 fixed by the Corporation during 2004-09. As mentioned above (Para 3.15.1) there was shortage of technical staff affecting R&M activity.

3.16.2 The employees of the Corporation were being assigned duty of eight hours during 2004-09 and no overtime was paid during 2004-09. Test check

The manpower productivity was much below the All India Average

^{12 637} buses held for the period upto February 2009

on six selected depots revealed that there was no underemployment of manpower. However, employees of lower cadre were deployed in higher cadre without extending any financial benefit of the higher cadre.

Payment of salary and allowance to idle staff

3.16.3 Despite no work being carried out at the Regional workshop at Ranchi and negligible work at Regional workshop, Muzaffarpur (only body work of nine buses done during 2004-09) it was noticed during audit that the Corporation incurred idle establishment expenditure of Rs. 2.51 crore during 2004-09 on payment of salary and allowances to the staff deployed in the workshop. The matter was raised in the paragraph no. 3.3.23 of the Report of the CAG for the year ended 31 March 2006 also. Audit observed that the irregularity continued to persist.

Duty hours /steering hours

3.16.4 The normal duty hours prescribed for operating crew is eight hours which includes steering duty of 6.5 hours. Test check in Gaya and Aurangabad depots of Gaya division revealed that these depots did not maintain records in this regard during 2004-09.

Fuel Cost

3.17.1 Fuel is a major cost element which constituted 13.29 *per cent* of total expenditure in 2008-09. Control of fuel costs by a road transport undertaking has a direct bearing on its productivity. The Table below gives the targets fixed by the Corporation for fuel consumption, actual consumption, mileage obtained *per* litre (Kilometre *per* litre i.e. KMPL), All India Average and estimated extra expenditure.

S.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Gross Kilometres (in lakh)	393.60	391.53	347.11	298.57	189.62
2.	Target of KMPL fixed by Corporation	4.5	4.5	4.0	4.0	4.0
3.	Kilometre obtained per litre (KMPL)	3.94	3.88	3.93	3.96	3.91
4.	All India Average in the category			4.94		
5.	Actual Consumption (in lakh litres)	99.86	100.82	88.26	75.46	48.45
6.	Consumption as per internal target (in lakh litres) (1/2)	87.47	87.01	86.78	74.64	47.41
7.	Excess Consumption (in lakh litres) (5-6)	12.39	13.81	1.48	0.82	1.04
8.	Average cost per litre (in Rs.)	25.32	31.44	33.24	30.05	34.91
9.	Extra expenditure (Rs. in crore) (7X8)	3.14	4.34	0.49	0.25	0.36

The Corporation incurred idle establishment expenditure of Rs. 2.51 crore It can be seen from the above table that norm for fuel consumption was

The Corporation increased extra expenditure of Rs. 8.58 crore due to excess consumption of fuel

North East	Karnata	ka State	Road
Transport,	Uttar	Pradesh	and
Andhra Prac	lesh regis	tered mile	age of
5.45, 5.33 and	d 5.26 KN	APL.	
(Source :	STUs	profile	and
performance	2006-07	by CIRT,	Pune)

reduced from 4.5 KMPL to 4.00 KMPL 2006-07 onwards. Thus, excess consumption of fuel appeared to be controlled during the period 2006-07 onwards, though it was as a result of reduction in targets. The Corporation consumed 29.54 lakh litres of fuel in

excess as compared to its internal targets during 2004-05 to 2008-09 resulting in extra expenditure of Rs. 8.58 crore. The main reasons for excess consumption of oil were lack of driving skills, poor maintenance of buses and poor road conditions.

3.17.2 A test check in Audit of two months Petrol, Oil and Lubricants (POL) statements for each year under review, in six depots, showed that the Corporation had not used them for analysis of driver-wise or vehicle-wise consumption for attempting any optimisation of KMPL. Different drivers were deployed frequently (ranging upto 16) and routes were also frequently changed (ranging upto 10) in each vehicle in each month due to which proper evaluation and monitoring of the performance of drivers in terms of fuel efficiency could not be ensured. It was observed that KMs recorded in POL statement were mostly on the basis of route length but not based on meters installed in the vehicles as those meters were non-functional in almost all the vehicles. Thus, the Corporation had no mechanism in place to monitor vehicle wise or driver wise data for consumption of fuel so as to exercise effective management control. Further, the Corporation had not prescribed any ideal driving speed/ norms so as to encourage fuel economy.

