# THE COMMERCIAL ROAD TRANSPORT SECTOR IN ETHIOPIA: PERFORMANCE, PROBLEMS AND FUTURE PROSPECTS

#### Bayou Mulat

### I. GENERAL

Transport, in the general context of the Ethiopian economy, is divided into three distinct sub-sectors: traditional, intermediate and modern transport. The traditional transport sub-sector comprises human porterage/head-loading and equine (horses, donkeys and camels). The modern transport sub-sector, on the other hand, is made up of engine-powered automotive-based means of transportation. The intermediate transport sub-sector comprises all possible range of transport modes between direct head load carrying by humans and equine and that of automotive-based vehicles. Hand trollies, wheel barrows, ox-carts, single-axle tractors are few of the characteristics of the intermediate transport system.

There exist considerable interactions and interfaces between the three subsectors. For example, equine using rural roads could cause delay to the modern sector and danger to the animals and drivers. Also, a grain warehouse can accept loads from the different transport sub-sectors, store them temporarily and transfer them to an alternate sub-sector. It should also be clear that the demand for vehicles of the modern sub-sector could be substantially reduced if the means of transport in the intermediate sub-sector are well-developed. Any serious discussion of a transport system should therefore look into the sub-sectoral interactions.

In Ethiopia, the importance, and in some cases even the existence, of the traditional and the intermediate transport sub-sectors are not well-recognized. When one talks of transport, the reference is invariably to the modern sector.

The modern transport system in Ethiopia is composed of about 35,000 km of roads (including about 4,000 km asphalt and 8,730 km gravel), two sea ports, a 780-km railway line linking the capital city with the Republic of Djibouti, form international airports and over 30 scattered airfields.

The contribution of the transport sector to the Gross Domestic Product, in spite of its great potential, is only in the region of 6 per cent. The transport system has often been identified as a bottleneck to an effective production and distribution system.

The Ministry of Transport and Communications, which overlooks the development of the road sector, is currently structured into four major sub-sectors: Surface Transport, Sea Transport, Air Transport and Communication.

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The Surface Transport Sub-Sector comprises the Road Transport Authority, the Public and Freight Transport Corporations and the Ethio-Djibouti Railway Organization. The Road Transport Authority is a regulatory organ of the Ministry of Transport and Communications which sets and enforces tariffs, determines routes, licenses drivers and vehicles, and generally regulates the road transport operations. The actual freight and passenger transport service is carried out by the two parastatals, the Freight Transport Corporation (FTC) and the Public Transport Corporation (PTC).

This paper treats the commercial road transport sector. The commercial road transport sector includes the private and government road transport activities, basically involving FTC and PTC.

## II. PERFORMANCE OF THE COMMERCIAL ROAD TRANSPORT SECTOR

## A.1 Urban Service

The bus service in Addis Ababa is run and operated by the PTC. Currently, there are a total of 247 buses with a standard capacity of 100 passengers. Buses, according to a 1985 survey, handle only 12 per cent of all daily trips performed in the city [CESEN 1985]. The number of buses per 1,000 inhabitants is only 0.15. The average for other African cities of similar population sizes like Abijan (1.7 million), Accra (1.5 million), Ankara (1.9 million) and Nairobi (1.3 million) was calculated to be 0.7 per 1,000 people [Jorgenson 1983].

## A. Passenger Transport Service

### A.1.1 Bus Service

Passenger transport service in Ethiopia is rendered at urban (mainly Addis Ababa) and regional levels. The urban service is provided by government-owned buses and privately owned taxis while the regional service is given by small, medium and big buses owned by the government, private individuals and a few shareholders.

Since the nationalization of the service, efforts to improve the service have been concentrated on increasing the fleet size and strengthening the maintenance branch. Accordingly, a total of 370 buses were purchased in the last 17 years. One modern garage, worth more than Birr 15 million, and group of satellite garages were constructed (PTC, compilation).

City bus service is currently a losing operation, and the standard of the service is deteriorating fastly. The existing rate (15 cents per trip) has not basically been changed since its introduction in 1956, except for the elimination of a 25-cent roundtrip ticket and shortening of some routes. The government has rather opted for subsidizing the operation (in terms of fuel price and duty free imports) rather than introducing a cost-based tariff.

