

## CHAPTER IX

### SUMMARY AND CONCLUSIONS

From the study of the North Bengal Transport organisation, certain conclusions can be drawn. This organisation is nationalised and huge subsidy is given from the government exchequers to run the organisation. The amount of subsidy is increasing over the period. However, with the mounting losses the organisation is growing in size. It has also diversified its services. The corporation operates in about 236 routes and plies in 75,725 effective Kilometers daily and the number of persons employed is about 4604. It is the second biggest state transport corporation undertaking in the state next only to Calcutta State Transport Corporation.

It has all the defects of the Calcutta State Transport Corporation in the sense whatever may be the criteria it is not a profitable organisation and therefore presumably an inefficient one. The World Bank Report of 1988 pointed out that the Calcutta State Transport Corporation is an example of low productivity and inefficiency. The World Bank points out - "The Calcutta State Transport Corporation (CSTC) has a fleet of some 1100 buses of which less than 700 are in operation, mainly for want of repair and maintenance and sometimes because of lack of drivers. It has a high staffing ratio of 20.7 per operational bus. The CSTC has been plagued by fare evasion estimated more than 15 percent of revenue. The resulting combination of low productivity with fare inadequacy and evasion necessitates a subsidy of about 116 million a month". About the private buses in Calcutta the World Bank Report comments that the "city's 2200 private buses operated mainly by small companies or individual owners grouped into several route associations - have been able to serve the people without subsidy". In other words the Calcutta State Transport Corporation is running at a huge loss, whereas the private buses are at least running at a profit. Purely from the standpoint of profit earning capacity the nationalised transport system is weak financially and survives with tax payers' money - namely subsidy.

The North Bengal State Transport Corporation is very similar to the Calcutta State Transport Corporation. However, we have made a comparison with other State Transport Corporations of India and came to a conclusion that even in respect to other State owned Transport Corporation the performance of North Bengal State Transport Corporation is perhaps most unsatisfactory.

North Bengal consists of five districts of West Bengal state viz. Cooch Behar, Jalpaiguri, Darjeeling, Malda and West Dinajpur. It approximately covers 21625 km. which is about 1/6 of the total area of West Bengal. The region is extremely backward whatever may be the criteria. Out of five districts of North Bengal four districts are officially declared as "no industry district". One km. of road in this region of the North Bengal is required to serve 2,266 persons on an average as against the country's average of 443 persons per km. Though North Bengal has special importance in the economic development of West Bengal, yet this region is a relatively backward area. The most important reason for the backwardness is the lack of rural and urban integration and absence of communication net work.

Transport, communication and energy play a vital role in the economic development of a nation like ours. Among these infrastructural ingredients, transport is a single powerful factor on which economic, social and political

activities of a nation depend. Of all the modes of transport, the Road Transport suits well to the Indian context because of its flexible operations, less capital investment and easy operation in the village where the majority of the people live.

In this study, we have attempted to study the causes of growth of this Corporation (NBSTC) inspite of all inefficiencies, losses and subsidies. We have analysed why it is running at a loss, what are the factors that led to its continuous "bad management". But it still grows in size, diversification and method. Perhaps the "theory of bureaucracy" may be helpful to understand its growth.

On 15.4.1960, i.e. the date on which the West Bengal Government handed over this undertaking to the Corporation, it owns a fleet of 87 buses. The number of persons employed was 651 and the amount of capital contribution by State Government was 28.74 lakhs. On 31.3.1983, the Corporation operates in 236 routes. The number of vehicles owned is 439 and the number of persons employed is 4,604. It is the second biggest State Transport Corporation in the state next only to Calcutta State Transport Corporation. The NBSTC has grown in size. The objectives were : (1) To help the public in trade and industries by the development of road transport; (2) To co-ordinating the road transport with rail transport; and (3) To improve the facilities for road

transport in the said region. Our study covers a period of not less than twenty one years to get a representative picture of the working of the Corporation.

The study of the Board of Directors of NBSTC reveals that it is full of political representatives and on temporary basis. Short duration of appointment and frequent transfer of top management are the twin features of the organisation. There is no worker's representation in NBSTC Board at present. The NBSTC has three divisions namely at Cooch Behar, Siliguri and Raiganj. There are nineteen depots on February, 1989 within the jurisdiction of the divisions. There is no proper system of reporting from the lower level to the upper level and decisions are very often taken on the basis of inadequate data or information. The controlling system of NBSTC is not effective.

