



KSRTC RESTRUCTURE 2.10

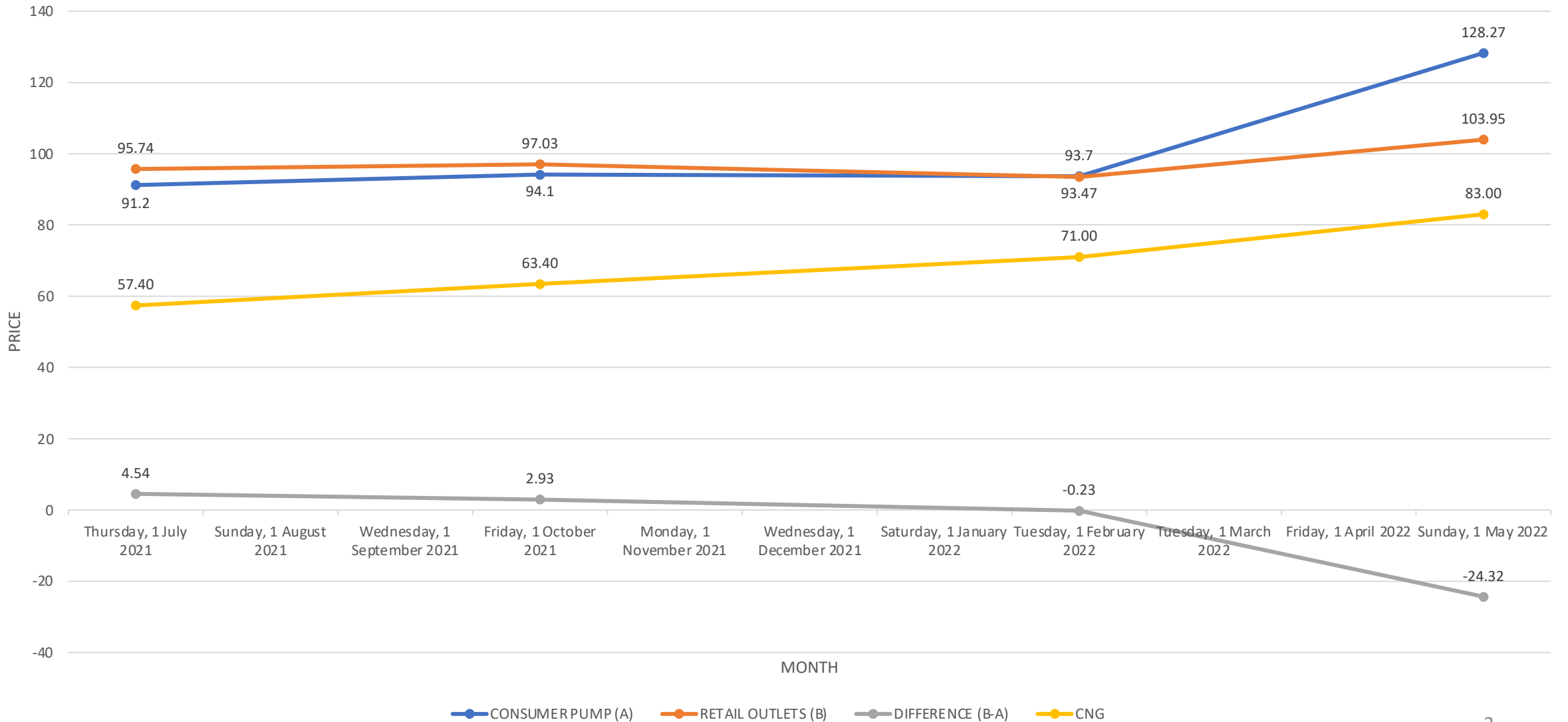
(Restructure 2.0 Modified)