Financial Management

3.18 Raising of funds for capital expenditure, i.e., for replacement/ addition of buses happens to be the major challenge in financial management of Corporation's affairs. This issue has been covered in Paragraphs 3.11. The section below deals with the Corporation's efficiency in raising claims and their recovery. This section also analyses whether an opportunity exists to realign the business model to generate more resources without compromising on service delivery.

Claims and Dues

Sundry debtors

3.19 The Corporation gives its buses on hire for which parties were required to pay in advance the charges at prescribed rates *per* kilometre basis at the time of booking. It was, however, noticed during audit that the destination of the journeys performed was not recorded. Speedometers were not working due to which, the actual charges receivable could not be worked out. Further, the charges due were also not promptly recovered from the parties. During 2004-09, the Corporation did not provide buses to schools. Further, during the period the Corporation also did not provide any free/concessional passes to

various categories of public like students, senior citizens, etc. The charges ranging from Rs. 1,800 to Rs. 2,500 and Rs. 18 to Rs. 21 per KM beyond 100 KMs for different category of buses fixed in February 2003 were increased in July 2008 and May 2009

From the perusal of records, it was observed that:

For want of effective measures and pursuance, the outstanding dues mounted in course of time

- dues dating back to 1967, amounting to Rs. 2.52 crore (including Rs. 4.91 lakh from private parties) as on 31.03.2009 were recoverable from 101 debtors (Government departments-83, Government agencies-02, Educational Institutions-09, Political parties-07);
- the Management did not seek confirmation of balances from the debtors; and
- effective measures were not taken by the Management for recovery.

Realignment of business model

3.20.1 The Corporation is mandated to provide an efficient, adequate and economical road transport to public. Therefore, the Corporation cannot take an absolutely commercial view in running its operations. It has to cater to uneconomical routes to fulfil its mandate. It also has to keep the fares affordable. In such a situation, it is imperative for the Corporation to tap non-traffic revenue sources to cross-subsidize its operations. However, the share of non-traffic revenues (other than interest on investments) was nominal at 5.42 *per cent* of total revenue during 2004-09. This revenue of Rs. 13.89 crore during 2004-09 mainly came from advertisements. Audit observed that the Corporation has non-traffic revenue sources which it has not tapped (or not tapped substantially).

3.20.2 Over a period of time, the Corporation has come to acquire 41 sites at prime locations at District Headquarters measuring 5.95 lakh square metres. It is, thus, possible for the Corporation to undertake projects on public private partnership (PPP) basis for construction of shopping complexes, malls, hotels, office spaces, etc. above (from first or second floor onwards) the existing sites so as to bring in a steady stream of revenues without any investment by it. Such projects can be executed without curtailing the existing area of operations of the Corporation. Such projects can yield substantial revenue for the Corporation which can only increase year after year.

3.20.3 Audit observed that the Government of Bihar is pursuing the idea of taking up site development strategy with Infrastructure Leasing and Financial Services (IL & FS) (May 2009). However, a Memorandum of Agreement is yet to be signed.

Income from advertisement

3.20.4 The Corporation entered into an agreement with the sole agent for advertisement M/s Sharpline Publicity Private ltd., Delhi for advertisement on bus bodies at the rate of Rs. 2,200 per bus per annum for five years during July 2001 to June 2006. However, this agreement was terminated by the

Administrator with effect from 31 January 2006 citing default on the part of the agent in making monthly payments. Though the Agent made payment of Rs. 0.50 lakh as penalty his request for not terminating the agreement on the cited ground was not considered (January 2006).

Subsequently, the Corporation made a proposal to the Bihar State AIDS Control Society Patna to avail AIDS related advertisement on buses of the Corporation for Rs. 3.00 lakh per month (January 2006). Accordingly, the society made an advance payment of Rs. 3.00 lakh. However no formal agreement for this was signed. It was observed in audit that without ensuring a formal agreement, the Corporation asked the society to proceed by meeting expenditure of preparation of advertisement script to be adjusted against the subscription payable to the Corporation. However citing non compliance of the terms of proposal on the part of the Corporation, the society asked the Corporation to refund the advance of Rs. three lakh paid earlier (November 2006). After waiting in vain for the society upto January 2008, the Corporation called fresh tender for advertisement and entered into an agreement with M/s Pisces Media World, Patna for advertisement on limited side panel of bus bodies at the rate of Rs. 2450 per bus per annum for a period of five years (January 2008).

