

Introduction of an Integrated Rail/Bus Commuter System in Zimbabwe – Political Gimmick or Sustainable Option?

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ABSTRACT: In order to alleviate the hardships experienced by the poor commuters in urban areas, Government of Zimbabwe inaugurated an integrated rail/bus commuter service in the cities of Harare (capital city) and Bulawayo (second largest city). The system uses the existing rail with buses transporting passengers from residential areas to pick up points. Some analysts dismissed the integrated commuter system as a short lived “political gimmick” meant to win the crucial urban vote during the presidential election held in March 2002. The paper seeks to examine trends in urban public transport provision in Zimbabwe particularly focussing on the contribution to public transport so far made by this urban commuter service, as well as to critically assess the integrated commuter system in terms of how it operates, how the users perceive the system and whether the system is sustainable.

.Résumé : Afin d’alléger la pénibilité des conditions de transport des migrants navetteurs des zones urbaines les Autorités du Zimbabwe ont mis en place un service intégré rail/bus pour les villes de Harare et Bulawayo (seconde ville), avec rabattement en bus dans les zones résidentielles. Certains analystes y ont vu une astuce politique pour gagner un vote crucial lors des présidentielles de 2002. Ce papier examine le transport public au Zimbabwe, avec sa composante de desserte ferroviaire pour jeter un regard critique sur ses modalités d’exploitation, la perception des usagers et sa durabilité..

INTRODUCTION

The Zimbabwean economy is currently characterised by severe social and economic problems. Unemployment is very high as formal employment continues to fall. As of February, 2002, inflation had increased to 116% (CSO Stats Flash). The Zimbabwean dollar, which in 1980 was marginally stronger than the British pound has fallen dramatically. Foreign currency reserves have been depleted, making the importation of the much needed goods difficult. Shortages in foreign currency have been compounded by the emergency of the thriving “parallel market” (a euphemism for black market) where foreign currency is transacted at more than four times the official rate. One of the commodities that has been affected by foreign currency shortages is fuel. Both the shortage in foreign currency and unfavourable exchange rate has resulted in the

unprecedented increase in the price of the product. Thus the rapid increase in the price of fuel in an already highly inflationary economic environment has in turn increased the prices of basic goods and services including public transport.

In view of the above backdrop, the Government of Zimbabwe in an attempt to alleviate the hardships experienced by commuters, introduced in phases a train/bus commuter service in Harare (capital city and Bulawayo (second largest city). The objective of this paper is to examine trends on urban public transport provision and to critically assess the contribution of the newly introduced integrated rail/bus commuter system.

2 BACKGROUND TO STUDY AREA

Zimbabwe has a national population of approximately 13 million with an annual growth rate of about 2.8% (CSO 1992). The urban population has now risen to about 40% of the national population (or 5.2 million), of which 3.844 million reside in the two primate cities of Harare and Bulawayo. Harare's population is now estimated to be 2 358 million while Bulawayo is estimated to be 1 486 million. (source). A significant number of this urban population who live in high density areas use public transport to commute between home and city centre and between home and the industrial. Most of the high density suburbs (low income groups) are located further away from industrial areas and city centres. For instance, in Harare the average distance of these residential areas from places of work is approximately 15 kilometres.

2.1 Historical Developments in Public Transport Provision

Historically, the operation of stage carriage services in Zimbabwean urban areas started just after the Second World War when the United Transport Group (UTG) negotiated for a "franchise agreement" which gave the operating company an exclusive right to operate services within a specified franchise area. With Zimbabwe's attainment of independence in 1980, the

new Government pursued a policy targeted at reducing the socio-economic imbalances that existed prior to independence. The Government laid emphasis on controlling certain key sectors of the economy that were regarded as being strategic and vital to the economy. Urban transport was one such sector as evidenced by a number of important decisions taken by the Government. These decisions included inter alia the legalisation in 1982 of "emergency taxis" a shared taxi service with a legal carrying capacity of 7 passengers though 9 passengers was the norm and the acquisition of a majority share holding (51%) in 1988 by Government in the Zimbabwe United Passenger Company (ZUPCO), a holding company that was formed to facilitate government participation. Thus, in the period up to 1993 Government played a considerable role in regulating urban public transport in Harare.