REASON FOR PRESENT CRISIS

RECEIPTS	Revenue (Rs. In Crore)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
	KSRTC/KURTC/SWIFT		121.62	154.50	132.54	118.76	151.37	154.84
Non Operating Revenue		1.55	1.35	5.82	6.01	7.18	8.43	9.18
	Total (A)	123.17	155.85	138.36	124.77	158.55	164.71	192.67
EXPENDITURE	Salary	62.01	68.12	73.11	77.09	82.00	98.27	77.50
	Pensionary Benefits	14.94	7.50	2.25	6.34	1.90	3.26	4.54
	Diesel	66.44	70.51	68.63	72.24	88.42	97.69	92.21
	Consortium Loan Repayment	5.09	28.30	30.38	27.44	90.38	30.18	31.19
	Insurance Renewal	0.20	4.27	0.01	0.00	9.75	0.11	0.00
	Spares	12.62	13.19	6.64	4.82	6.05	3.19	7.92
	MACT	6.23	2.18	3.68	2.00	2.29	4.63	1.34
	Other Expenses	3.90	4.12	3.93	3.62	9.94	3.83	6.72
	Total (B)	171.43	198.19	188.63	193.55	290.73	241.16	221.42
	Deficit	-48.26	-42.34	-50.27	-68.78	-132.18	-76.45	-28.75
	Govt Assistance	45.00	30.00	50.00	30.00	60.00	60.00	50.00
	Deficit after Government Assistance	-3.26	-12.34	0.27	-38.78	-72.18	-36.45	-21.25

CHALLENGES BEFORE US

Unprecedented increase in the price of diesel & CNG



RESTRUCTURE 2.0 PACKAGE

(Oct 2020)

RESULTS ANTICIPATED

1	Reduce fuel expense (by switching over to CNG, LNG, ELECTRICITY)	-35 Cr
2	Better utilisation of a) Buses b) Staff c) Workshops (As per norms fixed by Prof Susheel Khanna report and computerisation)	+25 Cr
3	Non fare revenue	+25 Cr
	Net reduction anticipated in revenue deficit	85 Cr

