

പതിനാലാം കേരള നിയമസഭ

ഒൻപതാം സമ്മേളനം

നക്ഷത്രചിഹ്നമിടാത്ത ചോദ്യം നമ്പർ: 210

23.01.2018-ലെ മറുപടിക്ക്

**കെ.എസ്.ആർ.ടി.സി പുനരുദ്ധാരണത്തിനായി സമർപ്പിച്ച റിപ്പോർട്ട്**

ചോദ്യം

ഉത്തരം

ശ്രീ.ടി.എ.അഹമ്മദ് കബീർ

പിണറായി വിജയൻ

(മുഖ്യമന്ത്രി)

<p>(എ) കൊൽക്കത്ത ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് മാനേജ്മെന്റിലെ റിട്ടയർഡ് പ്രൊഫസർ സുശീൽ ഖന്ന കെ.എസ്.ആർ.ടി.സി യുടെ പുനരുദ്ധാരണത്തിനായി പഠിച്ചശേഷം ഗവൺമെന്റിന് ഭാഗികമായിട്ടോ പൂർണ്ണമായിട്ടോ റിപ്പോർട്ട് സമർപ്പിച്ചിരുന്നോ; അല്ലെങ്കിൽ എന്തെങ്കിലും ശിപാർശകൾ സർക്കാരിന് നൽകിയിരുന്നോ;</p>	<p>(എ) ഇടക്കാല റിപ്പോർട്ട് സമർപ്പിച്ചിട്ടുണ്ട്.</p>
<p>(ബി) എങ്കിൽ എന്നാണ് ടി റിപ്പോർട്ട് ഗവൺമെന്റിന്/കെ.എസ്.ആർ.ടി.സി യ്ക്ക് സമർപ്പിച്ചത് ; അതിന്റെ പകർപ്പ് ലഭ്യമാക്കുമോ;</p>	<p>(ബി) 01.04.2017-ൽ മുഖ്യമന്ത്രിയുടെ അധ്യക്ഷതയിൽ ചേർന്ന യോഗത്തിൽ പ്രൊഫ.സുശീൽ ഖന്ന കരട് ഇടക്കാല റിപ്പോർട്ട് അവതരിപ്പിച്ചിരുന്നു. പകർപ്പ് അനുബന്ധമായി ചേർക്കുന്നു.</p>
<p>(സി) പ്രൊഫസർ സുശീൽ ഖന്നയെ പ്രസ്തുത ചുമതല ഏൽപ്പിച്ചതുമുതൽ 31.12.2017 വരെ ഈ ഇനത്തിൽ കെ.എസ്.ആർ.ടി.സി യ്ക്ക് ഗവൺമെന്റിനും ചെലവായ തുക ഓരോ</p>	<p>(സി) 22-09-2016 -ലെ സർക്കാർ ഉത്തരവ് നം. 445/2016/Trans. പ്രകാരം ശ്രീ.സുശീൽ ഖന്നയ്ക്ക് ഒരു രൂപയാണ് ഹോണറേറിയമായി നിശ്ചയിച്ചിട്ടുള്ളത്. ആയതുകൂടാതെ, പഠനത്തിനായി ചെലവായ തുക ചുവടെ</p>

	<p>വകയിലും (ഇന്ധനച്ചെലവ് ഉൾപ്പെടെ) എത്ര വീതം; അതിന്റെ വിശദമായ കണക്ക് പട്ടിക തിരിച്ച് ലഭ്യമാക്കുമോ;</p>		<p>ചേർക്കുന്നു.  <b>ശ്രീ.സുശീൽ ഖന്ന</b>                  Boarding, Lodging and Misc -1,57,405.00                  Seminar, food and rent - 60,134.00                  Taxi charges - 5,725.00                  Flight charges - 1,03,694.00                  ശ്രീ. തോമസ് മാത്യു (സുശീൽ ഖന്നയുടെ സഹായി)                  ഹോണറേറിയം - 2,10,300.00                  ആകെ ചെലവായ തുക - 5,37,258/- രൂപ</p>
(ഡി)	<p>അദ്ദേഹം റിപ്പോർട്ട് സമർപ്പിച്ചിട്ടില്ലെങ്കിൽ അതിനുള്ള കാരണം എന്താണ്; റിപ്പോർട്ട് പൂർത്തിയാക്കി ഗവൺമെന്റിന് സമർപ്പിക്കുന്നതിന് സർക്കാർ സമയപരിധി വച്ചിരുന്നോ; എങ്കിൽ അതിന്റെ വിശദവിവരം ലഭ്യമാക്കുമോ?</p>	(ഡി)	<p>ഇടക്കാല റിപ്പോർട്ട് ലഭ്യമാക്കിയിട്ടുണ്ട്. പഠന റിപ്പോർട്ട് സമർപ്പിക്കുന്നതിന് മൂന്നു മാസത്തെ കാലാവധിയാണ് അനുവദിച്ചിരുന്നത്. ശ്രീ. സുശീൽ ഖന്ന കൂടുതൽ സമയം ആവശ്യപ്പെട്ടിട്ടുണ്ട്. ഇക്കാര്യം സർക്കാരിന്റെ പരിഗണനയിലാണ്.</p>



സെക്ഷൻ ഓഫീസർ

അനുബന്ധം

Kerala State Road Transport  
Corporation Ltd:  
Crisis and Turnaround Strategy

Sushil Khanna

(with able assistance of Mr. Thomas Mathew)

*(Draft Report: Not for Circulation  
Only For Limited Consultation with Stakeholders)*

## PREFACE

The Kerala State Road Transport Corporation (KSRTC) has been in a grave financial crisis, making recurring losses and being unable to meet its necessary expenses for a while now. The Government of Kerala, by an order dated 24/09/2016, had appointed us as Consultant to study how KSRTC could be restructured by addressing the issues pertaining to its management of operations, finances, human resources and inventory management, amongst other.

After discussing with the other stakeholders, the honourable Minister of Transport, and senior managers of KSRTC, we set the following objectives for our study:

1. Analyse the financial and organizational crisis facing KSRTC
2. Study the operations of the KSRTC, its financial and human resource policies
3. Suggest changes in the policies of KSRTC to transform it into a viable and profitable organization, meeting its social obligations and providing the state of Kerala with an effective and pervasive public transport system.

4. Suggest financial restructuring of past liabilities and partially funding the past losses.
5. Suggest organizational development policies to strengthen the managerial human resources of the Corporation, so that KSRTC can face the turnaround challenge.

The methodology followed to analyse the crisis and find solutions was through wide consultation with managers and trade union representatives, in two full day workshops at Centre for Development Studies. In addition, we relied on secondary information gathered from KSRTC, including financial and operational data.

In addition, despite weak Management Information System, we have tried to gather detailed operational data, supplemented with field visits to depots and workshops. As far as possible, we have tried to benchmark KSRTC's performance parameters with other STUs in other neighbouring states. Apart from providing an overview of the financial crisis and the reasons that has caused it, the study has also attempted at suggesting positive changes in the operational, financial and Human Resource (HR) policies; the restructuring of KSRTC to meet its operational and organizational challenges; and, its financial restructuring

along with possible ways to fund its past losses. The underlying idea has been to suggest holistic changes in the work culture, operations and management of KSRTC so that it turns into a viable and profitable organization

In finding possible solutions, we were assisted by Shri Hanumantha Rao, former senior manager of APSRTC and a well known road transport expert.

***Kindly note that this is a draft of the report submitted with the intent of inviting suggestions, if any, that can be incorporated into the final report; and that this is not intended for public circulation.***

10/03/2017

Thiruvananthapuram

Sushil Khanna

(Signature)

Prof.

## CHAPTER - 1

# AN ANALYSIS OF THE FINANCIAL CRISIS FACING KSRTC

The Kerala State Road Transport Corporation (KSRTC) has been in grave financial crisis in the last few years. With very high debt and pension liabilities coupled with stagnant revenues and weak margins, KSRTC has found it difficult to make essential payments towards salaries and fuel expenses. KSRTC has been facing severe cash crunch due to unviable functioning and unplanned borrowing to meet the rising deficits. Lack of government support to meet the erosion of the net worth has forced the Corporation to resort to increasing borrowings at market rates meant for subprime borrowers. This chapter aims at providing a summary of the financial crisis facing KSRTC.

	<b>LOSS FOR THE YEAR</b>	<b>ACCUMULATED LOSSES</b>
<b>2003- 04</b>	120.50	1,272.19
<b>2004- 05</b>	151.04	1,422.26
<b>2005- 06</b>	191.90	1,618.10
<b>2006- 07</b>	155.64	1,777.50
<b>2007- 08</b>	136.39	1,368.89
<b>2008- 09</b>	117.12	1,483.31
<b>2009- 10</b>	232.90	1,721.26
<b>2010-</b>	379.32	2,102.88

<b>11</b>		
<b>2011-12</b>	416.64	2,517.67
<b>2012-13</b>	505.46	3,025.90
<b>2013-14</b>	808.82	3,609.79
<b>2014-15</b>	621.28	4,231.07
<b>2015-16</b>	613.14	4,844.21

Source: KSRTC

The losses incurred by the Corporation have been increasing over the years, accumulating over Rs. 4800 crores at present – which is double the accumulated losses five years ago.

However, an analysis of its cost structure shows that its current revenue is adequate to cover its direct operational expenses, even providing for a small surplus to meet its pension liabilities and interest cost.