Public transport deregulation in Zimbabwe was given impetus by the introduction of the Economic Structural Adjustment Programme (ESAP) in 1990. Deregulation, which was implemented in 1993 allowed private owners operating buses, named "commuter omnibuses" to enter the urban public transport sector to augment services hitherto provided by the single company ZUPCO. A lot of vehicles entered the urban public transport market as evidenced by the modal mix scenario shown below:

Table 1: Modal mix post deregulation

MODE	CAPACITY	OWNERSHIP	REMARK
ZUPCO bus	76-seater	Government	<ul style="list-style-type: none"> • declining and ageing fleet. • low popularity
ZUPCO minibus	28-seater	Government	<ul style="list-style-type: none"> • high rate of breakdowns. • fairly popular mode
Private bus	76-seater	Private Companies	<ul style="list-style-type: none"> • popular • competitive fare and service level
Midibus	28-seater	Privately owned	<ul style="list-style-type: none"> • popular and competitive
Combi	15-seater	Privately owned including owner driver operated	<ul style="list-style-type: none"> • most popular • highly competitive • very unsafe • easy entry for new operators
Emergency taxi	7-seater	Individual ownership (owner driver)	<ul style="list-style-type: none"> • popular • banned by Government in 1997

The increased capacity improved the quality of service in terms of reduction of waiting time. However, there has been loss of a scheduled service, and both accidents and fares have increased. Macro

economic fundamentals of high inflation and interest rates and the depreciation of the Zimbabwean dollar have compounded increase in fares.

2.2 Experiences with Management of Multi-modal System of Urban Public Transport

Table 2 below shows modes and related operational limitations.

Table 2: Modal Systems Structural Limitations

MODE	STRUCTURAL LIMITATIONS
ZUPCO bus ZUPCO mini-bus	<ul style="list-style-type: none"> • Government control implies limited fiscal funding to support fleet renewal and subsidy. • Controlled fare levels imply low revenue for maintenance, staff motivation and re-capitalisation. • Government control requires that ZUPCO sticks to rules like controlled fares, ethical service, timed services and reaching non-viable urban and rural destinations.
Private conventiona l bus	<ul style="list-style-type: none"> • Only operate during peak hours. • Can afford to “buy-out” routes or to price-out other competitors. • There is defacto monopoly disadvantaging the commuters
(Private) Mini-buses	<ul style="list-style-type: none"> • This mode has good potential although it has similar problems inherent in private buses and the combi.
Combi	<ul style="list-style-type: none"> • Limited passenger carrying capacity – expensive due to low scale economy. • Difficult to manage because there are too many operators each with one or few vehicles – results in congestion. • Not reliable, no scheduled service, wears out too quickly.
Pirate taxi	<ul style="list-style-type: none"> • Exists but legally not allowed to operate.

The main lesson in Zimbabwe has been that no single mode can render an optimal passenger service because of structural rigidities associated with each one of them as shown in Table 2..

The second lesson has been that each mode, once introduced, either by Government or by spontaneous origins, quickly finds its niche useful to the commuting public, as follows:

- ZUPCO (Government bus service) – useful on already established routes. Government can direct it to service less lucrative routes which private companies shun and Government can always direct or re-direct it towards needy routes. The system sticks to laid down rules and regulations of operation, fair practices, minimum safety standards, official fare levels – it therefore sets a public transport service standard.
- Private buses (76-seater) – offer high capacity and good journey speeds. They target the peak hour operations when most capacity is needed. They are manageable because they are owned by large registered bus companies. Service can easily be modified towards route franchises.
- Mini-buses (ZUPCO and privately owned) – offer the flexibility of good carrying capacity and faster turn-arounds than buses. Have a better comfort and safety configuration than the combi.
- Combi (private ownership) – offer high journey speeds and the quickest turn-around ratio. They are flexible to varying road sizes and can therefore offer the much needed door-to door service. They have a better comfort configuration than pirates, although they are not anywhere nearer to minibuses and buses in this regard.
- Pirate taxis – their major achievement is that they open up new public routes. They have been most useful in identifying new routes needing a public transport system. They have also proliferated on existing routes that have low capacity provided by formal transport modes.

