

**Partnerships to Improve Access  
and Quality of Public Transport**



# **Partnerships to Improve Access and Quality of Public Transport**

**A Case Report: Dar es Salaam, Tanzania**

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## **List of abbreviations**

CCM	Chama Cha Mapinduzi
CTLA	Central Transport Licensing Authority
DMT	Dar es Salaam Motor Transport Company
DRTLTA	Dar es Salaam Region Transport Licensing Authority
ILO	International Labour Organisation
JICA	Japanese Agency for International Co-operation
KAMATA	Kampuni ya Mabasi ya Taifa
MCT	Ministry of Communication and Transport
MOF	Ministry of Finance
MOHA	Ministry of Home Affairs
NBS	National Bus Service
NGO	Non-Governmental Organisations
NMT	National Motor Transport
NTC	National Transport Corporation
PCB	Public (Prevention) of Corruption Bureau
PO-RALG	Presidential Office, Regional Administration and Local Government
TDA	Tanzania Drivers Association
Tshs	Tanzania Shilling
UCLAS	University College of Lands and Architectural Studies
UDA	Usafiri Dar es Salaam
URT	United Republic of Tanzania
UTOS	United Transport Overseas Services
UWAMADAR	Umoja wa Madereva Dar es Salaam
WADAP	Wasafirishaji wa Abiria Dar es Salaam na Pwani

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# **Executive summary**

## **Dar es Salaam, Tanzania**

### **Background**

The city of Dar es Salaam has grown rapidly since the late 1940s. In the 1948 census, the population was 69,227; by the census in 1957 it had grown to 128,742. During this period the city remained highly concentrated, with its boundaries on average less than five kilometres from the sea front or the then town centre. The growth has continued and the estimated population in 2000 was 2,286,730, with a continuing annual growth rate of about 4.5 per cent against the national average of 2.8 per cent. In 2000, the city was divided into three municipalities: Ilala (209 sq.km), Kinondoni (501 sq.km) and Temeke (684 sq.km). In total the city occupies 1,394 sq.km.

### **The public transport system**

In May 1974, Dar es Salaam Motor Transport was split into two semi-autonomous transport Companies, namely ‘Shirika la Usafiri Dar es Salaam (UDA)’ and the National Bus Service (NBS) commonly known as ‘Kampuni ya Mabasi ya Taifa (KAMATA)’. While UDA was charged with the responsibility of providing urban public transport in Dar es Salaam city, KAMATA had the responsibility of providing inter-regional passenger transport services throughout Tanzania Mainland. Neither company was seriously expected to operate commercially; consequently they had no mandate to set economical fares and proposed fare increases had to be approved by the Cabinet before being applied. Probably this was intended to make public transport affordable to the poor, although there was no policy document to support this. Moreover, there was no mechanism to compensate the companies for the difference between economical fares and those approved by the government, which were far lower than even the break-even point.

Use of public transport by city commuters increased from 18 per cent in 1965 to 60 per cent in 1982, while the number of journeys taken on foot remained almost constant between 1965 and 1968 and then decreased drastically from 68 per cent in 1968 to 25 per cent in 1982. City residents, especially the poor, who are captive commuters, suffered from the inadequate service provided by UDA in the 1970s and early 1980s. This was due a range of problems, including:

- lack of foreign exchange to purchase spares directly from overseas, where the price was relatively lower;
- lack of qualified technicians, engineers and transport planners to carry out regular maintenance, which led to frequent breakdowns;
- buses failing to adhere to scheduled timetables due to increased congestion, especially on narrow roads in the Central Business District;
- poor relations between operators (drivers and conductors) and commuters, characterized by bad language, congested buses, long waiting times at bus stops, and the presence of pick-pockets inside the buses and at bus stops;

- an aged and obsolete fleet prone to malfunctioning (during 1981/82, 60 per cent of UDA's fleet was between six and 17 years old);
- uneconomical fares that did not reflect current costs (while passenger fares remained stable for eight years from 1974 to 1982, operating costs doubled);
- high fleet replacement cost (while a locally manufactured standard bus cost TShs.235,000/= in 1974, in 1980 the same bus cost UDA TShs.700,000);
- while operating revenue per vehicle kilometre stood at TShs.9.50 in 1980/81, the operating cost per vehicle kilometre was TShs.14.40; and
- a high staff/vehicle ratio leading to high overheads. The staff/vehicle ratio was already high in 1975 at 7.6:1 against a national standard ratio of 3:1, but rose during 1991/92 to no less than a 28:1 for serviceable vehicles.

When the UDA was established in 1974, the government set and maintained low tariffs to promote the welfare role of public transport by making it affordable to most of the city dwellers. The gap that resulted from the non-commercial fares was partially compensated for through government subsidy. Moreover, fares became even lower as a result of competition after liberalization of public transport, with fares in the range of US\$0.04 to US\$0.17 flat rate per trip (1US\$=1,041 TZS)

In 1980/81 UDA tried to improve matters by buying 40 'Ikarus' buses from Hungary (capacity 150 passengers), 45 standard single deck buses (capacity 90 passengers) and 20 minibuses (capacity 30–50 passengers). Fifty-five bus shelters were built, while 230 toolboxes for workshop personnel were bought through a grant from West Germany, to improve vehicle maintenance. A 5-Year Corporate Plan was prepared for financial years 1981/82–1985/86, aiming to increase the fleet from 275 to 600 buses. It also sought to increase vehicle availability from 57 to 75 per cent, reduce usage per bus/year from 83,463 to 60,000km, increase the number of passengers from 99.7 million in 1980 to 327.8 million in 1986, and increase operating revenue per bus from TShs.758,805 to TShs.1,481,345. This was all to be achieved by charging economic fares, training personnel and motivating staff.

The liberalization of public transport in Dar es Salaam came about due to the poor performance of the UDA, which was meeting only 60 per cent of demand. As a result, there were long queues at bus stops, buses were overcrowded and commuters spent longer journey times in congested buses. In an earlier attempt to fill the gap, in 1972 private operators started providing a public transport service parallel to UDA, but the government banned private operators in 1975. The demand gap then increased, prompting an influx of informal operators. Because *daladala* (minibus) operators were not complying with safety and traffic regulations, the government resolved to grant short-term operating licenses to them as 'sub contractors' to the UDA, which had an exclusive license or monopoly for providing public transport in the city.

Before 25 July 1997, bus fares in Dar es Salaam city were fixed by the Price Commission upon proposals made by UDA based on a 'cost plus' approach. The main reason for keeping fares low and subsidizing the company was that public transport was considered a service to promote commuters' welfare. However, the government's inability to fund these subsidies grossly affected UDA's performance.

## Public transport and the poor

While the government kept the fares below commercial rates, it had to subsidize the UDA in various ways. For instance, by 1978 the government had granted 42 per cent of the investment required by UDA as capital investment, which stood at TShs.77.146m (at current prices). Despite a massive injection of capital by the government into UDA and suppressed fares, records do not show any evidence that this support was intended to protect the urban poor. In other words, there was no specific policy to support the poor.

The period after 1983 saw the dominance of private operators over the UDA. However, there were various problems with privately operated services. Despite repeated government directives, private operators were reluctant to carry students because students paid only a fraction of the adult fare. It was also reported that *daladala* drivers often drove recklessly, and occasionally operated only for part of a route but charged passengers the full fare. This situation resulted from the fact that most *daladala* operators rent their vehicles on a daily basis, and so have to generate income over and above the rental payment in order to make a living.

Poor people were also affected by the fact that private operators were not willing to serve areas which had/ have poor roads. The limited capacity of these buses used for public transport and the individual ownership profile do not lead to economies of scale, or encourage cross-subsidization. Bus services used to run (on certain routes) between 4am and midnight, with the highest number of buses available during the peak hours of 7am to 9am and 4pm and 7pm. By the time of the case study (August 2001) availability was from around 5am to 10pm. Currently, there are 40 routes providing public transport in the city.

The main income sources for bus users are:

- petty trading, which generates travel trips to wholesale markets and shopping centres such as the vegetable and cereal markets and the fish market;
- formal employment, requiring travel to industrial areas, the Central Business District, and minor centres in the suburbs;
- schooling, social and recreational activities, including travel by pupils to attend schools in the city centre; and
- farming and market gardening, which require transport to take produce to market outlets in the city.

Students, the majority of whom form part of the less privileged members of the society, are denied immediate access to public transport especially during peak hours. They travel during the peak period of the day and pay a fare of TShs.50/=. During this time adults are charged a bus fare of TShs.150/= per trip and there is no compensation arrangement by the government for the students' concessionary tickets.

## Stakeholder perspectives

### Passengers

Most poor residents of Dar es Salaam rely absolutely on public transport. Due to their high relative cost, most residents only use taxis during emergencies, for instance, such as the need to rush a sick person to the hospital. Cycling is not seen as a feasible option and most

respondents (73 per cent) said that they are afraid to use bicycles for safety reasons, because the roads are narrow and congested, the climate is hot and humid and vehicle drivers are seen as being reckless. The current fare charges for buses are seen as too high, especially for those who have to board more than one bus to reach their work places. Although there were many complaints about the quality of service, few respondents were prepared to pay a higher fare for an improved service.

Few respondents were happy with the bus services, and commented that *daladala* buses sometimes even stop in the middle of the road or at areas where visibility is poor. This was reported to be one of the prime causes of traffic accidents and traffic jams. The alternatives are medium size Toyota-DCM, Isuzu and Toyota-Coaster buses, which operate between Rangi Tatu and the City Centre/ Kariakoo, or minibuses, which carry between 20 and 22 people. Even though these buses take much longer to reach their destinations, their fares are the same as those for minibuses .

Respondents claimed that both minibuses and larger buses operate without timetables or bus stops along the route. Because of the lack of bus stops along most routes, there is often undue traffic congestion and degradation of roadside pavements. Impatient minibus drivers who cannot wait for traffic bottlenecks to clear often aggravate such traffic congestion. Interviewed users complained that disputes frequently emerge because minibus drivers and touts often act rudely and inconvenience pedestrians, cyclists and vendors operating on the road sides. Users added that because of the overcrowding, particularly during peak hours, passengers tread on each other's feet as well as push one another. The general feeling among the users was that even though, ultimately, they meet their livelihood pursuits using the available public transport services, overcrowding, poor hygiene and mistreatment of women and school children make public transport services in the city substandard and unattractive.

Infrastructure, such as bus stands, was also regarded as inadequate and dangerous, particularly for school children. Moreover, because of lack of public toilets and poor collection of solid waste, public health conditions at bus stops are generally poor.

Vehicles were frequently overcrowded, particularly during peak hours, and it was reported that women are pushed aside by men. Conductors were also reported to use abusive language against women and young girls who do not get into the bus sufficiently quickly. Buses were stated to be unhygienic, particularly on hot days. As a result, passengers' clothes are often soiled and wrinkled. Children complain that they are discriminated against by conductors, who block the door until the bus is filled by full-fare paying passengers. Other problems associated with public transport include unnecessary loud music, hooting, smoking in the buses and pick-pocketing. Unfortunately, because bus drivers and conductors do not abide by the regulations to wear uniforms, it is often difficult for passengers to differentiate between a *deiwaka and shanta* (un-authorized driver and conductor) and a licensed driver.

### **Vehicle owners**

There is a demand for tax relief on the running costs to the owners of *daladalas* especially on some of the levies, and other operational costs related to spare parts and fuel. Owners would like bus fares to be raised from the current range of TShs.100/= – 150/= to Tshs.200/= to cover operational costs. They felt that traffic police should monitor bus



movements at terminal points so as to check route shortening, instead of focusing on minor offences made along some roads.

There was a general demand for improvements in infrastructure. Vehicle owners felt that roads and terminals should be improved, so as to improve the quality of public transport services and accessibility. Other issues were provision of shelters and benches for passengers, public toilets, storm water drains, bus stops and parking bays at terminal points.

Owners felt that the issue of uniforms for bus drivers and conductors should be left to bus owners to decide, instead of requiring them to purchase uniforms from institutions identified by the Dar es Salaam Regional Transport Licensing Authority (DRTLA). There was a demand that the DRTLA should be more transparent, especially on the issue of allocation of bus routes. Finally, owners suggested a need to establish a course on public transport issues focusing on primary and secondary schools, so as to impart knowledge on the use of transport services by students.

## **Bus drivers and conductors**

Many drivers and conductors complained that because they have to remit fixed amounts of money to the bus owners daily, they are obliged to use whatever means at their disposal (both foul and fair), so that they can reach the target, otherwise they will lose their jobs. They stated that they start early in the morning (usually at 5am) and work until late in the night (sometimes beyond 10pm) without even a half-hour break for lunch. Many buses have poor suspension, which makes travelling very uncomfortable.

Drivers and conductors also complained about the lack of formal employment contracts with bus owners, which means that owners can terminate employment without a notice. Some drivers proposed that the DRTLA should help them to establish a Drivers' and Conductors' Association to help safeguard their employment and reduce excessive working hours. Many felt that unless all drivers and conductors are paid monthly salaries (as some are), mistreatment of passengers and reckless driving cannot be prevented, because they are bound to obtain the target return agreed with the owners (plus some extra income for themselves). They felt that uniforms should be more durable and comfortable bearing in mind the difficult climate, and complained about corruption among the traffic police. Some suggested that the Public Corruption Bureau (PCD) should work closely with drivers and conductors to deal with the problem.

## **Regulation**

The traffic department of the police force is responsible for designating and allocating routes to public bus operators, whereas the DRTLA is *inter alia* responsible for monitoring and enforcing route compliance among the operators. Currently there are 6,000–7,500 privately owned and 20–30 state-owned vehicles, of which only 6,000 are properly registered and licensed. A permit for a route is normally valid for one year. The entire process from the time of lodging an application to its issue, takes about two days. Total costs for processing the permit amount to TShs.200,000/=. This excludes unofficial 'incentive payments', which certain respondents suggested might be imposed by corrupt officers involved in the permit and/ or route allocation process. The police force is also

involved in the inspection of vehicles for their roadworthiness and the testing of drivers for professional competency in driving various categories of vehicles.

The authors of the case study concluded that there is no clearly defined and applicable urban public transport policy to make Dar es Salaam an attractive place to investors, residents and especially the urban poor. They felt that the regulatory institutions are ineffective as there are no procedures for assessing customer service levels or providing a forum where stakeholders could propose improvements.

## Issues

Dar es Salaam has the highest rate of population growth and urbanization in Tanzania. Most of the poor depend on public transport for their livelihoods. However, the authors of the case study concluded that there is no clear policy on the part of the government to ensure provision of an affordable, convenient and efficient means of accessibility, especially to the poor. Some of the main issues affecting the poor are as follows.

- Poor road conditions are a general problem, and there is a case for prioritizing investment on the main bus routes. There is also a need for investment in associated infrastructure, such as bus terminals.
- Seventy-five per cent of residents live in ‘unsurveyed areas’, which lack essential social services including roads, clean water, electricity, schools and health facilities and also suffer from the absence of access to public transport.
- The road network in most parts of the city does not encourage the use of non-motorized transport. Taxes are high, and very few of the poor can afford to own a bicycle or a tricycle, even if road conditions were suitable for their use. There are no separate lanes for cyclists and pedestrians.
- Public transport in Dar es Salaam is dominated by private operators, who mostly own only one vehicle. It could be argued that this fragmentation is the cause of poor public transport services (although earlier experience with the UDA does not argue strongly for a public sector monopoly). The fragmented provision of public transport makes it difficult to prepare focussed plans and effective traffic management. This particularly affects the poor.
- More effective regulatory and inspection procedures are required. This could include shortening routes, removal of non-roadworthy vehicles, improving cleanliness, revoking the licenses of reckless drivers, penalizing bad behaviour by conductors and prohibition of operators from carrying excess passengers. *Daladala* buses should be checked or inspected regularly for roadworthiness.
- Public transport for school children needs special attention, since they are frequently denied access to public transport services, due to the disparity between adult and children’s fares.
- There is a need for alternative means of goods transport. A number of residents recommended the establishment of shared goods transport so as to transport goods from the wholesale markets to settlements where the poor households must have them in order to sustain their livelihoods.
- There is an urgent need to establish a forum for discussion, whereby bus owners, operators and users would meet to discuss pertinent problems on public transport. One

of the issues that requires urgent attention is a provision for employment contracts or agreements between bus owners and operators so as to safeguard the interests of both parties, while at the same time improving the quality of public transport services to users.