Fig 1.1 : Profit / Loss of KSRTC – Different Measures

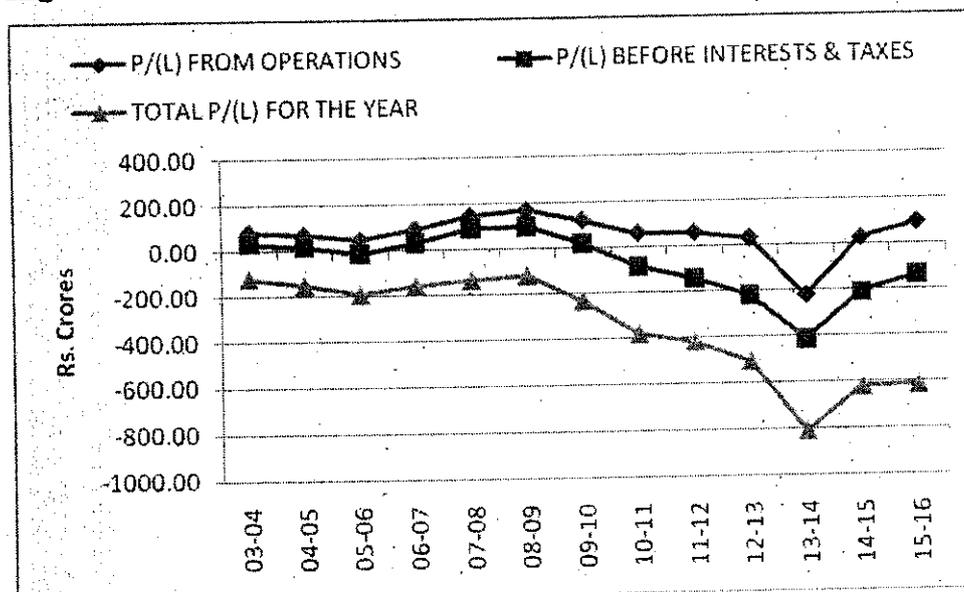


Figure 1

(1) As the chart above shows, KSRTC is just about able to meet its direct operational expenses including fuel, spares and

maintenance and direct wages in most years (except in 2013-14 when just before the elections, fares were reduced)

(2). KSRTC had a large pension liability and has been unable to meet it from its small surplus in most years. The situation was aggravated since 2009-10, when losses due to increasing pension liability ballooned and were not funded by the government. As these deficits became larger every year, the borrowings from banks on onerous conditions also increased. This increased the losses every year as external borrowings and interest costs ballooned. Currently, all KSRTC's resources are pulled to meet the salaries and other essential expenses like fuel. Based on the final accounts (provisional) for 2015-16, we figured out that KSRTC's annual operational surplus is just around Rs. 30 crores which is insufficient for a month's payment of half the salaries. A representative picture of the trap that KSRTC has found itself in can be given using the figures from the aforementioned financial year. (These figures are approximated and rounded off.)

a) Total revenue = Rs. 1,800 crores

b) Fuel expenses (on cash & carry basis) = Rs. 950 crores

c) Revenues apportioned to the escrow accounts of lenders = Rs. 500 crores

d) Expenses on spares for repairs = Rs. 150 crores

e) Other miscellaneous expenses = Rs. 170 crores

f) Balance with the Management  $[a-(b+c+d+e)]$  = Rs. 30 crores

A look at the growth in revenues, expenses and their constituents over this period gives a picture of the financial weaknesses of KSRTC.

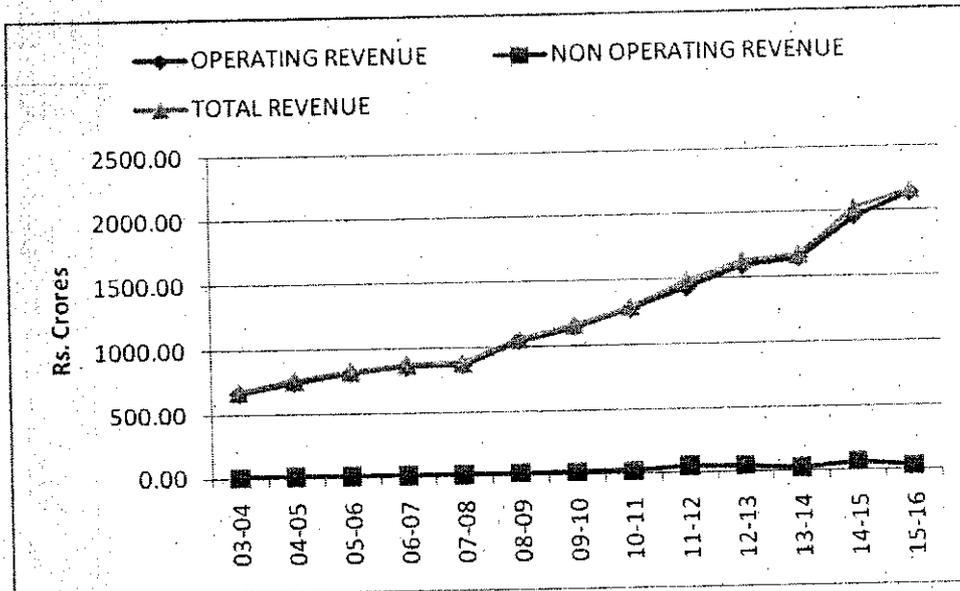


Figure 2

(3) The bulk of the total revenues of the Corporation are from operations. Non-operating revenue is negligible throughout, despite creation of assets that can fetch rental incomes. Profits from operations alone are also negligible, and, at times, negative - an indicator of inefficient manpower and fuel utilization (which shall be discussed in Chapter-2).

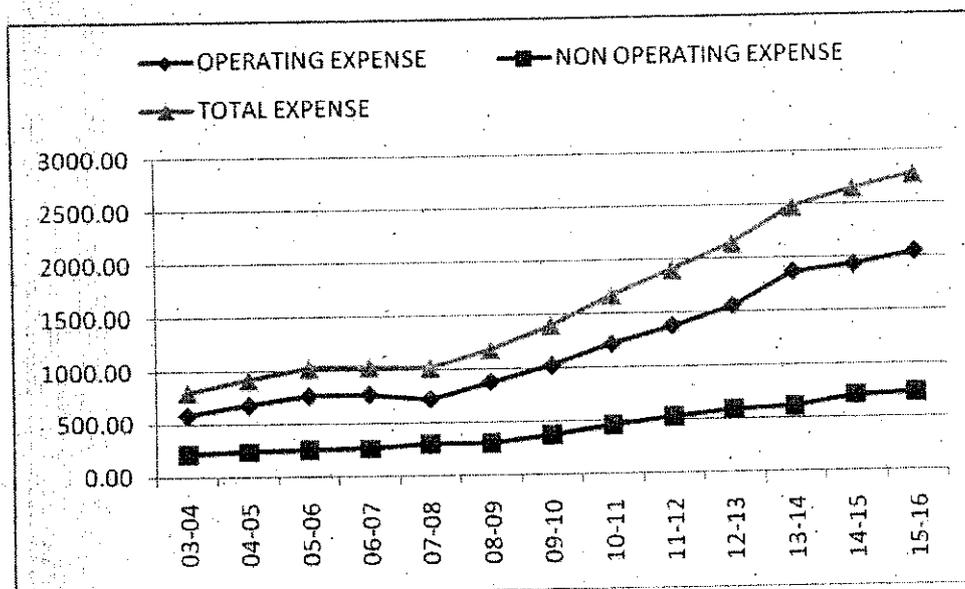


Figure 3

(4) Both operating & non-operating expenses are growing steadily since 2008-09. The growing share of non-operating expenses

(26.43% in 2015-16) in the total expenses of the Corporation is worrisome.

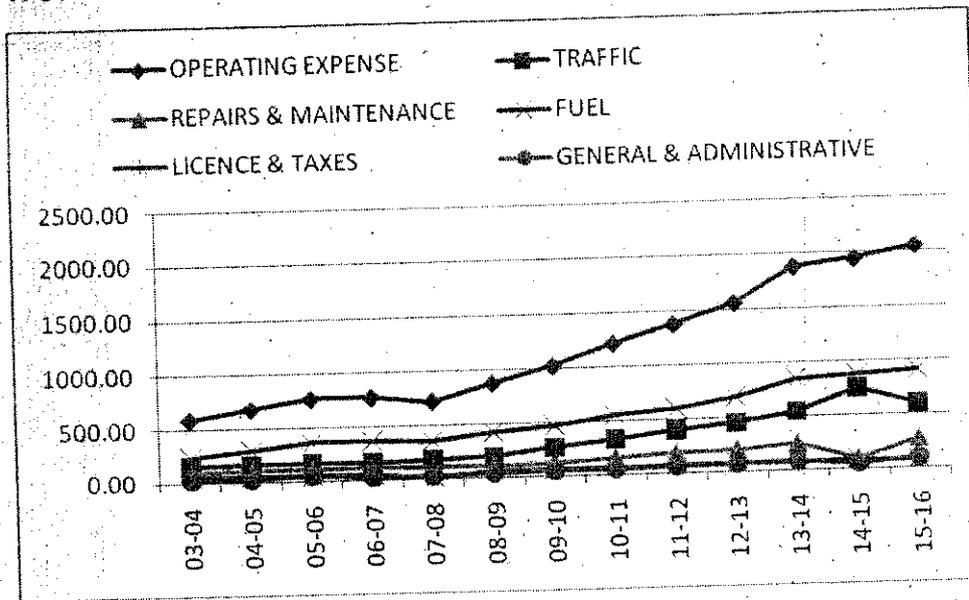


Figure 4

(5) Figure 3 gives a sketch of the growth in various expenses incurred towards operations in KSRTC. (While the total operational expense for each year includes depreciation as well, the figure does not show the growth in the amount earmarked on account of depreciation.) As is decipherable, half of the operational expenses are paid towards the consumption of fuel, making fuel efficiency a critical area of the study.

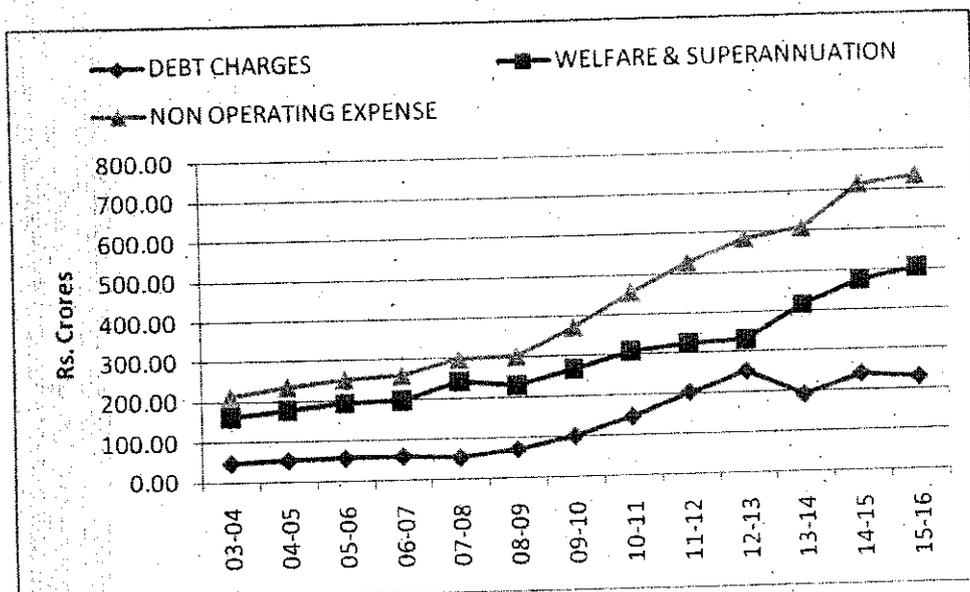


Figure 5

(6) The non-operating expenses include debt charges & pension payments - factors that have led the Corporation to huge financial turmoil. In 2012-13, KSRTC's EPKM (earnings per kilometre) was Rs. 30.75 of which Rs. 3.96 went towards interest payments. It incurred costs of Rs. 39.71 per KM, and 9.97% of total costs were paid towards interests. KSRTC's obligation to its pensioners is approximately Rs. 500 crores per annum and, is equal to roughly 70% of its current wage bill.

