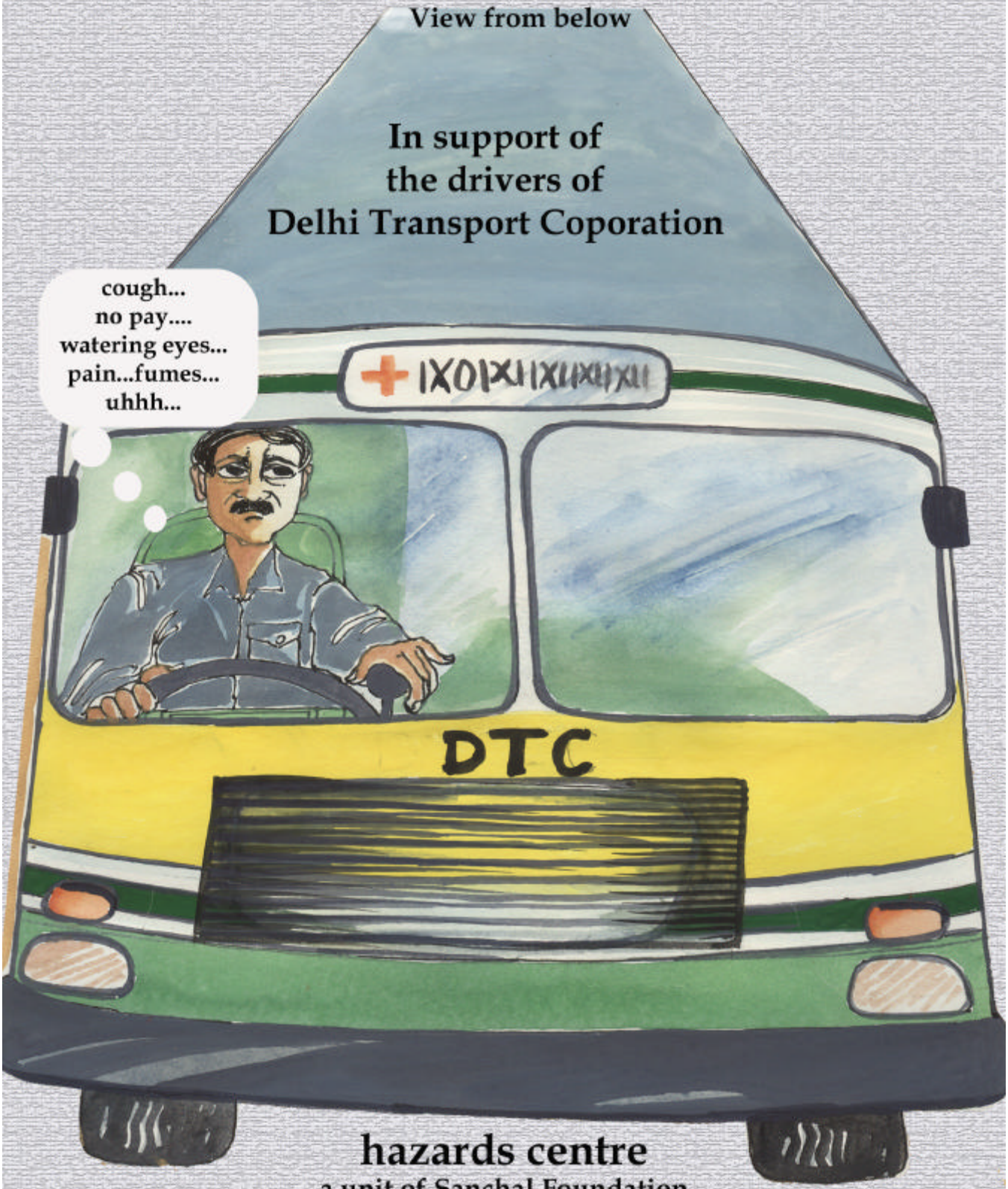
'RESTRUCTURING' AND 'EFFICIENCY'
THE CASE OF DELHI TRANSPORT CORPORATION

View from below

In support of
the drivers of
Delhi Transport Coporation



hazards centre
a unit of Sanchal Foundation
December 2006

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HAZARDS CENTRE
Sanchal Foundation
December 2006
New Delhi

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This report is the culmination of four months of research with the drivers of Delhi Transport Corporation (DTC) that sought to provide a framework for analysing the restructuring of the public transport sector in India so as to augment the supply and improve service quality. Since the approach to the study was to develop case studies of bus drivers to understand the institutional constraints, this project would not have been possible without the active support and cooperation of the DTC drivers in Delhi. We also gratefully acknowledge the inputs provided by Comrade Ardhendu, State Committee Member of All India Co-ordination Committee of Trade Unions (AICCTU), and Comrade Thomas, the General Secretary of DTC Union.

CONTENT

The Delhi Transport Corporation and its Role

Day by day, the decreasing availability of public transportation is one of the major urban issues of Delhi. Specifically, the burden of this seems to lie squarely at the door of the public sector Delhi Transport Corporation (DTC), the major supplier of public services in the National Capital territory of Delhi. In addition, while the rapid increase in the number of private vehicles is actually responsible for traffic congestion in various parts of Delhi, nevertheless the common perception, fed by an aggressive media campaign, is that buses are the cause of both pollution as well as decreasing road space. This flies in the face of the clear evidence that the number of people travelling by bus is much higher than any other mode of transport, although the number of buses is far less than what is required.

Table 1 below gives the different modes of transport and the percentage of people using them:

Table 1: Users of different modes of transport

Mode	Cycle	Bus	Car and jeep	2-wheeler	3-wheeler	Taxi	Rail
Percent users	5.3%	59.8%	10.0%	17.1%	3.1%	4.0%	0.7%

According to RITES, Government of India-2002, the transport of Delhi is mainly dependent on road traffic. Only **1**% of the total population travels by rail. The number of buses is only **1.2**% of the total vehicles, but almost **60**% of Delhi's

population travels by them. On the other hand, **64.5**% of the vehicles are motorcycles and scooters, but only **17**% of commuters use these means for travelling. Cars and jeeps constitute more than **26**% of vehicles, but only **10**% are able to use them. Thus, it is clear that the vast majority use the bus for travelling, but the bus services are inadequate to meet the needs of the people.

DTC has currently deployed more than 3000 CNG buses for the city service, down from the 4392 diesel buses in 1991 (ref: Delhi Statistical Handbook, 1998). These buses carry about 55 lakh passengers per day – that works out to 2000 passengers per bus per day, or, for an average of 10 trips per day, 200 passengers per bus! There are a total of 814 bus routes in Delhi and DTC buses are plying on 750 of them. This serves to explain the massive problems faced by bus commuters in the city.

DTC charges minimal fares for providing these services. Many of the fares are also heavily subsidised. The fares of different categories of service are given in Table 2:

Table 2: Fares for DTC services

S.No	Type of Service		Fare
1	**Ordinary Services**		
	a.	1 - 4 kms.	Re. 2
	b.	4 - 8 kms.	Rs. 5
	c.	8 - 12 kms.	Rs. 7
	d.	Over 12 kms.	Rs.10
2	Limited Services		Rs.10
3	Night Services		Rs.10
4	Green Line Services		Rs.10
5	Railway Special Services		Rs.10
6	Palam Coach Services		
	a.	Adult	Rs.50
	b.	Child/Luggage	Rs.25

The above figures themselves reveal how over-burdened the DTC system is, and how large is the financial strain on the Corporation. This can be traced to the legacy of past policies. We now examine whether the present policies of restructuring will be able to bring about significant changes in the operations of DTC.

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A Brief History of Changes in DTC

The Government of India, Ministry of Transport, took over the local bus services in Delhi in May 1948 in the name of Delhi Transport Service when they found that the services offered by the Gwalior and Northern India Transport Company Ltd., the then licensee, were inadequate. A Delhi Road Transport Authority was constituted under the Road Transport Corporation Act, 1950. This Authority became an Undertaking of the Municipal Corporation of Delhi by an Act of Parliament in April 1958.

On the recommendation of a Working Group of the Planning Commission, which concluded that the Delhi Transport Undertaking, as an extension of the Municipal Corporation of Delhi, had not been functioning efficiently and adequately, resulting in leakage of revenue and very high operation costs, the Government of India took over the management of the Undertaking by passing the Delhi Road Transport Laws (Amendment) Act, in 1971. It took over the assets and liabilities from the erstwhile Undertaking on November 2 of that year and rationalised the routes and bus utilisation. Thus, the Delhi Transport Corporation was set up and, in Section 22 of the Road Transport Corporation Act 1950, the following objectives were laid down for the DTC:

- To provide or secure or promote an efficient, economical, reliable and properly coordinated system of road transport in Union Territory of Delhi and any extended area.
- In doing so, it shall act on business principles.