Restructure 2.0: WHERE WE STAND

Reduction in Expenses of Fuel

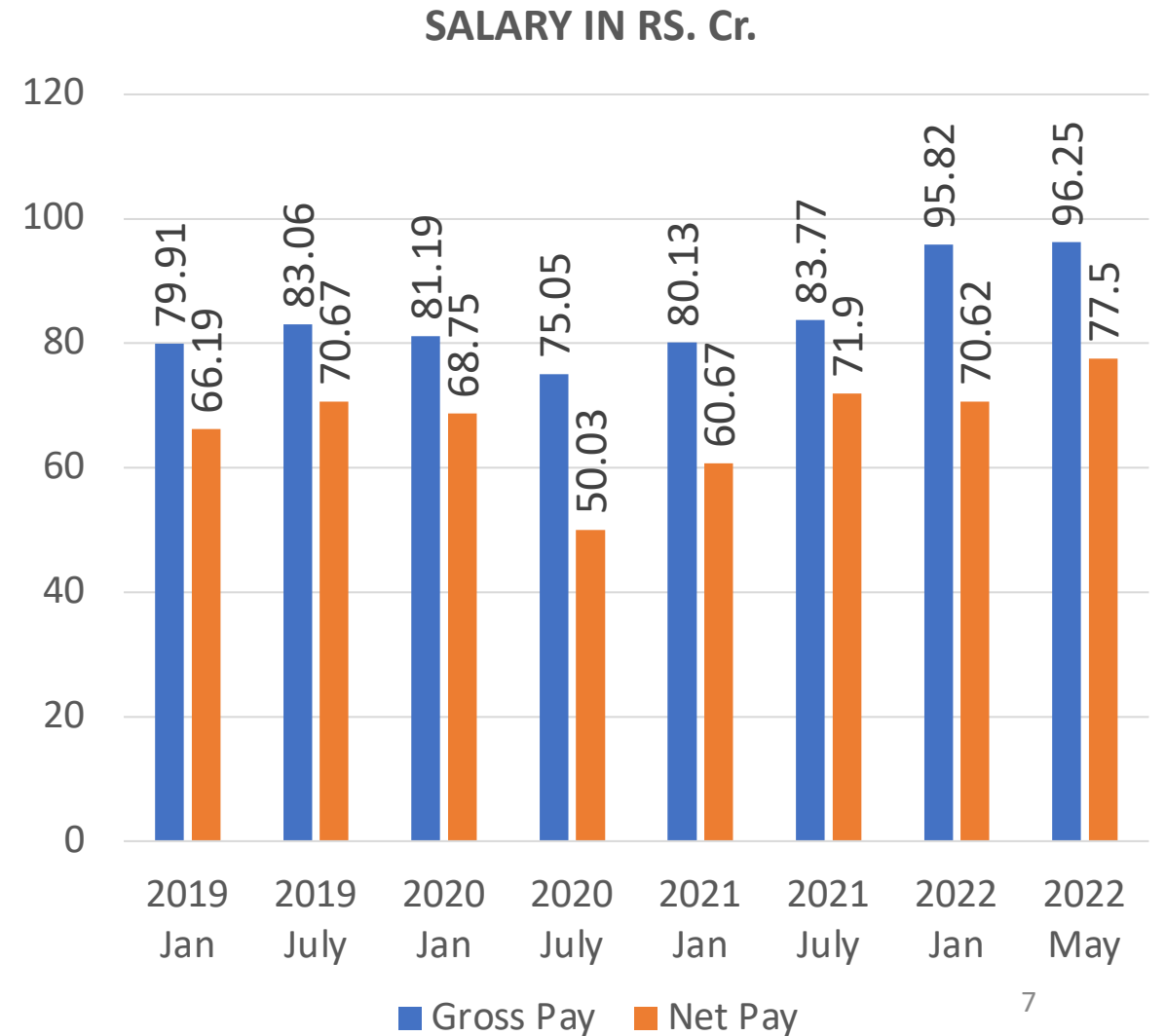
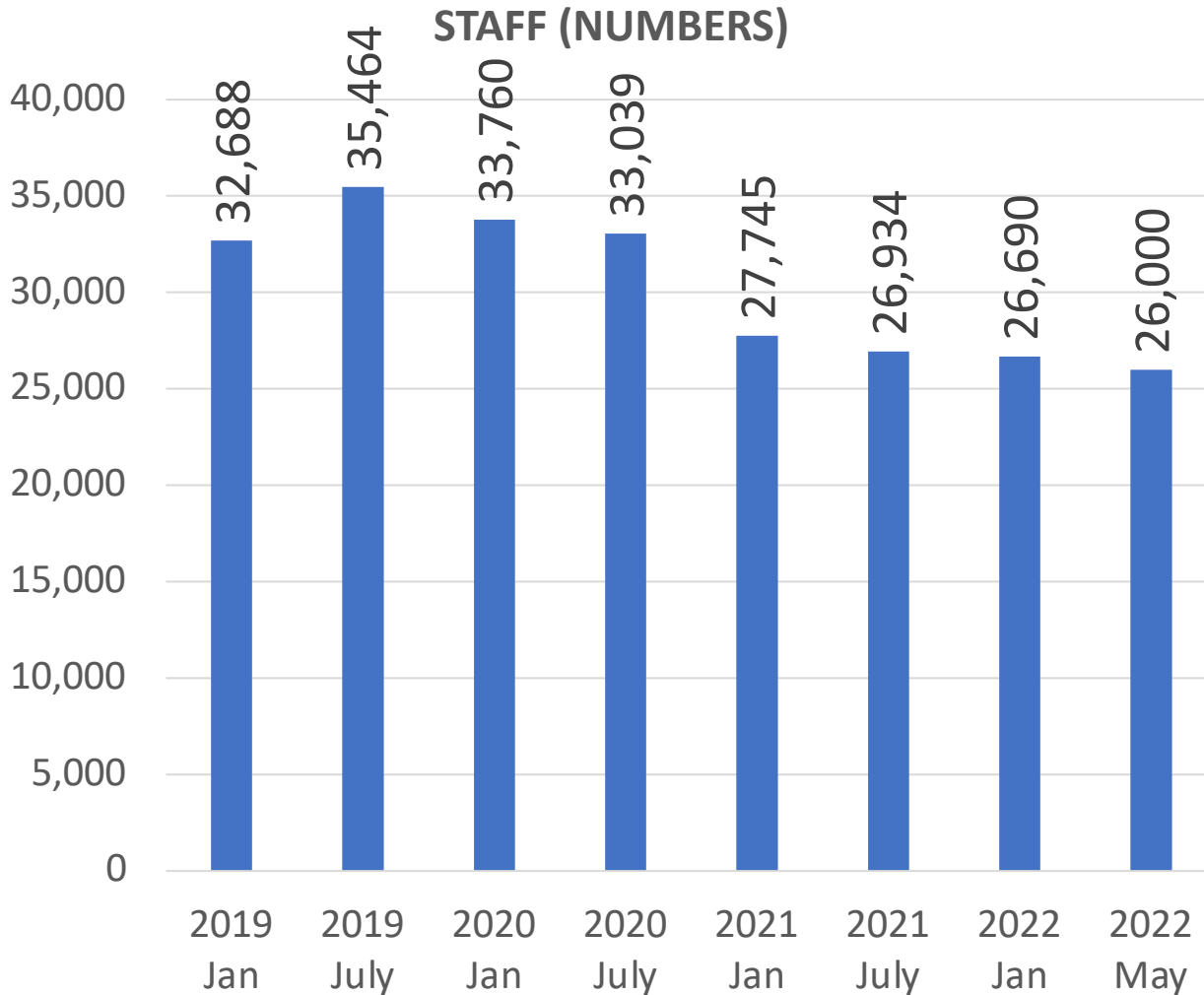
(KIIFB FUNDED BUSES)