There is no man-power planning at all in the organisation which is experiencing a high vehicle-staff ratio. In the year 1967-68, the number of vehicles held by the corporation was 233. The administrative staff, traffic staff and mechanical staff per vehicle held were 1.13; 3.63 and 1.29 respectively. In the year 1987-88, the number of vehicles held was 529 and the administrative staff, traffic staff and mechanical staff per vehicle held were 1.25, 5.14 and 2.30 respectively. The number of all kinds of staff per vehicle held is showing a rising trend. This ratio has

got no consistency with the increase or decrease in the schedules or operation. The productivity of employees in terms of km. is not satisfactory. There is no fixed recruitment policy in the NBSTC and very often recruitment is coloured by political or regional consideration. Hence the efficiency is very low in the NBSTC. The greatest problem is that in the NBSTC the employees are hardly trained. It is the most neglected function in the corporation. The policy as regard to transfer in the corporation is that any one who has served three years can be transferred. Many a time the transfers become paper transfer and are not implemented.

The accident rate of NBSTC per lakh kms. does not show much variation and it was almost been constant around 0.23 accidents per lakh kms. The rate of breakdowns per 10,000 kms. was exceptionally high in the years 1976-77, 1977-78 and 1984-85. With respect to other years, there is not much variation in the number of breakdowns per 10,000 kms. and it has almost been constant around 1.48 breakdowns per 10,000 kms. The percentage of vehicles off the road is high and has almost been constant around 28% on average. It means that  $\frac{1}{4}$ th or more of the vehicles remain off the road. However some improvement has been noticed during the current period of 1985-86 and 1986-87. But it is difficult to say whether the improvement is transitory, random or permanent feature of the NBSTC management. One paradox

that has to be noted is that with the increase in the number of mechanical staff, the number of vehicles in repair has increased and number of vehicles off the road has multiplied. This shows that the maintenance policy of the NBSTC is defective. One of the reasons that could be gathered from the repair shops is the lack of discipline, work ethics and poor supervision in the management. The management has virtually no control over the mechanical staff. Very often this mechanical staff are recruited not on merits but on extra-economic or extra-administrative conditions. The percentage of cancellation of trips is 23.14% over the seven year periods on an average. It is needless to say that due to frequent cancellations (varying from  $\frac{1}{4}$ th to  $\frac{1}{5}$ th of the schedule trips) the public at large are put into great inconvenience. It is found that most of the vehicles in each year belongs to "more than 8 year groups". Certain amenities are also provided towards customers, students, teachers, blind people, journalist, office-goers which presumably upgrades the image of the corporation.

The fleet utilisation records a 0.8% improvement during the study period. Except the year 1972-73 the fleet utilisation was below 90 per cent and does not compare favourably with 90 per cent fleet utilisation standard referred. The vehicle utilisation shows a 55.21 per cent improvement during the study period and does not compare

favourably with 300 kms. standard referred. The kms. obtained per litre of fuel in NBSTC has been poor and it has a long way to go to achieve a satisfactory performance. The occupation ratio shows an improvement of 7 percent during the study period. Except the years 1974-75 to 1978-79, the occupation ratio was below 70 per cent and does not compare favourably with 70 per cent occupation ratio standard referred. The number of routes, route kms. and effective kms of NBSTC have been increased during the study period.

The revenue per km. was 120.63 paise at the beginning of the study period and increased to 313.00 paise at the end recording 150.33 per cent increase. The cost per km. increased from 124.55 paise to 440.00 paise during the study period, registering a 253.27 per cent increase. The loss per km. was 3.92 paise in 1957-68 and 230 paise in the year 1987-88, recording 5,757.34 per cent increase over the period. The total revenue per vehicle per day was Rs. 180.82 in 1957-68 and Rs. 602.73 in the year 1986-87 records an increase by 233.23 per cent. The total cost per vehicle per day was 135 in 1957-68 and Rs. 1205.47 in the year 1986-87 and records an increase by 548.10 per cent. The cost revenue ratio is always more than 100.00 and it is losing very heavily. In 1957-68 the cost revenue ratio was 103.25 per cent and in 1986-87 it has become 200.24 per cent. The revenue capital ratio of NBSTC has come down



from 94.08 per cent in 1967-68 to 15.15 per cent in the year 1984-85. It indicates that asset utilisation and financial performance are not better.