- To achieve a high level operational efficiency.
- To charge fares not exceeding those prescribed by the State under Section 43(1)(i) of the Motor Vehicle Act, 1939.
- To attain financial self-sufficiency.

DTC, which functioned under the administrative control of the Government of India, was eventually taken over by Government of the National Capital Territory of Delhi on August 5, 1996 and further rationalisation of operations took place. In 2002, DTC was once again restructured by the Delhi Government while converting its diesel fleet into CNG, and the process of replacing permanent drivers with temporary ones and outsourcing the depot operations was hastened.

It may, thus, be seen, that over a period of half-a-century, the Delhi public transport system has been continuously changed using the same arguments of ***efficiency***, ***adequacy***, and ***self-sufficiency***. These arguments, therefore, merit closer examination since patently, the public transport system in Delhi has not improved over the years in any respect.

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Present Situation of Bus Transport in Delhi

The current road transport policy was introduced in 1972 when the Undertaking was restructured into a Corporation and has been in effect since then. Under this policy, there are basically three kinds of bus services in Delhi:

1) Inter-city

2) Intra-city

3) All-India private tourist services

Of these, DTC operates the first two services only.

The Inter-city bus fleet is constituted by those buses owned and operated by the DTC, as private operators are not given permits to ply their buses on inter-city routes until both the state governments have agreed to it.

The Intra-city bus service is further divided into the stage carriage system and the contract carriage system.

Stage carriage system

Stage carriages are a fleet of buses, which hold a permit to stop at the stages (bus stops), on the routes they ply on. Contracts for operating these buses could be allotted to people under any of the following schemes:

1) Graduate scheme: unemployed graduates could operate bus services by obtaining a permit.

2) SC/ST scheme: permits are granted to people in the SC/ST category.

3) Ex-service men scheme: retired services employees are granted the permits under this category.

4) Suvidha scheme: under this scheme the DTC buses are being hired out for tourists, weddings, and other group travel.

Contract carriage system

Contract carriages are the fleet of buses which ply from point to point and are not allowed to stop at stages (bus stops). Owned and maintained by the private operators, they ply their buses under contract to specific organisations. They operate as chartered buses, school buses etc. Total number of buses which have been granted contract carriage permits in Delhi are 1,969 as on July 4, 2002. Presently, also plying on Delhi roads, are mini buses, better known as RTV (Rural Transport Vehicle)or *hari bhari*, which are CNG buses with a seating capacity of 15-25 people. RTVs or *hari bhari* are owned by private operators but come under the contract carriage system. Till date there are 2,837 such buses plying on Delhi roads.

What the above reveals is that, as early as 1971, the seeds had been sown for the gradual privatisation of services within the public transport system. In other words, through contractual and permit systems, most of the profitable intra-city routes were turned over to private operators while DTC ran all the inter-city routes and most of the non-profitable intra-city ones. This adversely affected both financial viability as well as customer efficiency and employee morale. No one could have perceived this more clearly than the employees themselves. Hence, this study focuses on the impact on employees as an indicator of how the restructuring of DTC contributes to greater efficiency, adequacy, and efficiency.

Ref: Shailly Arora, New Public Management, Centre For Civil Society

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View from Below

Hazards Centre was invited to conduct the present study by the office-bearers of one of the labour unions in the DTC Okhla Depot, DTC Workers Unity. Initial discussions with them and workers belonging to the union threw up a wide range of perceptions and issues from the workers point of view:

- The recent process of restructuring of DTC was initiated in 2003 on the recommendations of a report prepared by Tata Consultancy Services.
- There has been decentralisation of DTC. Each depot has been given an autonomous status and is being managed by a depot manager.
- There has been an explicit demarcation between an individual depot and DTC headquarters, with each depot having to generate as well as manage its own funds, including the salaries of the workers. The headquarters only bears the cost of some benefits like Provident Fund, Gratuity etc.
- Depot managers are given targets to achieve; simultaneously they are also given full freedom to meet those targets. The routes and operations of buses are decided at the discretion of depot managers and the majority prefer the intercity routes as they believe that they generate more profit.
- The total fleet of DTC at present is 3100. Out of these, 930 are school buses, 1200 buses are intercity and only the remaining 970 buses ply within the city.

- In order to meet the target of generating revenue, depot space is being provided for parking cars and two-wheelers.
- In order to reduce the expenditure of the depot there has been curtailment of basic amenities like electricity, water etc. inside the depots.
- The single route pass scheme has been abolished.
- For the past 18 years there has been no new recruitment in DTC. There has always been a shortage of drivers and conductors. In order to meet this need DTC has been consistently recruiting contractual workers. Drivers of this category get Rs 113 per day while conductors get Rs 83 per day.
- A major source of revenue has been generated by curtailing the benefits of the workers. At present there are around 1700 contract workers. DTC is thus spending only Rs 5.5 crores on contract drivers, as against the Rs 17 crores it would have spent on permanent workers.
- Workers are the most adversely impacted by the process of restructuring, whether they are on permanent or contract employment, although contract workers are more affected.
- On one hand the overtime system of permanent drivers has been abolished; on the other hand they are compelled to drive even after their duty is over for which they are paid Rs. 2.00 per km. In the case of breakdown of the vehicle, the driver cannot leave the vehicle, nor get any financial benefits from it.
- The contract drivers are in very bad shape. Although contract drivers have been appointed as per the regulations of the Contract Labour Act 1970, there is no legal procedure followed in reality. Thus, according to the 1970 Act, one contract agency cannot supply more than 21 drivers

but, at present, one agency is supplying around 800 drivers. In addition, not a single driver has received an appointment letter.

- Contract drivers of intercity buses sign for wages of Re. 1.50 per km, although they actually get Re. 1.20 per km. On the other hand, drivers of intra-city buses sign for Re. 1.00 per km although they actually get only 70 paisa.

Impact on DTC Drivers

In order to substantiate the perceptions of the unionists, Hazards Centre conducted a survey with 130 contract drivers and 28 permanent drivers from the Okhla Depot of the Delhi Transport Corporation to ascertain their conditions in terms of wages, working conditions, social security benefits, health etc. It was also possible to compare the conditions of the permanent drivers with those of the temporary ones to discover whether there were any significant changes.

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Objectives of the Study

The objectives of the study were as follows; -

- To compare the condition of the permanent and temporary DTC drivers.
- To study the differential benefits given to, and costs borne by these drivers.
- To analyse the policy impacts on both these kind of drivers.

Results of the Study

Profile of the drivers

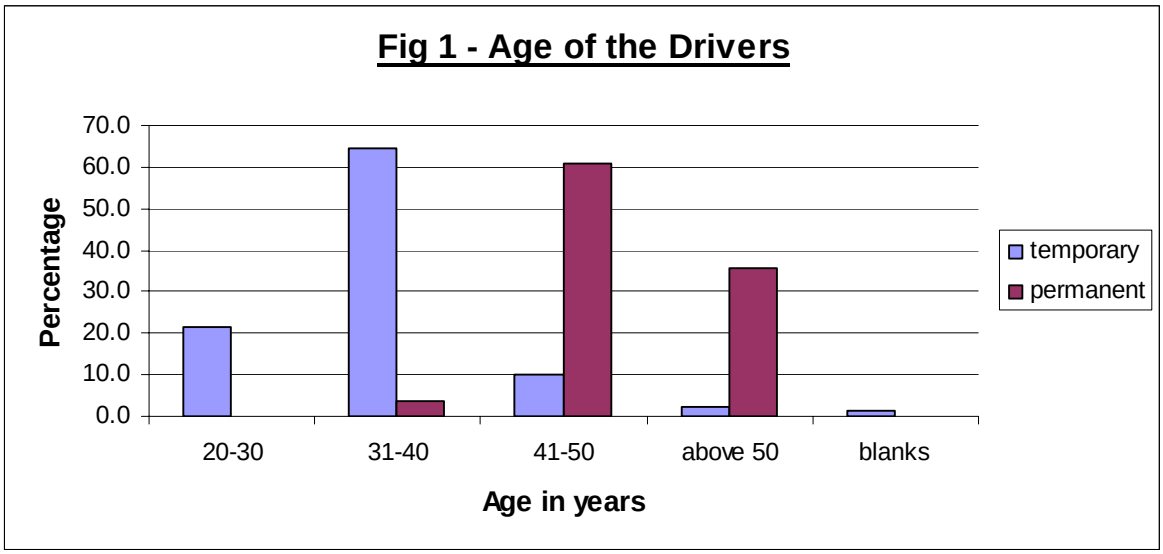

Table 3: Age

In percentage	Age in years (%)					Number of drivers
	20-30	31-40	41-50	> 50	blanks	
Temporary	21.5	64.6	10.0	2.4	1.5	130
Permanent	0.0	3.6	60.7	35.7	0.0	28

While the sample of the permanent drivers, as shown in Fig. 1, is considerably smaller than that of the temporary drivers, what comes across clearly is that a large percentage of permanent drivers is older than 40 years of age, while the temporary drivers are less than that. This substantiates the perception of the unionists that the change in policy has led to non-recruitment of new permanent employees and workers have been taken on contract to substantially decrease wage costs. The data also illustrates that many of the permanent drivers are on the verge of retirement, and this implies that many of the benefits that have been won through years of unionisation will now be lost and the younger contract workers will once again be at the mercy of ad-hoc labour policies.