1	LNG (400 Buses conversion – Rs. 100 Cr.)	<ul style="list-style-type: none">• Price increase from Rs.43/kg to Rs.110 – 170/kg• (Abandoned 100 Cr KIIFB project of converting 400 buses).
2	CNG (310 Buses Purchase– Rs. 207 Cr)	<ul style="list-style-type: none">• 310 Buses ordered with Leyland through tender.• Prototype not yielding satisfactory performance.• Second prototype to be tested (may take 4 months)• CNG available in Trivandrum through Retail Outlet.• First Consumer Pump in Enchekkal by Sep 2022• One bus converted to CNG trial starts next week
3	Electric (50 Buses Purchase – Rs. 46.22 Cr)	<ul style="list-style-type: none">• Order placed for 50 Buses with PMI Photon.• 25 Buses before 30th June 2022.• 25 buses by 15 Aug 2022

ELECTRIC BUS PROTOTYPE AT FACTORY



STAFF REDUCTION AND SALARY EXPENSES



KSRTC-SWIFT

- All 116 buses arrived
- 98 deployed
- Long distance has two Driver Cum conductors @ Rs.715/duty
- Average Daily collection Rs 20 lakhs/day
- 382 DCs appointed after Training
- First in history, **Non-stop Services** without conductors



COMPUTERISATION SO FAR

- SPARK payroll system implementation
- Transfer and Posting module
- E-office to be implemented in 3 months
- Data collection of Buses/HR through C-DIT
- ETM- 3600 introduced – 1400 more
- Travel card by June 22
- VLTD fitted on buses
- Tracking software entrusted to start up
- Data analysis by start-up company
- DIMTS PMU
- Punching system in 3 months time