In summary, the provision of transport in Zimbabwean cities and towns has never been on an integrated system. There has been, for the last 15 years, an approach of allowing many different modes to emerge and proliferate, in the hope that competition will bring about the badly needed choice, capacity and lower fares. All these have

been elusive. Thus the Government, in July 2001 decided to introduce a new urban public transport mode, the urban commuter train, to run as the first integrated strategy on a bus/train mechanism.

3 RAIL BASED COMMUTER SYSTEM

3.1 Historical Perspective on Urban Commuter Train Service Provision in Zimbabwe

In the early 1970s, the then Government of Zimbabwe planned to provide urban commuter train for the benefit of the residents of Harare high-density residential areas of Mufakose, Kambuzuma, Mabvuku, and Tafara, to facilitate the journey-to-work. These suburbs were chosen because: -

- They had high populations, mostly workers in city centre and industrial areas.
- The residential areas were along existing inter-city rail lines.

While plans for this were produced, the scheme was never implemented. In the early 1980s, the plan was revisited by the new post independent government. This time the proposed option was to open a new railway line to carry commuters from Harare to Chitungwiza, a dormitory town 25km south of Harare with a population now estimated to be 500 000. The project was never implemented due to financial constraints.

Meanwhile, between independence in 1980 to date, other new residential suburbs grew exponentially along existing inter-city rail lines, with particular reference to Ruwa on the eastern side, Budiro in the south and Dzivarasekwa in the north. At the same time, the turn of the century saw a deterioration of the capacity previously introduced a decade earlier through competition and deregulation in the early 1990s. There are many other failures of the deregulated public transport system, which Government sought to ameliorate through the urban bus-rail.

3.2 Integrated Urban Commuter Rail in Harare and Bulawayo

3.2.1 Rationale and System configuration

The main reason for introducing the rail/bus commuter service was the high fares charged by privately owned road based public transport operators. Other reasons include the need for a

properly scheduled service and augmentation of the capacity of public transport systems.

Government introduced the integrated rail/bus commuter system for Harare and Bulawayo in phases, starting from July 2001 using existing rail tracks passing through high-density residential areas. Trains are operated by the National Railways of Zimbabwe (NRZ) while the Zimbabwe United Passenger Company (ZUPCO) operate feeder bus services from surrounding high density low income residential areas to rail pick-up points in the morning and a reverse service during the evening peak. Thus, one round trip is provided on each service line per working day. Both NRZ and ZUPCO are quasi Government organisations. The Central Business District (CBD) bound services operated are:

- The eastern line in Harare, which carries passengers to and from the residential areas of Mabvuku/ Tafara and Ruwa
- The northern line in Harare, which ferries passengers to and from the residential areas of Dzivaresekwa, Kambuzuma and the industrial area of Workington
- The western line Harare, which carries passengers to and from the residential areas of Mufakose and Budiriro
- The Western line in Bulawayo which carries passengers from the residential areas of Entubane, Emakhandeni and Luveve
- The south-western line which carries commuters from the residential areas of Umganwini, Westgate and Barbourfields

A flat fare of Z\$15 to Z\$20 (US\$ 0.27-US\$0.36), depending on line, is charged per trip for both the bus and train rides. The fare charged is significantly lower than the Z\$25-Z\$30 (US\$0.45-US\$0.55) charged by privately owned road based public transport systems on the same routes. Average daily patronage on all the five service lines is approximately 16 400.