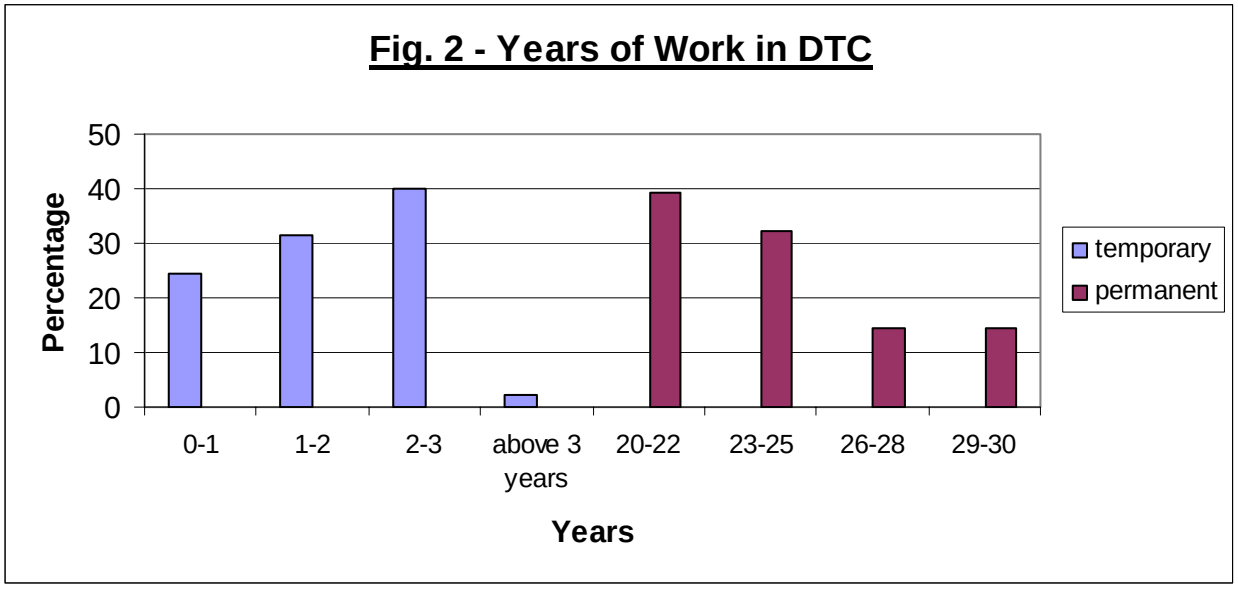

Table 4: Years of Working in DTC

In percentage	Years of working in DTC									Number of drivers
	0-1	1-2	2-3	>3	20-22	23-25	26-28	29-30	Blanks	
Temporary	24.6	31.5	40.0	2.4	0.0	0.0	0.0	0.0	1.5	130
Permanent	0.0	0.0	0.0	0.0	39.3	32.1	14.3	14.3	0.0	28

Fig. 2 illustrates that the permanent drivers generally have more than 20 years of experience, while the temporary ones were recruited only in the last 3 years. That also indicates that there has been a seventeen-year gap in between, in which there has been no new recruitment into DTC. In other words, when the present batch of permanent drivers retires there will be no significant experience within DTC to replace them. The Corporation will be totally dependent on temporary drivers and there will be no way of ensuring continuity either because of the very nature of temporary or contract appointments. It is also a curious fact that, even though 11 out of the 28 permanent drivers have been working for more than 22 years, nevertheless they are still not considered to be eligible for benefits that accrue to government employees. Nor are the contract drivers who have been in service for more than 3 years being considered for permanent posts. Hence, whether the DTC will be **adequately** staffed to meet the needs of the future becomes a critical question.

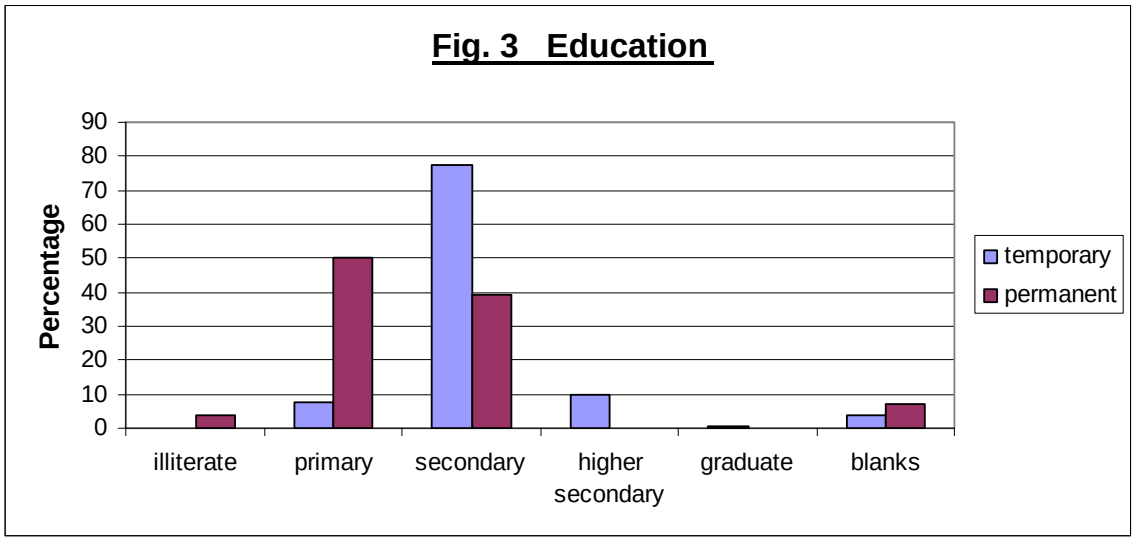

Table 5: Educational Profile of the Drivers

In percentage	Educational profile						Number of drivers
	Illiterate	Primary	Secondary	Higher secondary	Graduate	Blanks	
Temporary	0.0	7.7	77.7	10.0	0.8	3.8	130
Permanent	3.6	50.0	39.3	0.0	0.0	7.1	28

The data in Fig. 3 indicates that, out of 130 temporary drivers, 78% have schooling up to the secondary grade, while 50% out of the 28 permanent drivers have passed the primary stage. This clearly demonstrates that the lower educational qualification of the permanent drivers has been earlier used by the administration to peg wages at a lower level. It has only been the struggles of the unions that have enabled the permanent drivers to attain a reasonable standard of living. The subsequent hiring of temporary drivers, the majority of whom have slightly higher qualifications than the permanent ones, has depressed wages further.