Thus, due to pursuance of the matter of advertisement with the Bihar State AIDS Control society without ensuring a formal agreement, the Corporation lost the opportunity to earn revenue of Rs. 19.98 lakh against advertisement for 24 months from February 2006 to January 2008 worked out at earlier rates in vogue.

Loss due to non-disposal of condemned buses and spare materials

3.20.5 A mention was made in the paragraph no. 3.3.9 of the Audit Report of the Comptroller and Auditor General of India (Commercial), Government of Bihar, for the year ended 31 March 2006, that as per the revival scheme a sum of Rs. 12 crore was to be raised through disposal of condemned buses and scrap. The funds so raised were to be utilised for purchasing 130 new buses. It was reported that the Corporation could generate only Rs. 1.79 crore from auction of only 207 buses out of 1373 buses and scrap during 2003-05. As a result, the Corporation lost an opportunity to purchase 113 new buses.

The Management stated (September 2006) that action was being taken to dispose of the condemned buses and scrap material.

Audit observed that the Corporation failed to comply with the directives (April 2006) of the Transport Department to ascertain the total taxes due against the buses which was to be appropriated against the proceeds of auction of these buses and paid to the Government Exchequer.

Accordingly, directives were issued by the Secretary, Transport Department, Government of Bihar (October 2009) that the liability of tax dues of the buses of the Corporation being auctioned would be that of the Corporation and not of the buyer so that the auction of buses could be facilitated. The Corporation has taken up auction of buses afresh (November 2009).

For want of formal agreement, the Corporation lost the opportunity to earn Rs. 19.98 lakh from advertisement

Fare policy and fulfillment of social obligations

Existence and fairness of fare policy

3.21.1 Under Section 67 of Motor Vehicles Act, 1988 the power to fix fares in respect of Stage carriages operation in the State and their periodic revision is vested with the State Government. As already stated, power to fix fares by the Corporation at its own level on sound business principle was delegated (1998) to the Corporation by the State Government. It was observed that during 2003-04 to 2008-09 the Corporation revised fare thrice with effect from 15-11-03, 01-07-05 and 01-07-08.

3.21.2 At each revision of tariff increase in HSD price only was considered without linking to other input costs (e.g. tyres, spares, lubricants, depreciation, taxes etc.) with a view to minimise burden on commuters. Moreover, to arrive at the revised tariff the additional cost of fuel due to price hike of HSD was calculated on the basis of existing actual KMPL but not on the normative KMPL. Therefore, the fare policy of the Corporation has no scientific basis as it does not take into account the normative cost. Thus, there is a risk of commuters paying for inefficiency of the Corporation. The table below shows how the Corporation could have curtailed cost and increase revenue with better operational efficiency.

(Amount in Runees)

	(Amount in Rupees)					ipees)
S.No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1.	Cost <i>per</i> KM	28.69	28.99	33.81	36.90	60.69
2.	Revenue <i>per</i> KM	14.43	15.90	15.84	19.05	16.92
3.	Loss of revenue due to less vehicle productivity (per KM)	5.53	5.23	2.62	3.99	3.35
4.	Excess cost due to low manpower productivity (<i>per</i> KM)	3.68	3.39	5.54	5.80	14.82
5.	Excess cost due to excess consumption of fuel (<i>per</i> KM)	0.80	1.11	0.14	0.08	0.19
6.	Ideal revenue per KM (2+3)	19.96	21.13	18.46	23.04	20.27
7.	Ideal cost per KM [1-(4+5)]	24.21	24.49	28.13	31.02	45.68
8.	Net revenue per KM (2-1)	(-)14.26	(-) 13.09	(-) 17.97	(-) 17.85	(-) 43.77
9.	Net ideal revenue per KM (6-7)	(-) 4.25	(-)3.36	(-) 9.67	(-) 7.98	(-) 25.41
10.	Effective KMs (in lakh)	380.13	381.97	340.34	291.15	184.45
11.	Avoidable loss (in Rs. crore) [(8-9) x 10]	38.05	37.17	28.25	28.74	33.87

The above Table does not take into account other inefficiencies such as low fleet utilisation, excess tyre cost, defective route planning, etc. Nonetheless, it shows that the net revenue could be higher, if the operations are properly planned and efficiently managed, than what they actually are. Thus, the case made by the Corporation for increase in fare, includes its inefficiencies and in a way would make the commuters pay more than what they should be actually paying.