### A.1.2 Taxi Service

A total of 17 cities in the country are currently providing taxi services for their inhabitants. Considering Addis Ababa alone, there were a total of 4,400 taxis as of 1987. These taxis are of two types: short-distance taxis (numbering 3,025) and long-distance taxis (numbering 1,375). The short-distance taxis have a four-seat capacity and shuttle within 5-km limit while the long-distance taxis, with capacities ranging from five to twelve seats, operate on distances of more than 5 km. Taxi service is organized in a zonal system of operation whereby taxis are required to operate on assigned routes and at a fixed tariff. In 1985, taxis handled 10 per cent of all daily trips performed in Addis Ababa [CESEN 1985].

The age of taxis is an area of concern. As depicted in Table 1, over 75 per cent of the taxi fleet is over 20 years old. This fact has made taxi-riding dangerous, as many taxis operate below any acceptable level of safety. Many taxis have no side lights, horns and dependable brakes. As most doors do not close tight, it is not uncommon to see them opening wide as taxis take sharp turns.

| AGE GROUP |     |          |       |       |       |       |       |     |       |
|-----------|-----|----------|-------|-------|-------|-------|-------|-----|-------|
| Type      | 0-5 | 6-10     | 11-15 | 16-20 | 21-25 | 26-30 | 30+   | па  | Total |
| Big       | 5   | 180      | 417   | 50    | 352   | 170   | 175   | 28  | 1,377 |
| Small     |     | <u> </u> | 1     | 15    | 87    | 1,043 | 1,553 | 326 | 3,025 |
| Total     | 5   | 180      | 418   | 65    | 439   | 1,213 | 1,728 | 354 | 4,402 |
| Per cent  | 0.1 | 4.1      | 9.5   | 1.5   | 10.0  | 27.0  | 39.0  | 8.0 | 100   |

Table 1: Addis Ababa City Taxis by Type and Age (1987)

Source: PTC, 1987.

Recent trends tend to suggest some improvement in the taxi situation. After the restriction on imports of vehicles was relaxed (February 1989), over 1,100 longdistance taxis have been imported. The total number of taxis has now increased to 5,955. This situation made it possible for PTC to disband the zonal operation for small taxis. Currently, taxi service is becoming a reliable means of transport which plays an important role in the city's transport system.

### A.2 Regional Service

Regional passenger transport service is rendered by government and private fleets in accordance with a zonal system of operation. For this purpose, the corporation has divided the country into seven transport zones where buses are assigned on a rotation basis. There is also one cross-country transport service which radiates from the capital.

According to 1989 figures, there were 316 government buses, and about 3,120 privately owned small (up to 20-seat capacity) medium (21 to 44 seats) and big (more than 44 seats) buses. For the same year, the number of available seats per 1,000 population was calculated to be only 2.01.

 Table 2: Summary of Age Structure of Regional Passenger Transport Vehicles

 (Central Region)

| ·               | 0-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 30+ | па   | Total |
|-----------------|-----|------|-------|-------|-------|-------|-----|------|-------|
| No. of vehicles | 66  | 124  | 235   | 171   | 354   | 255   | 77  | 168  | 1450  |
| Per cent        | 4.6 | 8.6  | 16.2  | 11.8  | 24.4  | 17.6  | 5.3 | 11.6 | 100   |

Source: PTC, 1989.

With regard to service, the private sector handles about 82 per cent of the passenger transport service (1990). This percentage share has not been showing any noticeable changes in the last five years (83 per cent in 1985). This was mainly due to limited investment opportunities and aging fleet. For instance, inventory of one zone indicated that more than 65 per cent of the buses were over 15 years old.

## B. Freight Transport Service

The Ethiopian Freight Transport Corporation handles the movement of dry and liquid cargo throughout the six transport zones in the country, zones created for this purpose. Both government and private associates deploy a total of 7,400 trucks of various capacities.

The private sector, which owns 87 per cent of the national fleet, handles 70 per cent of the annual performed ton-kms (see Table 3). The average age of the private vehicles was 16.3 years while that of the government was 9.5 years [FTC 1991]. The old age of vehicles has made it difficult for the sector to cope with the growing transport demand, as witnessed by port congestion and serious transport shortages during harvest collection. The inventory taken on September 18, 1991 by FTC indicated that 49 per cent of government vehicles were in garages. With respect to the associate fleet, it was revealed that 23 per cent in Zone 2, 12 per cent in Zone 3, 13 per cent in Zone 4, 24 per cent in Zone 5, and 12 per cent in Zone 6 were in garages on October 11, 1992.