(7) The increased borrowings has led KSRTC in a severe debt trap. The figure below shows the build up of the total outstanding debt in recent years along with the increasing debt servicing costs.

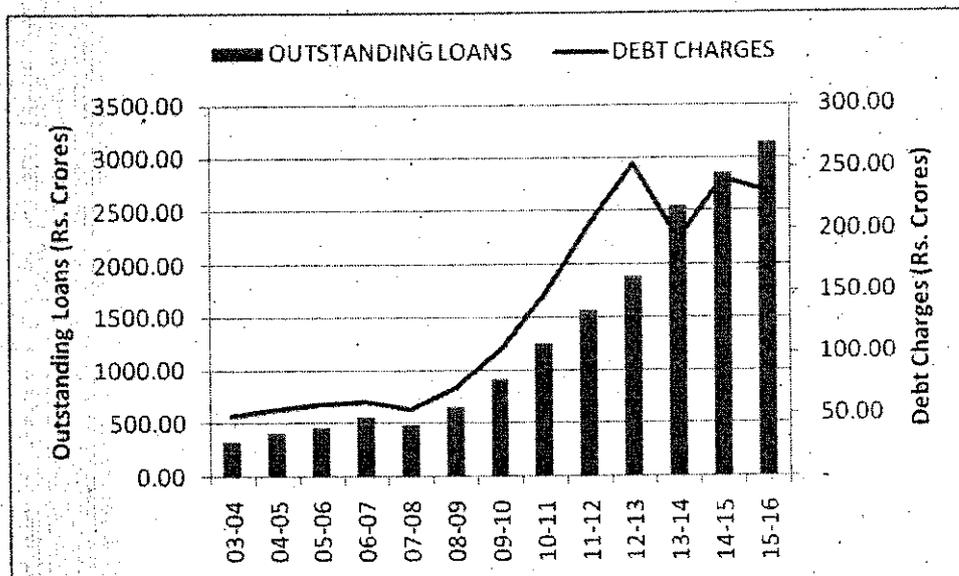


Figure 6

The total debt-servicing (interest charges plus repayment towards borrowings) burden in 2013-14 is Rs. 469 crores, and accounts to 28% of the total revenues generated in the financial year. This excludes an amount of Rs. 346 crores - payable as dues to the Government of Kerala and interest to loans & debentures - that is recorded as accrued charges in the balance

sheet; including this amount would mean that 49% of the total revenues would go into servicing the debt burden.

	<b>Princip al</b>	<b>Intere st</b>	<b>Total</b>
Government of Kerala*	480.82	67.29	548.11
KTDFC	435.63	-	435.63
HUDCO	400.87	-	400.87
LIC	65	33.26	98.26
KSTW Co-operative Society	7.34	-	7.34
Palakkad District Co-operative Bank	193.42	-	193.42
Ernakulam District Co-operative Bank	114.38	-	114.38
KSPIFC	47.35	-	47.35
Consortium of banks	1,298.9 9	-	1,298.9 9
<b>TOTAL</b>	<b>3,043. 80</b>	<b>100.5 5</b>	<b>3,144.3 5</b>

\*Excludes Rs. 1,090.75 crores converted as Equity Share Capital

Source: KSRTC

It is also to be noted that outstanding loan liability has increased by Rs. 430 crores in two years, and stands at Rs. 3144.35 crores on 31 March, 2016.

- (8) The borrowings from the banks and financial institutions to meet the current expenses of the Corporation have led KSRTC into the severe debt trap that it is in today. As KSRTC has unviable operations and is not creditworthy, the only way it can borrow from banks is either with government guarantees or by pledging its advance revenues to the lender through an escrow account. Since no long-term plan to turnaround the operations of KSRTC has been formulated or implemented, increasing borrowings with onerous conditions has further reduced the maneuverability of the Corporation.

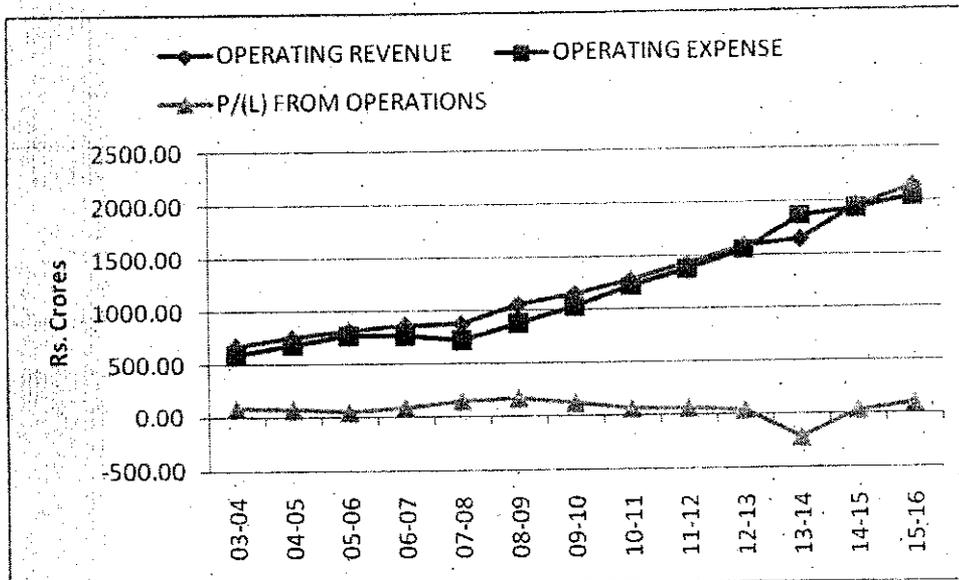


Figure 7

- (9) For a Corporation with high levels of non-operating expenses, just breaking even in operations is not sufficient for the overall health of the organisation. Consider the 28% of the total staff in 2012-13 that is empanelled: regularisation of these temporary employees in the future will lead to an increase in the payments towards salaries and pensions, thus aggravating the financial crisis in KSRTC.

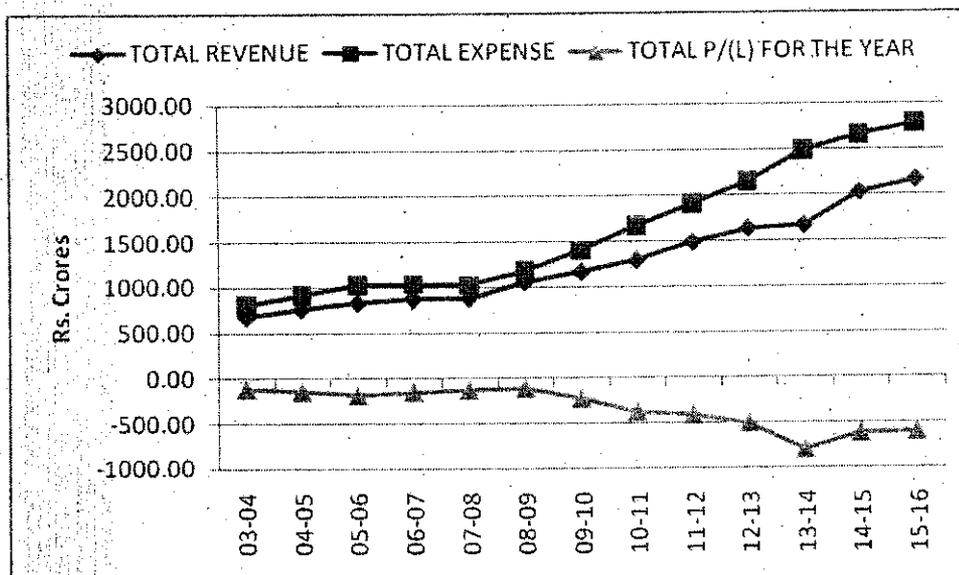


Figure 8

- (10) The gap between the total of revenues and expenses is widening at an increasing rate since 2009-10. The Net Loss for

2015-16 is Rs. 613.13 crores, and that puts an onus on KSRTC to increase its revenues by 28.32% to break-even. This has put KSRTC at a constant risk of defaulting on salary and pension payments.

Our strategic audit of KSRTC's operations and organizational factors that influence the operations – that is to be discussed in the following chapters – is made by keeping in mind the basic economic principle that, for an organization to thrive in the long run, revenues must be optimized and expenses brought down. That has been the rationale behind doing the exercise of overlooking the losses and the understanding the impact of revenues and expenses on these recurring losses, in this chapter.

### Notes

- Operating expenses include traffic expenses, repairs & maintenance expenses, fuel expenses, license & taxes on vehicles, general administrative expenses and depreciation.
- Traffic expenses, repairs & maintenance expenses and general & administrative expenses include salaries & allowances and other expenses under the respective departments. General & administrative expenses also include rent, rate & taxes; staff car & van expenses; insurance; maintenance & repairs to buildings; and heating, lighting & water expenses.
- Non-operating expenses include debt charges and welfare & superannuation charges towards pensions.

- Profit/ (loss) from operations = (Operating revenue - Operating expense). Similarly, Profit/ (loss) for the year = (Total revenue - Total expense); this does not include prior period adjustments. Profit/ (loss) before interest & taxes = [Profit/ (loss) from operations - Debt Charges].
- Accumulated surplus/ (deficiency) is the balance amount carried forward from Net profit/ (loss) accounts.