## Section 1

### **Methodology**

#### **1.1 Introduction**

Rapid urbanization without industrialization and employment generation has increasingly rendered a majority of developing and less developed countries' urban residents poor. In Tanzania, for example, in 1991 it was estimated that about 27 per cent of the people comprised households whose expenditure was insufficient to obtain enough food to meet nutritional requirements. In the same year about 48 per cent of the households were unable to meet food and non-food basic requirements. Updated estimates in the year 2000 reveal worsening trends (URT, 2000:5–6). In view of the dwindling formal sector employment, a majority of the urban residents are increasingly becoming engaged in the so-called 'informal sector activities' for their livelihoods. The actors running these activities depend on a variety of modes of transport to sustain their operations. In Dar es Salaam city, for example, it is estimated that there were a total of 315,958<sup>1</sup> people employed in the informal sector by 1991 and a total of 7,000 privately run buses that facilitated the operations of most of these activities. The types of livelihood activities people are engaged in are linked to the available means and modes of public transport supporting them<sup>2</sup>. In this study, livelihood activities in which people in the study areas are engaged in, the supporting infrastructure and the modes of transport used and the link between the and public transport are analysed. The study is conducted with reference to three main actors: that is, the providers of public transport, i.e. the operators (including owners) of that transport; the regulators, (the government and public institutions including NGOs and CISOs); and third, the users. The primary aim of the study is to understand the links between public transport and the livelihoods of the urban poor. The ultimate objective is to evolve areas for action, including policy implications required to improve and engender sustainable livelihoods between the poor taking into account the environmental and public health aspects in the settlements.

The research project comprises three case studies conducted in four countries namely Pakistan, Sri Lanka, Bangladesh and Tanzania. In all the four countries, the study framework focuses on three key components of the public transport namely users, operators and regulators—both formal and informal.

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1. This figure is obtained from ILO (1999) as obtained from the informal sector survey conducted in 1991.

2. Often because there are some livelihood activities that are undertaken by people who do not depend on public transport, such as vegetable gardens in Msimbazi valley or food vendors in the various residential neighborhoods; such people walk to and from their working areas.

## **1.2 Study approach**

### **1.2.1 Case study selection**

In trying to identify potential study areas, the main consideration has been to select data rich cases or settlements, where the study phenomenon, namely ‘the relationship between public transport (provision) and lack of it and livelihoods opportunities’, available among the urban poor could be studied. Thus, the selection was not guided by a theoretical proposition but rather by identification and on-spot assessment of several settlements. The choice of the areas was preceded by short-listing of potential settlements in the three municipalities. The short-listing was based on a literature review of the various studies conducted in the city housing area. The main criteria used were as set out below.:

Settlement predominantly occupied by the urban poor.

- Availability of activities depicting the existence of livelihood opportunities for the poor. This refers to both economic and social (livelihood) opportunities.
- Area with a variety public transport users including women, children, the elderly and handicapped or disabled people.
- Existence of multiple transport mode services—both formal and informal.
- Distance from the major service/ livelihood areas—city centre or municipal centre.

Consideration was also given to settlements that had resident public transport (buses) proprietors.

Besides, in selecting the study areas, attempts were made to identify areas where various actors involved in public transport could be simultaneously observed and/ or studied. Such actors include:

- users;
- operators (providers); and
- regulators.

In order to ensure that the selected settlements represent areas that are predominantly occupied by the poor, the study areas were chosen from a list of 55 major informal housing settlements in Dar es Salaam. This decision was based on the past studies conducted in the city, which have invariably shown that most informal settlements predominantly accommodate the poor (Kombe 1995, Kombe and Kreibich 2001, Kyessi 2000).

The choice of settlements where poverty and public transport could be examined simultaneously was considered in order to provide an opportunity for users, policymakers and operators to identify possible policy options and action areas necessary to address the shortcomings inherent in their individual decisions or actions. The aim, therefore, is to use the case study settlements to explore public transport-related hindrances to the livelihoods among the poor, as well as to evolve action-oriented remedial measures. Thus, while the chosen cases have to be rich in elucidating the relationship between livelihood

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opportunities among the poor and public transport, they have also to fulfil policy intervention and implementation considerations.

Following the literature review and reconnaissance survey of the city, ten potential informal settlements were chosen in each of the three city municipalities:

### *I. Kinondoni Municipality*

- |                          |                |
|--------------------------|----------------|
| 1. Kinondoni             | 6. Mabibo      |
| 2. Kawe                  | 7. Mburahati   |
| 3. Tegeta/Wazo Hill      | 8. Makongo Juu |
| 4. Mwananyamala Kisiwani | 9. Kimara      |
| 5. Tandale               | 10. Mbezi Luis |

### *II. Ilala Municipality*

- |                    |                      |
|--------------------|----------------------|
| 1. Tabata Kimanga  | 6. Karakata          |
| 2. Tabata Mtambani | 7. Ukonga            |
| 3. Kipunguni       | 8. Kigogo            |
| 4. Gongo la Mboto  | 9. Buguruni Mnyamani |
| 5. Kipawa          | 10. Vingunguti       |

### *III. Temeke Municipality*

- |                     |                |
|---------------------|----------------|
| 1. Tungi            | 6. Tandika     |
| 2. Mtoni Kijichi    | 7. Mbagala Kuu |
| 3. Keko Magrumbasi  | 8. Tuamoyo     |
| 4. Mbagala Charambe | 9. Temeke      |
| 5. Yombo Dovya      | 10. Mtoni      |

From the thirty potential study settlements, ten were selected from the three municipalities as shown below. The selection was based on field visits coupled with discussions with the residents and local *Mtaa* and Ward leaders. The discussions focused on the main mode of transport for the inhabitants in the area, their livelihood activities, their locations and any critical transport-related problems that the residents experienced in pursuing their livelihood opportunities. The 10 settlements were picked taking into account the need to pick and study representative low-income informal settlements in the three residential city zones—namely inner city, intermediate and peri-urban areas. Maps based on a 1992 aerial-photograph were used to locate the potential settlements within the three zones of the city as outlined below.

#### *(a) Inner city informal settlements*

- Buguruni Mnyamani
- Keko
- Magomeni Makuti

(b) *Intermediate informal settlements*

- Mabibo
- Tabata Mtambani
- Kawe

(c) *Peri-urban zone informal settlements*

- Yombo Dovyа
- Gongo la Mboto
- Mbagala Charambe
- Wazo Hill

The ten informal settlements were further scrutinized and rated so as to pick the three most appropriate cases. A summary of the process is presented on table 1.1 below.

**Table 1.1. Case settlement selection matrix**

No.	Selection criteria	CRITERIA					
		1	2	3	4	5	6
		Predominantly the poor	Availability of examples	Existence of various users	Existence of multiple modes	Existence users/operators & regulators	Preference selected settlement
1	Yombo Dovyа	•	Urban agriculture/ petty traders	•	•		
2	Keko	•	Rental housing Petty trading	•	•	•	•
3	Charambe	•	•	•	•	•	•
4	Gongo la Mboto		•	•	•	•	
5	Tabata		•	•	•	•	
6	Buguruni Mnyamani	•	•	•	•	•	•
7	Kawe	•	•	•	•	•	•
8	Tegeta	•	•	•	•	•	•
9	Magomeni		•	•	•	•	
10	Mabibo	•	•	•	•	•	•

*Selected study settlements*

- Charambe —peri-urban settlement
- Buguruni —inner settlement
- Mabibo—intermediate settlement



### **Secondary data collection**

Secondary data available in various sources includes academic works and reports on various public transport studies in the city. For instance, secondary data sources revealed interesting information on the performance of the public transport sector starting from the days of the Dar es Salaam Motor Transport Company (DMT) in the late 1940s up to the ‘Shirika la Usafiri Dar es Salaam’ (UDA) era. It also provided the institutional framework and changing roles played by the leading actors, including the private operators, over the last decades. A synthesis of the secondary data collected is presented in chapter one.

#### **1.2.2 Fieldwork studies**

The fieldwork conducted in the three selected settlements was co-ordinated by three senior researchers assisted by six field assistants. A training session was conducted prior to the fieldwork in order to ensure thorough understanding of the research issues, objectives and data collection strategy. In addition, a one-day pilot study was carried out where the researchers worked with the field assistants to test the checklist interview instrument and acquaint the assistants with field situation. The checklist instrument was structured based on eight issues including the socio-economic background of the respondent, travel modes and experiences with public transport expenditure. Thereafter, modifications were made, most of them aimed at focusing (specifying) on the issues being examined and making the outcomes expected from the interviews more specific and detailed.

During the initial fieldwork phase, the various modes of transport—including buses, minibuses, delivery vans, trucks and pick-ups, taxis, private vehicles and motorcycles, carts, tricycles, bicycles, and pull- and pushcarts—operating in the case study areas were observed, along with the quality of the transport infrastructure available. As will be noted later, most important transport infrastructure in Dar es Salaam are roads and paths, the road being the most important.

#### **Households interviews**

At least forty in depth questionnaires were administered in each of the three study areas. The interviews focused on individuals and households who are engaged in activities (social and economic), which often depend on or frequently use public transport systems. The respondents included households and individuals engaged in livelihoods such as:

- petty trading including urban agriculture, fish and vegetable vending and hawkers (*machingas*);
- routine social needs—school going, attending health clinics and recreational activities;
- employees in private and public institutions—commuting to various employment areas in the city; and
- casual employees—informal engagements at construction sites and other areas in the city.

A consultation workshop was conducted on 9 April 2002. Preliminary observations were presented to over 20 participants representing various stakeholders, including the traffic police; Tanzania Drivers Association (TDA); (UWAMADAR) ‘Umoja wa Madreva Dar

es Salaam —Dar es Salaam Drivers Association (TDA); ‘Wasafirishaji Dar es Salaam na Pwani’ (WADAP) and the National Institute of Transport (NIT); *daladala* bus drivers; owners; and conductors. During the workshop flip charts were used to display the key issues, which emerged from the cases; thereafter participants were required to give their views and experiences.

In order to make the discussions lively and to ensure participation by all participants, the presentation of the preliminary observations and discussions in the workshop were conducted in Kiswahili. The revelations given by the participants were corroborated with and used to enrich the field studies. In almost all cases, the workshop participants’ views closely matched those uncovered by the field studies.

A city wide consultation workshop was conducted in August 2002 to further enrich findings and observations from the case studies. The workshop provided a forum for more stakeholders to participate and enrich field work observations and a minor workshop that was conducted in April 2002.

A stratified choice of information-rich cases, rather than random sample survey based interviews, was preferred as it offers better insights into the interactions between the livelihoods of the poor and the public transport system. Focused discussions, including group interviews with for example, groups of students, women and bus proprietors, provided an opportunity to triangulate the information collected at household/ individual level.

### ***Focused groups interviews***

In order to ensure fair representation, including gender considerations, interviews were also conducted with:

- school children—predominantly using public transport to and from their schools;
- women, the elderly and the disabled;
- random interviews with commuters (a mixture of women, school children and men) at selected bus terminals, or local bus stops/ stations; and
- conductors (touts) at the bus stations.

### ***Interviews with operators and regulators***

Interviews with operators, regulators of public transport and other stakeholders were carried out after the households and focused interviews. The respondents include a profile of bus owners and operators.

### ***Analysis***

The key issues, which emerged from the three study areas, are pulled together and presented in chapter six. The synthesis and views derived from the group discussions, including mini-consultations with stakeholders, were incorporated in the chapters to enrich and better shape the emerging issues.

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In order to contextualize the study, quotes from the interviews are inserted in the various sections. Quantifiable data and information collected during the fieldwork studies are also tabulated.

The information and data collected in the three settlements corroborate the main working hypothesis, namely that public transport services make a significant contribution to the sustainable livelihoods of the poor in Dar es Salaam city.

The work plan for this research is summarized on table 1.2 and comprised three major activities, namely preparatory phase (activities 1–2), primary data collection activities 3–5) and finalization phase (activities 6–7).

**Table 1.2. Time schedule**

S/N	ACTIVITY/WEEKS	AUGUST				SEPTEMBER				OCTOBER				NOV.	DEC.
		1	2	3	4	1	2	3	4	1	2	3	4		
1	Literature review														
2	Pilot studies														
3	Fieldwork studies in the selected settlements (3)														
4	Preliminary report														
5	Draft final report (including synthesis) Preparation of Final Report														



## Section 2

### **Historical context and past experiences**

#### **2.1 Introduction**

Dar es Salaam city has been growing steadily since the late forties. This is evidenced by the censuses conducted in 1948, 1952 and 1957, which showed the population of Dar es Salaam to be 69,227, 99,140 and 128,742 respectively. During this period the city boundaries were within an average distance of less than five kilometres from the seafront or the then town centre. The road network planned and built since the German, and later on the British, era served the city (Sicard, 1970). Private cars and the traditional non-motorized transport (NMT) means, mainly walking and cycling, dominated urban transport in the period before World War II. As the population of Dar es Salaam increased rapidly to 273,000 in 1967, 769,000 in 1978 and 1,360,850 in 1988 (O'Connor, 1988), addressing demand for public transport to serve the increasing population, particularly the demand of those people living far away from their places of work and other important social services, became a priority.

It was 1949 when the first scheduled public transport<sup>3</sup> service was introduced in the city of Dar es Salaam by Dar es Salaam Motor Transport (DMT), which was privately owned by a British company (UDA, 1999). DMT was established on June 22 1949 as a subsidiary of the United Transport Overseas Services (UTOS), which was a British company with similar subsidiaries in Kenya, Southern Rhodesia (Zimbabwe), Northern Rhodesia (Zambia) and Nyasaland (Malawi) (NTC, 1989). DMT was later nationalized in 1974 and split into two parastatals (state owned companies that serve the state indirectly) namely the National Bus Service (NBS) for inter-regional public service and Usafiri Dar es Salaam (UDA), which was made responsible for urban public transport.

Since 2000, the city of Dar es Salaam has been subdivided into three municipalities, namely Ilala (209 sq.km); Kinondoni (501 sq.km) and Temeke (684 sq.km) In total the city occupies 1,394 sq.km. Estimated population in 2000 was 2,286,730 inhabitants with an annual growth rate of about 4.5 per cent against the national average growth of 2.8 per cent (UDA, 1999). Population distribution in the three municipalities of Ilala, Kinondoni and Temeke in 2000 was 549,023, 1,132,062 and 605,645 inhabitants respectively. Based on these figures, the average population density of Dar es Salaam was therefore 1,641 inhabitants per square kilometre, which is the highest in the country. Amongst the municipalities, Ilala is the densest with 2,627 inhabitants per square kilometre followed by Kinondoni with 2,260 inhabitants per square kilometre and Temeke with 886 inhabitants per square kilometre. On average this implies that a total of 1,144 standard

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3. Public transport refers to services provided by any authorized passenger-carrying vehicle in which the operators are ready to carry any person for hire or reward.

buses (one bus serves 2,000 persons per day) were required to provide public transport to city commuters.

## 2.2 Road density

The city road density of various categories of roads expressed in kilometre per square kilometre is given in Table 2.1, which reveals that most of the suburban areas where most people reside are served by poor roads.

**Table 2.1. Road density in Dar es Salaam City**

Area	Road type	Length (Km)	Density km/square km
Urban	Bituminous	400	0.29
	Gravel	200	0.14
Suburban	Bituminous	50	0.04
	Gravel	245	0.18
City in general	Bituminous	450	0.32
	Gravel	445	0.32

Source: Fieldwork and computations made by Researcher 2001.

## 2.3 Historical background of urban public transport in Dar es Salaam

### 2.3.1 Pre-independence period

Urban public transport in the city of Dar es Salaam can be traced as far back as 1949 when a privately owned company by the name of Dar es Salaam Motor Transport Company (DMT) started providing passenger transport services in Tanganyika (Tanzania mainland). The company was a subsidiary of a British Holding Corporation known as the United Transport Overseas Services (UTOS), which had its regional headquarters in Nairobi, Kenya (UDA, 1999). DMT enjoyed a monopoly for the provision of urban passenger transport services in Dar es Salaam, in addition to providing inter-regional passenger transport from Dar es Salaam to other selected urban centres within the then Tanganyika Territory (Tanzania mainland).

### 2.3.2 Post-independence Dar es Salaam

DMT was nationalized, in April 1970 (UDA, 1999) but retained its name and operated under the management of the National Transport Corporation (NTC). Later on in May 1974, Dar es Salaam Motor Transport was split into two semi-autonomous transport companies, namely 'Shirika la Usafiri Dar es Salaam (UDA)' and the National Bus Service (NBS) commonly known as 'Kampuni ya Mabasi ya Taifa (KAMATA)'. While UDA was charged with the responsibility of providing urban public transport in Dar es Salaam city, KAMATA had the responsibility of providing inter-regional passenger transport services throughout Tanzania Mainland. Neither company was intended to operate commercially, consequently they had no mandate to set economical fares. Rather, fares had to be approved by the cabinet before being applied (refer to section 2.10). Probably this was intended to make public transport affordable to the poor although there is no policy document to support this. Moreover, the government paid no compensation

to the companies for the difference between economical fares and those approved by the government, which were far lower from even the break-even point.

## **2.4 Urban public transport under UDA**

Since its inception in 1974, UDA has experienced problems such as poor financial and human resources, unserviceable vehicles and poor infrastructure of the city road network (refer to table 2.3). Consequently, UDA was unable to fully satisfy the growing demand<sup>4</sup> for urban travel in the city. For instance, in 1976 the demand for city urban travel stood at 400 buses against a fleet size of 330 buses owned by UDA with an annual average availability of only 52 per cent against a standard of 75 per cent (Budget Speech, 1977).