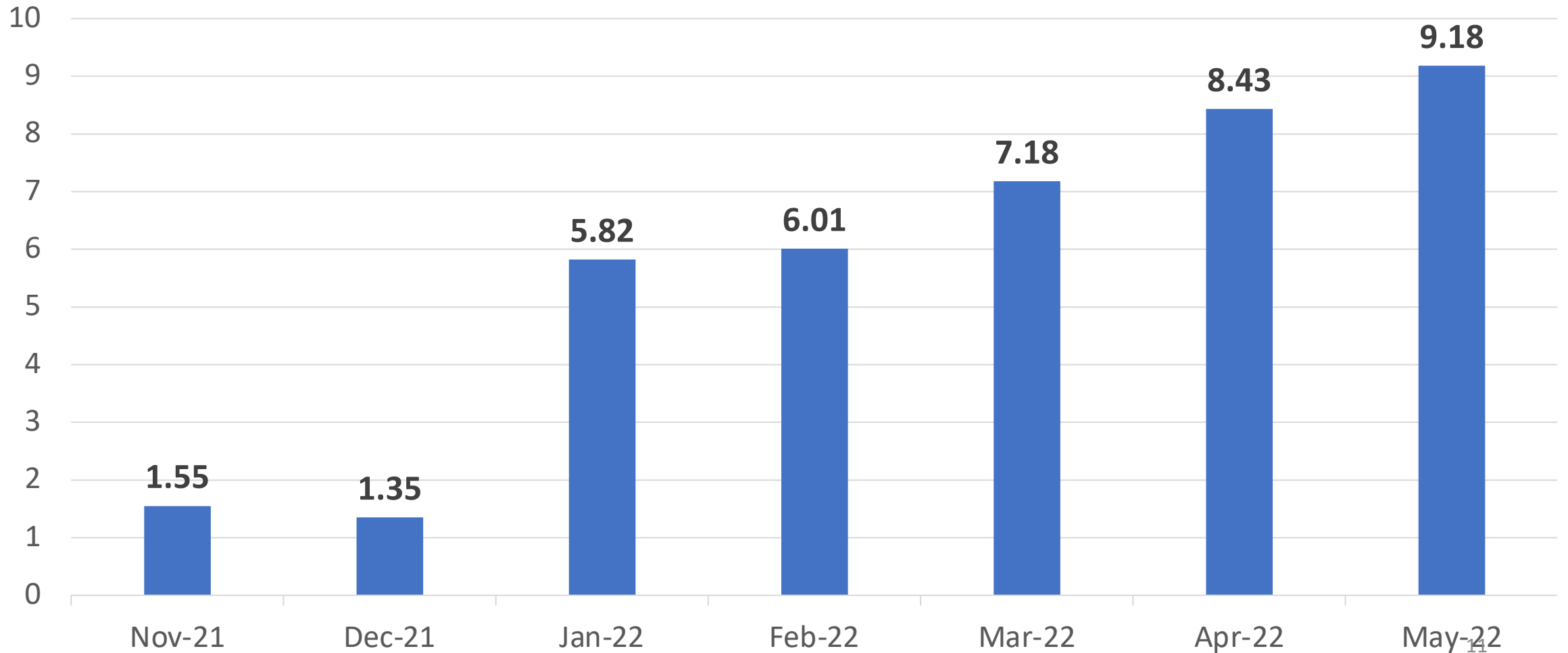


KSRTC YATHRA FUELS RETAIL OUTLET

8 nos. started ; 15 nos. more this year

IMPROVEMENT IN NON - FARE REVENUE

Month wise Non Operating Revenue (Rs. In Cr.)



PRESENT DAY CRISIS

	a) PENDING PAYMENTS (Rs crore)	
1	NPS	225.21
2	NDR	41.24
3	Arrears & Supplementary salary payable to Employees (Approximate)	15.00
4	Payment to suppliers (Running suppliers)	10.64
5	Pending payment to Oil companies	123.00
6	MACT	39.00
7	Maintenance of Floats	54.00
8	Maintenance of Spare parts inventory	18.00
9	Bus Purchase (Leyland)	12.91
10	Retirement benefits payable	134.00
	Total	673.00

- b) * Potential for operating 4500 buses
* **But operates only 3750 buses per day**
* Unions and ATOs Cites crew shortage as reason
* 12 hour spread over duty, duty surrender
still no increase of bus
Reasons:-
* Loose work norms
* Laxity in supervision
* Data collection and monitoring difficult.

PROF. SUSHEEL KHANNA REPORT – 2017 V/s PRESENT

PARAMETERS	2017	NOW
Board of Directors	Non Professional	Professional (Experts to be nominated)
No. of Buses	4600	3750
Avg. Collection per day Rs. In Cr.	5.37	5.91
Avg. EPB	11,600	16,000
Vehicle productivity (km/day)	332	324
Kilometer / Day	18 Lakhs	12.5 Lakhs
Fleet utilization (%)	81.00	72.00

PARAMETERS	2017	NOW
Fuel efficiency (KMPL)	4.15	4.16
Staff productivity (km/day)	36.80	45.49
Passengers	32 Lakhs	18 lakhs
No. Work shops	98	22
No. of Opn. Unit	93	93
No. of Offices	98	15
No. of Staff + Officers	41000	26000

A COMPARISON WITH KARNATAKA

PARAMETERS	KERALA	KARNATAKA
No. of Buses	3,750	7,511
Average Collection per day Rs Cr	5.91	9.31
KM Run per day (lakhs)	12.50	27.00
Avg. EPB	16,000	13,257
Vehicle productivity (km/day)	324	364
Fleet utilization (%)	72.00	88.90
Bus staff ratio	6.9	4.76

PARAMETERS	KERALA	KARNATAKA
Fuel efficiency (KMPL)	4.16	4.86
Staff productivity (km/day)	45.49	73.55
No Work shops	98	16
No of Operation Unit	93	80
No. of Offices	98	15
No. of Staff + Officers	26,000	35,654

NET GOVT ASSISTANCE RECEIVED (Rs Crores)

Month	Tax remitted to Govt by KSRTC				Govt Assistance to KSRTC (B)	Net Govt Assistance to KSRTC (B-A)
	Local Tax	Addl. Tax	Cess	Total (A)		
Mar'22	11.17	0.65	0.12	11.94	60.00	48.06
Apr'22	14.75	0.79	0.16	15.70	60.00	44.30
May'22	13.86	0.75	0.15	14.76	50.00	35.24
Total	39.78	2.19	0.42	42.39	170.00	127.61