3.2.2 Operational problems

The train service was hurriedly introduced without adequate preparations and some of the problems with the system include:

- Non availability of boarding platforms notwithstanding the steep and high stairs on trains
- Non availability of sheds/shelters to protect commuters against rain and sun
- The approaches are not surfaced so they get muddy and/or dusty
- There are no public toilets

- There is no public lighting at the train stops
- The coaches have narrow doorways as they were designed for long distance slow boarding intercity passengers. The internal spaces cannot comfortably accommodate loads of over 100 passengers especially standing passengers. Yet in Harare each coach carries at least 150% of its design capacity; and
- The low fares result in losses, which Government may have to pay for through subsidy.

Clearly, the major problems concern the provision of adequate infrastructure for the service to operate as a conventional mass commuter system. Government has acknowledged these problems and intend to improve the service by providing the requisite infrastructure.

3.2.2 User perception

Despite the problems cited above the train service in Harare is well patronised as the service in most cases is overloaded. In Bulawayo, patronage is still below expected levels. In general users have welcomed the train commuter system particularly the reduced fares as evidenced by the following quotations from users of the train system in Harare.

“I did not know that the responsible authorities could be so responsible. The bulk of my budget was going towards transport but now I am able to save and utilise the money for other worthy purposes” [The Railroader August/September 2001]

“I feel so relieved financially, mentally and physically because the train has cut my transport budget by half and I am able to commute to and from work with ease” [The Railroader August/September 2001]

On the negative side, other potential users lament the fact that the service is only confined to existing lines in the two primate cities. The existing users have also cited:

- The failure of the train at some occasions to call on time especially during the morning service
- The inadequacy of feeder buses to ferry commuters to and from the train pick-up points
- The inadequacy of train coaches and malfunctioning of doors
- The non-existence of public lighting at the train stations to improve security
- The non existence of public toilets and boarding platforms

- The need to improve safety features to prevent passengers hanging on doors and boarding of a moving train.

The breakeven fare is three to four times the Z\$15.00 currently charged. A cost-benefit analysis has since been prepared, showing that the service is viable when broader aspects are considered.

4. Discussion and Conclusion

It is now about eight months since the commuter train was introduced in the cities of Harare and Bulawayo. Albeit the popularity of the commuter system with users, the viability of the service has not been made public as revenues and costs have not been disclosed. There are concerns that the two parastatals involved in the provision of the service may be incurring heavy losses. Some analysts have argued that the project will be short lived as the train commuter service is a “campaign gimmick” that was only introduced to win the urban vote in the presidential election held in early March 2002.

Financial analysis undertaken on the project has shown that the breakeven fare is three to four times the Z\$15.00 currently charged. Clearly the project can be economically justified but certainly not financially viable. Experience elsewhere (TRRL 1990) has shown that successful urban rail commuter systems are supported by radial corridors to the city centre with total corridor flows of over 700 000 trips per day and corridors of such magnitudes are found in cities of at least 5 million inhabitants. In both Harare and Bulawayo, both city populations and that of the corridor are far below this recommended criteria.

The size of ridership alone cannot guarantee the viability and sustainability of the integrated rail/bus commuter system. The TRRL study (Ibid) also found out that those cities with successful rail guided systems have average incomes per capita of approximately US\$ 1800. In Zimbabwe, the average income per capita is approximately US\$520 (World Development Report 2000/2001). The per capita income will further be depressed by the high unemployment rates caused by companies closing down due to a depressed economic environment as well as the movement of people from rural to urban areas..

The Government of Zimbabwe has future plans to improve the commuter rail system by providing platforms, shelters and public lighting, surfacing access roads and even expand the service to other cities. It may be difficult to realise such plans if the integrated commuter rail system is making a loss. It is not clear at the moment whether the commuter rail

is subsidised or the two quasi government organisations are meeting all costs and absorbing the losses. Without an indication of present viability, it becomes difficult to assess the future of the rail commuter system. However, the conditions necessary for a successful urban rail guided system which include adequate ridership and real economic growth are way below the required level to sustain the commuter system. As to whether the rail commuter system is a political gimmick or not, time is the best judge.

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