***(All Figures in this chapter are made from the Profit & Loss accounts of KSRTC from 2003-04 to 2015-16; the estimates for 2013-14 to 2015-16 are provisional.)***

## **2. STRATEGIC AUDIT OF KSRTC:**

### **UNDERSTANDING THE CRISIS**

Any organization that is unable to meet its direct expenses and statutory obligations as well as liabilities to lenders must be faced with deep-rooted operational and organizational issues. Why is KSRTC unviable when private bus operators in Kerala seem to make substantial profits on their operations, while charging the same fares? Is it because of the financial burden imposed on KSRTC due to its social service obligations, like a large monthly pension liability, free passes to school students and providing access to remote areas? Or, is it unviable due to operational inefficiency or organizational challenges? Does the Corporation have a clear and viable strategy to meet its obligations?

To answer these questions, we carried out extensive discussions with managers, employees, other stakeholders. In addition, we reviewed the working of the Corporation. The latter was made difficult due to the lack of a proper Management Information System (MIS) in KSRTC, the annual accounts that have not been audited for several years, an almost complete absence of computerization and unclear lines of authority and responsibility.

We present here the key findings of the Strategic Audit that we carried out in KSRTC and regarding its operations. The thrust of the analysis is on those operational and managerial areas that

are vital as far as the turnaround strategies are concerned. The following tables provide a comparative overview of the physical performance of KSRTC vis-à-vis other STUs in South India. This chapter tries to understand the crisis in KSRTC by providing reasons for its poor performance in fleet utilization, fuel efficiency, staff productivity and vehicle productivity as evident from these tables; and overview the workshop performance and organizational bottlenecks that have either caused the deepening of the crisis or its non-redressal.

Name of the SRTU	Average Fleet Held	Fleet Utilization (%)	Over aged vehicles (%)	Occupancy Ratio (%)	Passengers carried per Bus/Day
Andhra Pradesh SRTC	22477	99.67	NA	68.87	629.87
Karnataka SRTC	7831	91.74	4.86	75.33	328.55
Kerala SRTC	5847	81.61	23.62	NA	569.59
TN STC (Kumbakonam) Ltd.	3678	94.83	34.38	68.88	790.82

Source: Open Government Data Platform India. "Physical Performance of SRTUs for the year 2012-13", <<https://data.gov.in/catalog/physical-performance-srtus>>.

Accessed 04 November 2016.

Name of the SRTU	Staff/Bus Ratio	Staff Productivity (Kms/Staff/Day)	Vehicle Productivity (Kms/Bus/Day)	Fuel Efficiency (KM/litre of HSD)
Andhra Pradesh SRTC	5.44	66.73	363.03	NA
Karnataka SRTC	4.63	71.16	329.41	4.8

Kerala SRTC	6.79	38.32	260.28	4.25
TN STC (Kumbakonam) Ltd.	6.01	76.06	457.16	5.58

Source: Open Government Data Platform India. "Physical Performance of SRTUs for the year 2012-13", <<https://data.gov.in/catalog/physical-performance-srtus>>.

Accessed 04 November 2016.

## Fleet Utilization

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total Buses	4,724	4,666	4,640	4,999	5,380	5,640	5,810	6,154	6,150	6,011	6,148
Buses Operated	3,858	3,761	3,780	4,210	4,611	4,818	4,919	5,141	5,168	4,977	5,008
Buses Off-Road Spare	766	807	704	623	616	685	730	738	698	837	914
Fleet Utilisation (%)	81.67	80.60	81.47	84.22	85.71	85.43	84.66	83.54	84.03	82.80	81.46

Source: KSRTC

The average fleet utilization in KSRTC is way below that of other STUs in the neighbouring states. The major reasons for poor fleet utilization are: -

- Long time taken for overhauls: Buses are off-road for long periods for repairs in workshops. Delays are caused by lax work norms, archaic technology (for example, hand-

painting of buses), poor inventory management, lack of spare parts and absence of modules that need replacement. The loose work norms and the resultant work culture in all workshops have made possibilities of fleet optimization bleak.

- b) Manpower-Deployment mismatch: A major reason for cancellation of schedules due to reasons apart from buses being off-road owing to workshop repairs and buses undergoing refurbishing for the Certificate of Fitness appraisal is mismatch between the demand and deployment of staff in units. For example, a schedule may be cancelled when the driver goes on leave whereas another one operating from the same depot may be cancelled for want of conductor. This is even though the staff-bus ratio in 2015-16 is as high as 7.09. To make matters worse, there is excess of staff in some depots while there is shortage in the neighbouring depots, giving room for perennial cancellations in schedules despite buses being roadworthy.
- c) Excessive absenteeism: In addition, KSRTC suffers from excessive absenteeism. Unannounced absence of crew means that the Depot Manager cannot muster adequate crew at short notice to run the available bus. Schedule cancellations on account of unavailability of crew vary between 220 and 250 schedules per day.
- d) Paper schedules: The average percentage of schedules cancelled in KSRTC in 2015-16 is 23.07, and this has been

rising over the years. The secular rise in schedule cancellations is due to the continual upkeep of what has been termed 'paper schedules' or schedules that exist only in the books. These are schedules that have not been operated for years but have not been scrapped from the books due in large part to the reasoning that a schedule existing in the book would accommodate idle manpower. It is learnt that KSRTC had categorized such schedules and that those that had been non-functional for above one year – there was also a category of schedules that had been scandalously non-functional for over five years – have been scrapped in October 2016. Notwithstanding this positive step taken by the Management, this needs to be mentioned not only because we are doing a historical audit of the operational inefficiencies and losses, but also so that such a practice should never get back into the Organization. Nevertheless, there are still a lot of schedules that operate for less than 100 days in a year – many of them operating just a day or two in a whole year – just so that they evade categorization under 'paper schedules'.

**TABLE-4: Schedule Cancellation in KSRTC**

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Schedules Sanctioned	4,423	4,514	4,599	4,697	4,812	5,102	5,315	5,501	5,604	5,659	5,743
Schedules Operated	4,058	4,132	4,203	4,277	4,323	4,473	4,592	4,613	4,568	4,493	4,418

Schedules									1	1,16	1,32
Cancelled	365	382	396	420	489	629	723	888	,036	6	5
Schedule											
Cancellation					10.1	12.3	13.6	16.1		20.6	23.0
(%)	8.25	8.46	8.61	8.94	6	3	0	4	18.49	0	7

Source: KSRTC

### **Fuel Efficiency**

KSRTC's fuel efficiency is the lowest among the southern STUs that operate both rural and urban areas. It covers only 4.25 kilometres per litre of HSD while in other STUs, consumption of one litre of HSD guarantees above 5 kilometres of operation. It has been noted that there is no monitoring of the drivers' fuel usage, let alone corrective mechanisms.

### **Staff Productivity**

In 2012-13, when the staff-bus ratio was 6.79, the productivity of a staff was a meagre 38.32 km/day, compared to 66.7 km/day for APSRTC, 71 km/day for KnSRTC and 76 km/day for TNSRTC (Kumbakonam). As manpower estimates are determined on the sanctioned schedules and not on the fleet size, an average schedule cancellation of 23.07% means that as much operational staff is under-utilized (assuming nearly all vacancies are filled). It is to be noted that there has been a rise in schedule cancellations - and, thereby, in staff under-utilization - by 15 percentage points in the last decade (See

Table-4). The following are the major causes of declining staff productivity:-

- a) Duty patterns: Unlike any other STU, KSRTC offers multiple duties in a single day. Such a duty pattern implies that some crew members drive buses for more than 8 hours a day in contravention of the Section 13 of the Motor Transport Workers Act. In other words, while double duty pattern may, in some cases, have less than 8 hours of steering duty, triple duty and above are all clearly in contravention of the Act. As of 2016, nearly 91% of the schedules offer double duties to the staff while another 8% assign 3 to 6 duties for each operated schedule; less than 1% of all schedules in KSRTC follow single-duty patterns. Apart from causing huge financial burden for the Corporation due to the additional staff needed to accommodate such duty patterns, it has also led to irrational scheduling and unprofitable trips. Multiple duties means that most operating staff are required to present themselves only 3 days a week or less, leading to shortage of staff on other days. Thus despite high manpower, KSRTC is unable to operate its entire fleet that is roadworthy or utilize its staff efficiently due to the duty patterns.

<b>Duties per Schedule</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
		500				
<b>For Drivers</b>	52	0	358	64	23	1
<b>For Conductors</b>	52	4,99	354	66	23	4

		7				
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Source: KSRTC

- b) Loose work norms: Apart from drivers, conductors and mechanics, the work norms of other staff including Inspectors, Station Masters and Vehicle Supervisors are loose and still not adhered to. Even Administrative Officers and ministerial staff have very loose norms. As discussed earlier, the manhours required for bus body overhauls and overhaul of units are higher than industry norms in KSRTC. For example, new bus body construction takes 2,600 to 2,800 manhours in KSRTC as against industry norms of 1,507 to 1,658 manhours.
- c) Long leaves, Unauthorised absence & Empanelled staff: 26% of the total staff in KSRTC as on 31 March 2016 is empanelled (nearly half of whom are conductors, followed by drivers and mechanics), signalling at the high incidence of long leaves in the Corporation, as well as loose manning norms agreed to with unions. As of 01 November 2016, 7.6% of operational staff and 5% of mechanical staff are on long leave or leave without allowance (L.W.A). This also leads to schedule cancellations due to unavailability of operational staff and longer overhaul periods at the workshops, respectively.

<b>TABLE-6: SUMMARY OF PERMANENT STAFF IN KSRTC AS ON 01/11/2016</b>						
<b>STAFF TYPE</b>	<b>IN THE ROLL</b>	<b>LONG ABSENT</b>	<b>LEAVE WITHOUT ALLOWANCE</b>	<b>SUSPENSION</b>	<b>DEPUTATION</b>	<b>NET AVAILABLE</b>
Ministerial	2,297	75	58	7	14	2,143
Mechanical	5,566	114	164	1	11	5,276
Operating	27,045	1,591	466	28	73	24,887
ALL	34,908	1,780	688	36	98	32,306

Source: KSRTC

### **Vehicle Productivity**

In 2012-13, an operated bus in KSRTC ran an average of 260 kms in a day (computed on total buses held) which is below the industry average. The bus productivity in APSRTC is 363 km/day, while in TNSRTC (Kumbakonam), it is as high as 457 km/day. Even for the buses operated in KSRTC, the bus productivity is only 328 km/day. The reasons for unfavourable indicators of vehicle productivity are:-

- a) Irrational running times: The running times of schedules are thus designed so as to make room for double duty patterns in operations, resulting in longer running times for lesser distances.
- b) Trip curtailments: It is noted that certain trips within a schedule are cancelled without prior notice - a fact not captured in schedule cancellations but has a bearing on vehicle productivity. Apart from breakdowns and

accidents, traffic congestions or no valid reasons are often cited.