UDA started operations in 1974 with capital of TShs.40,854,000/= (equivalent to US\$5,689,972 at current prices); by 1978 this rose to TShs.77,146,000/= (equivalent to US\$9,655,319 at current prices). Of this, 58 per cent was contributed by UDA itself while 42 per cent comprised government subsidy. UDA was owned jointly by Dar es Salaam City Council with 51 per cent of shares, and the National Transport Company holding 49 per cent of the shares (UDA, 1995).

### **2.4.1 Increasing demand against decreasing supply (level of service)**

Provision of public transport by UDA continued to be inadequate despite the efforts that were made by the government to strengthen the company so as to cope with the rapid growth of Dar es Salaam's population. For instance, in 1975, Dar es Salaam population's was 686,683; this rose to 1,051,642 in 1982, with a travel demand equivalent to a total fleet of 500 vehicles against the 194 owned by UDA. Worse still, out of this fleet, only 131 (68 per cent) were serviceable (Budget Speech 1983). Table 2.2 provides a comparison between Dar es Salaam's population growth and UDA's fleet size.

Table 2.2 shows an inverse relationship between population growth that implicitly indicates demand for travel and supply of transport capacity. While the city population grew from 0.7million (M) people in 1975 to 1.1M people in 1982, the fleet size of UDA decreased from 372 buses in 1975 to 194 buses in 1982. During this period, there was some improvement in vehicle availability from 52 per cent in 1976 to 67.5 per cent 1982 against the national industrial standard average of 75 per cent (Budget Speech 1983). However, with such a small fleet size, even if the serviceability rate were 100 per cent, it would be very difficult for UDA to meet demand.

Due to the increasing population there was a greater demand for public transport. More people required the service for education and work. A greater population density means longer travel times, as people cannot obtain work close to residential areas. Unplanned settlements may be difficult to access, which further complicates transport issues.

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4. Demand for urban travel is considered to be the number of buses required to meet public travel requirements of potential city commuters each day; it is expressed in standard buses computed by using a factor of one bus for every 2000 residents (NTC, 1989). A standard bus has a designed capacity of 90 passengers. This approach is rather crude in determining demand because it uses estimated population projections, which results in unreliable demand figures.

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**Table 2.2. Population growth of Dar es Salaam against UDA's fleet size for the years 1975–2001/02**

Year	Passengers carried (number)	Number of buses as at December 31		Population of Dar es Salaam (number)	Demand for travel in standard buses (Number)
		Large*	Small**		
1975	80,751,933	322	50	686,683	344
1976	86,235,355	280	50	738,820	370
1977	94,823,817	280	50	790,957	396
1978	99,535,088	230	66	843,094	422
1979	Not available	NA	NA.	NA.	NA
1980	105,876,088	224	44	947,368	474
1981	105,152,230	186	40	999,505	500
1982	119,685,780	154	40	1,051,642	526
1992/93	17,893,000	77	NA	NA	NA
1993/94	10,972,000	78	NA	NA	NA
1994/95	14,421,000	71	NA	2,500,000***	1,250
1995/96	10,411,000	72	NA	NA	NA
1996/97	5,971,000	62	NA	NA	NA
1997/98	12,794,000	41	NA	NA	NA
1998/99	4,557,480	32	NA	NA	NA
1999/00	2,457,000	26	NA	NA	NA
2000/01	3,865,000	31	NA	3,500,000***	1,750
2001/02	2,820,000	24	NA	NA	NA

Source: United Republic of Tanzania URT, Budget Speech for Year 1983/84

\* Standard buses single deck with capacity of 90 passengers

\*\* Minibuses with carrying capacity of 30–50 passengers

\*\*\* Based on projections



## 2.5 Major problems that faced urban transport under UDA monopoly

Generally the travelling population encountered various mobility problems throughout the period when public transport was provided by UDA. While more than 60 per cent of vehicle users in the city use public transport (JICA, 1994), the company was only able to serve less than 60 per cent of that demand (Mamuya, 1993). Very few routes provided services to newly developed residential areas on the urban fringes or to densely populated low-income residential areas (JICA, 1994). A study conducted by a company called Japan Engineering in 1994 showed that the frequency of bus services on radial roads was as high as one bus every two minutes, while that in newly developed fringe areas was as low as one bus per hour. Most UDA buses were overcrowded and prone to malfunctions. Most of the bus stops and terminals were poorly marked and had no bus bays, shelters, posts, benches, destination signboards, reliable timetables or other relevant information for commuters. City residents, especially the poor, (who are captive commuters) continued to suffer as a result of the inadequate service provided by UDA. This poor service was due to the following reasons:

- Lack of adequate foreign exchange to purchase spares at source, where the prices were relatively lower. For instance, during 1980/81 UDA had enough local cash to purchase spares worth TShs.19.7M/= (current prices) but was allocated foreign exchange worth TShs.6.5M/= (current prices) only.
- Lack of qualified technicians, engineers and transport planners to carry out maintenance and scheduling of vehicles more effectively and efficiently, which led to frequent breakdowns due to mechanical failures (JICA,1994; URT, 1977/78 Budget Speech).
- Buses were failing to adhere to their scheduled timetables due to increased congestion, especially on narrow roads in the Central Business District and bottle-neck links such as the Selander Bridge along Bagamoyo Road (Ali Hassan Mwinyi), Kilwa road/ Kur-asini railway crossing location along Kilwa road and the Jangwani strip along Morogoro road (Budget speech, 1979/80).
- Bad relations between operators (drivers and conductors) and commuters, characterized by bad language, congested buses, long waiting times at bus stops and pick-pockets inside the buses and at bus stops, especially during embarking (Budget Speech, 1979/80).
- An aged and obsolete fleet prone to malfunctioning. For instance, during 1981/82, 60 per cent of UDA's fleet was aged between six and 17 years (URT; 1981/82Budget Speech).
- Uneconomical fares that did not reflect changes in the price of inputs (refer to table 2.4). While passenger fares remained the same for eight years from 1974, operating costs increased by 100 per cent. For instance, a litre of diesel cost TShs.1.47 at current prices in 1974, while it was bought by UDA at a price of TShs.3.90 at current prices in 1980 (JICA,1994; Budget Speech, 1981/82). See also table 2.4.
- High fleet replacement costs. While a locally manufactured standard bus was sold at TShs.235,000/= at current prices in 1974, it was bought by UDA in 1980 at TShs.700,000/= at current prices (Budget Speech 1981/82).

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- While operating revenue per vehicle kilometre stood at TShs.9.50 in 1980/81, the operating cost per vehicle kilometre was TShs.14.40, leaving a financial gap of TShs.4.90 for every vehicle kilometre operated in the financial year 1980/81 (Budget Speech, 1981/82).
- High staff/vehicle ratios, which implies that UDA was operating with relatively high overheads (UDA, 1995) as indicated in table 2.3. The highest level was reached during 1991/92 when there was a staff/vehicle ratio of 28:1 for serviceable vehicles, while the lowest ratio was reached in 1975 and was 7.6:1 against a national standard ratio of 3:1.

**Table 2.3. Staff/vehicle ratio of UDA (1974–2001/02)**

Year	Fleet size		No. of staff (workforce)	Staff/vehicle ratio	
	Total (Entire Fleet)	Serviceable		Total	Serviceable
1974	290	130	1,856	6.4	14.3
1975	374	257	1,965	5.3	7.6
1976	331	245	2,092	6.3	8.5
1977/78	330	221	2,021	6.1	9.1
1978/79	297	172	1,932	6.5	11.2
1979/80	249	142	1,791	7.2	13.9
1980/81	258	141	1,764	6.8	12.5
1981/82	186	139	1,661	8.9	11.9
1982/83	194	164	1,609	8.3	9.8
1983/84	216	141	1,661	7.7	11.8
1984/85	216	139	1,558	7.2	11.2
1985/86	216	108	1,399	6.5	13.0
1986/87	223	101	1,354	6.1	13.4
1987/88	204	109	1,305	6.4	12.0
1988/89	172	70	1,308	7.6	18.7
1989/90	166	59	946	5.7	16.0
1990/91	94	32	743	7.9	23.2
1991/92	77	25	699	9.1	28.0
1992/93	77	36	442	5.7	12.3
1993/94	86	54	453	5.3	8.4
1994/95	71	NA	451	6.4	NA
1995/96	72	NA	451	6.3	NA

**Table 2.3. Staff/vehicle ratio of UDA (1974–2001/02)**

Year	Fleet size		No. of staff (workforce)	Staff/vehicle ratio	
	Total (Entire Fleet)	Serviceable		Total	Serviceable
1996/97	62	NA	374	6.0	NA
1997/98*	41	NA	230	5.6	NA
1998/99*	32	NA	99	3.1	NA
1999/00*	26	NA	110	4.2	NA
2000/01*	31	NA	126	4.1	NA
2001/02*	24	NA	125	5.2	NA

Source: UDA, 1995 and field surveys based on annual estimates as per company's business plan

## 2.6 Attempts by UDA to improve public transport services

In 1980/81 UDA decided to set strategies to cope with the high population growth, which was projected at 6.8 per cent annually. Such strategies included the following (Budget Speech, 1980/81):

- A contract was awarded to buy 40 'Ikarus' buses from Hungary (capacity 150 passengers), 45 standard single deck buses (capacity 90 passengers) and 20 minibuses (capacity 30–50 passengers).
- 55 bus stops/ shelters were built to improve service quality to commuters.
- 230 toolboxes for use by workshop personnel were bought out of a grant from West Germany, so as to improve effectiveness and efficiency in the maintenance of vehicles.
- A 5-Year Corporate Plan was prepared covering the financial years 1981/82–1985/86. Among other things this aimed to: increase the fleet from 275 buses to 600; increase vehicle availability from 57 to 75 per cent; reduce kilometre per bus/year from 83,463 to 60,000 km; reduce passenger congestion per bus from 2,396 to 1,974 . increase passengers carried per year from 99.7 million in 1980 to 327.8 million in 1986; increase operating revenue per bus from TShs.758,805 at current prices to TShs.1,481,345 at current prices by charging economic fares; train personnel; and motivate staff.

However the plan was never achieved. Instead, the fleet size decreased to 216 vehicles in 1985/86 from 374 vehicles in 1975, and serviceable vehicles went down to 108 in 1985/86 from 257 vehicles in 1975 (see Table 2.3).

## 2.7 Attempts by the government to improve urban transport service

In 1983, the then Prime Minister, the late Honourable Edward Moringe Sokoine directed the Ministry of Communication and Transport to officially give licenses to privately owned vehicles commonly known as *daladalas* and to those owned by parastatal

organizations and government departments to provide urban public transport services to city commuters.

The directive became effective on April 1, 1983 and in the same month 151 privately owned and 54 parastatal owned vehicles, along with government vehicles were licensed to carry passengers for hire or reward parallel to UDA services. However, after some months some of the parastatal organizations gave up the business. Probably this was due to a lack of professional expertise with respect to their personnel to run, control operating costs and make collections from the new transport activities.

The government then directed the National Transport Corporation (NTC) to make a study on the possibility of licensing buses owned by parastatal institutions and government departments as ‘subcontractors’ to provide public transport services after ferrying their staff in the mornings and evenings.

The Ministry of Communications and Transport through the National Transport Corporation (NTC) commissioned a study known as ‘Dar es Salaam Passenger Transport Study’ to an independent consultant (NTC, 1989). The aim was to establish actual demand for public transport.

## **2.8 Accessibility of public transport**

Measures of accessibility of public transport to users include the following parameters:

- fare levels;
- hours service is available; and
- service coverage.

### **2.8.1 Bus fare levels**

Since the establishment of UDA in 1974, the government set and maintained low tariffs, probably in order to promote the welfare role of public transport by making it affordable to most of city dwellers. The gap that resulted as a consequence of the non-commercial fares was partially compensated for through government subsidy (Mamuya, 1993). The fares that were charged by UDA between 1974 and 1994/95 are indicated in table 2.4.

Table 2.4 shows that generally the fares that were charged by UDA were low enough to be afforded by most commuters because they were controlled by the price commission (refer to 2.10). Moreover, fares became, even lower after liberalization of public transport , which gave rise to competition, and fluctuated between US\$0.04 to US\$0.17 flat rate per trip. This was considered a great benefit to most of the city residents who could make even longer trips by the same lower fares. According to table 2.4, expressed in US dollars the highest fares were charged during the financial years 1996–97 and the lowest during 1987/88. It can be noted from table 2.4 that the special fare charged by UDA, that was applicable to express services provided by minibuses and some selected standard buses, was abolished during the 1988/89 financial year. The express fares were almost twice the normal fares between 1974 and 1985/86. These changes were not made for the purpose of promoting welfare benefits to the poor, rather they were a response to the newly competitive public transport environment.

## SECTION 2: HISTORICAL CONTEXT AND PAST EXPERIENCES

**Table 2.4. Fares charged to commuters between 1974 and 2001/02**

Year	Exchange rate 1US\$ = TShs.	Fare (flat rate) per person (TShs.)			
		Full (adult)		Minibus and express service	Children and students
		TShs.	US \$	TShs.	TShs.
1974	7.18	1.00	0.14	2.00	0.50
1975	8.29	"	0.12	"	"
1976	8.31	"	0.12	"	"
1977/78	7.99	"	0.13	"	"
1978/79	7.45	"	0.13	"	"
1979/80	8.26	"	0.12	"	"
1980/81	8.22	"	0.12	"	"
1981/82	8.33	"	0.12	"	"
1982/83	11.71	"	0.09	"	"
1983/84	16.34	1.50	0.09	3.00	1.00
1984/85	17.21	3.00	0.17	4.00	1.00
1985/86	38.16	3.00	0.08	"	"
1986/87	68.65	4.00	0.06	5.00	1.00
1987/88	108.25	4.00	0.04	5.00	1.00
1988/89	154.68	8.00	0.05	NA	1.00
1989/90	197.00	15.00	0.08	NA	5.00
1991/92	230.00	"	0.07	NA	"
1992/93	300.00	30.00	0.10	NA	"
1993/94	437.30	30.00	0.07	NA	5.00
1994/95	530.00	50.00	0.09	NA	20.00
1994/95	581.30	70.00	0.12	NA	30.00
1995/96	605.00	100/150*	0.24	NA	50.00

**Table 2.4. Fares charged to commuters between 1974 and 2001/02**

Year	Exchange rate 1US\$ = TShs.	Fare (flat rate) per person (TShs.)			
		Full (adult)		Minibus and express service	Children and students
		TShs.	US \$	TShs.	TShs.
1996/97	618.30	100/150*	0.24	NA	50.00
1997/98	665.00	100/150*	0.23	NA	50.00
1998/99	750.00	100/150*	0.20	NA	50.00
1999/00	800.00	100/150*	0.19	NA	50.00
2000/01	840.00	100/150*	0.18	NA	50.00
2001/02	960.00	100/150*	0.16	NA	50.00

Source: Field Work Survey, BOT (Monthly Economic Review) and computations by the researcher.

\* TShs 100 is charged during off-peak periods, while TShs 150 is charged during peak periods and along poorly maintained rough roads.

Compared to household disposable income, it was estimated that expenditure on transport as a percentage of household income in developing countries stood at 16 per cent (Maunder, 1990). This is considerably higher than the experience in developed economies, where transport expenditure is less than 10 per cent on average. The authors' study gives an average of 16.5 per cent, which agrees with Maunder's findings (see also tables 3.2, 4.1 and 5.2).

### 2.8.2 Hours service is available

When UDA had a monopoly on public transport in Dar es Salaam, the average hours of service were from 4.00am to 12.00pm. Usually buses were brought onto the road, increasing gradually and reaching the highest number of buses during peak hours which were between 7.00 and 9.00am in the mornings and 4.00–7.00p.m. in the evenings. There were timetables displayed at bus stops. However, the timetables were never honoured although UDA made sure that at least the starting times and ending times of the services were mostly observed. At present (August 2001) private and public transport operators start operations at around 5.00am in the mornings to 10.00pm in the evening without any specific pattern in terms of number of buses to be put into operation relative to time of the day (Interview, DRTLA Chairman, August, 2001).

### 2.8.3 Service coverage

The number of routes served by UDA, for example, during 1993/94 was 33 with a total length of 412.7 kilometres (UDA, 1995). The longest route was Kiparang'anda–Kariakoo (56 km from the city centre) while the shortest was Kigogo–Kivukoni (6.8 km). A study conducted in 1996 showed a total of 81 routes. Currently, there are 40 routes providing public transport in the city. New circular, longer routes (40) are now being introduced by the regional licensing authority to replace most of the former ones (81), which were generally shorter. Shorter routes meant that commuters had to spend more per trip as they had to change buses to complete an outward or inward trip while paying a flat rate fare for every change made.

However, operators are free to opt in or out whenever they find that there is not much traffic on that route and then apply for another one. A licence is usually guaranteed to an operator on any route if all conditions are met, provided the maximum number of buses set for that particular route is not exceeded. There are no fixed routes for the entire road network. It is the discretion of the Licensing Authority to close routes and introduce new ones when it feels it to be appropriate and in the public interest.