The stated objective of increasing the share of the government in the freight service has forced heavy investment. Accordingly, from 1980 to 1990, an average of Birr 17 million has been invested by the government annually for purchase of vehicles, construction of garages, etc.

| Capacity group<br>(in ton) | Private<br>fleet | Government<br>fleet | Total |  |
|----------------------------|------------------|---------------------|-------|--|
| a) Dry cargo               |                  |                     |       |  |
| 0.5 - 7                    | 2,848            |                     | 2,848 |  |
| 7.1 - 12                   | 1,936            | _                   | 1,936 |  |
| Above 20                   | 838              | 814                 | 1,652 |  |
| Sub-total                  | 5,622            | 814                 | 6,436 |  |
| b) Tanker trucks           |                  |                     |       |  |
| Up to 13                   | 154              | -                   | 154   |  |
| Above 13                   | 674              | 141                 | 815   |  |
| Sub-total                  | 828              | 141                 | 969   |  |
| Grand Total                | 6,450            | 955                 | 7,405 |  |
| Per cent                   | 87               | 13                  | 100   |  |

 
 Table 3: Private and Government-owned Dry and Liquid Cargo Fleet (by Capacity)

Source: ETC, October, 1991.

## III. PROBLEMS OF THE COMMERCIAL ROAD TRANSPORT SECTOR

The commercial road transport sector has become a major bottleneck in the areas of production and distribution. Shortage of transport, which used to occur during harvest seasons only, has now become a perennial problem. Even relief operation, which has received both national and international priorities, has been seriously affected by transport problems.

Major cities like Addis Ababa have reverted to the use of donkeys to withstand the shortage of trucks. The number of operational vehicles in any public and freight transport zone is dwindling. We have now reached a point where newly constructed roads deteriorate before they get a reliable transport service. Most of these problems have emanated from the sectoral policies of the government.

### A. Lack of Integrated Approach

There is a serious lack of vision with respect to the crucial importance of integrated sub-sectoral development, especially that of the modern and the Bayou Mulat: The Commercial Road Transport Sector

intermediate transport sub-sectors. The modern sub-sector is treated as an independent and, many times, as the only transport sector. Solutions to transport problems are always sought for within the modern sub-sector. For instance, transport shortage is attempted to be solved through purchase of vehicles. However, a genuine step taken in the direction of developing the intermediate transport sub-sector could alleviate the problem, with the ultimate result of reducing the vehicle requirement in the modern sub-sector.

## **B.** Sectoral Development Strategy

The development strategy pursued so far with regard to the commercial road transport sector could be summarized as being one of strengthening the state sector by reducing the role and share of the private sector. This objective was clearly stated in Ten-Year Perspective Plan which stipulated the service share of the government fleet to increase from 35 per cent to 75 per cent in freight transport and from 17 per cent to 50 per cent in the passenger transport by the end of the plan period. To realize this, a total of Birr 1.4 billion was to be invested by the government for the purchase of 1,630 trucks, 1,360 buses and other infrastructural developments.

Consideration of the first five years of the plan period shows that only 15 per cent of the envisaged investment level was realized. The number of trucks and buses purchased during this time was only 342 (20 per cent) and 384 (28 per cent) respectively.

The share of the government fleet could not therefore increase as stipulated. In fact, government share has currently declined to about 30 per cent in freight transport while only a 1 per cent share rise was achieved in passenger transport.

On the other hand, the growth of the fleet size of the private associates was controlled through various restrictions like import and tax policies. The sector was also discriminated against in foreign currency allocation for spare part purchases. The meager foreign currency allocated to the private sector led to the closure of many spare part importers. For example, Fiat Sacafet, a dominant spare part importer for Fiat model vehicles (the predominant model in the country), was liquidated in 1986.

| Years   | Private | Government | Total  |  |
|---------|---------|------------|--------|--|
| 1986/87 | 22,512  | 12,491     | 35,003 |  |
| 1987/88 | 13,521  | 7,000      | 20,521 |  |
| 1988/89 | 9,724   | 7,040      | 16,764 |  |

Table 4: Foreign Currency Allocated for Spare Parts for Private and Government-owned Buses and Trucks (in '000 Birr)

Source: Compilation of Quarteriy Foreign Currency Allocation, ONCCP Documents.

The old age of the private fleet increases the demand for spare parts. Ironically, however, the amount of foreign currency allocated for the private sector was decreasing (see Table 4).

As stated earlier, private associate fleets are required to operate on assigned routes. They are sometimes assigned to war zones where the danger of burning down or being taken away is high. It was provided by the government that during such accidents, the owners were entitled to duty-free replacement from the Automotive Manufacturing Company of Ethiopia (AMCE). However, this priority has not been respected as it is only after the requirements of government organizations were satisfied that replacement purchases were processed. Actually, not including the most recent figures, there are over 400 private owners waiting up to six year to replace their vehicles lost in the war zones.