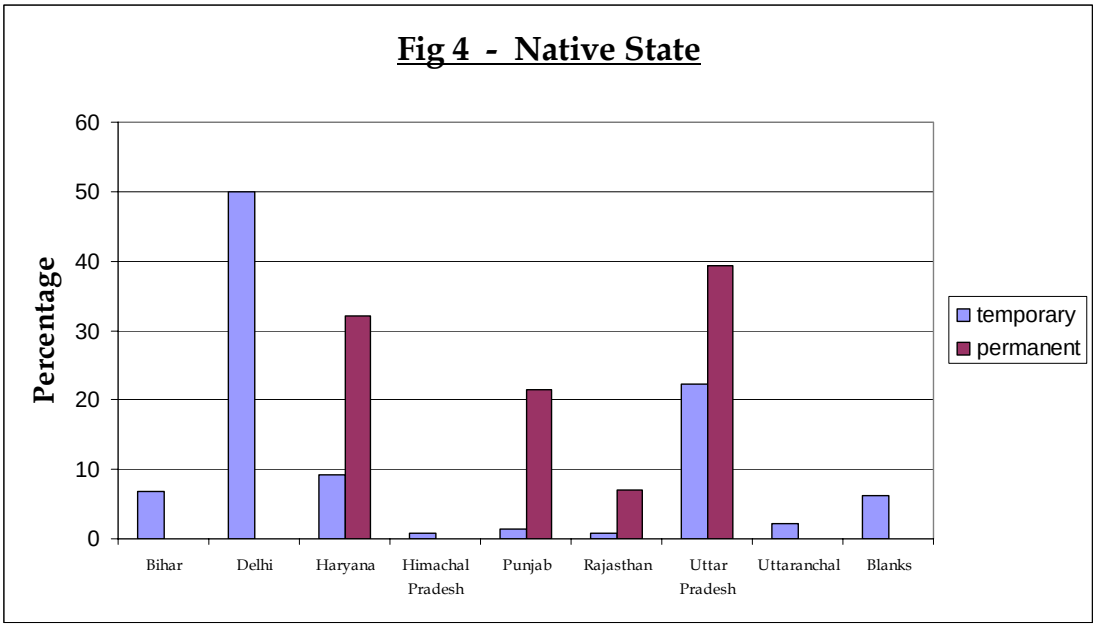

Table 6: The Original State the Drivers Belong to

In percentage	Native state									
	Bihar	Delhi	Haryana	Himachal	Punjab	Rajasthan	UP	Uttaranchal	Blanks	Number of drivers
Temporary	6.9	50.0	9.2	0.8	1.5	0.8	22.3	2.3	6.2	130
Permanent	0.0	0.0	32.1	0.0	21.4	7.1	39.4	0.0	0.0	28

Out of the total temporary drivers, 50% are from Delhi itself, whereas 32% and 21% of the total surveyed permanent drivers are from Haryana and Punjab respectively, and this is clearly reflected in Fig. 4. Thus the data illustrates the logic of keeping local employees on a temporary basis, while earlier the migrants were kept on a permanent basis, in order to reduce labour costs as well as deny them shelter and other social benefits. Local employees are also more vulnerable to hire and fire policies and organisation becomes more difficult when there are no focal points, such as common housing. Now that permanent recruitment has been stopped for almost two decades, DTC is currently manned extensively by an insecure and transient workforce, which is not healthy from an institutional perspective of sustainability.

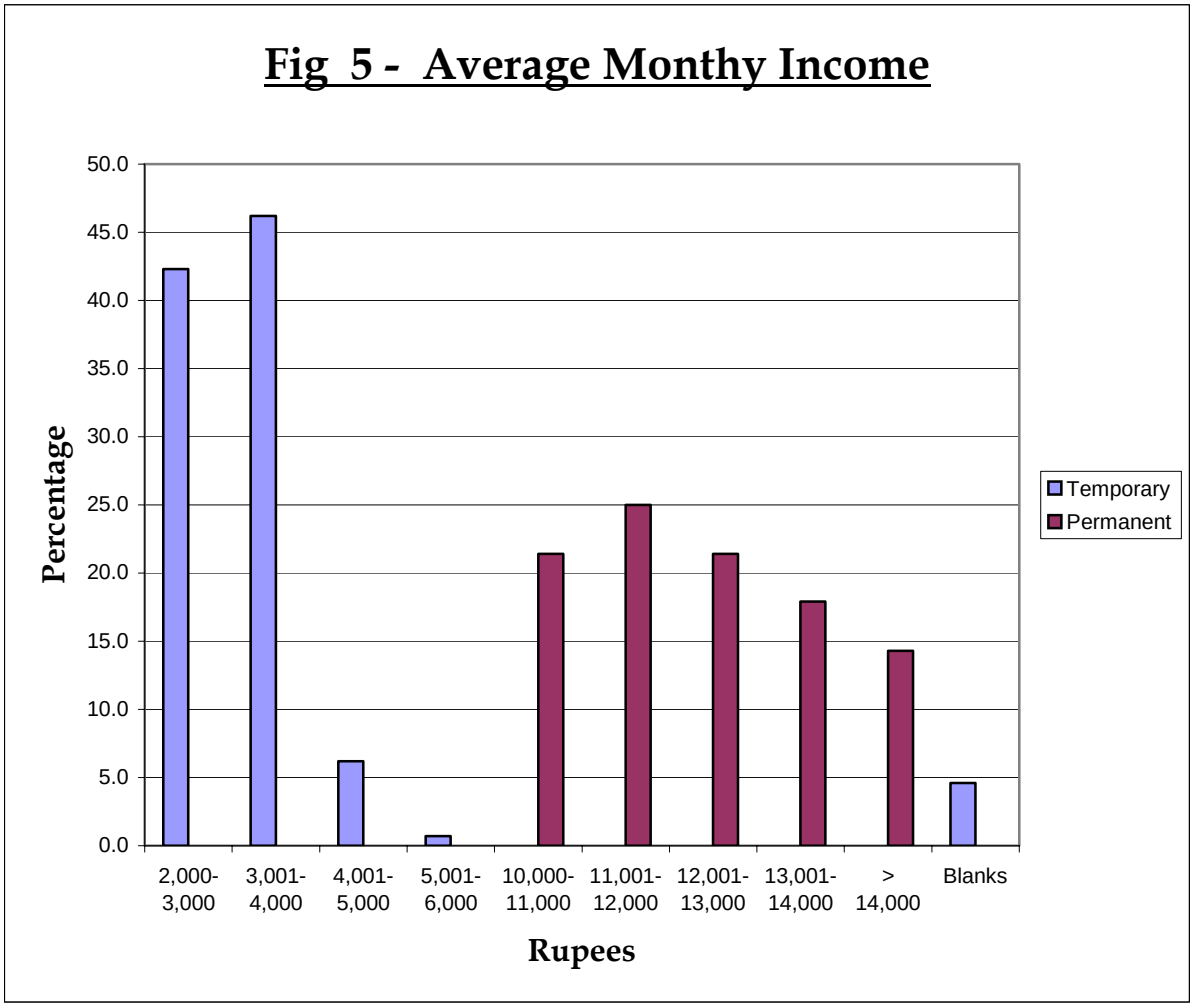

Table 7: The Monthly Income of Both the Drivers

In percentage	Average monthly income										
	2000-3000	3001-4000	4001-5000	5001-6000	10,000-11,000	11,100-12,000	12,100-13000	13,100-14,000	> 14,000	Blanks	Number of drivers
Temporary	42.3	46.2	6.2	0.7	0.0	0.0	0.0	0.0	0.0	4.6	130
Permanent	0.0	0.0	0.0	0.0	21.4	25.0	21.4	17.9	14.3	0.0	28

From Fig. 5 it can be seen that the average monthly income of temporary DTC drivers is within Rs 2000 to 6000 per month. More than **86%** earn less than Rs 4000 per month. This is not a time-rated wage, but a piece-rated one, fixed at Rs 1.20 per kilometre per day. Many of the temporary drivers are thus working

below the minimum wage norms. This compares very unfavourably with the salary of permanent drivers that starts from Rs 10,000 per month. In fact, more than 65% of the surveyed permanent drivers earn within the range of Rs 10,000 to 13,000 per month. Interviews with these drivers have also revealed that they used to earn about Rs 8,000 to 9,000 about five years ago. This effectively means that now DTC is saving at least Rs 7,000 per driver by imposing contractual obligations on them and nullifying the wage increases that the employees had been able to negotiate earlier. Apart from the cost-cutting mechanism, this measure also makes the drivers much more vulnerable to hire and fire policies, and thus keep them in a state of perpetual insecurity if they do not perform according to the norms laid down by the administration. This serves to explain the DTC management's insistence on ruling out permanent norms for the drivers and keeping them as temporaries. It also, thus, becomes a major factor affecting driver performance and the **reliability** and **efficiency** of the whole DTC system.