WAY FORWARD

1. Employee productivity to be improved (Implement single duty system as per Prof Sushil Khanna Report)
2. Tough negotiation with union to increase production – can run more bus daily.
3. Working capital of Rs 250 Cr – against to govt guarantee – and enhanced Monthly Govt assistance of 45 Cr for one year.
4. Moving towards Electric buses now instead of CNG buses.
5. Enhancing plan scheme grant to Rs 100 Cr as promised in Budget June 2021 – so as to buy 280 diesel buses
6. Hiring more buses for Long distance services

PROCUREMENT OF BUS

No	Projects in hand	Cost of project (Rs Cr)	Source of Finance	Challenges	Alternative proposals
1	Procurement of 310 Nos of CNG Bus	201.50	KIIFB	Requires more time to resolve the technical issues. Commercial viability is also a question.	To procure 600 Nos of Electric bus.
2	Conversion to LNG – 400 Nos of bus	100.00	KIIFB	Not feasible due to technical and commercial reasons.	
3	Procurement of 700 Nos of CNG Bus	455.00	KIIFB	Requires more time to resolve the technical issues. Commercial viability is also a question.	
	TOTAL	756.50			
4	Procurement of 140 Diesel buses	50.00	Plan - Govt	For replacement of super fast buses	May be enhanced to Rs. 100 Cr

COMPARISON OF OPERATIONAL EXPENDITURE (Rs per km) – DIESEL Vs ELECTRIC

No	Head of Expense	Diesel Bus (A) in Rs	Electric Bus (B) in Rs
1	Fuel / Energy Expenses	24	8.00
2	Wages	19.32	14.28
3	Repair and Maintenance Expenses	7.08	4.00
4	Insurance	0.50	2.00
5	TOTAL	50.9	28.28
Expenditure For 600 buses x 30 days x 280 km/day		Rs.25.65 Cr	Rs.14.25 Cr
Savings/Month by switching to Electric Bus (A-B) in Rs. Cr			Rs.11.40 Cr

ADDITIONAL REVENUE FROM NEW SERVICES

* 600 New ordinary buses due to replacement of 600 Electric buses

* Income after fuel + spares

$$600 \times 13,000/\text{day} \times 25 = \text{Rs. } 19.50 \text{ Cr.}$$

$$35 \% \text{ of above} = \text{Rs. } 6.825 \text{ Cr.}$$

* New 280 long distance buses (Rs. 100 Cr. Plan scheme)

$$280 \times 26,000/\text{day} \times 25 = \text{Rs. } 18.20 \text{ Cr.}$$

$$50 \% \text{ of above} = \text{Rs. } 9.10 \text{ Cr.}$$

IMMEDIATE MEASURES

No	STRATEGY	EXPECTED SAVINGS / ADDL REVENUE (Rs crore)
1	SAVINGS FROM SWITCHING TO ELECTRIC BUS	(-) 11.40
2	Net REVENUE FROM 600 ADDL SERVICES (ORDINARY)	(+) 6.83
3	INTRODUCTION OF 280 NOS. OF NEW (LONG DISTANCE) SERVICES	(+) 9.10
4	INCREASING NON-FARE REVENUE (BOT projects mainly)	(+) 25.00
	Net effect on expenses	52.33

STRATEGIES FOR OPERATION

Operational Turnaround strategies

Ref. Prof. SUSHIL KHANNA REPORT

Chapter -4 – Duty Pattern

❖ DUTY MODIFICATION

AS PER

MOTOR TRANSPORT WORKERS ACT 1961

(KARNATAKA RTC MODEL)

DUTY AS PER MTW ACT 1961*

- **Hours of work - Steering duty** (Running Time + Sign in and off + Terminal rest less than 15 minutes) **could be up to 10 hrs a day, 54 hrs in a week (Maximum)**
- **The spread over could be up to 12 hours**
Steering Duty + Interval for rest (Rest -Half an hour in 8 hrs steering duty) in a day.
- **Extra wages for overtime : Double the wages (Basic pay +DA)**
Karnataka RTC Pattern (As per MTW Act 1961)
- **Over time = Total Steering Duty Hrs – 8 Hrs Duty**
- **Additional 1% collection incentive (Optional)**

* **MTW ACT 1961 – abstract in last slides for reference**

KANIYAPURAM – A SAMPLE UNIT

Overview**

- **Total Buses – 45 + 2 K-SWIFT SLEEPERS**
- **TOTAL SCHEDULES -38 + 2 K-SWIFT**
- **MAXIMUM BUSES OPERATED (KSRTC) – 32**
- **Staff Ratio for operated buses – 4.59 (Driver & Conductor)**
- **KM per day 36 Ordinary – 9056 km**
- **Bus Km (36 ordinary) - 252 km**
- **Total Duty - 63 (63 Dvr + 63 Cond)**
- **Km per duty – 144 km**
- **Available Crew – 147 (65 Drivers, 82 Conductors)**
- **Crew required – 182 (91 drivers, 91 conductors – for 36 service)**
- **Short for full service - 35 (26 drivers, 9 conductors)**