The cost of personnel has recorded an increase over the period of seventeen years at 747.72 per cent. The cost of fuel records an increase of 838.15 per cent over a period of seventeen years. The interest cost or debt charges has recorded 1121.10 per cent increase. The costs of depreciation records an increase of 435.19 per cent and the cost of spare parts 359.55 per cent during a period of seventeen years. The percentage of cost of tyres and tubes to total cost has come down from 7.9 per cent to 5.48 per cent and it is mainly due to better km. obtained per tyre. The cost of battery as a percentage to total cost was 0.8% in 1971-72 and 0.33 per cent in 1987-88. It means that it is not used in a better way. The cost of lubricant shows declining trend. The cost of stores record 139.50 per cent increase. The tax cost is increased by 133.58 per cent during the period of seventeen years. Other costs not included in the above heads have increased by 232.37 per cent over 1971-72. The total cost in absolute terms records an increase by 1293.70 per cent and total revenue by 729.60 per cent during the study period.

It is observed that the fares are not revised in each year. The revision of fares is not in the hands of the

Corporation. A break even cost per seat km. is calculated which tells that the fare charged by the Corporation per km. is much lower than the break even cost per seat kms.

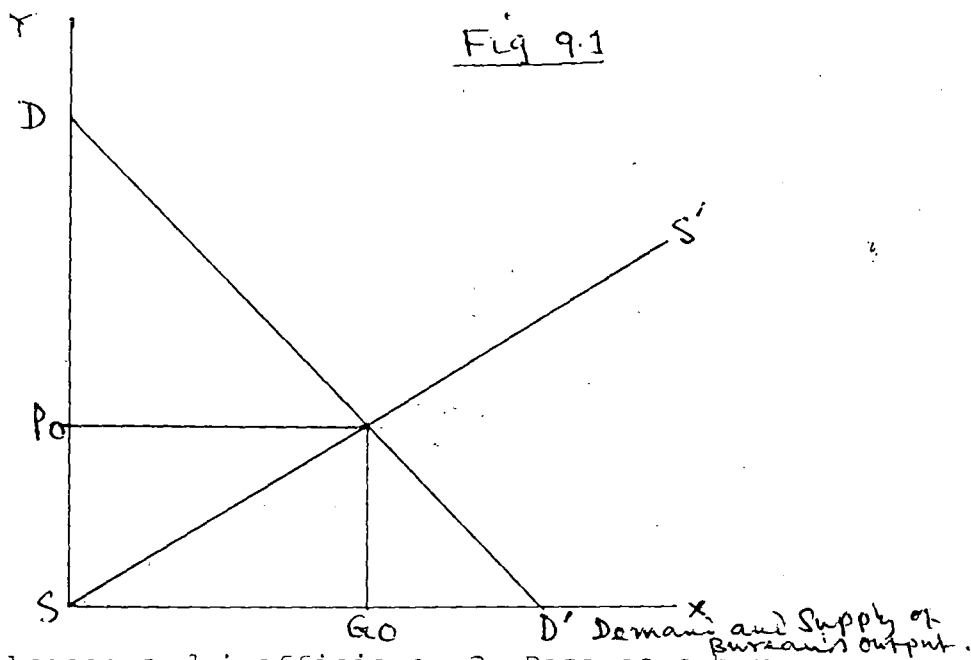
It is observed that out of every rupee received by the Corporation about one third is made over to government. The interest on capital/loan is the single largest item and accounts for 96.40% to total payment and 30.97 per cent of total revenue. Capital contribution received from the participating Government is irregular during the period. From 1984-85 the payments made to the participating Government were higher than the capital contribution received. The capital contributions were not made proportionately along with the growing requirements of the Corporation. The agreed ratio of capital contribution between state and Central Government is 2:1. But the Central Government is in a back log of Rs. 1207 lakhs in 1984-85.

The lower optimum cost in 1987-88 is Rs. 528.67 when  $Y_1 = 5.54$  (i.e. No. of staff per vehicle per day  $Y_2 = 71.3198$  (i.e. quantity of fuel used per bus per day); and  $Y_3 = 0.01066$  (i.e. the number of tyres used per vehicle per day). The higher optimum cost is Rs. 610.69 where  $Y_1 = 7.56$ ;  $Y_2 = 71.3198$  and  $Y_3 = 0.01066$ . But the actual cost incurred per vehicle per day in that year is Rs. 1133 and the actual earning per vehicle per day was Rs. 556.31.