## **2.9 Liberalization of public transport in Dar es Salaam**

Due to the problems pointed out earlier, UDA was capable of supplying only 60 per cent of the demand (Mamuya, 1993) leading to a shortfall of 40 per cent. As a result there were long queues at bus stops, buses were overcrowded and commuters spent longer riding times on buses in congested traffic. Consequently there was a general outcry by commuters on the poor services provided by UDA.

### **2.9.1 Beginning of private bus operators**

In an attempt to fill the gap, in 1972 private operators started providing public transport services parallel to those provided by UDA but the government banned private operators in 1975 (Stern 1989). The reason behind the ban was probably related to the government's socialist ideology, as private operations were considered exploitative; a public service provided by the private sector was against the objective of building a socialist society.

### **2.9.2 Pirate operators between 1975–1983**

Despite the ban of the private public transport operators by the government, pirate 'private operators' continued operating illegally without licenses. In order to compensate for the risk involved in case they were apprehended by police officers, such operators hiked fares to TShs.5.00 (a 500 per cent increase) instead of the TShs.1.00 (adult) and TShs.0.50 for children charged by UDA (UDA, 1996 and Stern 1989). Because the five-shilling coin was referred to as '*dala*', starting from this time buses, which were charging fares equivalent to TShs.5.00 became popularly known as *daladala*. To-date this is the term used to refer to all privately owned buses that provide public transport services in the city.

### **2.9.3 Public transport operations after 1983**

As a consequence of the government's failure to strengthen UDA, the demand gap increased prompting informal operators to continue filling the gap. Because *daladala* operators were not complying with safety and traffic regulations (MCT, Budget Speech 82/83), the government resolved to grant short-term operating licenses to them (private operators) but as 'subcontractors' to UDA, which had an exclusive license or monopoly for providing public transport in the city of Dar es Salaam (URT, 1984). The 1982/83-budget speech quantified the gap that existed in the public transport in Dar es Salaam that UDA could not meet. For instance, during 1980/81 the company had 202 buses against a demand of 464. During 1981/82, UDA had 298 buses against the 496 that were needed to meet demand. The fact that UDA was unable to meet the growing demand for public transport led the government to decide to issue 'subcontractors' licenses to private operators. However, the idea was for UDA to regulate the operations of the *daladala* so that they would conform to the traffic laws and regulations.

### **2.9.4 Emergence of 'Chai-Maharage' and their demise**

During the second phase of presidency in 1985 (the first one being from 1961–1984); the government ordered the Licensing Authority to issue road licenses to private operators

with light trucks locally called '*Chai Maharage*<sup>5</sup>', to transport passengers not only in Dar es Salaam, but all over the country. This mode was already a practice in Zanzibar where light trucks were used to carry passengers. It has not been possible to establish the exact number of this category of vehicles that were licensed during the period.

Continued reforms in the urban transport system arising from deregulation, trade liberalization and some policy changes that took place starting from 1991 led to a shrinking number of the *Chai Maharage* trucks after they had reached a peak in 1997 when the government withdrew from fixing bus fares. Since then, commuter fares have been determined by market forces (*Daily News*, 25 July 1997). These factors encouraged entry into the public transport system with more efficient, safe, convenient and comfortable vehicles, such as minibuses, minibuses and standard buses. Gradually this led to the displacement of *Chai Maharage* and their final exit from providing public transport services in the city. Buses that replaced *Chai Maharage* were mainly those withdrawn by proprietors from long trips (inter-regional services) because public transport in the city appeared to be relatively more lucrative and convenient for aged vehicles that could not make long journeys competitively.

## 2.10 Fare setting procedures

Before 25 July 1997, bus fares in Dar es Salaam city were fixed by the Price Commission upon proposals made by UDA based on a 'cost-plus- approach'. The proposals were then presented to the National Transport Corporation (NTC), which in turn forwarded them to the Ministry of Communications and Transport for approval. Fares approved by the government were generally lower than those proposed by UDA, making it difficult for UDA to operate commercially. The main reason for keeping fares low was that public transport was considered a service to promote commuters' welfare (Mamuya, 1993). To fill in the financial gap, the government opted to subsidise the company. However, its inability to provide the required funds (subsidies) adversely affected UDA's performance.

When private operators came in informally to fill in the demand gap, they provided transport services at relatively higher tariffs that were enough to cover for the risk involved and to generate profit. Table 2.5 shows the fares charged by UDA as compared to other operators (*daladala* and informal or unlicensed operators).

Between 1974 and 1982/83 private operators' tariffs were 500 per cent of the fares charged by UDA. Thereafter the difference decreased until in 1988/89 when both charged a common fare of TShs.8/= for an adult commuter. As regards students' fares, both private operators and UDA charged the same amount. However, in most cases private operators avoided the students by denying them access to their buses because they were paying uneconomical (concessionary) fares that were not compensated for by the government.

## 2.11 Position of the poor

The Dar es Salaam urban transport system operated as a welfare service to society between the years 1970 (when DMT was nationalized) and 1983 when private operators were formally allowed to operate and provide public transport services parallel to those

5. Refers to the seating arrangements in light trucks converted into PSV status, where passengers sit on opposite sides facing each other. This was likened to mourning people seated while taking tea (*chai*) with cooked beans (*maharage*), which is the common food taken during such occasions.



## SECTION 2: HISTORICAL CONTEXT AND PAST EXPERIENCES

**Table 2.5. Comparison between fares charged by UDA and other operators**

Year	UDA Fares (in TShs.)				Private/ Pirate operators	
	Adults		Children		Adults	Children
	Normal	Express	Normal	Express*		
1974	1.00	2.00	0.50	n.a.	5.00	1.00
1975	1.00	2.00	0.50	n.a.	5.00	1.00
1976	1.00	2.00	0.50	n.a.	5.00	1.00
1977/78	1.00	2.00	0.50	n.a.	5.00	1.00
1978/79	1.00	2.00	0.50	n.a.	5.00	1.00
1979/80	1.00	2.00	0.50	n.a.	5.00	1.00
1980/81	1.00	2.00	0.50	n.a.	5.00	1.00
1981/82	1.00	2.00	0.50	n.a.	5.00	1.00
1982/83	1.00	2.00	0.50	n.a.	5.00	1.00
1983/84	1.50	3.00	1.00	n.a.	5.00	1.00
1984/85	3.00	4.00	1.00	n.a.	5.00	1.00
1985/86	3.00	4.00	1.00	n.a.	6.00	1.00
1986/87	4.00	5.00	1.00	n.a.	6.00	1.00
1987/88	4.00	5.00	1.00	n.a.	6.00	1.00
1988/89	8.00	NA	1.00	n.a.	8.00	1.00
1989/90	15.00	NA	5.00	n.a.	15.00	5.00
1990/91	15.00	NA	5.00	n.a.	15.00	5.00
1991/92	30.00	NA	5.00	n.a.	30.00	15.00*
1992/93	30.00	NA	15.00	n.a.	30.00	15.00
1993/94	50.00	NA	20.00	n.a.	70.00	20.00
1994/95	70.00	NA	30.00	n.a.	70.00	30.00
1995/96 to 2001/02	100.00/ 150.00**	NA	50.00	n.a.	100.00/ 150.00	50.0

Source: Shirika la Usafiri Dar es Salaam (UDA) 1995.

\*School children (primary and secondary schools) with uniforms were paying TShs.5/= only while other children were charged TShs.15/=.

\*\* TShs.150/= is charged during peak periods and for longer routes, while TShs.100/= is charged during off peak periods and for shorter trips.

\*\* 1U\$ is equivalent to TShs 950.

provided by UDA. During this period the government deliberately kept the fares below commercial rates so that most commuters could afford to use public transport. Subsequently the government had to subsidize UDA in various forms. For instance, by 1978 the government had granted 42 per cent of the investment required by UDA, which stood at TShs.77.146M (at current prices) as capital investment. Despite a massive injection of capital by the government into UDA and suppressed fares, records do not show any evidence that this support was intended to protect the urban poor. In other words, there was no policy to support the poor. School-going children, for example, most of whom were from poor families, were denied access to public transport by private operators despite repeated government directives (*Daily News*, 18 June 1991, 10 March 1992 and 28 May 1993).

The period after 1983 saw the dominance of private operators over UDA. There were, however, a number of problems with privately operated services. Private operators were not willing to carry students because they were paying only 20 per cent of adult fares. At the same time, *daladala* drivers often drove too fast, putting commuters' lives at risk, and occasionally operated only for part of a route but charged a full fare, exacerbating the suffering of poor workers who often had to pay double the fare to complete their journey to work or back home. This meant spending a larger percentage of their meagre income on transport. Private operators were also unwilling to serve areas that had/ have poor roads. If they did, fares were hiked. For example, the interviews held<sup>6</sup> show that people commuting between Mandela Road/ External Service to Tabata-Kisukuru (3 km) pay up to 200 per cent the fare charged for a 10-km trip on good roads. This is particularly the situation during the rainy season and peak periods of the day.

## **2.12 Carriage of goods**

Petty traders, most of whom own stalls at various locations far from wholesale markets such as Tandale, Kariakoo, Ferry (Kigamboni), Tandika and many other sources, carry their goods mainly by using non-motorized means of transport. Recent surveys made at the major outlets of essential food items and merchandise at various parts of the city show that more than 95 per cent of goods bought for re-sale by retailers (most of whom are petty traders) are carried by non-motorized means of transport in combination with public transport. Building materials and other items bought in bulk by well-to-do families and businesses are usually transported by various types of light trucks at negotiable freight rates.

## **2.13 The current situation: an overview**

### **2.13.1 Introduction**

Presently public transport in the city of Dar es Salaam could be said to be disorganized because it is provided by too many individual bus operators who are not co-ordinated. For instance, to-date there is no clearly defined and applicable urban public transport policy, which would provide an appropriate institutional set up that would facilitate for transport planning, provision, management and control to make Dar es Salaam an attractive place to investors, residents and especially the urban poor. The regulatory institutions are not very effective as there are no procedures for taking stock of customer service levels and providing a forum where stakeholders could propose areas requiring improvement. For example, lack of bus schedules at bus stops, use of abusive language by conductors and

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6. Interview held on 23/7/01, 2/8/01 and 6/8/01 at Mandela Rd/ External Service junction.

drivers, vehicle owners not properly maintaining their vehicles, speeding, the students' transport problems and how the urban poor can access affordable public transport.

The government has failed to build adequate infrastructure in the form of major/ minor roads, footpaths, waste collection systems and storm water drainage systems. All of these would help to alleviate poverty.

### 2.13.2 The current fleet

Currently there are between 6,000 and 7,500 privately owned<sup>7</sup> and between 20 and 30 public owned vehicles (UDA)<sup>8</sup>, which provide public transport service in Dar es Salaam. Out of the estimated 7,500 vehicles, there are only 6,000 registered while the rest operate without licenses. All buses have a carrying capacity of less than 90 seats. This means the current fleet does not have even a single standard bus<sup>9</sup>; instead it is dominated by limited-capacity small buses. There was no adequate reliable data to establish whether the present number of vehicles meets current demand or not.

Private operators, most of whom own one vehicle dominate public transport in the city. To most of the operators, engagement in public transport is a secondary activity, as most of them have other occupations that are not connected with the transportation business. It is, therefore, a part time activity. For instance, the authors found a medical officer, a university lecturer, a politician, a civil servant, a retailer and a farmer, just to mention a few, all of whom owned a bus engaged in urban public transport. This has partly contributed to the current disorganized situation because the bus owners are not playing an active role in transport operation or service improvement. Such work is left to the conductors and drivers alone. The vehicle owners are mainly interested in monitoring and receiving their fixed amounts of revenue for each day. The private operators realize that the monopoly position that they hold can be exploited. The level of service they provide can become poor because customer demand is so great that people cannot turn the service down. There are few regulatory bodies that the paying customers can approach and the government has no clear transport policy. As a result public transport in Dar es Salaam is provided without any professionalism. Consequently, road accident rates are high. For instance, in 1992, 93 per cent of fatal accidents in Dar es Salaam involved *daladala* buses (*Daily News*, 17 May 1994).

### 2.13.3 Students' transport

Students<sup>10</sup>, the majority of whom are members of the less privileged sector of the society, are denied immediate access<sup>11</sup> to public transport, especially during peak hours. This is mainly due to two reasons. One is that they travel during the peak times of the day and pay a fare of only TShs.50/= (33 per cent of the full fare). During this time adults are charged a bus fare of TShs.150/= per trip, and there is no compensation arrangement by the government for the students' concessionary tickets. Secondly, the small capacity of the buses used for public transport and the ownership profile discussed earlier do not lead to economies of scale in the operation of the buses. Such a factor would have been able to facilitate a proportionate cross subsidization of low children fares by adult rates for every bus, or for the entire fleet for all routes operated. Indeed, this is an area that requires further

7. Interview held with Dar es Salaam Regional Transport Licensing Authority, Mr. Mwaibula on 23 August 2001.

8. Interview held with UDA operations manager, Mr. Mlaki on 21 August 2001.

9. A standard bus is a Public Service Vehicle (PSV) with a designed carrying capacity of 90 passengers, including people standing.

10. 'Students' refers to both primary school and secondary school children.

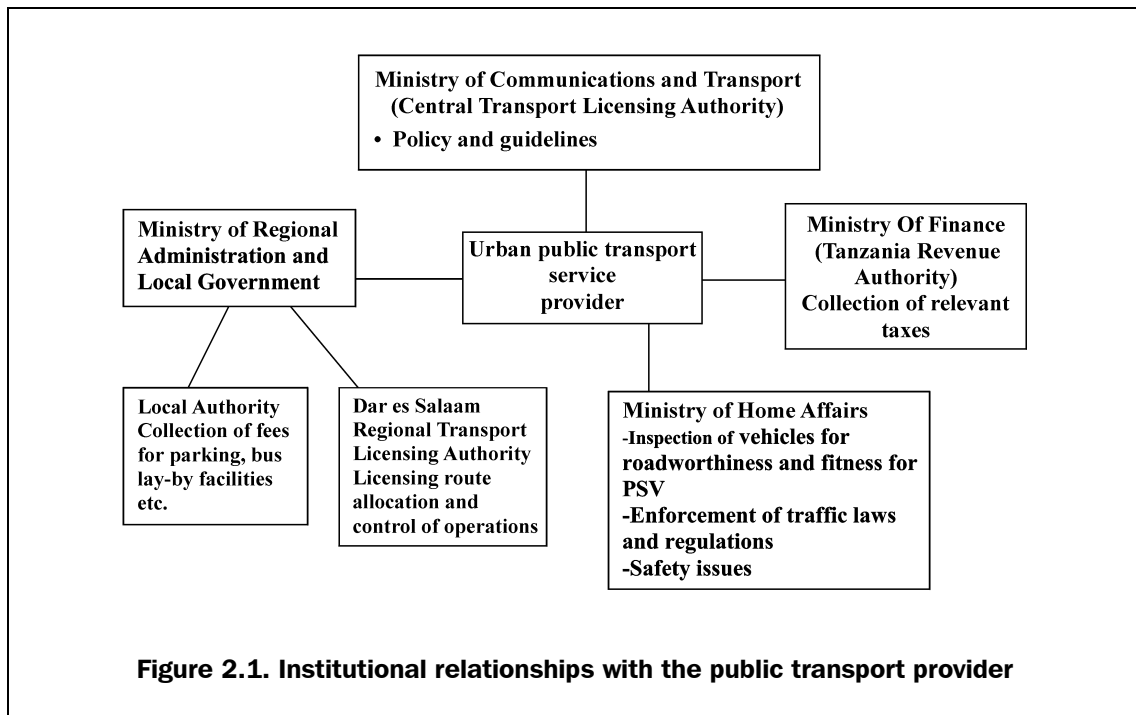
11. During peak hours, operators prefer carrying adults who pay full fare rather than students who pay less.

in-depth analysis by all the institutions involved with policy issues on the provision of social services, and by those involved with urban transport so that a lasting solution can be found.

In 1992 a school bus project was established as a solution to the problem, but it did not last long. Its failure was mainly attributed to the decision to start a company whose cash flow schedules showed that it would not break-even throughout its economic life, even if the students' fares had been doubled (NTC, 1991). The project was not financially feasible based on the students' fares as the main source of revenue. A political or social decision to proceed with the project required an assurance of a continuous flow of subsidy funds from the government, a factor that was not met.

**2.13.4 Institutional arrangements**

Public transport in the city is provided via a fragmented arrangement between the Ministry of Communications and Transport (MCT), the Municipal Council, the Ministry of Home Affairs, the Ministry of Finance and the Ministry of Local Government and Regional Administration. Figure 2.1 shows the existing institutional arrangement in relation to provision of public transport in Dar es Salaam. Section 2 of the Transport Licensing Act Number 1 of 1973, states that 'the Minister<sup>12</sup> may, if he considers it expedient or desirable to do so, from time to time ...suspend the operation of any or all of the provisions of this Act...'. Section 4(1) states that 'There shall be established a Central Transport Licensing Authority (CTLA) and also for every region in Tanganyika, a Regional Transport Licensing Authority (RTLA)'. Section 10 and 11 of the Transport Licensing Act Number 1 of 1973, restricts operation of any vehicle for hire or reward on a public road without having a licence from either CTLA or RTLA. Operators in Dar es Salaam ought to obtain their road service licences from the Dar es Salaam Regional Transport Licensing Authority (DRTLA) after fulfilling all the required procedures as indicated in figure 2.2. It is the DRTLA that allocates the specific route to each respective operator.