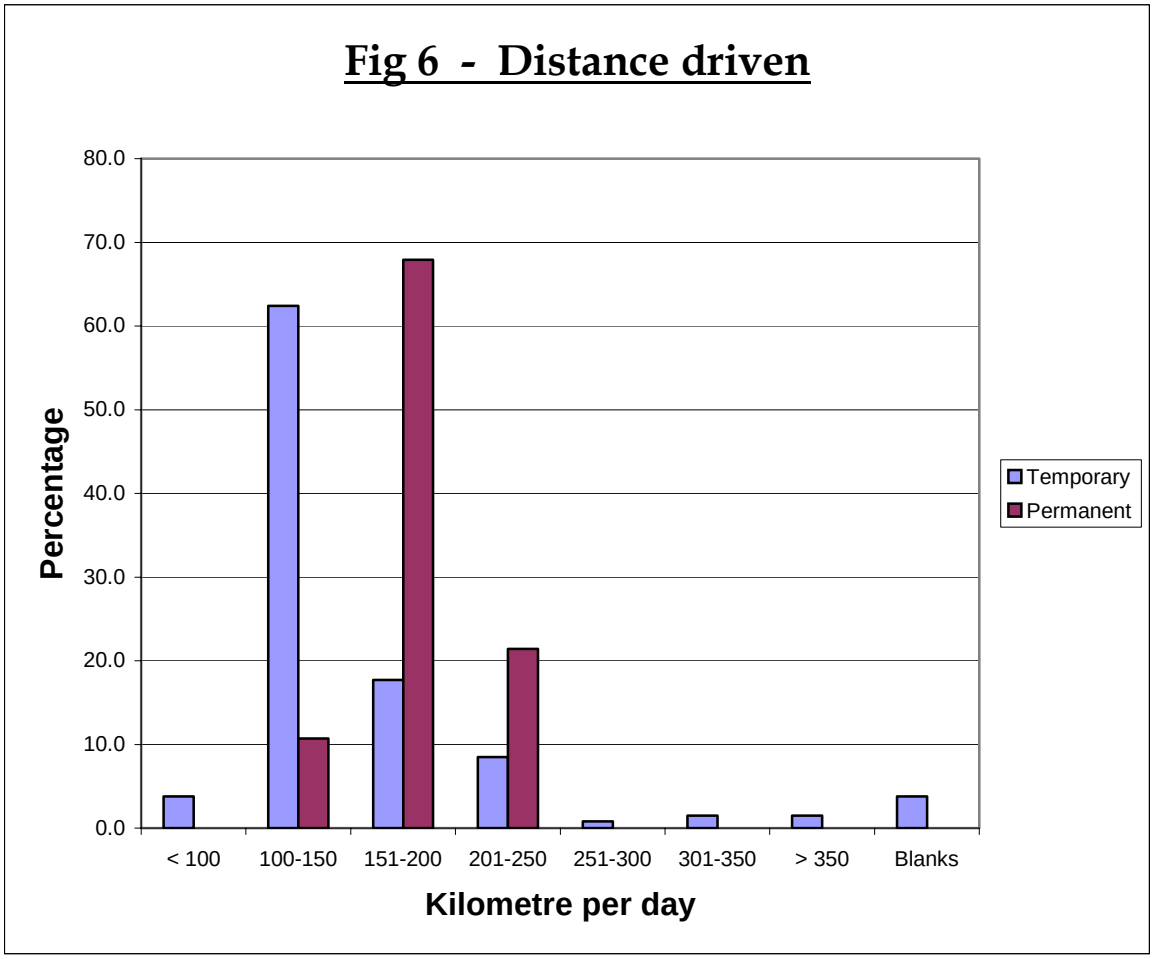

Table 8: Distance driven

In percentage	kilometre per day < 100	100-150	151-200	201-250	251-300	301-350	> 350	blanks	Number of drivers
Temporary	3.8	62.4	17.7	8.5	0.8	1.5	1.5	3.8	130
Permanent	0.0	10.7	67.9	21.4	0.0	0.0	0.0	0.0	28

The data in Fig. 6 clearly shows the variation in labour costs both for temporary and permanent drivers. In the case of temporary drivers, more than 62% drive 100 to 150 km per day, but their range could go up to 350 km per day, depending upon their need to increase their incomes. On the other hand, 79% of the surveyed permanent drivers drive 150 to 200 km per day and no one drives more than 250 km. This demonstrates the pressure that piece rate wages have on

workers to work for longer hours in order to earn more. While the workload on the temporaries may ostensibly be less, this pattern of employment also contributes to greater labour flexibility for the administration as also insecurity of work for the drivers, and this again reflects on the efficiency of DTC as a public service.

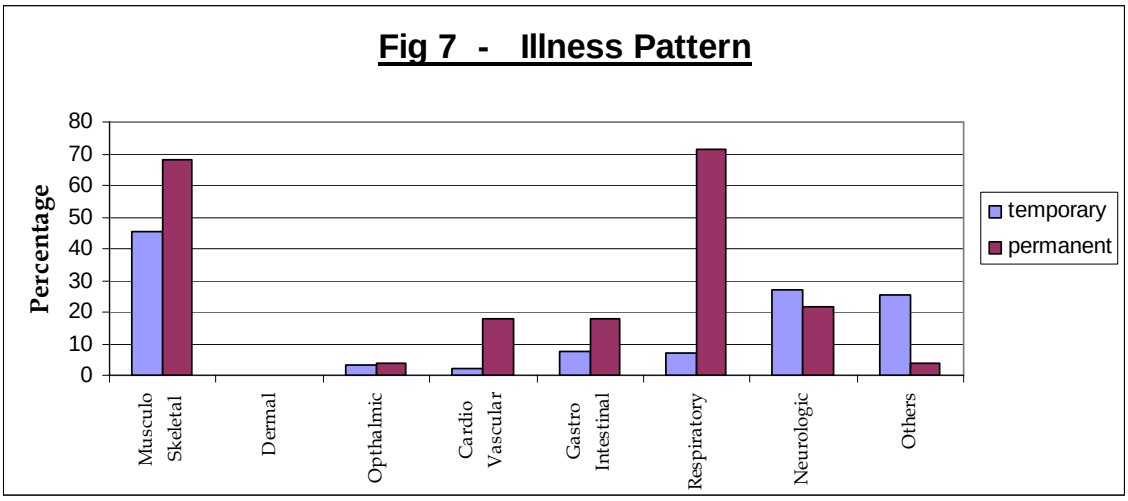

Table 9: Illness pattern

In percentages	Illness								Number of drivers
	Musculo skeletal	Dermal	Ophthalmic	Cardio Vascular	Gastro intestinal	Respiratory	Neurological	Others	
Temporary	45.3	0.0	3.8	2.3	7.7	6.9	26.9	25.3	130
Permanent	67.8	0.0	3.5	17.8	17.8	71.4	21.4	3.5	28

The data for illnesses affecting the drivers (Fig. 7) shows how the workload and the employment policies are impacting on the drivers. The reported incidence of musculo-skeletal complaints is higher for permanent drivers (68%) than for temporaries (45%) and 71% of the former report respiratory diseases as compared to only 7% for the latter. This is to be expected since the permanent drivers have been exposed to the occupational hazards of long driving and inhaling exhaust gases for a generation longer, but it is still revealing that so many temporaries (38%), who have at the most served for 3 years, are already

complaining of backaches, knee pains, etc. What is even more disturbing is that the incidence of neurological disorders is higher for the temporaries (27% as compared to 21% for their older counterparts). The drivers report that the new CNG engine is hotter, but not more powerful, than the old diesel one and consequently their working conditions have worsened. This provides an insight into the kind of pressure these drivers are operating under, and this will obviously affect DTC's performance as a whole as also the **safety** and **convenience** of the commuters.

It should be noted that all this is part of the policy framework within which DTC operates. It is precisely these policies of contractualisation as well as slowly allowing the older, more experienced staff to gradually fade away without any new appointments to replace them, that is at the root of many of the problems that managers, employees, and commuters face. In addition, the stage carriage and contract carriage systems further complicate the performance parameters because they also operate on the same system of contractual, over-worked, and under-paid employees who are piece-rated rather than time-rated.

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"Self-Sufficiency" and "Efficiency" of DTC Drivers

We shall now examine how the drivers, particularly the temporaries, respond to the biggest policy-driven problems of low pay and long hours of work. The most obvious response seems to be to drive even more in order to make up for the low wages. Our survey revealed that many of the temporary drivers interviewed drive more than one bus within or on the outskirts the city. We have attempted to classify the various categories of buses that they drive, such as within the city, National Capital Region, intercity, school bus, etc.

Table 10 gives the details of the various kinds of buses and the number of temporary drivers driving them.