In spite of all inefficiencies, losses and subsidies the state transport sector is in existence not merely because some interest groups want them and the legislature authorises them. They must be "manufactured". More often than not, the supplies of the programmes for nationalised transport is part of the government itself, a government bureau. Government may grow not only because inefficiencies are tolerated by the citizens or increased expenditure are demanded by the citizens, but because they are demanded by the bureaucracy supplying government programmes in the form of new buses, (which would ultimately run into huge losses). The government bureaucrats even in the less developed region like North Bengal are an independent force, which possibly may lead to constant growth of the size of the North Bengal State Transport Corporation. The North Bengal State Transport Corporation is incurring loss and a huge loss, but still it is increasing in size.

To understand the problem consider Fig.1. Let  $G$  be a measurable output from public transport programme — say number of buses successfully completing its task by carrying<sup>1</sup> passengers or number of buses earning profit per kilometer. The demand for this output, somehow revealed through the political process, is the line  $DD'$ . Let the minimum cost of supplying this output be schedule  $SS'$ . The optimal quantity of  $G$  to purchase from the point of view of community

is  $G_0$ , where the marginal benefit to the community of another bus successfully completing a year of operating just equal marginal cost. The minimum total cost of supplying the optimal output is  $P_0 G_0$ . But if members of North Bengal State Transport Corporation desire a greater budget expenditure than  $P_0 G_0$  it may still occur. Why greater budget still occur



in the face of losses and inefficiency? Because a bureaucracy does not simply offer up a supply schedule such as  $SS'$  to the legislature and ask the legislature to pick a point on it. Instead, it offers up a total budget  $B = P_B G_B$  that may exceed the optimal budget from the point of view of demanders because  $G_B > G_0$  or  $P_B > P_0$  or both. How can the bureaucracy get the legislature to "buy" this higher budget? Two characteristics of the legislature bureaucracy relationship work in favour of bureaucracy in achieving this end.

First, the legislature and bureaucracy may be typically in a bilateral monopoly situation. Whereas the bureaucracy obviously needs the legislature in that the legislature must approve all expenditure measures, if bureaucracy is to be sustained, the legislature also, at least in the short run, is in equal need of the bureaucracy. If the bureaucracy refuses to supply any output, allows a significant deterioration of quality or like it may be members of the legislature that bear the hostile reaction of the citizens at the next election, not members of the bureaucracy. If  $B_O = P_O G_O$  is the optimal budget from the point of view of the community and  $B_B$  the optimal budget from the perspective of the bureaucracy, then by analogy with other bilateral monopoly situations, one can probably expect a budget  $B^*$  with  $B_O \angle B^* \angle B_B$  to emerge from the bargaining process.

The bureaucracy is aided in bargaining with the legislature in that the legislature typically has at best a vague idea of what  $SS'$  is — or often even what  $G$  is, for that matter. Indeed, it is often precisely because the good cannot be supplied is well defined. The same is true for transport. Indeed again, one typically must rely on members of the bureaucracy itself to supply necessary information. These same bureaucrats are also often the only ones who can define the cost of obtaining a given level of output — however defined. Here the monopoly nature of the bureau helps it achieve its goods because the legislature cannot define output properly nor do know the cost.

If the bureaucrats claim it can supply  $G_1$  at the total cost of  $B_1$  and  $G_2$  at total cost of  $B_2$ , it is often difficult for the legislature to counter effectively that it instead demands  $G_1$  at total cost  $B_3 < B_1$ .

That the bureaucrats will wish to obtain a  $B$  greater than  $B_0$  seems almost obvious. Even if the bureaucrats supplies  $G_0$  it seems natural that it would prefer an effective unit price for supplying  $G_0$  that is greater than  $P_0$ . The extra revenue could be used to offer higher salaries more leisure (because of a larger staff), more perquisites (free travel) and a whole host of amenities that might make a bureaucrat's life on and off the job more pleasant. This model of the budget - maximising bureaucrat has a certain similarity with models of the corporation that assume that managers maximise the corporation's size, its growth in size or other size related variable such as white-collar staff (Banmol)<sup>2</sup>, Marris and William<sup>3</sup>. However, one should not be too quick to generalise.

The top officers in a nationalised corporation, like North Bengal State Transport Corporation (or the like) are typically political appointees, who may stay at the corporation for four or five years at most. Thus expanding size of the bureau, even if size and salary are positively related would not be likely to benefit directly the bureaucrats who really brought about the increase. If the growth

of corporation benefits the top members of the bureaucracy, it must in general be from non-pecuniary dimensions of a bureaucrat's rewards that accompany the growth in a corporation's size. For example, it may be that higher the size the higher the "power" of the bureaucrats or the top bureaucrats can bring their "own" persons as employees in the expanding corporation or there may be "extra-official" ways to earn more money, power and prestige.