On the other hand, such a deliberate policy of strengthening the state sector has, by and large, meant strengthening the inefficient sector at the cost of the more efficient private sector. For instance, the average annual coverage of a governmentowned truck was only 35,000 km while that of the private was 42,000 km. On the other hand, cost per km for government-owned trucks is 105 cents while a private truck costs only 95 cents [Sedin 1987]. These variations are explained by delays in the maintenance branch, bureaucratic procedures, high rate of accidents, lack of incentive and huge overhead costs observable in the government sector.

#### C. Import Policy

A stringent foreign currency policy of the post-1974 era brought an end to the allocation of foreign currency to the private sector for importation of vehicles. In fact, vehicle importation was completely banned for three years until *franco-valuta* imports were permitted in 1984. According to this decree, importation of vehicles on *franco-valuta* basis was restricted to buses with a minimum of 27 seats and trucks of 70 or more quintal capacity. (*Franco-valuta* is import conducted without involving foreign currency from the National Bank. It is made by nationals residing abroad or students returning from training). In the following four years, an average of 180 trucks and buses were imported annually.

Most of these vehicles were latter found to be repainted old vehicles which required spare parts the very next year, putting additional strain on the already serious spare part shortages. To avoid such problems, a new directive was issued in 1988 whereby all *franco-valuta* imports were restricted to one-year-old trucks and buses. It was then reported that the level of imports radically declined due to the high costs of importing one-year-old vehicles.

The import-restricting regulations have, by and large, been directed at private automobiles, which were considered luxury items. Import of private automobile was totally banned for a period of 6 years. Until the restrictions were finally lifted, even foreign loans or assistances for the purchase of vehicles were directed to purchasing pick-ups and station wagons. As a result, government offices were forced to use such heavy-duty vehicles for the routine transport requirements, normally satisfied by smaller automobiles.

|                                       | 1984/85 | 1985/86 | 1986/87 | 1987/88 | Total |
|---------------------------------------|---------|---------|---------|---------|-------|
| Minibus (27 seats)                    | 3       | 2       | -       | -       | 5     |
| Minibus (44 seats)                    | 2       | 2       | 19      | 12      | 35    |
| Maxi-bus (64 seats)                   | 3       | 14      | 12      | 7       | 36    |
| Dry cargo (with trailer)              | -       | 5       | 23      | 1       | 29    |
| Small dry cargo (15-<br>100 quintals) | 1       | 94      | 158     | 44      | 297   |
| Liquid cargo (with trailer)           | 6       | 65      | 44      | 9       | 124   |
| Liquid cargo (with out trailer)       | 9       | 82      | 78      | 22      | 191   |
| Total                                 | 24      | 264     | 334     | 95      | 717   |

Table 5: Imports of Buses and Trucks by Private Individuals on Franco-Valuta Basis

Source: Compilation from FTC and PTC, Reports on Private Participation in Freight and Passenger Services (unpublished), March 1988.

The restriction on the import of private automobiles has, in an indirect way, affected the development of the taxi service. It should be known that it is private automobiles that are converted into taxis when the business is attractive. The restriction of import of private automobiles limited the chance of replacing the old taxis. Furthermore, the exorbitant prices of automobiles in the market lured some taxi owners to abandon the service by selling their cars to private automobile users.

In brief, the import policy of the government has contributed seriously to the weakening of the commercial road transport sector and led to uneconomic use of vehicles in the non-commercial sector.

### D. Tariff

The present tariff for city buses is over 30 years old. Tariff for regional passenger and freight services was last revised in 1980 following oil price increases in the country.

Many studies have indicated the freight tariff to be insufficient to cover costs except under favourable road conditions [World Bank 1988]. Another shortcoming of the tariff structure is related to rate differentials. The difference in the rates charged for a truck trailer and a single truck is so small that investors are lured

towards a single truck instead of truck trailers. Furthermore, tariff for freight operations on rural roads is fixed by negotiation. Such services, best performed by pick-ups and smaller capacity trucks, are highly rewarding for operators. The tariff structure therefore subsidizes the lower capacity vehicles. This could be one of the factors that explains the dominance of small trucks (91 per cent) in the importation of dry cargo vehicles (Table 5). If we probe further, we could see that some of the owners of multiple minibus taxis were potential investors in the trucking industry, had the tariff been somewhat attractive.