### **Route Rationalisation**

Another major cause of loss in revenue concerns with rationalising the routes on which operations are carried out at the depot level. This is mainly due to:-

- a) Sub-optimal route selection, and
- b) Operating on low revenue routes (C&D) while foregoing operations on more profitable routes (A&B).

This results in low revenue per bus per day. Though many schedules earn higher than Rs. 15,000 daily, about 3,300 or 64 per cent of the schedules earn less than Rs. 10,000 a day.

### **Workshop Audit**

KSRTC has five workshops employing nearly 2,000 workers. In addition, most depots have workshops for immediate repairs. The role of these workshops is to ensure that the maximum number of fleet is made available for operations in roadworthy conditions, undertake routine overhaul needed for creditworthy certification and also build bus bodies on new chassis for the Corporation. Like in operations, restrictive work practices along with ineffective management and controls have resulted in the poor utilization of workshops, their equipments and manpower. Over the years, the norms for workshop activities have evolved

through bargaining between the Trade Unions and the Management; and are far below the norms in other STUs or in the private sector workshops. Thus, the new bus-body building norm varies from 325–350 mandays compared to 200 in APSRTC and 140 in private workshops. The time required, as per norms, for tyre retreading vary between 6 for permanent employees to 12 for empanelled employees which is both unethical and signalling at inefficiency. Though the Central Institute of Road Transport (CIRT, Pune) provides for accreditation of body building workshops across the country, only one KSRTC workshop is accredited. What is more, the workshops use outdated equipments which should be in museums and have archaic practices like painting buses with brushes. The money provided in the State Budget and from the State Planning Board for workshop modernization has been continuously diverted for other needs. The workshops also maintain regular buses, refurbish them and keep them roadworthy. Because of lax work norms, poor inventory management and lack of planning, the turnaround time of any bus varies from 2 to 3 weeks if involved in accident. The inefficiency of the workshops is obvious from the fact that approximately 15% of the buses are off-road, and are major cause of the crisis at KSRTC.

### **Management Information System**

Many of the problems faced by KSRTC are not identified, let alone addressed, due to a lack of proper Management

Information System (MIS). An effective MIS presupposes proper upkeep of accounts and their computerisation, as well operational data, essential for monitoring and enhancement of productivity.. The absence of MIS in an organisation of the scale of KSRTC is due to:-

- a) Lack of accounts & accounting system:** KSRTC's accounts are poorly maintained due to a lack of accountants at the Corporation, non-adherence to proper accounting practices and non-compliance to accounting standards; this has made informed decision-making difficult.
- b) Lack of computerisation:** Lack of computerisation from the lowest to the highest unit in KSRTC has not only led to higher staff ratios, but also to long delay in finalising the accounts. Absence of computerisation also means that leakage will take a long time to be detected – often years later when accounts are finalised and audited. Though KSRTC has introduced partial mechanisation (like introduction of GPS systems in buses), these are not integrated with other operational parameters.
- c) Lack of managerial & administrative talent:** Many of the required critical management positions have been either not created or left vacant; and where the positions are filled via restrictive agreements with employees, the lack of necessary qualifications and ambiguity regarding the roles to be carried out have led to poor judgement or indecisiveness on the part of the management.

## **Summary**

The crisis in KSRTC is largely a result of poor operational efficiency. This low efficiency and productivity is a result of restrictive agreements with workers and employees thanks to which bulk of them work only for 3 days in a week. There is also no monitoring of manpower requirements, absenteeism, schedule cancellations, fuel consumption etc. Depots and workshops alike portray a dismal picture of how not a work environment ought to be. Operations are inefficient, and practices unhealthy. The weak operational controls, the lack of budgetary targets as well as monitoring and the total absence of MIS have made it difficult for the Management to identify the problems and take remedial measures.

### **3. THE STRATEGY WORKSHOP**

#### **Our Methodology: Participatory Strategic Analysis**

The consulting team organised separate one-day workshops with Trade Union representatives and senior managers of KSRTC on 6 & 7 December, 2016 at the Centre for Development Studies, Thiruvananthapuram. Based on our understanding that any turnaround strategy prerequisites the mandate and support of all major stakeholders, the consulting team carried out wide discussions with both the major stakeholders. The turnaround strategies and action plan that we present in the succeeding chapters have been based on our analysis as outlined in Chapter-2 and our understanding that there were major organizational roadblocks and weaknesses that had made it difficult to overcome the challenge. In order to garner organizational support, the workshops discussed all issues pertaining to the operations of the Corporation. However, financial restructuring and organizational strengthening were not discussed.

The objectives of the workshop were to:

- i) Summarise the contours of the grave financial crisis facing KSRTC;
- ii) Compare KSRTC's performance parameters with those of other southern STUs;
- iii) Highlight possibilities of better deployment of KSRTC's assets, including buses and workshops;
- iv) Provide a forum to all key stakeholders to provide feedback and point out any major omissions by the consulting team;
- v) Invite participants to provide possible strategies and policy changes that will make possible the permanent change and long term turnaround of the organisation; and,

- vi) Provide suggestions on how to make KSRTC a viable and sustainable organisation, able to meet all its current and future liabilities.

Presentations on the crisis by the resource persons - Prof. Sushil Khanna & Mr. Ch. Hanumantha Rao - were followed by suggestions from the floor. Further causes of concern that may also have contributed to the organizational crisis were provided by participants. These issues highlighted by the participants were collected, discussed, and those found acceptable, were collated into a list.

In the second half, the resource persons presented possible organisational and assets, that could be deployed to improve the working of KSRTC. The participants then again met in small groups to discuss possible actions and policy changes that could make KSRTC a viable organisation.

These suggestions for turnaround and early rescue of the Corporation were then discussed in an open forum (separately with Trade Union representatives and managers) and deliberated upon. We present the summary of the discussions along with the recommendations put forth by the trade union leaders and senior managers of KSRTC.

### **RESOURCE PERSONS' PRESENTATION ON CRISIS IN KSRTC AND POSSIBLE WAY OUT**

The resource persons made two short presentations. These covered the following points:

- ▣ **On the grave financial crisis in KSRTC and the productivity of its assets:** This began with an overview of the business environment of KSRTC, where public opinion is increasingly hostile to public sector organisations, resulting in privatisation of such organisations, direct transfer of subsidies (rather than

through PSEs) and greater public scrutiny of PSE performance. Even though the present Left-front government may not favour privatisation, it is unlikely to pay for the large and mounting deficits.

▣▣ **Comparative Performance and Operational Efficiency Parameters:** Comparing the performance of KSRTC with neighbouring SRTCs (Andhra Pradesh, Karnataka, Tamil Nadu) demonstrated very large and significant productivity differences, like on fleet utilization, curtailment of trips resulting in lower mileage and revenue loss, higher than average fuel consumption, higher accident rates, poorer workshop productivity and turnaround time in workshops. While KSRTC enjoyed higher or comparable fares per kilometre compared to its peers, it showed lower productivity and higher fuel consumption.

▣▣ **Possibilities of Enhancing Productivity:** The third presentation identified assets and resources—mainly buses and workshops and manpower, whose better utilisation can enhance income and cash flow to the corporation. The participants were asked to identify policies, practices and procedures that stand in the way of higher utilisation of these assets, vital for turnaround.

The participants in the two workshops identified key actions and policies that can lead to better asset utilization and enhanced productivity. These were collated and discussed in detail. Changes required in policies and practices were discussed. While agreeing to the action plan, workers' representatives felt that the main responsibility for turnaround and better asset utilisation rested with managers. On the other hand, managers felt that the trade unions erected barriers to changes that could result in better productivity.

### **SUGGESTIONS FROM THE TRADE UNIONS**

### ***What the Government can do?***

- Government should reimburse subsidy on concessions
- Pension burden to be taken over by the Government
- Diesel Tax to be reduced
- Checking of parallel & illegal services
- Strict enforcement of policies governing nationalized routes

### ***What can be done to improve Manpower Utilization?***

- Need for changes in duty patterns was appreciated
- Appointment of Driver-cum-conductor & Conductor-cum-driver only
- Possibility of recruiting driver/conductor/mechanic from ITI courses
- Better training of workshop mechanics in repairing modern buses with pneumatic doors, CNG etc.
- Need for change in work norms in workshops & depots was appreciated
- Better HR policies with appropriate rewards & punishments
  - Instituting rewards for efficiency
  - On-the-spot penalties for minor infractions, saving long disciplinary procedures & enquiries
- Better deployment & posting of women conductors

### ***What can be done at Operations level?***

- Rationalization of schedules
- Better route selection/ deployment

- Irrational running time to be addressed
- Manpower & bus deployment mismatch resulting in avoidable cancellations to be addressed
- Fleet strength to be increased
- Fleet Utilization to be increased to 95% by reducing off-road buses
- Better fleet management - avoiding convoy of similar buses, route collection analysis, demand forecasting etc.
- Fast Passenger buses to move ahead of Ordinary buses carrying free pass students
- Long-distance services to be centralized & monitored from Control Room
- Better fuel efficiency to be achieved

***What requires urgent modernization?***

- Modernization of workshops to improve turnaround
- Better management of workshops to quick disposal of scrap & availability of spares etc.
- Better working conditions to workers - i.e. canteens, washrooms etc.