But this shortage could easily be managed by following strategy

** Detailed position in last slide

NEW SINGLE DUTY PATTERN AS PER MTW ACT 1961

- Modification proposed - 36 ordinary service
 - Total Kilometer per day - 9056 km
 - **Bus Km** - **251 km**
 - **Km per duty** - **143 km**
 - Existing duty pattern
 - Double Duty - 18 schedules
 - 1.5 Duty - 18 Sched
- **Crew required – 126 (63 drivers, 63 conductors)**
- **After Modification**
 - ❖ Schedules - 46 Schedules
 - ❖ Duties - 92 duties (46 Dvr + 46 Cndr)
 - ❖ OT - 88 Hrs (Double the wages)
 - ❖ Buses required - 46 numbers (Now held)
 - ❖ Km after Modification - 9292 Km
 - ❖ Bus km - 202 km
 - ❖ Km per duty - 202 km
 - ❖ Saved Duties - 34 Duties (17 Dvr + 17 Cndr)

MERITS***

- Crew saved - 17 Drivers + 17 Conductors
- **Wages saved a month** - **Rs 11.05 Lakha**
- **OT wages (Addl. expenditure) – Rs 7.13 Lakhb**
- Net Savings in wages (a-b) - Rs 3.92 Lakhc
- Revenue from addl km - Rs 3.18 Lakh.....d
- Net Savings (c+d) - Rs 7.10 Lakh

Or

- **Additional service** -**17 Numbers**
- **Addl. Revenue per Month** - Rs 34.42 Lakh
- Bus crew Ratio (Reduced) - 3.5 per Bus to 2 per Bus
- Km per duty (Increased) - 143 km to 202 km
- Increases - EPKM , Total collection & Fleet Utilization
- **Bus Km (Reduced) - 252 km to 202 Km But optimized**

*** Calculations in last slides

PROJECTION FOR 2400 ORDINARY BUSES OF KSRTC – Single duty with OT

- Crew savings @ 27% -2492 (1246 Dvr,+ 1246 Cdr)
- Savings in Salary – 8.10 Cr
- Schedule increase @ 28% - 3072 schedules
- Additional Buses required - 1246 Buses
- OT wages per schedule - Rs 516 (Double the wages)
- Total OT/ Month - Rs 4.76 Cr (Expenditure)
- Revenue from addl. Km – Rs2.07 Cr.
- Net Savings - Rs 5.41 Cr

or

Additional revenue from 1246 Buses with 150 km @ Rs 45 EPKM = Rs 25.23 Cr.

***MERITS - Calculations

- Crew saved - 17 Drivers + 17 Conductors
- Wages saved - $34 \times 32500 = \text{Rs } 11.05 \text{ Lakh}$ a
- **OT wages (Addl. expenditure)**
 - Average salary - Rs 32500 (Basic + DA)
 - Wages per Hr - Rs 135
 - OT wages for 88 Hrs - $\text{Rs } 135 \times 2 \times 88 = \text{Rs } 23,760$**OT wages per Month – Rs 7.13 Lakh**b
- **Wages (a-b) - Rs 3.92 Lakh**c
 - Addl. Km per day - $9292 - 9056 = 230$
 - Addl. Revenue / Month- $230 \times 30 \times \text{Rs } 45 = \text{Rs } 3.18 \text{ Lakh}$ (@ Rs 45 EPKM)d
- **Total savings (c+d) - Rs 7.10 Lakh + Pesion+allowance+leave etc**
OR
- **Additional service -17 Numbers**
- Km from additional service – $150 \times 17 = 2550$
- **Addl. Revenue per Month @ Rs 45 per Km = $2550 \times 45 \times 30$**
= Rs 34.42 Lakh
- Bus crew Ratio - 3.5 per Bus to 2 per Bus (Reduced)
- Km per duty - 143 km to 202 km (Increased)
- Increases - Earning per Km , Total collection & Fleet Utilization
- **Bus Km - 252 km to 202 Km (Reduced) But optimized**