Even at middle levels, salary levels do not differ much across the bureaus. The Secretaries, undersecretaries, Assistant or peons earn the same regardless of which department they are in. But the chances of promotion in a rapidly growing corporation are certainly greater than in a shrinking one. Thus, middle level bureaucrats do have a financial incentive to encourage the rapid expansion of their corporation, because it increases the likelihood of their promotion to a higher rank. Career bureaucrats are also likely to be with the bureau long enough to benefit directly from the expansion, unlike their short-term superiors.

Although this analysis provides a rationale for the promotion of growth in size by middle-level career bureaucrats, it generally complicates the story of why these individuals are allowed to fulfil their goals to the loss of society. If the bureaucrats at the top of bureau do not benefit from the growth in bureau size, why do they not

curtail growth? Are middle-level bureaucrats able to deceive both the legislatures and their superiors within the bureau about the true magnitude of  $P$  and  $G$ ? It is quite obvious that bureaucrats supply the goods at a higher price or cost than the private sectors. A direct comparison with the private sector alternatives cannot be ruled out. The legislature can always compare the private and public sectors performance or the bureaucrats can often be subjected to private market.

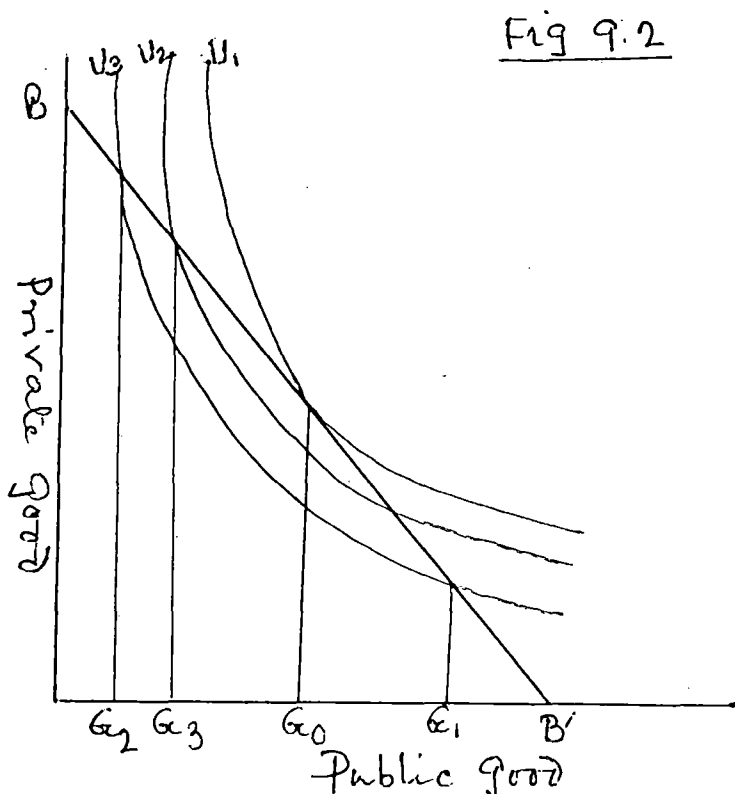
It is in this context a model can be developed in which bureaucrats can force voters to choose a higher level of government expenditures than the level voters must prefer under the particular set of institutional rules in which the choice is made. Consider Figure 2. Let  $U^1$ ,  $U^2$  and  $U^3$  be indifference curves for the median voter in a community defined over units of private goods,  $X$  consumed by the voters and publicly provide  $G$ . Let  $BB'$  be the budget constraint line facing the voter, given him or her tax share of the costs of providing  $G$ . The median voter's most preferred quantity of  $G$ , given his tax share and budget constraint  $BB'$  is then  $G_0$ . If the quantity of  $G$  for the community were determined by majority rule with all levels of  $G$  as possible outcomes,  $G_0$  would be the chosen level of public good for the community.

Suppose, however, the community does not get to choose from all possible levels of  $G$  but is simply given the choice



between  $G_1$  and  $G_2$  a level of expenditure proposed by the corporation that supplies  $G_1$  and  $G_2$ . Given the choice between  $G_1$  and  $G_2$  the median voter prefers  $G_1$ .