12. Minister for the time being responsible for Transport.

However, section 55(1)(n) of the Local Government (Urban Authorities) Act 1982, states the functions of urban authorities under the Ministry of Regional Administration and Local Government (MRA&LG) as including ‘... to regulate the use and conduct of public vehicles plying for hire, ... to regulate the routes and parking places to be used by such vehicles ... and when necessary to provide for the identification of all licensed vehicles.’ It is worth noting that there is an overlap of responsibilities between the local urban authority, the RTLA and the MCT/CTLA, which is basically caused by a lack of harmonization of the respective Acts. Furthermore, while the RTLA is appointed by the respective Regional Commissioner under section 4(3) of the Transport Licensing Act Number 1 of 1973, section 8 of the same Act requires the body to submit to the Minister an annual report of its transactions. Such fragmented institutional arrangements makes it difficult to foster an organized and planned urban transportation system that takes into account the interests of all the various groups.

The Ministry of Home Affairs (MOHA) is involved through the traffic police unit of the police force, which is required to inspect vehicles for their roadworthiness and test drivers for their professional competency in driving various categories of vehicles. A vehicle’s owner must produce evidence that it has been approved for roadworthiness by attaching police form number PF93 (Vehicle Inspection Report) to the application form for a road vehicle license. However, there are claims that some vehicles get a clean police report (PF93) even though they are defective. This is evidenced by the large numbers of public service vehicles that are impounded whenever there is a traffic police crackdown. For instance, 250 commuter buses were impounded on October 23, 2000 for violating traffic rules (*Daily News*, 24 October 2000). Two hundred and seventy-four vehicles were impounded on 12 September 2000, out of which 203 vehicles were commuter buses (*Daily News*, 13 September 2000). Two hundred vehicles were impounded by police officers between 1 and 8 July 2000 in connection with various traffic offences. Commuter buses made up 168 out of these 200 vehicles. The offences included defective vehicles, speeding, drunkenness, student harassment and route violations (*Daily News*, 8 July 2000).

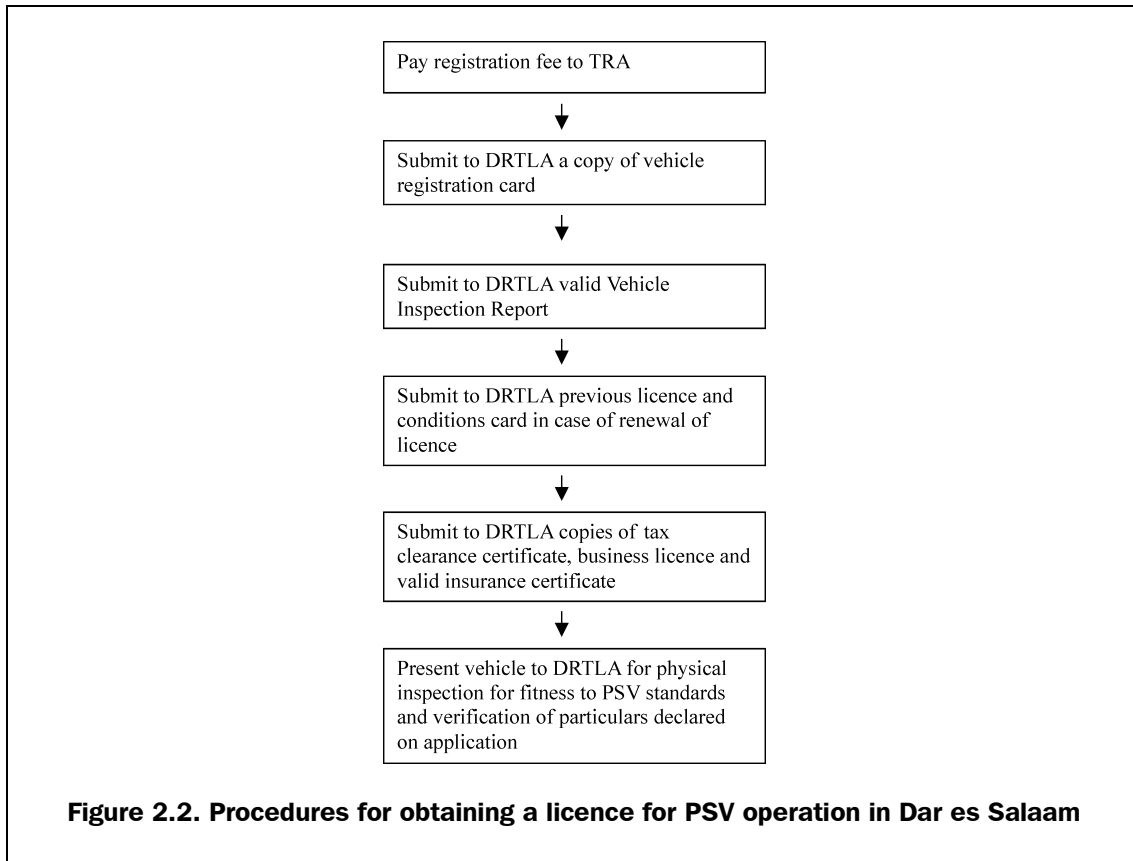
The Ministry of Finance (MOF) or the Treasury requires that public transport operators, just as any other person engaged in business, pay provisional tax through the Tanzania Revenue Authority (TRA) before a road service licence is issued.

#### **2.13.5 Procedure for obtaining an operator’s license (road service licence)**

The Dar es Salaam Regional Transport Licensing Authority (DRTLA) is charged with the responsibility of issuing licenses to any person or institution that owns and meets the legal operating requirements for a public service vehicle as prescribed under the Transport licensing Act No. 1 of 1973 section 4 and section 16(1)(a) and (b) (URT, 1973). On registration by the DRTLA, the operator is allocated the route that he or she applied for, providing the Authority is satisfied that the maximum number of buses supposed to serve that particular route has not been exceeded. The DRTLA may allocate additional operators to serve an area by opening new routes if the need is justified.

Before a prospective operator is issued with a public service operating license (road service license) in the city, he/she must meet the following conditions set down by DRTLA, as indicated under figure 2.2.

Where necessary, the licensing authority may require more particulars to be submitted before a licence is issued to the operator.



For taxicabs the procedure is different and much more cumbersome. First, the owner is required to obtain a Vehicle Inspection Report from the traffic police indicating their approval of the fitness of the vehicle for providing public service. Secondly, the applicant pays the required annual estimated revenue tax to the Tanzania Revenue Authority. Thereafter he/she is required to pay to the City Council some fee for using designated taxi stands. Finally, the prospective taxicab operator will be issued a business license by the Tanzania Revenue Authority at a fee.

It may be worth noting that the procedure required to be followed and the amount of money to be settled before a person gets an operating license might be one of the contributory factors to the existence of both pirate *daladalas* and unregistered taxicabs.

### 2.13.6 Modal split

The main modes of transport used to provide mobility in the city include public transport (the buses and taxicabs), cycles (bicycles and motorcycles), private cars and walking. Studies made by Macro Survey in 1965 (Nairobi); Project Planning Associates Ltd. (1968); Marshall Macklin Monaghan Ltd (1979) and COWI Consult ( Dar es Salaam Passenger Transport Study 1983), gave the following trend of modal split amongst walking, using bicycles and motorcycles, private cars and public transport as presented in table 2.6 between the years 1965 and 1982.

Table 2.6 reveals that between these years usage of public transport by city commuters increased from 18 per cent in 1965 to 60 per cent in 1982 while walking remained almost constant between 1965 and 1968 but decreased drastically from 68 per cent in 1968 to 25 per cent in 1982. These figures, however, do not provide much insight as to how the urban

**Table 2.6. Modal split of urban public transport in Dar es Salaam (1965–1982)**

Mode of transport		YEAR			
		1965	1968	1979	1982
Walking	%	66.9	67.8	52.0	25.4
Bicycle/ Motorcycle	%	2.2	3.5	6.0	7.3
Private cars	%	2.2	3.5	16.0	7.3
Public transport	%	17.7	20.2	26.0	60.0
TOTAL	%	100.0	100.0	100.0	100.0

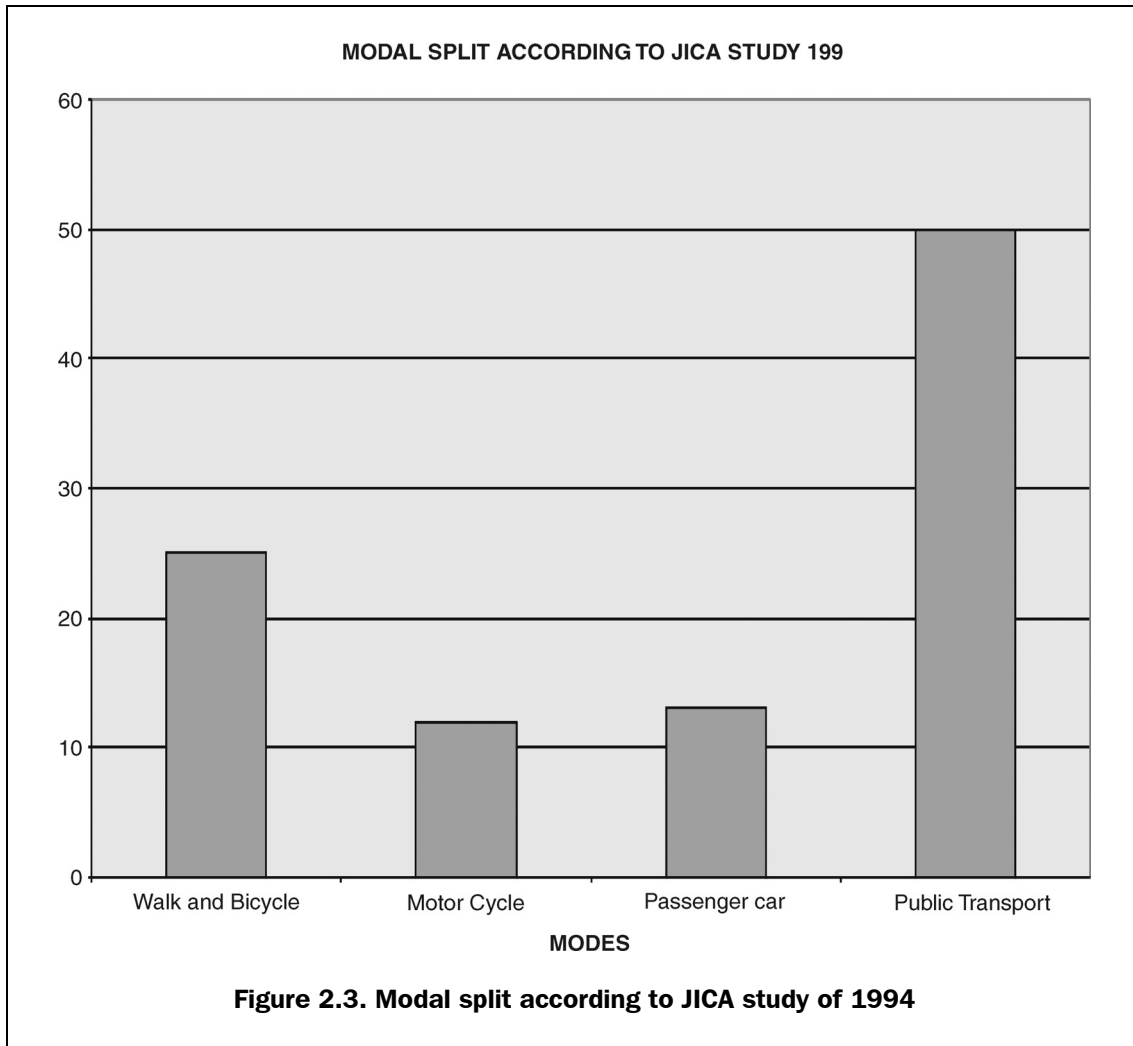
Source: NTC, A review of urban passenger transport in Dar es Salaam, 1989 p.36.

poor have been faring with regard to transport accessibility and livelihoods; they just present a general assessment of the transport situation. Such circumstances provide evidence that the urban poor have not yet attracted the attention of the urban transport planners and their livelihoods are still at stake unless measures are taken to rectify the situation.

Results from ‘Person-Trip Surveys’ conducted in 1994 show that 60 per cent of vehicle users in the city use public transport (JICA, 1994). A survey made in 1991 showed that 90 per cent of the school-going children used public transport (NTC, 1991). The situation has not improved with the liberalization and privatization of public firms, which has reduced the state-owned vehicle fleet. Most of the parents have opportunities and their links with public transport services in three low-income settlements in Dar es Salaam city are discussed.

## 2.14 Emerging issues

- Dar es Salaam city has the highest rate of population growth and urbanization in the country. Most of the poor in Dar es Salaam depend on public transport for their livelihoods. However, there is no clear policy on the part of the government that ensures provision of an affordable, convenient and efficient means of accessibility, especially to the poor.
- The road network in most parts of the city does not encourage the use of non-motorized transport (NMT). For instance, the road infrastructure does not have separate lanes for cyclists and pedestrians, a fact that makes NMT unpopular due to safety issues. Moreover, the NMT means are relatively expensive to most of the poor due to the taxes incorporated into them before they reach the ultimate user. Very few can afford to own a bicycle or a tricycle, for example, even if he/ she would be willing to use it.
- School-going children, of whom 90 per cent use public transport, are denied access to public transport services. This is especially the case with the private operators who are more inclined to profit maximization; there are no arrangements for compensation to operators by the government for students’ reduced fares. This makes their school life extremely difficult. The extent to which the children’s academic performance is affected is yet to be established. However, if education standards are to be improved then a



solution to this problem has to be found, especially for school-going children in urban centres.

- The complex and overlapping multiple institutional involvement in the provision of public transport makes it difficult to have focussed plans and effective traffic management, plans and management that will address the interests of all categories of stakeholders, especially the livelihoods of the poor. For instance, about 75 per cent of residents in Dar es Salaam live in areas that have not been surveyed and that lack essential social services including roads, clean water, electricity, schools and health facilities<sup>13</sup>.
- Public transport in Dar es Salaam is dominated by private operators, most of them owning only one vehicle. Lack of strong operators' and commuters' associations results in the provision of poor public transport services. Professionalism is disregarded and not practised, a fact that puts commuters' lives at risk and makes their livelihoods unbearable. The buses speed and are noisy, characterized by the use of abusive language by operatives. Commuters have to spend long times in congested buses during peak hours of the day. At the bus originating points, especially during off-peak periods, a bus will not depart until it is full.

13. *Hali na mwelekeo wa Ukuaji wa jiji la Dar es Salaam 2001–2010* (Current and trends of Dar es Salaam city growth 2001–2010).



## Section 3

### **The case of Charambe**

#### **3.1 Background**

Charambe ward is south of the City of Dar es Salaam along Kilwa road, about 20km from the city centre. According to the population estimates made during the 2000 general election, the ward comprised 12,000 households accommodating 75,000 people.

In total, there are 11 sub-wards (*Mitaa*) incorporating Rangitatu, Nzasa A, Nzasa B, Kwezomboka, Kurasini Mji Mpya, Kibonde Maji A, Mchikichini, Kimbangulile, Maji Matitu, Machinjioni and Mianzini. The interview cases for this work were picked from four out of the eleven sub-ward areas, namely Rangi Tatu, Mianzini, Machinjioni and Nzasa A. The four sub-ward areas were chosen primarily because they are the most densely populated areas and, as such, they exhibit more diversified livelihood (socio-economic) opportunities, most of which use or depend on public transport services.

About 27.5 per cent of the respondents were female while the rest were male, their ages varying between 16 and 55 years. Forty-eight per cent of the Charambe settlers use public transport daily throughout the week, 17.5 per cent use it for four days, 7.5 per cent use it for six days, and the other 7.5 per cent use it for five days. The rest use public transport for less than three days a week. That nearly a half of the residents use public transport routinely or daily, and that about 80 per cent use it for at least 4 days a week, illustrates the significant role public transport services play in the livelihood pursuits of the settlers.

As depicted on table 3.1, at least 60 per cent of the residents travel more than 15km by bus to their livelihood destinations. Occasionally, trips of less than 4km are made on foot. This, however, varies depending on several factors.

As shown in Appendix d, most of the trips are geared towards meeting household economic well-being, while a few trips are made for social and recreational purposes. Most of the trips are made using either larger buses or minibuses. In the following section, the main public transport routes linking Charambe with the rest of the city and the livelihood opportunities that they support, are discussed.