***What needs to be done at Management level?***

- Better communication between Management & TUs
- Better Management Information System and Controls
- Computerization/ EDP to be speeded up
- Accounts & Audit to be strengthened
- Zonal Offices without power or responsibility - better delegation of authority needed

- More business autonomy & fleet deployment powers to Unit Officers

### ***Other Suggestions***

- BOT agreement to be enforced on shopping complexes
- Corruption to be controlled
- Better customer service with Quality, Reliability and Safety

### **SUGGESTIONS BY THE MANAGERS**

- ▶ Maximize buses on the road to 95%
- ▶ Redeployment of staff from depots of excess manpower to depots where buses idle for lack of staff
- ▶ Faster turnaround of off-road buses by night-time repairs & maintenance
- ▶ Avoid overcrowding of buses at small depots
- ▶ Proper checking of buses daily to avoid trip curtailment
- ▶ Single Duty for all employees including mechanics
- ▶ No long leave
- ▶ Better service & revenue analysis
- ▶ Depots to be made profit centres with accountability
- ▶ More clear standing orders
- ▶ Uneconomical services only at peak hours
- ▶ Proper chronology for schedules to be made

- ▶ Time-tables to be displayed on buses
- ▶ Introduction of non-stop & unlimited stop buses
- ▶ Online reservation for all services above FP
- ▶ Travel Cards to be introduced
- ▶ Training for Front Office Staff
- ▶ Workshops to be modernised in sequence
- ▶ Scarp to be removed at the earliest
- ▶ Work Norms at workshops to be revised
- ▶ Committee to set new norms to achieve 1600 manhours for new bus body
- ▶ Float engines & ready spares to minimize bus downtime
- ▶ Target to reduce bus turnaround time after repair to a few hours or a day

## **4. OPERATIONAL TURNAROUND**

### **STRATEGY**

KSRTC has enjoyed higher per-kilometre fare structure and more lax manning compared to its peers in the neighbouring states. Its employees enjoy relatively better salary structure and retirement benefits compared to other STUs. With 43574 employees operating less than 6000 buses, it has the highest bus-staff ratio amongst the southern STUs, and operates the smallest fleet with the lowest fleet utilization. The average running of a KSRTC bus (on buses operated) is only 328 km/day as compared to 400-450 km/day by neighbouring STUs. KSRTC's fuel consumption is also the highest amongst its peers, and there seems to be no monitoring of fuel consumption.

As is evident, KSRTC has been unable to use its resources in an optimal manner. All these point at a potential for harnessing the slack within the organization to improve its productivity and profitability in the short-to-medium term. What is more, all the trade unions and officers have offered to co-operate with the turnaround effort to change the fortunes of the Corporation. The long-term viability of KSRTC depends on efficient and productive deployment of its assets - buses and manpower.

It is to be noted that all the causes and effects of operational inefficiencies at KSRTC are inextricably linked to each other. For example, sub-optimal fleet utilization is primarily due to long overhauls at workshops and inelastic manpower deployment - both signaling at poor management and unhealthy work norms - that in turn affect staff productivity. Illegal double duty patterns also affect staff productivity; it also leads to schedule cancellations and idling of buses - leading to poorer fleet utilization. In the schedules that are operated, revenues are not optimal due to irrational running times and sub-optimal selection of routes that would help accommodate double duties in a single schedule. That the revenues are not optimal is, in turn, often cited as a reason for trip curtailments within schedules - causing fall in vehicle productivity and exacerbating staff underutilization - without addressing the primary issue, viz. double duty patterns.

Thus, we have seen that to surgically remove any one operational concern ailing KSRTC requires addressing all its concerns lest it go back to being irrevocably ill in no time. That any attempt at raising the performance in any one parameter alone is redundant and half-hearted: it is all or none. The critical operational areas that require strategic intervention are outlined below:-

### **Duty Patterns**

As it flouts the law, leads to high bus-staff ratios and expenses, and causes accidents, the current practices concerning the duty patterns must be replaced by one that is rational, legal and does not exploit either the employee or the corporation. This will require an immediate end to the prevailing duty patterns that have evolved over the years, requiring every worker to present himself for 8 hours of steering duty as provided for in the Motor Transport Workers Act. A duty should mean upto 8 hours of steering duty for drivers and conductors. For all the time spent at work but not on operating the schedules (for example, time taken during tea/ lunch breaks or time between trips), the worker must be entitled for an overtime allowance. For long-distance schedules, there should be crew change at stipulated intervals. Nevertheless, fresh vacancies arising should be filled by driver-cum-conductor posts.

As the Trade Unions and other employees have agreed, in principle, to accept single duty patterns prevalent in other STUs, we expect this to result in major operational improvement and efficiency. However, it will also require redrawing of almost all schedules and duty patterns. As far as possible, a set of crew should be attached to one bus so that other operational parameters like fuel consumption, faults due to poor driving, accidents etc. can also be monitored. The measures to be discussed below also hinge on this change in the duty patterns.

## Fleet Utilization

The first task is to raise fleet utilization from 80-84% to 95-96% within the next few months that alone can raise KSRTC's annual revenues by Rs. 433 crores as calculated and presented in the table below. (Note that the Earnings per Bus (EPB) is taken to be Rs. 11,030 – as it is the EPB for the date taken – as against the average EPB for 2015-16 which is a higher amount of Rs. 11,698.)

	<b>Buses</b>	<b>EPB per day (in Rs.)</b>	<b>Daily Revenue (in Rs. Crores)</b>	<b>Yearly Revenue (in Rs. Crores)</b>
<b>Total</b>	6598			
<b>Operated</b>	5191	11030	5.73	2089.87
<b>Operable @ 95%</b>	6268	11030	6.91	2523.47
<b>Additions</b>	1077	NIL	1.19	433.59

*Source:* Our calculations & assumptions, using KSRTC Data for 07 October 2016

To achieve higher fleet utilization, major amendments in workshop practices (to be discussed below in this chapter), inventory management and duty patterns will be required. Moreover, all paper schedules (schedules once run, but now only shown on paper and not currently operated) – listed and otherwise – must be scrapped, and absenteeism be checked. Unannounced leaves resulting in schedule cancellations owing to the Depot Manager's inability to assign duties at short notice must be severely dealt with. There should also be flexibility within a zone to make

transfers to address perennial fleet- and staff-underutilization stemming out from manpower-deployment mismatch. (Consider Pappanamcode depot, which, as of February 2016, has 264 conductors for 232 drivers.)

### Route Rationalization

Considering KSRTC's average Earnings per Bus (EPB) per day in 2015-2016 is Rs. 11,698, it is possible to raise the EPB of its nearly 3300 schedules that fetch less than Rs. 10,000 per day to a benchmark of Rs. 10,000 a day if the routes and schedules are rationalized. It turns out that many of these schedules are not designed to meet the demand, but ply just so that the double duty patterns are accommodated. Hence, putting an end to double duty patterns alone can autotune much of the discrepancies and losses associated with plying schedules sub-optimally. A recalculation of earnings if all schedules fetch a minimum of Rs. 10,000 per day shows that KSRTC can earn another Rs. 328 crores from route- and schedule-rationalization.

Type of Schedules	*Schedules (those fetching less than Rs.10000 per day)	Average Daily Earnings of *Schedules (in Rs.)	Total Daily Earnings of *Schedules (in Rs.)	Total Daily Earnings of *Schedules @ Rs.10000/schedule (in Rs.)	Additional Daily Earnings (in Rs.)	Additional Yearly Earnings (in Rs. Crores)
ORD	2397	7199	17256003	23970000	6713997	245.06
CTY	226	6120	1383120	2260000	876880	32.01
TT	73	8584	626632	730000	103368	3.77

LSOR	376	8142	3061392	3760000	698608	25.50
CFP	65	8230	534950	650000	115050	4.20
FP	143	7233	1034319	1430000	395681	14.44
LSFP	9	6553	58977	90000	31023	1.13
SFP	7	5102	35714	70000	34286	1.25
High-end	5	5855	29275	50000	20725	0.76
<b>TOTAL</b>	<b>3301</b>		<b>24020382</b>	<b>33010000</b>	<b>8989618</b>	<b>328.12</b>

Source: Our calculations & assumptions, using KSRTC Data for July 2016

The office of the Executive Director of Operations (ED-O) should be entrusted with the preparation of new schedules and analysis within one month.

### **Vehicle Productivity**

In 2015-16, KSRTC operated only 77.22% of its scheduled kilometers, suggesting high levels of trip curtailment. Breakdowns, crew absenteeism, traffic congestion etc. are often cited as reasons behind trip curtailments. If these are to be checked, KSRTC would earn additional Rs. 42.58 crores per annum. (Note that the figures taken for the calculation of increase in vehicle productivity due to trip curtailments exclude the buses operated by KURTC, the subsidiary undertaking of KSRTC, for unavailability of data.)

- (A) Average kilometres lost daily due to trip curtailment (for October 2016) = 36,647
- (B) Earnings per kilometre (for October 2016) = Rs. 31.83

- (C) Annual additional earnings from checking trip curtailments:  $(A)*(B)*365 \text{ days} = \text{Rs. } 42.58 \text{ crores}$

KSRTC's bus productivity is as low as 328 kms/bus/day on buses operated whereas performance of other southern STUs in this parameter is above 400 -450 kms/bus/day. If trips are operated without curtailments, there could be an increase in vehicle productivity to kms/bus/day. This is calculated as outlined below:

- (D) Average number of buses operated daily (for October 2016) = 4,575
- (E) Increase in vehicle productivity from checking trip curtailments:  $(A)/(D) = 8.01 \text{ kms/bus/day}$
- (F) Vehicle Productivity on buses operated (for October 2016) = 334.83 kms/bus/day
- (G) Vehicle Productivity (potential) on buses operated:  
 $(E)+(F) = 342.84 \text{ kms/bus/day}$

As other neighbouring STUs have even higher vehicle productivity indicators, there is still scope for increase in KSRTC's vehicle productivity - and, thereby, its earnings - after putting an end to trip curtailments. This would require optimization of running times consistent with the rationalization of routes as explained earlier. Hence, we are factoring in optimization of running times as the second

crucial factor that can improve vehicle productivity. The calculations below show that Rs. 416 crores can be additionally earned if the vehicle productivity is increased from 343 to 400 kms/bus/day.

(H) Optimal vehicle productivity on buses operated = 400 kms/bus/day

(I) Desirable change in Vehicle Productivity: (H)–(G) = 57.16 kms/bus/day

(J) Total buses operable at 95% fleet utilization (for 07 October 2016) = 6,268 (see Table-4.1)

(K) Annual additional earnings from the desirable change: (J)\*(I)\* (B)\*365 days = Rs. 416.25 crores

(L) Total annual additional earnings from increase in Vehicle Productivity: (C)+(K) = Rs. 458.82 crores

Thus, an increase in vehicle productivity from checking trip curtailments and optimizing the running times can fetch the Corporation Rs. 458.8 crores per annum.

### **Fuel Efficiency**

KSRTC's fuel consumption is worst amongst its peers, giving only 4.15 kmpl (kilometre per litre) of High Speed Diesel (HSD) in 2015-16. The immediate target must be to raise it to 5 kmpl.