The above facts lead to conclude that it is necessary to regulate the fares on the basis of a normative cost and it would be desirable to have an independent regulatory body (like State Electricity Regulatory Commission) to fix the fares, specify operations on uneconomical routes and address the grievances of commuters.

Adequacy of services on uneconomical routes

3.22 The Corporation had about 46 *per cent* profit making routes as of March 2009 as mentioned in paragraph 3.13.3. However, the position would change if the Corporation improves its efficiency. Nonetheless, there would still be some routes which would be uneconomical. Though the Corporation is required to cater to these routes, the Corporation has not formulated norms for providing services on uneconomical routes. In the absence of norms, the adequacy of services on uneconomical routes cannot be ascertained in audit. The desirability to have an independent regulatory body to specify the quantum of services on uneconomical routes, taking into account the specific needs of commuters, is further underlined. No uneconomical routes have been identified by the Transport Department for the Corporation and therefore no reimbursement is being provided to the Corporation for plying on these routes.

Monitoring by top management

MIS data and monitoring of service parameters

3.23 For an organisation like a Road Transport Corporation to succeed in operating economically, efficiently and effectively, there has to be written norms of operations, service standards and targets. Further, there has to be a Management Information System (MIS) to report on achievement of targets and norms. The achievements need to be reviewed to address deficiencies and also to set targets for subsequent years. The targets should generally be such that the achievement of which would make an organisation self-reliant. In the light of this, Audit reviewed the system prevailing in the Corporation and made the following observations.

- The MIS in the Corporation was deficient
- The Corporation has a system of monthly meeting of Administrator of the Corporation with the departmental heads, divisional managers and depot superintendents for reporting on their performances with respect to norms of operations, service standards and targets. However, the meetings were not held at regular intervals and there was no effective follow up of the decisions taken in the earlier meetings.
- Though the Corporation set targets for important operational parameters, the same were not monitored for improvement.
- Despite being repeatedly pointed out by the C&AG, the Corporation could not remove the deficiencies with respect to maintenance of books of accounts to ensure safeguard of assets and disclosure of reliable financial data through timely reporting.

The Corporation did not have any fulltime administrator during 2004-09.

Conclusion

Operational performance

• The Corporation could not keep pace with the growing demand for public transport.

- The Corporation was not running its operations efficiently as its performance on important operational parameters was below all India average.
- The corporation did not ensure the economy in operations as its manpower and fuel costs were higher than the all India average.

Financial management

- The Corporation did not demonstrate utmost discipline in raising its claims for dues in time or follow up recovery of its dues to logical end.
- The Corporation has tremendous potential to tap nonconventional sources of revenue. Despite having a policy in place it did not strive for large scale tapping of such funds.

Fare policy and fulfillment of social obligations

- Though the Corporation has a fare policy, it is not based on scientific norms.
- No policy yardstick has been laid down for operation on uneconomical routes. Therefore, the adequacy of operations could not be ascertained in Audit.

Monitoring by top management

• The MIS system of Corporation was not adequate and the monitoring by its top management of key operational parameters and service standards was largely ineffective.

On the whole, there is immense scope to improve the performance of the Corporation. However, the present set-up of the Corporation does not seem to be equipped to handle this. Effective monitoring of key parameters, coupled with certain policy measures, can see improvement in performance.

Recommendations

The Corporation may:

- increase its percentage share in passenger transport by purchasing new buses;
- maintain the indices of fuel consumption, load factor, IPEKM, fleet utilisation, vehicle productivity, etc. as per norms;
- dispose off condemned buses; and
- consider devising a policy for tapping non-conventional sources of revenue on a large scale, which will result in steady inflow of revenue without additional investment.

The State Government should:

• consider creating a regulator to regulate fares and also services on uneconomical routes.