#### **3.2 Main routes and livelihood opportunities**

As discussed earlier in chapter one, the traffic department of the police force is responsible for designating and allocating routes to public bus operators, whereas the Dar es Salaam Road Transport Licensing Authority (DRTLA) is, among other things,

responsible for monitoring and enforcing route compliance among the operators<sup>14</sup>. A permit for a route is normally valid for one year. The entire process from the time a person lodges an application to the time he or she gets one, takes about two days. Total costs for processing the permit amount to TShs.200,000/=, although this excludes bribes which could be imposed by corrupt officers involved in the permit and/ or route allocation process<sup>15</sup>. Vendors of fish, foodstuffs, vegetables, cosmetics, old garments and other retail businesses comprise the main users of public transport. Others include people engaged in the various public and private offices in the city centre, and people running various business enterprises such as pharmacies, veterinary stores, hardware shops, restaurants, bars, tailoring and welding workshops.

### **3.2.1 The Rangitatu–Kariakoo bus route**

The Rangitatu–Kariakoo route is one of the main routes, which links Charambe with one of the main business areas in the city, Kariakoo. Large buses serve the route along with minibuses, and most of the users are business people, including petty traders. For instance, most vegetable vendors travel to Kariakoo market because they can buy commodities at wholesale prices and later transport these goods to Charambe where they run small retail stalls, locally known as ‘*genge*’. The commodities bought at Kariakoo market include fruits, onions, tomatoes, carrots, spices, cabbage, eggplants, *dagaa*, coconuts, dried fish, bananas etc.

When prices for commodities at Kariakoo market are too high, vendors normally travel to other markets in the city such as Tandale, Urafiki or Tandika markets. In such cases, they change buses at Kariakoo.

### **3.2.2 The Rangitatu–Posta-Stesheni-Kivukoni bus route**

Fish vendors from Charambe use the Rangitatu–Kivukoni route to reach the Ferry fish market where they buy fish at wholesale prices. They also use the same route to transport fish to Charambe. Other people who depend on buses operating along this route include Charambe residents employed in the various public and private institutions located at the city centre. Besides, there are also business people who travel to and from Zanzibar where they buy a variety of items including garments, electronics, household items, cosmetics, etc. The latter travel from Charambe to the Sokoine Drive, where they board shuttle boats to Zanzibar. There are also hawkers (*machingas*) who reside in Charambe but commute daily to various destinations in the city.

### **3.2.3 The Charambe–Tandika bus route**

Some residents board buses heading to Tandika market, where they buy food commodities such as rice, tomatoes, onions and sardines, and fruits such as mangoes, oranges etc. at wholesale prices and transport them to Charambe, where they operate retail stalls (*genges*). There are also a few people from Charambe who operate *genges* or retail shops at Tandika, and these commute daily to and from Charambe.

### **3.2.4 Other popular routes**

Other popular routes in Charambe include Rangitatu–Buguruni, Charambe–Buguruni, Rangitatu–Mwenge, Rangitatu–Ubungo. These routes cater for people who are involved in a variety of income-generating activities such as bars and groceries, veterinary stores

14. Lately, DRTLA has been allocating routes.

15. During the one-day workshop held on 9 April 2002 several participants, which included members from TDA, UWADA, WADAP and drivers, observed that decision-making procedures at the DRTA were often erratic, non-participatory and not informed with sufficient data and information.

### SECTION 3: THE CASE OF CHARAMBE

and pharmacies, restaurants, hardware shops, etc. Others include people engaged in small-scale activities including tailoring, carpentry, welding, car repair as well as food vending.

Apart from journeys that are directly linked to livelihoods, school-going children and other residents who depend on public transport to meet social needs also use buses operating along these routes. For instance, school-going children from Charambe travel by bus to the Metropolitan Technical and Commercial school in Mbagala or Mwenge Secondary School at Mgulani, while others travel to Kibasila and other schools in the city centre. Owing to the lack of adequate social and recreational activities in Charambe, such as a soccer field and disco halls, many young people travel to the city centre, the national stadium and elsewhere in the city in search of such services.

Whereas it is mainly the less poor and young people who use the buses to meet social needs, including recreational activities, generally fewer residents board buses to meet friends and relatives. This is primarily because the majority cannot afford to do so. Most of the social-related trips that are made by bus include visiting sick relatives/ friends and special cultural ceremonies, e.g. weddings.

In general, most respondents said they use only one route to reach their work place, school or livelihood destination. Otherwise, most of the livelihood activities that are undertaken in Charambe are concentrated around the market and shopping centre at Rangitatu. A few such activities are situated along Kilwa and Mbande roads as well as at Charambe *Mwisho* bus stand.

The following excerpts depict the importance of, and general views about, public transport versus livelihoods, as reported by Charambe settlers.

- 'Without public transport, I cannot survive here, i.e. I cannot earn my daily bread.'
- 'There is hardly anyone in Charambe who does not depend on public transport for his/ her livelihood.'
- 'Is there anybody who does not travel in order to survive here in Dar es Salaam?'
- 'We travel to Kariakoo market at 5.00am so as to buy goods at lower prices when the market has just been opened and be back in the morning between 7 and 8am, ready to display the fresh commodities and start business. If we travel to Kariakoo market late, middlemen will have bought all the commodities at wholesale prices and will re-sell them to us at prohibitive prices. If one buys from these middlemen, one cannot make a profit.'
- 'We travel to the Ferry fish auction market at 5.00am so as to buy fish at a cheap wholesale price during the early morning auctions i.e. when the fishermen who have been fishing the whole night bring the night catch to shore. If one goes to the fish market late one will have to buy from the middlemen. If one buys from the middlemen one cannot make a good profit.'

Since there are only a few formal bus stops along most routes, buses and minibuses pick up and drop off passengers anywhere along the route. At times *daladala* buses may stop even in the middle of the road or in areas where visibility is poor. This was reported to be one of the prime causes of traffic accidents and traffic jams.

Explaining the problems associated with routes, participants during the one-day workshop complained that some routes were unsafe and dangerous because of thieves.

For instance, they noted that some routes, such as those in Mwananyamala, were notorious. Incidences were narrated where drivers and conductors had been robbed during the daytime and during the evening. It was also reported that much of the time the local community members are aware of the problem, but do not take any action lest they be targeted by the robbers, most of whom are known to local residents.

### 3.3 Modes of transport

The private sector minibuses and buses (*daladala*) are the main providers of public transport services in Dar es Salaam city. At present, the Usafiri Dar es Salaam (UDA)—a parastatal organization, which used to be the main public transport company up to the 1980s—makes an insignificant contribution to the public transport service sector. In reality, private proprietors provide a total of 169 vehicles, including large buses (35–50 seats) and minibuses (15–20 seats), operating between Charambe and various destinations in the city. The main bus station in the ward is at Rangitatu shopping centre. UDA operates only one bus to Charambe.

Public transport services provided in the city are largely motorized modes, including large buses and minibuses. The latter are locally known as ‘*vipanya*’ (meaning ‘rats’). They get this name ostensibly because of their ability to manoeuvre even in poor and congested roads. There are also light trucks (pick-ups) and taxis. Non-motorized public transport modes include push-carts, bicycles, tricycles and walking.

#### 3.3.1 Motorized transport

##### Medium-sized buses

Most of buses that operate between Rangitatu and the city centre/ Kariakoo are medium-sized Toyota DCMs, Isuzus and Toyota Coasters. Even though the medium buses take more time to reach their destinations, their fares are the same as those for minibuses. According to the interviews with the users, most commuters (80 per cent) in Charambe use minibuses. Minibuses are usually preferred because they are faster and take much less time waiting for passengers at the bus stations and stops.

Most of the Toyota-DCMs, Toyota Coasters and Isuzu buses operating between Charambe and the various destinations in the city are old but still roadworthy. The price for a used bus (3500–4000cc engine, 35–50-seater), such as a Toyota DCM is estimated to be between TShs.8.5 million and 10.0 million i.e. between 10,000–12,500US\$. The cost for a new bus ranges between TShs.20–25 million. Access to loans for purchasing buses is generally limited. This is primarily because most people who may wish to engage in the public transport sector cannot meet the conditions given by banks<sup>16</sup>. Consequently, there are generally few cases where bus owners have accessed or borrowed funds from either the banks or individuals. The latter may be done through individual negotiations and trust, often under informal negotiations and arrangements. There is a general tendency among most people to shy away from taking out mortgages or using their properties as collateral for loans because they are afraid of losing their properties in case the business fails (see Appendix d).

16. Besides, bank interest rates for commercial loans are too high, for instance, lending rates range between 20–30 per cent per annum; these rates are unattractive and thus do not encourage people to take a loan.



*Photograph 3.1. Medium sized minibuses*

In recent years there has been a shift by public transport operators to provide more minibuses than the large buses. This is understandable because the former are preferred by public transport users; at the same time, the capital required to buy a minibus is much lower. However, the local authorities and the police would like to and intend to replace minibuses with large or medium-sized buses.

### **Minibuses**

The Toyota Hiace is the most popular minibus type in the city. Even though the seating capacity of minibuses ranges between 12–16 people, minibuses often carry between 20 and 22 people. Both minibuses and large buses operate without timetables or bus stops along the route. Because of lack of bus stops along most routes, there is often undue traffic congestion and degradation of roadside pavements. Impatient minibus drivers aggravate traffic bottlenecks. Interviewed users complained that many a time disputes emerge because minibus drivers and touts (conductors) often act rudely and inconvenience pedestrians, cyclists and vendors operating on the road sides.

Normally passengers are free to choose between minibuses and large buses because there are periods when buses and minibuses are available at the same time. Most of the bus stations, including the main bus stations at Rangitatu, Buguruni and Kariakoo, have no waiting bays, sitting benches or sheds for passengers or buses. However, even without such facilities, most drivers park their vehicles in an orderly pattern<sup>17</sup>. Owing to the lack of areas for vehicle repair or maintenance bays at the stations, often one finds a bus or

17. An orderly pattern in the sense that buses are parked back-to-back according to the arrival time of each bus at the station.



*Photograph 3.2. Medium sized minibuses*



*Photograph 3.3. Minibus*

minibus being repaired on the roadside or at the bus station. Other facilities, such as public toilets, are also lacking in most bus stations including Rangitatu and Buguruni.

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Conductors, drivers and passengers often use sanitary facilities in the nearby bars and restaurants. This was observed at Rangitatu and Buguruni bus stations.

UDA has a large bus depot and repair workshop at Kurasini. At present, this facility is however, grossly underutilized. It was built during the heyday of UDA i.e. when UDA used to operate with hundreds of buses. It is hoped that the underutilization of the depot will probably cease once the on-going privatization of UDA is accomplished.

Presently, a minibus (Toyota Hiace, 2000cc engine, 15–20-seater) costs about TShs.6 million (7,000US\$). Costs for getting through all the necessary formalities, including insurance, road license, route allocation and painting to indicate the route are estimated to be about TShs.2.5 million.

#### **Light trucks**

Most of the trucks used are Toyota Hilux, Land Rover and Canter. These are used to transport consumer goods such as flour bags, salt, sugar or building materials such as cement, timber and iron bars from the city centre or other parts of the city to the shops located at Rangitatu and its surroundings. The cost for hiring the truck from the city centre to Charambe depends on the size of the luggage. Normally the costs range between TShs.7,000/=–15,000/= per trip.

During the harvest season, some farmers hire light trucks to transport agro-produce such as cassava, oranges and pineapples from their farms to Rangitatu market or other market outlets in the city, including Kariakoo and Tandika. Light trucks are also occasionally used to transport passengers' commuting between Charambe and Chamazi, Mbande or Kitonga (see Appendix d).



*Photograph 3.4. Light truck*

### **Taxis**

Due to high living costs, residents seldom use this mode of transport. Taxis are mainly used during emergencies, for instance, when somebody has to rush a sick person to the District Hospital at Temeke or Muhimbili referral hospital, which are about 6 and 10 kilometres away respectively. Only one taxi stand exists in the entire ward; therefore people who need taxi services have to walk/ travel to Rangitatu centre. The price per trip varies depending on the distance and negotiations between the taxi driver and the passenger. On average, it costs TShs.5,000/= from Rangitatu to the city centre or Temeke District Hospital.

#### **People's opinions about the use of taxis**

- 'I only use a taxi during emergencies. For instance in May this year, when my wife started labour pains, I had to hire a taxi and rush her to Temeke hospital. This cost me TShs.3,000/=. I negotiated with the driver, otherwise I would have paid more.'
- 'I cannot use a taxi as that is the mode for the rich; I cannot afford it.'
- 'I never use a taxi for my business activities, it is too expensive compared to my income.'

### **3.3.2 Non-motorized transport**

#### **Bicycles**

Bicycles are used by some residents to transport goods within and outside the settlement. This includes ferrying agro-produce from farms outside Charambe to the market at Rangitatu and other markets in the city centre. Most respondents (73 per cent), however, said that they are afraid to use bicycles for safety reasons, particularly because most *daladala* drivers drive recklessly.

Nevertheless, most *madafu* (coconut fruit), as well as some vegetable and fruit vendors, use bicycles to ferry fruits from Charambe to the various market outlets in surrounding areas and the city centre. Bicycles are preferred because vendors can cycle swiftly along the narrow routes as well as reach densely built up areas where there are customers. Bicycles are also preferred because sellers can reach customers easily, including passengers waiting for buses along the roads. Occasionally bicycles are used by farmers to transport cassava, vegetables, charcoal and fruits, including oranges from the outlying farms in Mbagala, Chanika and Tandika. Occasionally bicycles are also used to transport goods bought at wholesale shops in Rangitatu to the retail shops in the sub-ward areas of the ward.

Overall, non-motorized transport modes, especially bicycles, are popular in areas where options for using motorized modes are limited or non-existent, such as when transporting agro-produce from farms located outside the major public transport routes.

Generally there are very few tricycles in the settlement. Like bicycles, most of these are used to transport commercial goods. including foodstuff within the settlement.

#### **Pull-/ push-carts**

Push-carts are, among other things, used to transport and distribute used clothes (*mitumba*), furniture, timber and consumer goods, such as oranges, cassava and

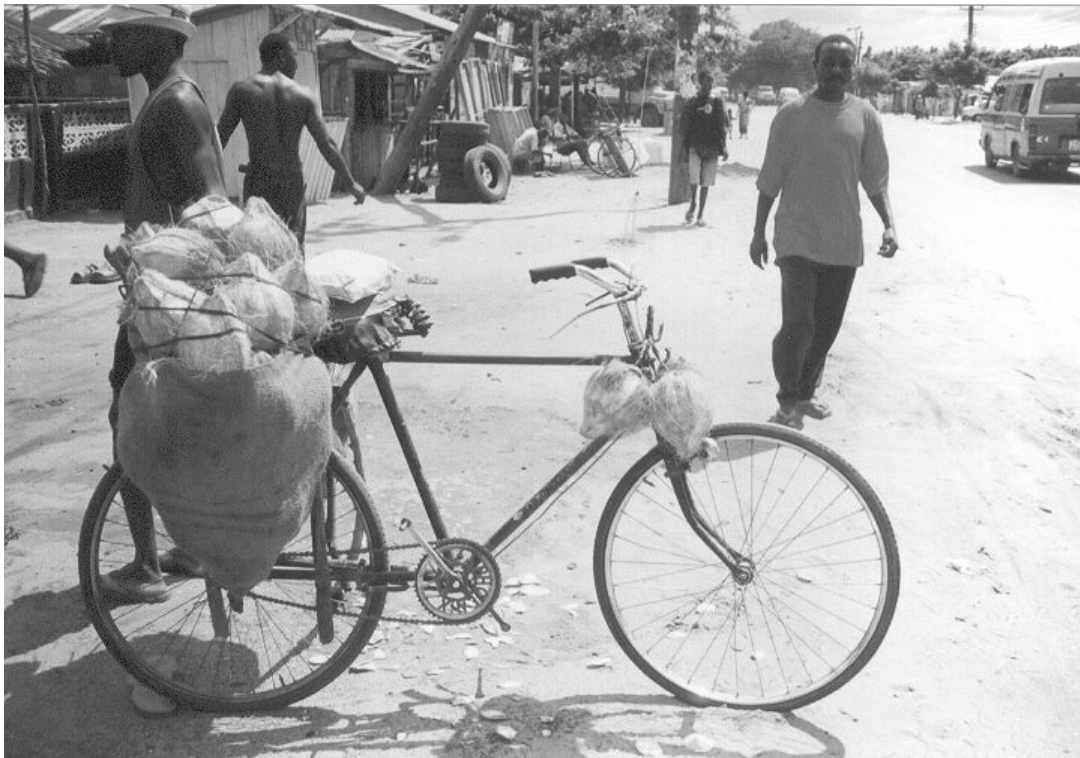


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#### What people say about the use or non-use of bicycles

- 'It is very risky to ride a bicycle in a city like Dar es Salaam because there are too many vehicles and most of the drivers are reckless.'
- 'I do not want to use a bicycle here in Dar es Salaam because it is too risky.'
- 'How can you use a bicycle here at Charambe where the roads are so narrow and they are speeding most of the time?'
- 'Many people do not use bicycles due to fear of accidents; besides it is too hot and humid for one to use a bicycle in Dar es Salaam.'
- 'I like to use a bicycle, but I fear the speeding vehicles.'
- 'I would like to use a bicycle if the government would expand the roads and provide areas for cyclists.'
- 'I would like to use a bicycle, but the road to my residence is sandy; it is difficult to cycle on such areas.'
- 'One needs courage to ride a bicycle here in Dar es Salaam; the speeding vehicles often knock those who use bicycles down.'
- 'Bicycles are useful in the areas without heavy traffic.'
- 'I always use a bicycle to carry and sell *madafu*.'