(A) Total distance operated in 2016 = 61,41,81,584 kms

(B) Total HSD consumed in 2016 = (A)/4.15 litres = 14,79,95,562.4 litres

(C) HSD required in 2016 with consumption at 5 kmpl = (A)/5 litres = 12,28,36,316.8 litres

(D) Potential annual savings in fuel (for 2016): (B)–(C) = 2,51,59,245.6 litres

(E) Average price paid for HSD by KSRTC in 2016\*\* = Rs. 57.07 /litre

(F) Potential annual revenue savings from raising fuel efficiency: (D)\*(E) = Rs. 143.58 crores

(\*\*Note that the average price paid for diesel in 2016 is calculated by us using the data provided by KSRTC of the HSD price at Thiruvananthapuram City depot for all days in the later half of the year; hence, the average here would, in fact, be the average taken for the second half of 2016.)

Thus, raising the fuel efficiency of buses through the adoption of adequate HR policies and routine overhauls can help KSRTC save to the tune of Rs. 144 crores annually (at 2016 prices). Borrowing the practices in other STUs, KSRTC may adopt the following policies:

- Tying a crew to a bus to monitor fuel efficiency

- Financial incentives for meeting the targets & penalties for those who operate at below 4.5 kmpl
- Identification of low-kmpl drivers & providing training to improve their performance

### **Workshop Productivity**

For more buses to be available on road, work norms and planning in the workshops will also have to undergo a comprehensive change. In contrast to KSRTC, a fleet utilization ratio of 95–99% provide for bulk of the profits and surplus generated in the neighbouring STUs. The following measures must be attached prime importance, considering the role workshops – both Regional and depot-level – have in streamlining operations:-

- There is urgent need to establish scientific work norms at the workshops to enhance productivity and ensure that buses sent for repairs are turned around in less than 48 hours. Not only do the work norms for permanent and empanelled employees show wide variations in the work undertaken by both sets of workers: these work norms also show how underutilized and lethargic the workshop staff at KSRTC is with respect to those in other STUs. (See Appendix-A for the work norms associated with overhauls and new bus body building at ASRTC.)

- Along with the work norms, work practices also need to be scientifically redesigned and delineated. Archaic practices like hand-painting the bus bodies and non-adherence to assembly line in production must be checked to retrench wastages in work time, manpower energy and overall costs.
- The workshop productivity, especially for overhaul of unfit buses, must substantially rise. Ready-to-use float units must be available at workshops so that instant replacements can reduce the time taken otherwise for repairs, and help bring the buses back to operating schedules within hours.
- Adhering to proper inventory management procedures, the availability of spares must be routinely evaluated and ensured. The purchase of spares must be centralized at the Regional Workshops that should be tied to each Zonal Office.
- The fact that workshop staff also follows double duty patterns is a pointer not only to how this practice has been insidious and universal across all wings of operations at KSRTC, but also to how inimical it can be to the overall productivity of workshops, when combined with unscientific work norms. As in schedule operations, double duty patterns in workshops must also be checked.

- There is also an immediate need to address the issue of mismatch in workshop staff deployment at depots. For instance, mechanics are in excess in one depot while scarce in another one. Considering this has a bearing on the number of buses off-road for minor glitches and waiting at the depot workshops, there should be necessary re-deployment of workshop staff.

### **Summary**

None of the measures outlined in this chapter are outside of the book; these are just the basic steps that ought to have been followed at KSRTC from its inception. However, the riveting predicament that KSRTC has brought itself in means that stepping out of this quagmire requires strong will and action. This is vital as financial redemption packages and organizational rejuvenation would only be temporary fixes and redundant exercises respectively unless operational turnaround – that impacts the long-term viability of the Organization – is ascribed central role in the revival of KSRTC. To do that, productivity of manpower, buses and units must be raised at least so that its indicators are at par with the industrial average. Doing so can fetch additional earnings and savings for KSRTC as has been indicated by the calculations we carried out in this chapter.

- Total annual additional earnings from fleet optimization, route rationalization and increase in vehicle

productivity = Rs. (433.59 + 328.12 + 458.82) crores = Rs. 1,220.53 crores

- Total annual additional savings from raising fuel efficiency = Rs. 143.58 crores.
- Annual increase in KSRTC's revenue = Rs. (1,220.53 + 143.58) crores = Rs. 1,364.11 crores
- Operational surplus\* = 39% of Rs. (433.59 + 458.82) crores + 92% of Rs. (328.12 + 143.58) crores = Rs. 782 crores

(\*Operational surplus is that part of the revenue after apportioning for expenses on fuel and spares necessary to undertake the operations. According to the representative picture we provided in Chapter-1 based on the final accounts of 2015-16, 61% of the total revenue is earmarked for expenses towards fuel and spares for repairs, leaving 39% of the total revenue as operational surplus. However, since the measures aimed at route rationalization and raising fuel efficiency do not require buses to run additional distances, operational surplus from these parameters is 92% of the total revenue as only 8% of it are apportioned towards expenses on spares.)

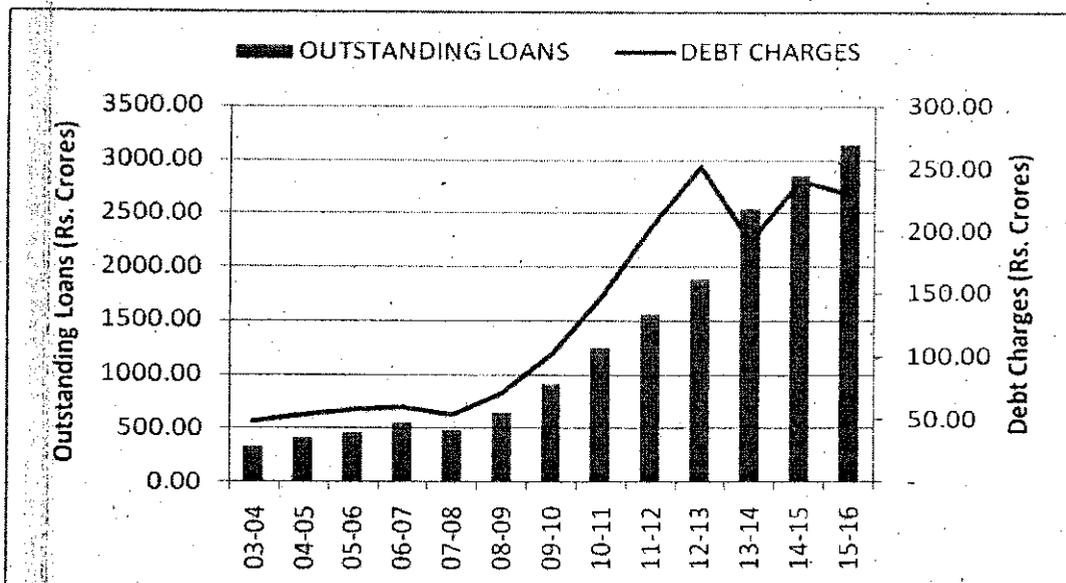
The above exercise demonstrates that the key to turnaround of KSRTC from the current crisis lies in more efficient operations. For a Corporation that has been borrowing around Rs. 100 crores per month at present, the untapped

potential in its operations manifests as a blessing in disguise. It must, however, be noted that these measures are only as good as the commitment of and the immediacy attached to it by all stakeholders of the Corporation.

## 5. FINANCIAL RESTRUCTURING OF KSRTC

Today, KSRTC is working under a severe financial squeeze which makes adoption of any turnaround strategy difficult. After paying for the fuel - on cash & carry basis - and to the lenders, KSRTC is left with very little cash to meet its obligations to other stakeholder's like the employees, pensioners & suppliers. This has meant that KSRTC is borrowing to meet these obligations at the rate of approximately Rs. 100 crores every month, leading to a rapid build-up of debt.

Fig. 5.1: KSRTC's Loans and Debt Charges



Source: KSRTC's Financial Statements and Cash Flow (Same as Fig. 1.6)

To prevent such a build-up of liabilities which will make any turnaround impossible, the restructuring of the KSRTC's debt is the first challenge. Since KSRTC is not a credit worthy organization, it cannot meet its obligations without innovative restructuring or assistance from the Government of Kerala. We discuss below some possibilities of meeting the cash crunch through the restructuring of liabilities.

### **1) Reduction in Debt through Sale of Assets**

KSRTC debt has grown to gigantic proportions, quite out of line with its asset base. With total fixed assets of about Rs. 100 crores, KSRTC's liabilities to banks and financial institutions exceed Rs. 3000/- crore, and more than 170 crores outstanding towards the 'Trust' fund. This debt needs to be brought down to a manageable level.

As the Government of Kerala has made it clear that it will not bail out KSRTC by taking over its liability and rewarding it for its profligacy and mismanagement, we have to look for asset swap or sale to lower the outstanding liabilities, so as to provide the management with an opportunity and breather to turn around the company.

KSRTC has depots located at prime locations in major urban centres of Kerala. During the last decade, it handed over the land at 4 major depots to KTDFC (Kerala Transport Development Finance Corp) to develop commercial office space on a BOT (build, operate and transfer) basis. We are given to understand, that under the contract, KTDFC was to build the four large multistory, commercially exploit them and share the revenue with KSRTC till the cost was recovered. Neither had KTDFC kept to the schedule of construction (12-18 months) nor had any building been built within the budgeted amount. KSRTC, however, could complete the buildings only with significant cost and time overruns. KSRTC has found it difficult to exploit the space developed and most of the buildings are still empty.

The commercial area built up in such buildings is more than 84,955 sqm (= 9.14 lakh sq. ft.). Currently, commercial space on ownership basis in downtown urban centres in Kerala is Rs. 8,000-12,000 per sqft. Hence, the value of the built-up space for KSRTC at its depots is approximately Rs. 915 crores. KSRTC should offer to sell this space to KTDFC at the market value less the cost of construction as budgeted. In case KTDFC is unable or reluctant, the Government of Kerala may take over this property at the current market rate or at assessed rate by a valuer. It is obvious that KSRTC needs time to overcome

the many constraints that have held back its potential. Since it needs financial support to meet its immediate obligations as well as restructure its operations during this period. Either mortgaging or selling these assets to the State Government would be essential to prevent further pile-up of debt.

## **2) Short Term Financial Assistance Linked to Plan to Improve Operations and Productivity**

As discussed in Chapter 4 above, the solution to the crisis facing KSRTC lies in substantial improvement in productivity of its assets, buses and workshops, and enhanced manpower productivity, new work norms and rationalization of its routes and schedules.

However, even under most optimistic scenario and with unstinted support of employees, this will still require several months to achieve. In the meantime, crippling financial burden of past profligacy, means that KSRTC management lacks even the minimal financial resources to meet its current obligations and have a small surplus to make changes in the workshops, carry better inventory and enhance asset productivity.