Table 10: Temporary drivers driving pattern

S.No.	Types of bus driven	No. of Drivers	Percentage
1.	City	58	44.6
2.	NCR	0	0
3.	School	1	0.8
4.	Intercity	21	16.2
5.	Other	1	0.8
6.	City, School	17	13.1
7.	City, Intercity	8	6.2
8.	NCR, School	2	1.5
9.	City, NCR, School	1	0.8
10.	City, School, Intercity	7	5.4
11.	City, School, Other	1	0.8
12.	City, NCR, School, Intercity	10	7.7
13.	City, School, Intercity, Other	1	0.8
14.	City, NCR, School, Intercity, Other	2	1.5
	Total number of drivers	130	100

From the table it is clear that there are temporary drivers who drive even four to five types of buses in order to earn a sufficient livelihood. The response from the drivers indicates that 63% of them drive only one kind of bus, whether it is a city bus, or one in the NCR, a school bus, an intercity bus, or any other. But 37% of them drive more than one bus to earn an extra income. 21% of them drive two buses, 7% drive three buses, 8% drive four buses, and almost 2% drive as many as five kinds of buses. This is evidence of the economic compulsions arising out of a low wage that force the temporaries to undertake more work than is available with them from DTC. This is another indicator of the pressures to which the piece-rated contractual employees are being subjected to as part of the restructuring of DTC. These pressures will eventually impact on the driving performance, on the safety of the commuters, and the sustainability of DTC itself. Fig. 8 graphically illustrates the work pressures on the temporary drivers. The same could not be determined for the permanent drivers because they have fixed routes and driving schedules.

Fig. 8: Work pressures of temporary drivers

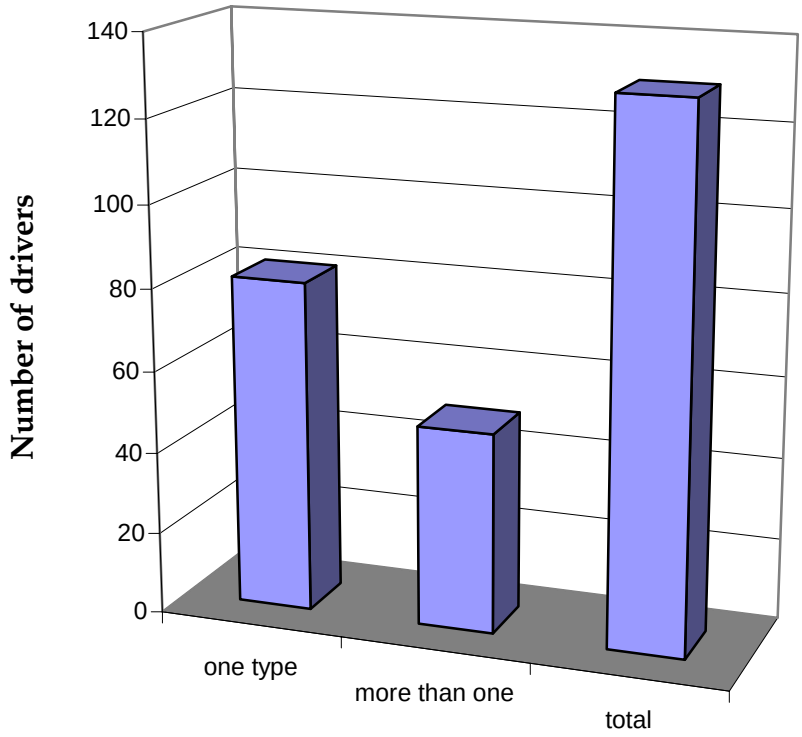

Table 11: Single and multiple bus driving by temporaries

	Number of buses driven		
	One type of bus	More than one type of bus	Number of drivers
In percentage	62.3	37.7	**130**

Table 12: Variability of rates of payment

	Rate of payment, Paisa per kilometre													No. of drivers
In percentage	70	80	90	100	110	120	70, 90, 100, 110, 120	70, 110	70, 120	80, 90	80, 110	80, 120	Blanks	
One type of bus	0.8	15.4	0.0	0.0	0.0	0.8	32.3	0.8	0.8	0.8	0.8	10.0	0	
More than one	0.0	4.6	0.0	0.0	0.0	17.7	0.0	0.0	1.5	0.8	0.0	12.3	0.8	**130**

Table 12 provides a glimpse into how the drivers are further subjected to irregular routines and wage rates that make them uncertain of incomes and compel them to undertake higher workloads. The data shows that 32% of the temporary drivers can drive one type of bus but their rate arbitrarily varies from 70 to 120 paise per kilometre. If they want to drive one bus but get a fixed rate then for 15% the rate drops immediately to 80 paise/km. On the other hand, for driving more than one bus, for 17% the rate stays stable at 120 paise/km, and for 12% it could either be 80 or 120 paise/km. The drivers report that every day an individual driver gets a changed route from the route on the earlier day, and every bus and every route has different rates. They said, "For a particular day we may be informed about a rate for a certain route, but the rate changes on the next day for same route and even with same bus".

Fig 9 - Average Monthly Income

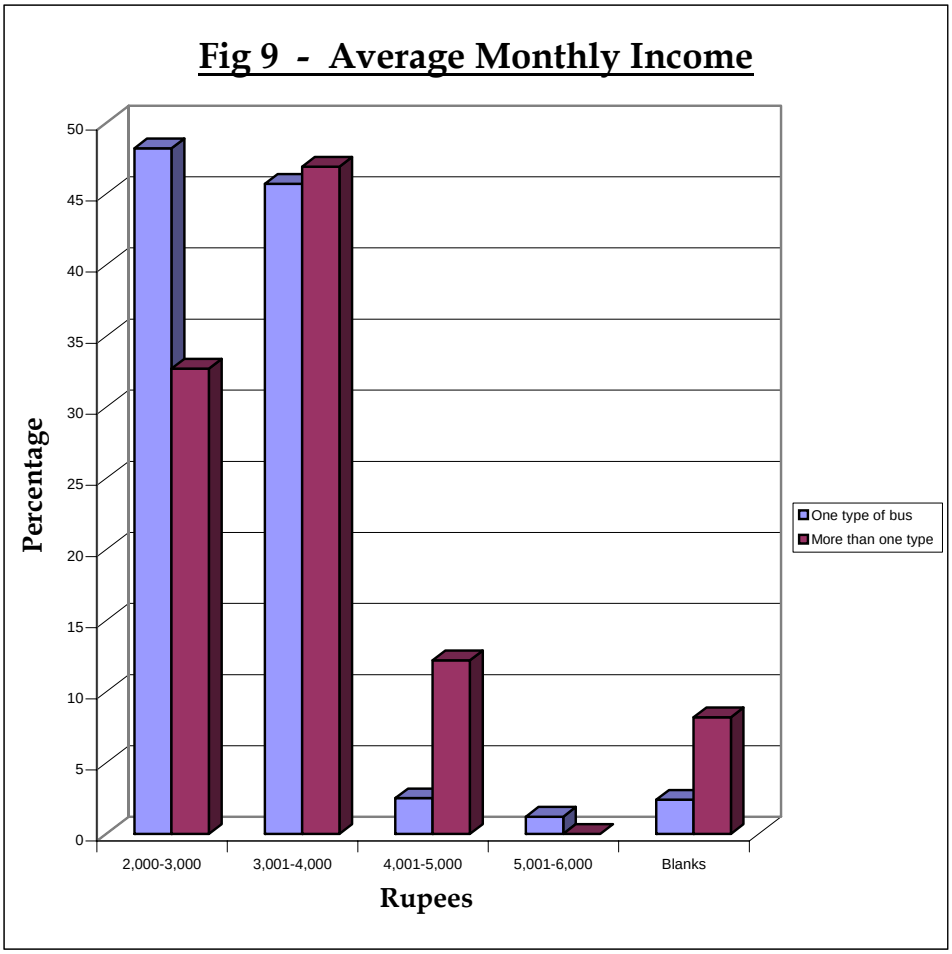

Table 13: Income dependency on driving pattern

In percentage	Average monthly income					Number of drivers
	2000-3000	3001-4000	4001-5000	5001-6000	Blanks	
One type bus	48.2	45.7	2.5	1.2	2.4	
More than one	32.7	46.9	12.2	0.0	8.2	**130**

The economic compulsions that force the drivers to take on more work are quite clear from the data on average monthly incomes (Fig. 9). The peak monthly income for one-bus drivers hovers around Rs 2,000-3,000, although a significant percentage also earn up to Rs 4,000 per month. On the other hand, the multi-bus drivers peak at the higher category of Rs 3,000-4,000 and some may even earn as much as Rs 5,000 per month. As we have seen earlier, the monthly wage for a permanent driver is about Rs 11,000. In other words, driving multiple buses becomes an imperative if the drivers wish to earn even half as much as the permanent drivers do.