Updating tariff rates to reflect recent cost conditions becomes critical in keeping transport a profitable undertaking. In Ethiopia, however, the existing tariff rates of both passenger and freight transport services are long overdue. For example, the price of one tire, which was only Birr 674 in 1980, increased to over Birr 900 in 1989. Considering vehicle costs, one Fiat 330.30 truck, which costed Birr 128,000 in 1986, shot up by 56 per cent to reach Birr 198,000 in 1989. Furthermore, administrative costs have been increasing at an annual average of 9 per cent in both corporations from 1980 to 1988.

This is why tariff revision has now become a pre-condition for obtaining loans from agencies like the World Bank. The latest IDA loan to the transport sector has made it a condition for new tariff to be set before loans are disbursed.

### E. Tax Policy

The various tax proclamations regarding the commercial transport vehicles were, by and large, designed to limit imports and increase government revenue. The tax policies introduced thus far complement the import restriction policies. The tax structure in force to date was based on C&F values with a depreciation allowance of 1 per cent per month.

According to the earlier tax policy (1980-89), a small truck or bus (15 quintals or 15 seats) imported for taxi business was taxed 125 per cent of its C&F value, out of which 50 per cent was the surtax. All other vehicles of higher capacities were also paying a 50 per cent surtax over the 44 per cent normal rate.

The October 1989 proclamation exempted the smaller trucks and buses imported for taxi service from paying surtaxes. However, if such vehicles were imported for non-taxi business like private commercial service, a surtax of 100 per cent was levied. With regard to the medium- and higher-capacity vehicles, a 50 per cent and 25 per cent surtaxes (over the normal rate of 44 per cent) were charged respectively. This proclamation was out to encourage importation of taxis and somehow favoured higher-capacity than medium-capacity vehicles.

The latest tax low (May 1990) could be said to be more refined and realistic in reflecting the priorities of the sector. For example, the tax for a big truck (more than 70 quintals) was only 39 per cent (a reduction of 55 per cent over the previous level)

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while that of buses with more than 30-seat capacity was 49 per cent. The elimination of surtaxes for higher-capacity vehicles while maintaining it for the mediume ones is an apparent attempt to encourage importation of the former.

The reaction to the in-built objective of promoting importation of highercapacity vehicles has not been encouraging, as most of the imports are still minibus taxis. For example, according to the reports of the Road Transport Authority, the number of big trucks and buses imported since September 1990 was 128 while that of minibus taxis was 179.

### IV. FUTURE POSSIBILITIES FOR THE COMMERCIAL ROAD TRANSPORT SECTOR

The road transport sector, which now serves over 95 per cent of the national passenger and freight traffic, is likely to remain the dominant mode of transport for years to come. As discussed in the proceeding chapters, the sector is poorly developed and remains an obstacle to the development of agriculture, the enhancement of export, the putting of imports to productive use quickly and, in general, to the realization of greater economic potentials.

For certain, the commercial road transport sector cannot, in the future, continue on the same path it has traversed. If the service is to continue unabated, major changes are required in areas of management and operation, ownership pattern and related policies, the final goal of which would be to make the sector competitive and efficient.

Major strategies to be pursued should aim at promoting the private sector and minimizing the role of the government in areas of operation and investment. Accordingly, depending on the need and on the reaction of the investors to the opportunities in the sector, the existing government fleet could be trimmed to an efficiently manageable size or could be totally sold to individuals or transport firms. The centralized dispatching and zonal allocation of vehicles, indicated to be inflexible, bureaucratic and cumbersome, should also be radically improved or disbanded, subject to supply conditions in the sector. On the other hand, the existing tariff rates should be revised in a way that encourages acquisition of higher-capacity vehicles and reflects road conditions.

Achieving the above mentioned objectives would, among many other things, create a competitive transport system, which will, in the final analysis, lead to an economically efficient service.

Once the government pulled out of the sphere of operation, it can systematically concentrate on regulatory functions in the areas of tariff, safety, environment, and energy. It can also watch some inter-modal competitions which lead to distorted development of a given service. A case in point is the urban taxi and bus service in Addis Ababa. The recent expansion of the taxi service and the relative deterioration

of the bus service is not a healthy development. The social and economic costs of developing taxi service are higher compared to bus service. In fact, in terms of accessibility, even bus service may not be the best choice. Mass-transit services like light rails should be introduced.

The replacement of the old vehicles in the freight and passenger services is the most urgent task in the sector. At present, the rate of attrition of these vehicles has reached such an appalling proportion that, if immediate steps are not taken, the service will be in a debacle. External assistance will play a decisive role in this area as the financial implications of a such programme would be beyond the means of the country.

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