This calls for small short term financial assistance from Government of Kerala. We estimate that a small grant of

about Rs. 300 to 400 crores, which will be just adequate to meet the deficit for the next 3 months, will help a strengthened management team to get down to the challenging task of improving operations and turnaround the fortunes of the organization.

### **3) Swapping of loans**

KSRTC should present a proposal to swap the higher interest/ short repayment period loans against lower interest/long repayment period loans. More than Rs.3500 crores worth of loans outstanding as of January 2016 are from KTDFC, LIC and HUDCO that are to paid back within 5 years at an interest rate of 14.5% per annum - causing cash outflows from KSRTC to the tune of Rs.80-100 crores per month towards repayment. Were these to be renegotiated against loans with an interest rate of 10.5% per annum and a repayment period of 12 years - with government guarantees - KSRTC's monthly debt servicing obligation will fall by half, helping it from the severe cash crunch that has made any turnaround policy impossible.

### **4) Renegotiation of terms concerning escrow accounts**

Unplanned borrowings at onerous terms have meant that KSRTC's cash flows from the most attractive depots are transferred to an escrow account for meeting monthly debt service obligations of lenders. Such transfers, often several times more than the liabilities, for interest & loan repayments, undermine corporations ability to plan its finances and conduct its normal operations. For example, the consortium of banks gets collections from 27 depots amounting to Rs. 1.9 crores everyday against a daily liability of only Rs. 53 lakhs. The balance is transferred back only after 2-4 weeks. Not only does this force KSRTC to forego the interest on the huge sums, it also puts a heavy burden on the Corporation already under a cash crunch to carry out essential payments of daily nature, making it vital for the Management to renegotiate the terms with the creditors.

#### **5) Creation of KSRTC Pension Fund**

With 5,557 employees retiring from the Corporation within the next five years (2017 to 2022), an already-ailing KSRTC would find it difficult to pay their superannuation benefits timely and effectively. Those employees who have joined the Corporation after 01 April 2013 come within the purview of the New Pension Scheme introduced by the Government of Kerala wherein the age of

superannuation is 60 years. According to the calculations by the KSRTC Management, if the age of superannuation for the employees who had joined prior to April 2013 is to be raised from 56 to 60 years, the Corporation could save to the tune of Rs. 450 crores from the 10% Treasury Savings Bank (TSB) account. This amount can then be used to create a Pension Fund to address the part of the pension liability to be borne by the Corporation.

#### **6) Compensation for concessions**

The Government of Kerala must compensate KSRTC for the losses it incurs on account of concessions towards students, physically handicapped, freedom fighters, MLAs & MPs (former & current) etc. However, caution must be given to KSRTC's procedure of valuating the amount foregone on account of concessions as their calculations seem inflated and pulled out of thin air. For example, KSRTC's calculation of concessions given to all categories excluding students in 2013-14 amounts to Rs. 105 crores, i.e. Rs. 28.8 lakhs per day. However, the Government must reimburse the social obligation costs that are only fairly and evidentially accounted for.

#### **In Summary**

The turnaround in the operations of KSRT is contingent on the financial restructuring of its past liabilities. It assumes that the organization has filled in essential senior managerial positions, especially that of a financial controller along with head of the accounts, with skill and capacity to renegotiate with lenders and secure better terms.

Yet the key strategy rests on an early sale of assets to substantially reduce the corporation's total loans by at least one third, and a small financial assistance from the state government while the employees, unions and a strengthened management team work together to enhance productivity.

## **CHAPTER - 6**

# **ORGANIZATIONAL RESTRUCTURING** **AT KSRTC**

Any turnaround strategy needs to address the organisational challenges for the strategy to succeed. A strong organisation with an appropriate structure and high quality managerial talent to lead and execute the new strategy is an essential pre-requisite.

This chapter provides an overview of what needs to be done in order that the organizational bottlenecks are addressed and KSRTC is strengthened as an Organization over the next few years. The Senior Management of KSRTC will be the main drivers of this organizational transformation. Hence, a new team of senior managers has to be 'assembled'. In addition, the organization structure needs to be modified for decentralization of decision making as well re-assemble the units into viable profit centres. Only such decentralization will facilitate better utilization of assets and resources already available with KSRTC

- (1) An empowered Board of Directors with authority to approve all executive actions must be constituted. This means that the Board will, for all purposes, replace the

Ministry of Transport as the executive body that oversees the functioning of the Corporation. The Board must be responsible for monitoring the turn-around milestones and should consist of two or three independent directors, with few them being familiar with issues of road transport management. There is also need for a full-time Chief Executive Officer (CEO)/ Managing Director (MD) at the Corporation.

The Board will also be authorized to recommend and approve all executive decisions, including use of flexible fares, high value services, approve creation of new positions within the organization, as well act as grievance redressal forum for all employees.

(2) Over the years, KSRTC has failed to attract managerial and administrative talent so abundantly available in Kerala. Several key positions like Financial Controller, Senior Accountants, and statisticians & analysts for advisory function have been left vacant. The senior-most positions in the Organization are headed by Executive Directors (Operations, Technical, Administration etc.) with no senior general management positions tasked with coordinating the different functions. If KSRTC is to turnaround and grow as a sustainable and profitable organization, it needs to immediately fill the gaps in the senior management positions, beginning with at least two senior General Managers/ Deputy Managing Directors

from outside the Corporation and a Financial Controller (with a team of accountants for assistance).

- (3) Restrictive agreements with employees have kept several managerial and critical positions limited to workers who do not necessarily have the qualifications or skills required in undertaking the task. KSRTC should also consider timely revamp and revision of those agreements that promote unqualified employees to critical positions. It should also encourage its staff to upgrade their qualifications to be eligible for higher-level positions.
- (4) What is more, descriptions of many of the jobs have been either overlapping or not clearly defined - resulting in poor delegation of work and concentration of work at the top level; delay in decision-making; duplication and inertia; and deficient monitoring, thus affecting the overall health of the Organization. It is imperative that KSRTC clearly define the roles and responsibilities of each managerial and administrative staff to streamline the organizational activities smoothly and to identify the deficiencies in manpower or their skills. Clarity in work norms precedes efficiency and commitment which, in turn, are prerequisites in ushering in a healthy work culture within the Organization.
- (5) Once the skill deficiencies have been identified - there is no doubt deficiency in skills is pervasive in KSRTC -

adequate training consistent with their functional roles must be given to the existing staff in all wings of the Organization, viz. operations, finances, human resources etc. With KSRTC's training school focused on lower level operating staff, unit officers and supervisors remain the weakest link within the Organization. Initially KSRTC should use the training facilities offered by neighbouring states like Andhra Pradesh, Tamil Nadu and Karnataka (which has a tie-up with IISc, Bengaluru).

(6) At present, KSRTC has five Zonal Offices, catering to the zones of Thiruvananthapuram, Kollam, Ernakulam, Thrissur and Kozhikode. These zones are of unequal size and resources, and it is not clear what has been the basis of formation of such zones. The Zonal Managers are bereft of any responsibilities or powers, and these offices are non-functional, to say the least. These offices were created with the purpose of coordinating the schedules in the depots under their jurisdiction and monitoring the overall level of operations, but have become an additional financial burden to the Corporation. No clear operational targets and budgets are set before the Depot Managers by the Zonal Offices, nor is there any clear process of performance evaluation.

(7) We recommend that the KSRTC zones be limited to three large cities of Kerala, namely Trivandrum, Ernakulam and Kozhikode. These cities have a mix of intra-city and

intercity schedules, are important origin or destination points for passenger traffic and can serve as viable profit centres with the Zonal General Manager empowered to rationalize routes and deployment of buses, and controlling all the depots and workshops in the area. Only such direct control will ensure that zones function as viable business entities, without having to look for approvals from head offices every small action and redeployment of assets and personnel.

(8) Zonal Managers must be given clear functional roles with power to penalize the wrongdoers and make transfers in case of manpower mismatch in depots. Once the workshops report to the Zonal managers, the zone will be responsible for ensuring that buses are on-road as per demand and without delays. In short, Zonal Offices should be made independent profit centres with their own budgets and targets. This necessitates zones to be headed by freshly recruited and qualified General Managers, and an IT-based budget and financial control system, with adherence to financial policy manuals, to be in place.

(9) Currently, the accounts are manually prepared and haphazardly maintained in an organization of the scale of KSRTC is surprising. Not only are they poorly maintained and inconsistent, there is also ambiguity regarding the accounting procedures to be followed and a lack of

ownership of data regarding accounts. There is a total absence of any kind of cost control systems within the Organization. KSRTC must immediately appoint a Chartered Accountant to overlook all accounts in the Organization, and conduct annual internal audits of its accounts. Due to accounts not being finalized, the last annual audit done of KSRTC pertains to the financial year 2013-14.

- (10) The efforts at computerization of operations have been piecemealed and half-hearted. One may suspect that their integration with the control system has been consciously sabotaged. KSRTC has engaged outside consultants to assist in computerization of operational data, but the project has been incomplete for many reasons. Partially mechanized areas like GPS should be fully integrated with other operational areas in order to avoid duplication and wastage of manpower. Computerization can help automate fleet, manpower and inventory management, and integrate accounts, thereby bringing efficiency within the Organization and helping in curtailing redundant jobs in the future.
- (11) Absence of computerization also means that KSRTC totally lacks any Management Information System (MIS) or even a financial reporting and control system that is not manually driven. (Manual controls have been seen to be open to manipulations.) Establishing an effective MIS

headed by a General Manager versatile in organizational computerization and integration of technology like GPS for Operations Controls and for marketing of KSRTC's services is absolutely essential for compiling consistent data that can be owned and analyzed for the purpose of corrections within and development of the Organization.

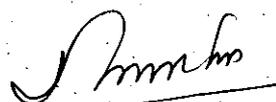
#### In Summary

The key to turn around strategy is strengthening the organization. This must begin with a professional Board of Directors, empowered to authorize all decisions made by the CEO and his senior managers. The Board will also monitor the turnaround milestones and help make KSRTC a more market responsive organization.

The corporation is to be restructured into three Zones headed by General managers. The Zones to act as profit centres with full autonomy on deployment of assets and manpower.

Rapid introduction of computerization in accounts and establishment of an effective MIS and fleet monitoring software. All manual based records to be phased out within one year..

A large scale training and skill development, linked to performance evaluation and promotion policies is last leg of this organizational development strategy

  
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