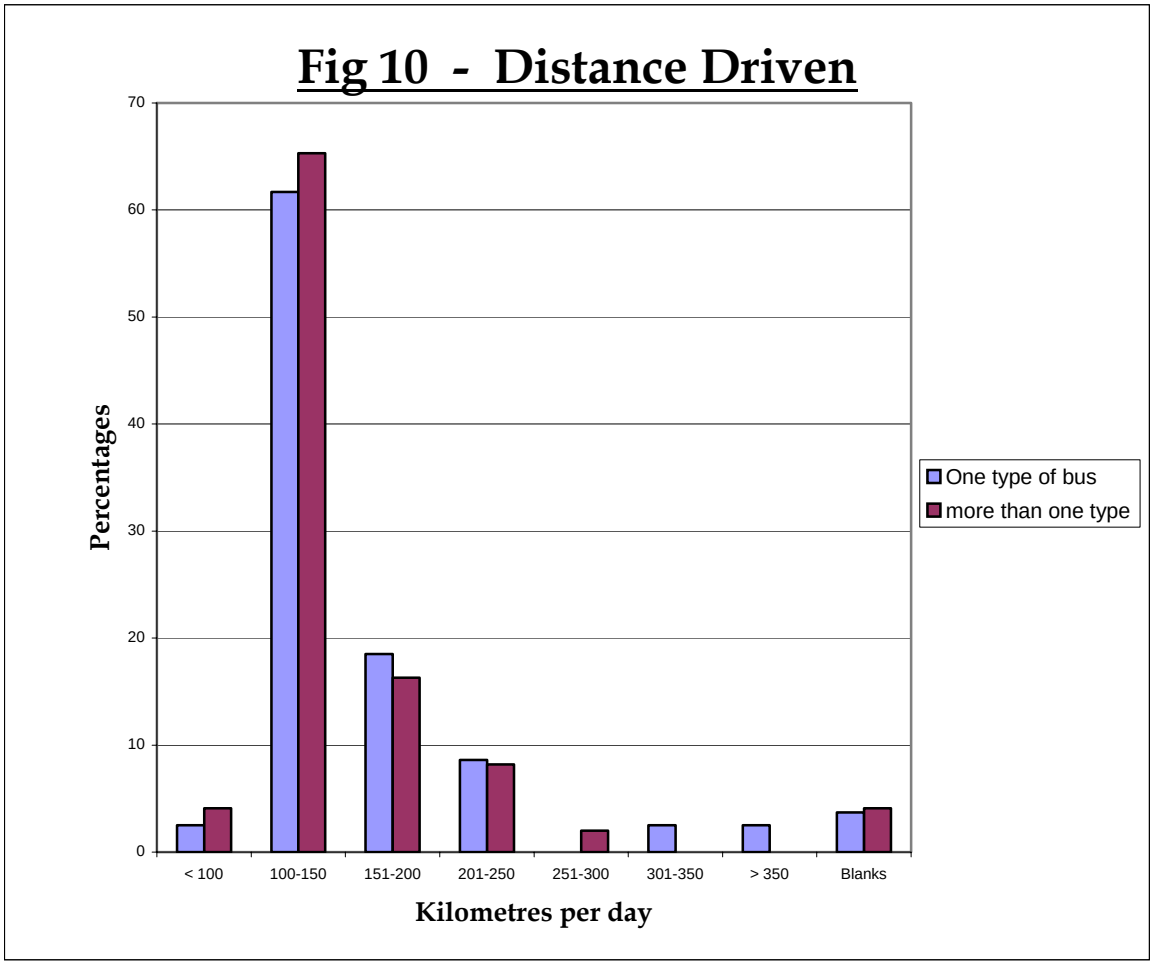

Table 14: Distance driven for different driving patterns

In percentage	Km per day								Number of drivers
	< 100	101-150	151-200	201-250	251-300	301-350	> 350	Blanks	
One type bus	2.5	61.7	18.5	8.6	0.0	2.5	2.5	3.7	
More than one	4.1	65.3	16.3	8.2	2.0	0.0	0.0	4.1	**130**

The compulsion to earn more within the given situation for the contract drivers also impacts on the distance driven. From Fig. 10, it is clear that the larger section of both the categories of temporary drivers (driving one type of bus and more than one type of bus) drives 100 to 150 kilometres per day, although some may drive as much as 350 kilometres in a day, particularly if they are driving a single bus, probably of the inter-city type. A comparison with what the drivers report

about their working hours also reveals significant clues about the increasing pressure of work (Fig. 11).

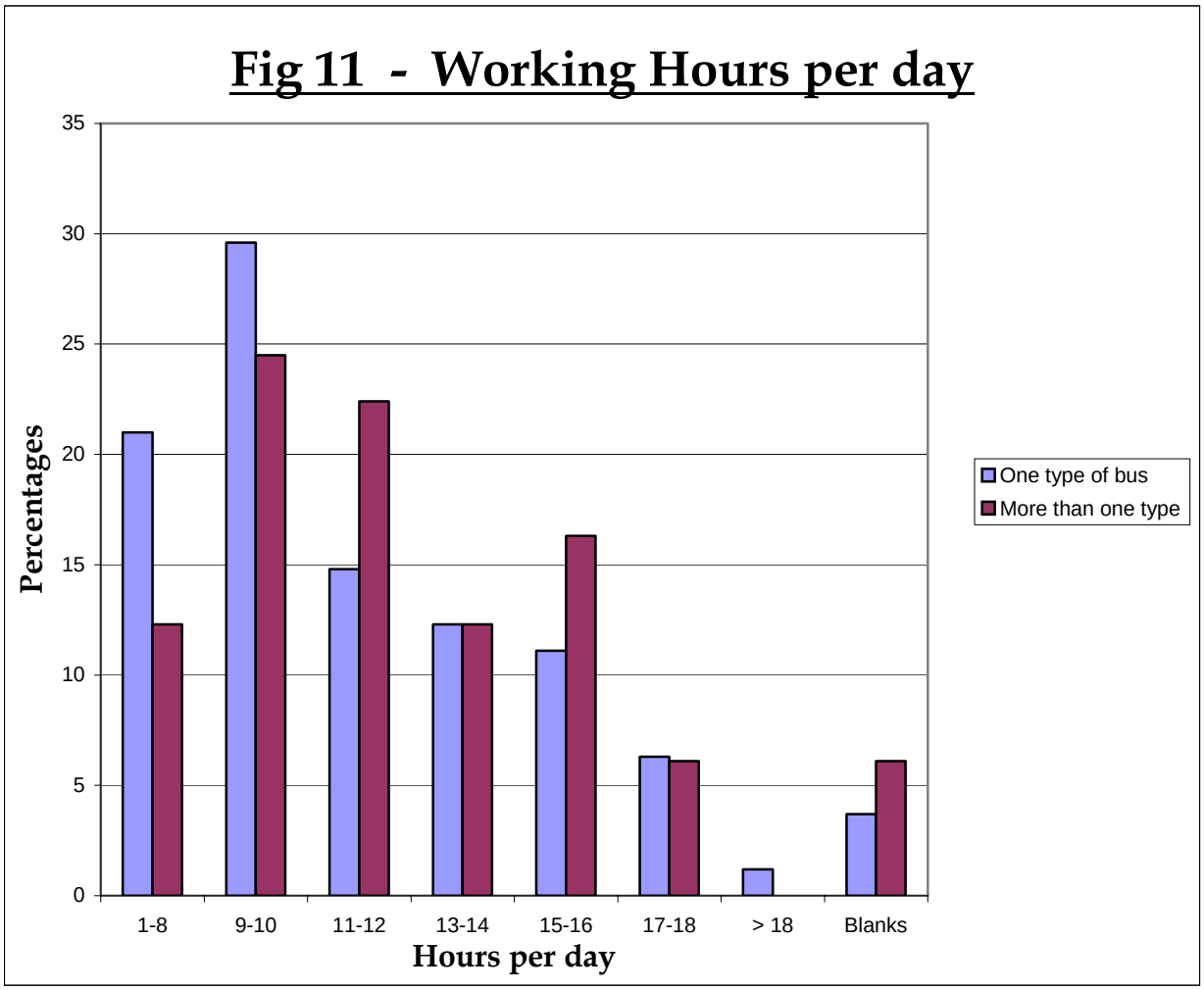

Table 15: Working hours per day for different patterns of driving

	Hours per day								
In percentage	1--8	9--10	11--12	13--14	15-16	17-18	<18	Blank	Number of drivers
One type bus	21.0	29.6	14.8	12.3	11.1	6.2	1.2	3.7	
More than one	12.2	24.5	22.4	12.2	16.3	6.1	0.0	6.1	130

As shown by Fig. 11, most of the drivers work 9 to 10 hours per day irrespective of the pattern of bus they drive. However, many more of those driving more than one bus are also under greater compulsion to work longer hours. Thus, the "efficiency" of the drivers is ensured by the need to be "self-sufficient" with

respect to their incomes, and this is what at the heart of the efficiency drive of DTC. In many aspects, therefore, the self-sufficiency of DTC is dependent upon the extent to which the contract drivers exploit their own bodies to work longer hours on more buses. Thus, the impact of the work pressures on their bodies is of great significance in understanding how it will eventually affect the drivers, the DTC, and the commuters.