**Kaniyapuram Unit Operation Details 20/06/2022 – Monday

BUS POSITION

Buses Held - 44 + 2 K-SWIFT	Buses Operated -32 + 2 K- SWIFT	Not used buses -12	IDLING -1	Off Road -11	Reason - Want of Driver and conductor
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CREW POSITION

Total drivers	65	on operation	32	Not on operations	33
Total conductors	82	on operation	32	Not on operations	50
Duty off and C/off (Double duty off) - 43	Casual Leave -3	Other Leaves (EL, Pesion leave, Maternity leave etc) - 9	Resignation, Long Absent, Expired, Suspension- 1	Weekly Off on Monday -22	Other Duty- 5
On working Arrangement - 0	Unproductive Drivers and Conductors -39		Total Productive crew (including pervious Duty off) - (73%)		

*DUTY PATTERN – MOTOR TRANSPORT

WORKERS ACT 1961 Chapter -5 section -13, 26

HOURS OF WORK (Steering Duty) – Definitions

- The time spent in work done during the running time of the transport vehicle;
 - The time spent in subsidiary work; and
 - Periods of mere attendance** at terminals of less than fifteen minutes.
 - **No adult motor transport worker shall be required or allowed to work more than 8 hours in a day and 48 hrs in a week**
 - **Provided, for long distance routes, festive and other occasions, with approval of such authority, the employer may require or allow a MT Worker to work for more than 8 hrs in any day or 48 hrs a in a week. But no case for more than 10 hrs in a day and 54 hrs in a week**
 - Section 26(2) -Where an adult motor transport worker works for more than eight hours in any day in any case referred to in the second proviso to section 13, he shall be **entitled to wages in respect of the overtime work at such rates as may be prescribed.**
- **“period of mere attendance”** means the period during which a person remains at his post solely in order to reply to possible calls or to resume action at the time fixed in the duty schedule.

*DUTY PATTERN – MOTOR TRANSPORT WORKERS ACT 1961 - Chapter - 5, section -15-17

INTERVAL FOR REST section 15

- There shall be half an hour rest after continuous 5 hrs duty.
- If the work is not more than 6 hrs, interval for rest not needed.

SPREAD OVER section 16 - means the period between the commencement of duty on any day and the termination of duty on that day;

- There shall not spread over more than 12 hrs in any day.
- Inclusive of hours of duty (section 13)
- Inclusive of interval for rest (section 15)

SPLIT DUTY section 17 - The hours of work of a motor transport worker shall not be split into more than two spells on any day.

The period between split duty is “period of mere attendance”

Below 15 minutes will only be considered as hours of duty.

PROBABLE SOURCES FOR CREATION OF AN PUBLIC TRANSPORT FUND (PTF)

No	Description	Additional charges in Rs (towards the PTF)	Expected volume (No per annum)	Estimated fund generation (Rs lakhs)
1	Registration of commercial vehicles	5,000.00	40,000.00	2,000
2	Registration of non-commercial vehicles	2,500.00	7,00,000.00	17,500
3	Green Cess (for commercial vehicles with age more than 5 years)	250.00	14,00,000.00	3,500
4	Green Cess (for two wheelers with age more than 15 years)	500.00	24,40,000.00	12,200
5	Green Cess (for four wheelers with age more than 15 years)	1,000.00	11,40,000.00	11,400
6	Fitness certificates issued	100.00	6,25,000.00	625
7	Fancy numbers issued	500.00	65,000.00	325
8	High value fancy numbers issued	2,500.00	7,00,000.00	17,500
	TOTAL			65,050



LONG TERM MEASURES

1. Avail a KFW loan (100- 220 Million EURO) to replace the fleet to Electric and CNG.
2. Hire more buses for long distance service.
3. Tie up with Compressed Bio Gas (CBG) plant of KSIDC – to use CBG instead of CNG.
4. Start trials of
 - Retrofitted Hydrogen buses
 - Retrofitted Electric buses
 - Buses with replaced CNG engine.

SUPPORT AND DECISIONS REQUIRED FROM GOVERNMENT

1. Service the debt from Consortium of Banks @ Rs 30 crore per month.
2. Additional financial support towards working capital @ Rs 25 crore per month.
3. To reappropriate the financial sanctions (KIIFB) for the procurement of Electric buses.
 - i. Rs 100 crore sanctioned for the conversion to LNG.
 - ii. Rs 455 crore sanctioned (administrative sanction) for the procurement of CNG buses.
4. To avail loan for restructuring from funding agencies like KfW Bank.
5. In-principle approval for the creation of an Public Transport Fund (PTF).

THANK YOU