(Refer to photograph in Appendix d)



*Photograph 3.5. Bicycle*

vegetables etc. from Rangitatu market to the small stalls (*genges*) in the housing areas. Push-carts are also used to transport and distribute consumer goods such as maize flour,

rice and beans from the wholesale shops at Rangitatu to the retail shops in the surrounding areas. Besides, like in many other settlements in the city, push-carts are the main transport mode used by water vendors to transport and distribute water (in cans) to their customers.



*Photograph 3.6. Pull-/push cart*

Most of the pull- and push-carts are owned by salaried people. The operators hire them on an agreed fixed rate. The price for hiring push-/ pull-carts varies.

- Hiring for a trip to carry goods within the settlement, the renter pays TShs.300/= to the owner.
- Renting for the whole day, the operator pays TShs.3,000/=.
- Hiring a push-/ pull-cart within the settlement ranges from Tshs.300/= to TShs.5,000/= per trip, depending on the distance and the amount of goods transported (see Appendix d).

### **Walking**

Walking is the main mode used for intra-settlement movement. Settler residents walk to and from a bus stand, and to and from their farms, the market, shops, the health centre, school etc. They also walk to visit friends and/ or attend social and cultural events taking place in the settlement. Occasionally bicycles are used, particularly for trips associated with farming activities.

### 3.4 Users' assessments of the modes

#### 3.4.1 General impression of the present mode

Even though public transport services are available from about 5 in the morning until late in the night, sometimes after midnight, most users complained that the number of *daladala* services available in Charambe was inadequate. This is particularly so during peak hours, i.e. between 6am and 8am and 3pm and 5pm. As observed earlier, during these periods there is overcrowding in the buses and minibuses operating along almost all routes. Confirming the foregoing, over 50 per cent of the public transport users interviewed cited overcrowding on the buses to be one of the most critical problems facing commuters.

Users also added that because of the overcrowding, particularly during peak hours, passengers tread on each other's feet as well as push one another. The general feeling among the users was that even though ultimately they meet their livelihood pursuits using the available public transport services, overcrowding, poor hygiene and mistreatment of women and school children make public transport services in the city substandard and unattractive.

Efforts need to be made to alter social mind-sets relating to women and gender discrimination. Public transport can play a vital role in helping women back into the workplace or in helping them complete their household chores. The transport sector can help to promote gender equality through the price of women's fares.

The following excerpts further illustrate users' feelings about buses and minibuses.

'The buses are too few compared with the demand. This is the source of the overcrowding in the buses'.

'Pick pocketing is another problem. There are many unemployed youths idling around the bus station, most of whom pose as passengers'; they even scramble to get into the buses, but often they are pick-pockets.'

#### 3.4.2 Accessibility of bus stops

As noted earlier, because there are only a few formal bus stops along Kilwa road and Mbande road, drivers stop anywhere along the route as long as there are passengers to be picked up or dropped off. This creates traffic jams, increased pollution and inconvenience to other road users, including private car owners who cannot conveniently overtake because the roads are often too narrow.

There are no formal bus stops in many areas along the routes linking Charambe and other areas in the city; as a result passengers and drivers decide on their own when and where to stop or board a bus.

Otherwise, the three main bus stops in the settlement are at Charambe Mwisho, Nzasa and Rangitatu. As discussed earlier, Rangitatu bus stop is the main station. According to the users, the three bus terminals evolved informally with population growth, increases in commercial/ shopping activities at these areas and demand for public transport. In this regard the areas occupied by the three bus stations were not formally designated for their

current use. It is no wonder there are no vehicle parking lots, or vehicle servicing or repair facilities. The Rangitatu bus station is far too small to deal with the number of vehicles that use the station and other on-going commercial activities in the area.

Most Charambe residents walk for between 20–40 minutes to reach the nearest main bus stop. However, people who reside in the remote sub-wards, such as Machinjioni and Mianzini, walk for about one hour i.e. 3 to 4km. A few public transport users walk part of their journey so as to save on transport costs, suggesting that some residents cannot afford the fare if they were to pay for the entire trip. Most of those who walk part of the journey are those who require at least two or more connections to reach their destination.

As regards official policy concerning bus stops, participants who attended the one-day consultation workshop noted that because the DRTLA is responsible for establishing and allocating routes to bus operators it ought also to identify and designate bus stops. It was, however, regrettably noted that the DRTLA is in reality doing very little or nothing to provide and designate such bus stops.

### **3.4.3 Condition of the bus stands and stops**

The environmental conditions at Rangitatu bus station are generally poor. There are no roofed sheds, therefore passengers have to wait in the scorching sun. During the rainy season passengers crowd in the narrow verandas fronting retail shops, restaurants and bars, or stand along the stalls surrounding the bus station. The excerpts below further illustrate the condition at Rangitatu bus stand.

- ‘During the rainy season we suffer a lot because we have to scramble to get a space in the small verandas in front of the shops.’
- ‘All of us, including school children, have to cram into the narrow verandas in front of shops; some shopkeepers are not friendly and they often complain that passengers standing in front of their shops blocks customers from accessing the shops’.

Congestion and poor traffic management have given rise to traffic accidents at the Rangitatu bus terminal. Moreover, because of the lack of public toilets and poor collection of solid waste, public health conditions at the bus stop are generally poor.

Likewise, the few roadside bus stops along Kilwa and Mbande roads, do not have sheds. Worse, most of the bus stops are small and thus do not provide convenient waiting bays for the passengers. As a result, during the rainy season passengers encroach upon private property adjacent to the bus stops. This was reported to have provoked discontent among the property owners.

At Charambe Mwisho the existing big mango tree provides shade against the sun to the passengers waiting for buses. Planting trees in and around other bus stands and at the bus stops along the roads would significantly improve public transport conditions.

### **3.4.4 Conditions of the transport modes**

As depicted below, because most of the journeys that are made during peak hours are essential for the households’ livelihood needs, most residents board buses and minibuses even when they are congested and overcrowded. Many passengers interviewed contended that congestion and overcrowding in the buses have been increasing in tandem with

population growth. They blamed the DRTLA, noting that this organization has done little to ease congestion in buses or improve the conditions at the bus station. Asked what steps the traffic police have taken to prevent scrambling and overcrowding in buses, most respondents complained that the traffic police were not keen on solving the overcrowding problem. They remarked ‘...they [meaning the police] do not seem to be sensitive to or concerned about overcrowding in buses’. Others thought that the traffic police were often only interested in checking for mechanical faults on the vehicles and not in checking up on the boarding or travelling conditions of the passengers.

#### **3.4.5 Comfort in the buses**

The conditions inside the buses and minibuses are generally satisfactory except for overcrowding during peak hours. During peak hours, people have to scramble to get into or out of the buses. Some passengers resort to getting in or out through the windows or the driver’s door. The excerpts below expound further on the conditions inside the buses.

- ‘Travelling from Kivukoni to Rangitatu on 6 and 7 August 2001 at around 7.00 and 7.45am, I (interviewer) noted passengers boarding the bus that was heading to Charambe although their destination was the city centre. Later, I discovered that the passengers had boarded the bus in order to get a seat before the bus became overcrowded as it reaches Rangitatu, the final stop. By the time the bus reached the final stop, all seats were occupied, with some passengers already standing. Because of the overcrowding, passengers who had reached their destination and thus wanted to disembark had to get out through the windows.’
- ‘While I was contemplating on what to do, i.e. how to get out of the bus, the bus driver saw me and allowed me to use the driver’s door so as to get out. This was reported to be a normal situation during peak hours.’

#### **3.4.6 Sitting and standing conditions**

During peak hours there are normally more people standing in the buses than those who are seated. Because of congestion, occasionally some passengers suffocate. Many bus users complained that due to congestion during rush hours, a person easily gets his/ her clothes soiled and wrinkled. If the reader considers this alongside sub-standard vehicle design and their overall lack of reliability, the service is very poor. Often buses carry more passengers than available seats. Many a time six passengers are obliged to occupy a space intended for only four people. When some passengers resist this, conductors shout at them using foul language.

##### ***What people say about problems during peak hours***

- ‘It is very difficult to get into and out of the buses during peak hours as some passengers scramble to get out, while others try to get in; some resolve to use the windows to get into or out of the buses’.
- ‘If one is not strong enough, he or she cannot get a seat during morning and evening peak hours’.
- ‘Standing and hygienic conditions are worse in the small minibuses (Toyota Hiace or Isuzu) because of the inadequate height (roof height)’.

### 3.4.7 Hygiene conditions

The conditions of hygiene in most buses are poor, particularly during hot days. Most respondents asserted that as the day gets warmer, the unhealthy smell in the bus increases, particularly because so many people are sweating and breathing inside congested buses. Some respondents complained that they often feel nausea because of the bad smell. Users also expressed fear that overcrowding in the buses could be a source of the spread of communicable diseases, such as Tuberculosis (TB).

### 3.4.8 Conditions for women

Apart from harassment, particularly during non-peak hours women, like other passengers, are usually treated fairly well by fellow passengers and operators alike. However, during peak hours they suffer; for instance, it was reported that women who attempt to scramble or compete with men in order to get a seat are pushed aside by the men. Conductors were also reported to use abusive language against women and young girls who do not get into the bus quickly enough. They also push women and young girls to board the bus quickly because of the competition with other buses.

'Conductors direct passengers to stand facing the opposite direction, i.e. "back-to-back", however, some male passengers do not follow this order, instead they stand facing the backs of the female passengers. Often women shout when any sexual harassment occurs; others simply keep quiet because when they complain the conductors harass them. Some conductors are very arrogant, when one complains, they respond "If you feel you are too beautiful, why did you not take a taxi"?''

Other mistreatment of women relates to sexual harassment. Incidents confirming this are outlined in the subsequent sections.

A woman travelling from Rangitatu to Kariakoo speaking to the interviewers recalled an incident, which took place in August 2000, when she witnessed a woman being harassed by a male passenger. She reports:

'As we were travelling in an overcrowded bus, a woman shouted, complaining that a man wanted to rape her. At the same time she slapped him on the face. The woman complained that the man had already unzipped his trousers. Fortunately, a policeman who was with us in the bus apprehended the man and took him to the police station'.

During discussions with some male passengers, they asserted that such harassment incidents are common on buses and went on to blame some men for this unacceptable behaviour. The excerpt below narrated by a male passenger tells it all:

*'Utakuta jamaa anashika bomba na kubanana na msichana hata kama kuna nafasi ya kusogea ndani ya basi. Basi likiyumba huku yeye yumo, likiyumba kule bado yumo pale pale kang'ang'ania bomba na kubanana na msichana, hasogei.'* Meaning 'Some men would do all they could to bump into girls; as the bus moves sideways they would hold on and keep on bumping the girls to satisfy their sexual desires'.

On the other hand, some of the men interviewed blamed the women for the sexual harassment incidences. They said that some women put on garments that show their private parts. Others added that because some women put on transparent clothes, or mini-skirts, men are sexually enticed to bump into them. Yet others claimed that these incidences are not unexpected on public buses in urban areas. One claimed ‘... *hizi ndizo raha za daladala*,’ meaning ‘these are the joys associated with *daladala*’.

Occasionally, even in situations where buses are not overcrowded, sexual harassment may happen. For instance, some female public transport users complained that some male passengers stare at women or girls straight into their faces without turning their head or even blinking. This makes the women uncomfortable. Others complained that there are also men who try to seduce women travelling on the buses; when they are turned down, they resort to foul language.

There were also complaints that women who resolve to scramble to get a seat on the buses and thus compete with men during peak hours, are not only harshly pushed aside by men, but are also harassed sexually. Because of this, many women do not scramble for the seats, and thus travel standing. Hooligans and bad-mannered men were said to take advantage of congestion to sexually harass women standing on the buses.

#### **3.4.9 The condition of school-going children**

Some *daladala* operators, especially the minibus drivers, were reported to deny school children free access onto the buses. This was particularly reported to be the case during peak hours. Consequently, availability or access to public transport services for school-going children in Rangitatu is a serious problem during morning hours, particularly between 6.00am and 7.00am, when the number of school-going children and other people who are in a rush to get to work, far exceeds the buses available. Bus conductors, especially for the buses that operate along the Mbagala–Kariakoo and Mbagala-Posta/Stesheni/ Kivukoni, routes, were reported to be the main culprits who bar school-going children access to buses. In addition, because some *daladala* conductors allow only a limited number of children to board the buses, school children, particularly girls, suffer a lot.

Some bus conductors allow only one, others two and at most four, school children per trip. Students interviewed complained that there are numerous incidences where they had been pushed out by conductors so as to provide seats for adults, who pay full fares.

Some adult passengers asserted that even during non-peak hours, when most buses are not overcrowded, there are some conductors who still deny school-going children seats. Many a time primary school children and secondary school students are forced to stand throughout the journey. Many get to school late. The excerpts below from the discussions held during the interviews with the school children further elaborate on their conditions.

During a discussion with a group of students it was revealed that some male students have vowed to fight bus conductors if they are harassed or denied access to board buses. Meanwhile, some male students travel hanging onto the doors, while others have resolved to pay the full fare of TShs.150/= per trip per person so as to get equal treatment with adults. Further, the interviewed students reported that female students and primary school pupils, who are not strong enough to confront the conductors or scramble to get into the buses, have to wait for a long time or hours at bus stations. As a result of the mistreatment

- 'If you are in school uniform, it is very difficult to board a *daladala* as conductors block the door until it is filled by those paying full fare (TShs.150/= or 100/=)'.
- 'If you are not in school uniform, it is easy to get into a bus. But when one shows the [conductor] the student's identity card saying that you pays student fare rates, the conductor humiliates you and even insults you, asking why you didn't declare this before boarding the bus? This is one of the sources of conflicts'.
- 'In July 2001, I saw a male student from Metropolitan Technical Commercial School fighting with a conductor at Rangitatu bus stop because the conductor had tried to prevent him from boarding a bus'.
- 'In July 2001, a student fought a conductor in the morning at the Njia Panda (Nzasa/ Mbande crossing) bus stop. Again this happened because the student was prevented from boarding a *daladala* (Toyota Hiace) minibus. This happened even though the conductor knew the student was already late for school'.
- 'When I arrived at Kigogo bus stop today at around 6.30am. I found a Toyota Hiace heading to Kivukoni. As four of us (students) tried to get into the bus, the conductor blocked us, stretching his arms across the door. Soon, the *daladala* bus was full. Two of us manoeuvred and managed to get into the bus. I was blocked from entering the bus but I scrambled and made my way into it. Noting this, the conductor started insulting me. I lost my temper and started beating him up.....' '*nilimkunja kondakta na tulitaka kupigana*', meaning 'I confronted the conductor with an intention to fight him. During the confrontation my shirt was soiled'.
- 'On 1 March 2001 at 3pm, I witnessed a female student being mercilessly pushed out of a *daladala* by a conductor at Kariakoo bus stop'.
- 'On 1 August 2001 a conductor pushed students out while a bus was in motion in Kinondoni B. The students were struggling and pushing the door so as to get onto the bus'.

of students, some have been lured to befriend bus conductors and/ or to act softly so as to win their favour, i.e. to get priority to board buses during peak hours.

Interviewed students asserted that there are some female students who have been lured to engage in sexual relationships with *daladala* drivers and conductors so as to get favours. This became clearer and was confirmed by one girl's father who painfully narrated how his daughter became pregnant following what he termed to be a 'forced relationship with a *daladala* conductor' that she resorted to in order to solve the transport problems she had been facing.

'My daughter, who was in form II at Kibasila Secondary School, in 1994 became pregnant because she started having affairs with a *daladala* conductor of a bus after frequent harassments and her failure to get onto buses in the morning and in the evening. Often she was punished at school for arriving late. She was therefore forced to befriend a bus conductor in order to be treated favourably. As a result, she became pregnant and the school terminated her studies. The conductor had to marry my daughter. I did not like this, but I had no choice other than painfully accepting it'.