Fig. 12 shows the type of illnesses reported by the contract drivers, categorised according to whether they drive one or more bus.

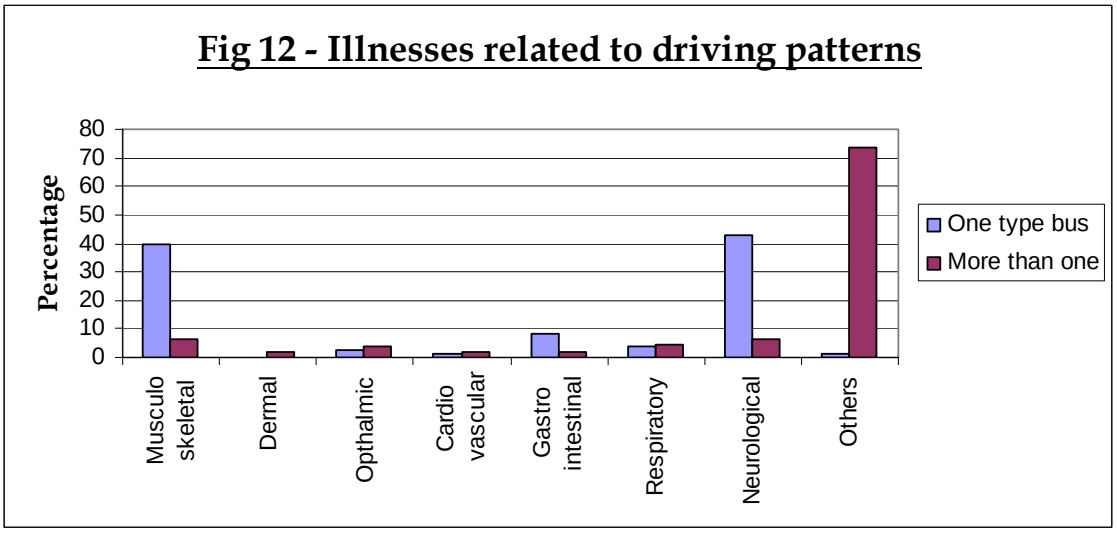

Table 16: Illnesses related to driving patterns

In percentage	Illness								Number of drivers
	Musculo skeletal	Derma l	Opthal mic	Cardio vascular	Gastro intestinal	Respir atory	Neurol ogical	Others	
One type bus	39.5	0.0	2.5	1.2	8.6	3.7	43.2	1.2	
More than one	6.1	2.0	4.1	2.0	2.0	4.2	6.1	73.5	**130**

Driving more than one bus should have obvious implications for occupational diseases related to increasing stress of workloads, as shown in Fig. 12. What emerges from the survey data, though, is that the single-bus drivers continue reporting high incidence of musculo-skeletal (25%) and neurological disorders

(27%), while the multi-bus drivers appear to be more beset with "other" problems, such as heat itching, headache, tiredness, rashes on skin, and loss of appetite. This may have something to do with the fact that the temporary drivers have worked with DTC for only 3 years or less. In other words, it may be too soon for them to exhibit the symptoms of occupational disease.

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A View on the Comments

Hazards Centre held a conference on 27th December 2006, to release this report to the Press.

Comments by Mr. Anshu Prakash, Chairman of DTC:

- It would have been better if the comparison had been with a control group rather than between permanent and contract drivers.
- Fresh recruitment of drivers has been cleared on a permanent basis.
- Education qualification would be not less than 10th pass for the new drivers.
- There would be exams for recruitment and a probation period for six months.
- Delhi Government is going to introduce 650 new low-floor and rear-engine buses, in view of the coming Commonwealth Games.
- Hence, the drivers would no longer be exposed to the hazards mentioned in the report.
- There would be an increment on pay per kilometre, depending upon the type of bus driven.
- There would be provisions for overtime and medical facilities for the permanent drivers.
- The Government is also going to introduce 3 new depots and 250 new bus stands.

Responses by Comrade Thomas, DTC Union:

- There should have been different salaries for different kinds of vehicles but, in reality, all of them get the same pay.
- It is not clear whether the new scales are going to be only for future drivers or for the present drivers.
- It is also not clear whether the present contract drivers, having served for more than 3 years, would be considered for regularisation.
- The rear engine buses would mitigate some of the hazards for the drivers, but they would be transferred to the passengers sitting at the rear.
- There is no deadline for the implementation of the new announcements made by the Chairman

Conclusions

The survey is somewhat limited in terms of the number of drivers covered. We were able to interview only 158 drivers during the course of the study, although several attempts were made to contact them at the bus depots and at general meetings of the union. In addition, the sample is a little skewed because 130 of the respondents were temporary drivers while only 28 were permanent employees.

Nevertheless, the results of even this limited study give some clear indications of the manner of DTC's restructuring and its impact on the drivers. While the ostensible reasons given for restructuring are ***efficiency***, ***adequacy***, and ***self-sufficiency***, the data on drivers shows that the means employed to achieve these objectives are self-defeating – and have been so even for earlier attempts to reform DTC.

Firstly, the apparent efficiency is being achieved by contracting out work. This creates a workforce that is patently more insecure, works longer hours, and gets much less pay. It is, therefore, forced to drive more than one bus, which may be good for acquiring labour flexibility but is also giving rise to working conditions that are going to make the same employee less efficient with less motivation to improve performance. The occupational injuries and diseases that are implicit in this manner of reforming DTC are only going to decrease employee efficiency

and alertness. Further outsourcing and privatisation of DTC is not going to remedy matters any further, if the present trends are any indication.

Secondly, by not appointing permanent employees, DTC is cutting at the roots of its own adequacy because when the current batch of permanent drivers retires, DTC will no longer have any experienced employees on its rolls. There will only be a large contingent of younger, relatively inexperienced, and underpaid contract workers who have no stake in the continuity of DTC. This can only mean that the entire system will be inevitably privatised. This is not going to give a better service to customers. As is already apparent, drivers are being forced to take on multi-tasking in order to meet ends meet. Such compulsions can hardly result in a "better" service for the harried lot of bus commuters.

Thirdly, even with all this restructuring, DTC is still making losses. In other words, the goal of self-sufficiency is not being achieved with the cutting down of wage costs alone – even though they are significant. Clearly, DTC will have to look at the more critical aspect of providing a <u>better</u> service to its customers in order to be able to attract more people and wean them away from the private carriers and even the competing (although higher-priced) Metro. This better service cannot be made possible through a policy that creates discontented employees. It will have to be achieved through a more integrated vision of what the commuters of Delhi need and what the DTC can do to fulfil that need as a "public" service provider. In other words, the vision of the planners will have to be more closely linked with the reality of daily life in Delhi rather than being determined by an imagination of what Singapore and Shanghai or even Paris are like.

DTC has about 3,100 buses in service with more than 6,900 drivers. Gradual decline of this workforce through retirement and contractual policies would not only drastically affect DTC's performance, while putting large numbers out of productive unemployment, it would also inconvenience a much larger population that uses buses to get to and from work.

If DTC has to be revived, the following options have to be seriously considered by planners:

- Design of an adequate public transport system to offset the huge increase in private transport
- Regularisation of a permanent workforce with proper wage rates and social security benefits
- Evaluation of alternative fuels and technology for buses as the pillar of a radial public transport system
- Regulatory and management options for inspection and maintenance centres for buses, depots, and workmen
- Speedy and effective response mechanisms to grievances of bus users, pedestrians, and cyclists

Each of these separate initiatives would be complementary in the development of a sound urban transport policy for Delhi, as much as for the rest of the country.