This perhaps offers an explanation. The bureaucracy's ability to expand the budget beyond the amount legislature or citizens demand depends in part on its ability to misrepresent true prices and quantities of publicly provided goods. The ability to misrepresent is likely to depend in turn on the size and the complexity of the budget itself. The bigger the bureaucracy is, the more difficult it is for outsiders to monitor its activity and the more insiders there are who are working to increase the size of bureaucracy<sup>5</sup>.



Size in a Bureaucrat - Determined Budget Model.

It is pointed out that the growth of bureaucracy is likely to depend on its absolute size. To see this relationship let us define  $G_1$  as the amount of publicly provided goods the citizens or legislature truly demand. Let  $B_1$  be the total size of the budget.  $B_1$  is greater than  $G_1$  to the extent to which the bureaucracy is capable of forcing a greater expenditure of resources towards the bureaucracy than is demanded; that is

$$B_1 = \alpha_1 G_1 \quad \alpha_1 > 1 \quad \dots \text{(I)}$$

$$\text{Let } \alpha_1 = e^{aB_1} \quad \dots \text{(II)}$$

and let the amount of publicly provided goods demanded grow at a constant rate  $n$  equal to say the growth in national income

$$G_1 = Ce^{ni} \quad \dots \text{(III)}$$

Then

$$B_1 = Ce^{aB_1} e^{ni} \quad \dots \text{(IV)}$$

Thus the growth in the budget  $G$  is then

$$g = \ln B_1 - \ln B_{t-1} = a (B_t - B_{t-1}) + n \quad \dots \text{(V)}$$

The growth rate of the budget both exceeds the growth in national income,  $n$ , and increases with the absolute difference between this period's and last period's budget.

Other functional forms for  $\alpha_1$  will yield other relationships between  $g$  and  $B_1$ ; so long as  $\alpha_1$  increases with

budget size however, the growth in the size of the budget can be expected to increase with its absolute size<sup>6</sup>.

Equation (IV) is broadly consistent with the pattern of growth of government expenditure in India in case of government run organisations; slow but steady initial growth, gradually shifting into more rapid rates of growth. This process results in a 'S' shaped growth path of government organisation "S". Shaped growth path for organisations are sufficiently common that one could hypothesise even in case of North Bengal State Transport Corporation. Only that it is still in the expanding path of the "S" curve. Government growth or corporations growth operated by the State cannot outpace national income indefinitely and so the subsequent slowdown in growth characteristic of the S must also come. This has, however, not yet happened in the North Bengal State Transport Corporation.

The hypothesis that bureaucrat, power increases the size of the government presumes that the bureaucracy can deceive the legislature about true costs of supplying different levels of output. The fiscal illusion hypothesis presumes that legislature can deceive the citizens about the true nature of corporation or its "optimal" behaviour. Some have traced the argument back to Mill and also cites Pareto as a source of hypothesis of "fiscal illusion"<sup>7</sup>. The "fiscal illusion" explanation for government size assumes

that citizens measure the size of the government by the size of their tax bill. To bring about an increase in government size or for the inefficiencies of the government - run institution or corporations, for which the citizens are not willing to pay voluntarily the legislature - executive - politicians - bureaucrats must increase the citizens' tax burden in such a way that the citizens are unaware that they are paying more in taxes or be willing to pay the price of citizen displeasure in the next election. If tax burdens can be "disguised" in this way, citizens have the illusion that government is smaller than it actually is and government can grow beyond the levels citizens prefer. Mill felt that direct taxes were more visible and by implication, that excessive government growth would have to rely on indirect taxes. The percentage of direct tax and indirect tax in the year 1950-51 was 35% and 65% respectively and in the year 1983-84 it was 16.5% and 83.5% respectively<sup>8</sup>.

In fact this has what happened in West Bengal or India. Indirect taxes have increased in most of the commodities to pay for the "subsidies" to the corporations like North Bengal State Transport Corporation. It is a moot question in theory whether "indirect" taxes can really "disguise" the inefficiencies of the government or the corporations.

Alternatively, one can think of "privatisation" of the transport system. But in west Bengal "privatisation" appears

to be a "dirty philosophy" at least at the present stage of political development. Hence, we have to live with increased tax burden to pay for subsidies for the inefficiently run government corporations like North Bengal State Transport Corporation. Further, we have to live with the idea that North Bengal State Transport Corporation will increase in size inspite of all losses and inefficiencies - however defined.

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