The low bus fares charged to school children were said to be one of the root causes of harassment and denial of school children's entrance to buses. On the other hand, many drivers and conductors complained that because they have fixed amounts of money they have to remit to the bus owners daily, they are obliged to use whatever means at their disposal (both fair and foul), so that they can reach the target, otherwise they will lose their jobs. Some of the drivers who attended the one-day workshop noted that some students



who board the buses plying between Charambe and city collude and cheat operators. For instance, five or 10 students from Jitegemee/ Mgulani and Lugalo secondary school paid together using a TShs.5,000/= bill, while they knew that none of the operators had change for a TShs.5,000/= note. This they noted is the source of conflict. Commenting on this, a respondent noted with regret that the government was ill advised to set low fare rates for school children. This, it was noted, had complicated the transport situation for school children. The excerpt below from a parent further confirms the foregoing.

‘The government ought to have been extra careful before reducing fares for students to TShs.50/= per trip. The idea was to help parents, but this has led to tension and conflicts between students and operators. There was not sufficient basis to support this decision. It is better for the government to restore equal fares for school children/ students and adult public transport users. Our children are getting a lot of hassles. If the government wants to assist us, it should increase our salaries’.

### 3.4.10 Operators’ working conditions

Most of the drivers are young people aged between 30 and 40 years. Although all the drivers interviewed had grade ‘C’ driving licenses, two out of 10 had gone through formal driving schools while the rest had learnt driving in garages or through their engagement as conductors in *daladala* buses.

Asked what causes the mistreatment of passengers, some of the interviewed drivers and touts (conductors) responded:

‘We have a fixed sum, which we have to remit to the bus owners everyday. We are working under very tight conditions. We start early in the morning, usually at 5.00am and work till late in the night, sometimes beyond 10pm without rest. We break for only half an hour for lunch. If I fail to meet the target set by the owner for two days consecutively, I will lose my job. I have a minibus (Toyota Hiace, that is a 15–20-seater) and I have to remit TShs.25,000 per day. Those driving big buses such as DCMs, Coasters, Isuzus etc. remit up to TShs.35,000/= per day. Mind you, daily remittances exclude running costs such as fuel and minor repair work. We solely depend on whatever is left after paying the bus owner his daily dues. The *daladala* job is very difficult. People think we are comfortable, minting money and are happy to do this job; it is not an easy job; we work like ‘*wamwaga zege*’ [meaning, ‘we work like casual labourers at a construction site’].

Another driver added, ‘... we do not have salaries or benefits since we have no formal salaries. Sometimes one is lucky if a bus owner decides to give one a commission amounting to TShs.20,000/= or TShs.30,000/= per month if one has attained the target and has had no accident or problems associated with traffic police. This commission is, however, not guaranteed’.

Besides, interviewed drivers and conductors complained that they do not have formal employment contracts with bus owners. The owner can therefore decide to terminate employment without notice. Interviewed drivers and conductors also asserted that at times they are obliged to bribe traffic police in order to avoid harassment. They complained that sometimes traffic police officers raise unnecessary queries and even make ad hoc vehicle inspections in order to solicit bribes. One driver explained:

'Some traffic police stop a bus and demand a lot of things which are not routine. Others will start inspecting the vehicle when they know that passengers are waiting in the bus. Others demand to see the driving license and once you give it to them they confiscate it until you give them something. If you resist they will ask you to drive the vehicle to the "Central", i.e. meaning to the traffic police headquarters'.

Asked why they (drivers) do not abide by the loading/ unloading and parking regulations, most of them complained that in many cases there are no proper bus stops along the routes; as such, passengers request them to stop suddenly along the route. Others charged that they are obliged to pick up passengers anywhere along the route; otherwise they will not collect the sum agreed upon with their employers.

As regards mistreatment of school children and students the bus drivers had this to say:

'Often students scramble to get into the bus. If I fill the bus with students, I will not be able to raise the amount demanded by the owners'. 'You have to understand our problems also'" he added..

Others added, '...some students, particularly those who do not put on their school uniform, are very stubborn as they board a bus and occupy a seat but then they want to pay only TShs.50/= per trip. They do not want to allow the elders to occupy the seats. As a result, when students have filled-up the buses, we suffer a loss because many adults do not want to travel standing'. 'How do we survive under such conditions?', he charged.

Asked about how public bus services in the city could be improved, some drivers proposed that the DRLA should help them to establish a Drivers and Conductors Association so as to safeguard their employment by, for instance, putting in place and enforcing employment contracts between drivers, conductors and bus owners. Many thought that unless drivers and conductors are paid salaries, mistreatment of passengers and reckless driving cannot be prevented because operators have to strive to get the sum agreed upon with the owners as well as get some extra income for themselves. In order to fight corruption among the traffic police, some were of the opinion that the Public Corruption Bureau (PCD) should work closely with drivers and conductors.

#### **3.4.11 General feeling about public transport**

Besides overcrowding and the harassment of school children, other problems associated with public transport include unnecessary loud music, hooting and smoking in the buses and pick-pocketing. Some (65 per cent) of *daladala* users asserted that bus and minibus conductors often use abusive language against female or young bus users. The problem was reported to be more serious during peak hours. It was also reported that some passengers incite conductors to use abusive language. For instance, a conductor complained that some passengers would give a conductor a TShs.10,000/= bill note, while they know that it is very difficult to get a change for such a large bill during rush hours. Other conductors claimed that some passengers were unco-operative as they do not want to abide by the appeals made by the conductors to, for instance, stand in a line or in an orderly manner so as to make it easy for the conductors to pass in-between when

### SECTION 3: THE CASE OF CHARAMBE

collecting fares from the passengers. Other passengers were reported to refuse sharing seats with more people than the seats available. The quotes below illustrate views on public transport:

- 'Conductors use foul and abusive language. They use abusive language when there are disputes with passengers'.
- 'When female passengers complain that men are assaulting them sexually or bumping into them, some conductors' response is "... if you think that you are too beautiful why did you not take a taxi?"'
- 'When the conductors use abusive language against girls we feel embarrassed because we often travel with spouses and children'.
- 'Conductors use foul language because they are unethical and are not trained for the work they are doing. Most of them are people who have been idling for years'.
- 'It was between 25 and 26 June 2001, when one woman cried out when the bus reached Kivukoni fish market. She was complaining that TShs.17, 000/=, the money which she had hidden in her brassiere.. After she had got out of the bus and she had gone to the market to buy the fish, she realized that her money had been stolen. She started crying.

On their part overall, the participants in the one-day workshop echoed the foregoing noting that most of the operators (drivers and conductors) had no formal education; they were not professionals but people who had failed to make a meaningful living elsewhere. Thus, such people resorted to driving without any sense of commitment.

As illustrated below, some discerning views were also given by a number of users who were interviewed.

- 'The language used by conductors is not bad, unless one provokes them; for instance, if a passenger pays a TShs.10,000/= bill in the morning when he or she knows that conductors do not have a change for such an amount. The conductor therefore gets irritated'.
- 'Vendors do not have problems with conductors or drivers; we board buses and they help us to carry our goods into the bus without any problem'.

However, the discerning views presented above have to be taken with caution because they were given by adult men who are not normally mistreated by conductors, because they are afraid that such people would fight back or react aggressively.

A third of the passengers interviewed expressed their reservations regarding the role played by porters, locally known as '*wapiga debe*', who are engaged by bus conductors and drivers to persuade and direct passengers to board their buses. Respondents complained that some porters were pick-pocketing during peak hours<sup>18</sup>. Others said that porters are too noisy, and were a nuisance to passengers. Yet more passengers added that they are irritated by the sharp sound often made by porters and conductors who bang on the bus bodies so as to draw passengers' attention that the bus is ready to leave the station.

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18. These views were echoed by some of the participants who attended the one-day consultation held on 9 April 2002, at UCLAS.

**Table 3.1. Public transport users, main routes, mode and purpose of the trip**

Users' sex		Mode	Route and distance (km)	Purpose of the trip
Male	Female			
16	1	Bus [DCM, Canter and Isuzu journeys]	Machinjioni/ Rangitatu to Kariakoo (18km)	<ul style="list-style-type: none"> <li>to buy goods from Kariakoo market</li> <li>to buy mechanical tools for vehicle repairs (garage)</li> <li>to sell charcoal</li> <li>to repay loans at the pride office</li> <li>to collect newspapers for distribution/ selling</li> </ul>
4		Bus [DCM and Canter]	Machinjioni/ Rangitatu to Posta (20km)	<ul style="list-style-type: none"> <li>to the Port to travel to Zanzibar to purchase clothes, cosmetics etc.</li> <li>to work</li> <li>petty trading i.e. clothes</li> </ul>
4		Bus [DCM and Isuzu]	Rangitatu to Kivukoni (20 km)	<ul style="list-style-type: none"> <li>buy fish at the wholesale (Ferry) fish market</li> </ul>
1	4	Minibus [Toyota Hiace]	Charambe to/ from Tandika	<ul style="list-style-type: none"> <li>buy consumer goods at Tandika market</li> <li>running retail shops and groceries</li> <li>to work (employers)</li> </ul>
2	1	Bus [DCM] and minibus	Charambe–Buguruni	<ul style="list-style-type: none"> <li>to buy workshop materials</li> </ul>
	2	Bus [DCM]	Rangitatu–Mwenge	<ul style="list-style-type: none"> <li>to work</li> </ul>
	2	Bus [Isuzu]	Rangitatu–Ubungo	<ul style="list-style-type: none"> <li>to work</li> </ul>
1		Bus	Rangitatu–Stesheni	<ul style="list-style-type: none"> <li>to work (petty trading)</li> </ul>
3		Minibus and pick-ups [Toyota Hilux]	Charambe/ Rangitatu to Mbande/ Chamazi	<ul style="list-style-type: none"> <li>to buy domestic needs such as onions, beans, potatoes, coconut and charcoal</li> <li>farming</li> </ul>
1		Minibus (DCM)	Charambe–Rangitatu	<ul style="list-style-type: none"> <li>to buy drinks for the bar</li> </ul>

Source: Field studies, August/September 2001.

### Connections along the way

Rangitatu is the main connection or interchange terminal to the various routes that link Charambe with its surrounding settlements and villages. Normally passengers travelling from the settlements and sub-ward areas which surround Charambe, such as Nzasa A and B to Kariakoo or other parts of the city centre, board buses at Rangitatu. Similarly, most trips from Charambe to Buguruni, Tandika, Ubungo and Mwenge start at Rangitatu bus terminal. Some passengers from Charambe who travel to Manzese, Urafiki or Tandale markets change buses at Kariakoo, while settlers who travel from Charambe to Tandika or Temeke Hospital either connect at Machinjioni area or at Rangitatu.

### Cost per trip

During peak hours, both large buses and minibuses charge TShs.150/= per trip per (adult) person. Starting from around ten o'clock in the morning into the early afternoon, the fare per trip along most routes decreases to TShs.100/=. Fares are lower during this period

because then there are relatively fewer commuters. Students (primary and secondary) pay a flat rate of TShs.50/=.

### 3.5 Vehicle condition and safety

Most public transport users interviewed (85 per cent) were satisfied with the condition of the vehicles. Most of the minibuses, including DCM buses, operating between Rangitatu and Kariakoo and the bus station (near Kariakoo station) were said to be in fairly good condition; this includes the exterior and interior upkeep.

The light trucks e.g. the Toyota Hilux, Datsuns and a few Land Rovers that drive between Charambe and the hinterland villages such as Chamazi, are generally in bad condition. Some respondents contended that most of the vehicles operating between Rangitatu and the remote villages surrounding it are not roadworthy. They contended that vehicles that were not roadworthy on the major city routes were often dumped on the Chamazi route or other routes to the hinterland. This could be attributed to the absence of police patrols along these routes. Most of the fish vendors use the Rangitatu–Kivukoni route to transport fish bought at the Ferry market to their retail stalls in Charambe. Passengers who frequently use Rangitatu–Kivukoni buses, however, complained that because the buses operating along this route often carry both fish and passengers, the smell in some of them was offensive. Besides, they added that many drivers, especially minibus drivers, speed up and even overtake at dangerous corners and junctions. Some respondents asserted that some passengers have sustained injuries and some have even died following traffic accidents, often as inconvenient a result of careless driving.

Vendors who have erected temporary stalls along the paths besides the main roads were said to hamper the smooth flow of traffic as well as constitute the source of some accidents. A number of users confessed that they had witnessed accidents, often fatal, including an incident that occurred two years ago when a truck ran into vendors operating along the main road at Charambe. It was reported that a number of vendors lost their lives in this accident.

During the field study, several incidents were observed where passengers were picked up and dropped off at accident-prone areas. According to the respondents, a bus stop on a corner near the police post at Rangitatu is one of the most dangerous areas in the settlement. A number of accidents were reported to have occurred at this area. Despite this, minibuses and other bus operators continue to pick and drop passengers in the area.

#### What people say about safety hazards

- 'At peak hours, there are many passengers. Others resort to using bus windows to get into the buses'.
- 'Speed bumps are very important as they check and discipline speeding drivers'.
- 'I normally do not board buses, which are overcrowded, as I fear communicable diseases and pick pockets'.
- 'A lot of passengers travel while standing; as a result, if brakes are applied abruptly they lose balance and swing forward. This may cause accidents'.

All interviewed respondents supported the introduction of speed bumps on the main roads so as to force drivers to reduce their speeds. Mbande road was pointed out to be one of the priority roads, which ought to have bumps. This was reported to be one of the most dangerous roads, particularly because of the speeding trucks that transport sand from Machimboni area to various sites in the city.

#### Accident locations and contexts

- At the transformer area. In May 2001 (this year), a person riding a motorcycle was knocked down by a moving vehicle. *Up to the period this study was being conducted, the victim was still hospitalized at Muhimbili National Hospital.*
- Near Charambe Machinjoni bus terminal. In July of this year (2001), a young boy was knocked down and killed by a light truck, a Toyota Hilux.
- Two accidents have occurred recently at a sharp corner near the police post at Charambe. The first accident involved a nursery school pupil who was knocked down by a *daladala*. She sustained injuries. The second involved a soldier who was knocked down and killed by a moving vehicle while riding a motorcycle.
- 'Some years ago I witnessed a lorry running into vendors who were operating vegetable stalls on the roadside at Rangitatu. Several people were killed'.

### 3.6 Expenditures on public transport and willingness to pay

There were mixed feelings among the *daladala* users regarding the fairness of the current fare charges of TShs.150/= per person per trip. About 50 per cent of users said that the charges were fair, while others (45 per cent) said the charges were too high, unaffordable by most people and therefore unfair. The excerpt below illustrates their views.

- 'The charges (TShs.150/=) per person per trip are fair because when passengers are few, the rates are often lowered to TShs.100/= per person per trip'.
- 'The current fare rates for the buses and minibuses are too high and unfair. Some people walk part of the journey because they cannot afford TShs.150/= per trip. I also sometimes walk from Rangitatu to Mianzini because the fare is too high'.
- 'The current fare charges are too high, especially to those who have to board more than one bus to reach their work places'.

When asked whether they would be ready to pay more for improved transport services, 65 per cent of users responded affirmatively. 17.5 per cent said they would be ready to pay TShs.150/= whereas 17.5 per cent, would be ready to pay between TShs.200/= and 300/= per trip.

About 87.5 per cent use only *daladala*, while 10 per cent use both *daladala* and bicycles; the rest walk and therefore depend on public transport only occasionally. Because of high charges, taxis are seldom used and even then by very few people, mainly by the affluent. Cyclists are generally few, mainly because most people are afraid of the high risk of accidents. Like in most areas in the city, roads in Charambe ward do not have distinct bicycle paths or routes.

### 3.7 Income and expenditure on public transport

The major sources of income for most settlers in Rangitatu are small business activities and farming. The business sector accounts for 77.5 per cent of all the activities, whereas employment in the public and private sectors and farming account for the remainder. Income and expenditure on transport are indicated in table 3.2.

**Table 3.2. Weekly expenditure on public transport**

R/no	Income per week	Amount used for public transport per week	% of expenditure on public transport
4	6,000	2,600	43.3
34	6,000	2,500	41.6
27	8,000	3,500	43.8
14	9,000	3,500	38.9
31	10,000	1,800	18
36	10,000	2,100	21
24	12,000	2,100	17.5
1	12,500	8,400	67.2
3	14,000	900	6.4
11	14,000	2,000	14.3
38	14,000	2,400	17.1
28	22,000	2,800	12.7
2	24,000	7,000	29.2
8	30,000	2,400	8
18	35,000	1,500	4.3
30	40,000	1,750	4.4
7	40,000	3,200	8
21	45,000	4,000	8.9
22	49,000	2,100	4.3
25	50,000	200	0.4
26	50,000	1,800	3.6
37	50,000	2,100	4.2
12	70,000	1,400	2
17	80,000	2,500	3.1
39	105,000	3,500	3.3
9	157,500	1,800	1.1
20	175,000	2,500	1.4
32	200,000	2,100	1.1
29	210,000	400	0.2
19	245,000	3,500	1.4

**Table 3.2. Weekly expenditure on public transport**

R/no	Income per week	Amount used for public transport per week	% of expenditure on public transport
5	*	300	
6	*	4,200	
10	*	1,750	
13	*	2,000	
15	*	2,800	
16	*	1,800	
23	*	2,000	
33	*	1,500	
35	*	400	
40	*	600	

Source: Field studies, August/ September 2001

Note: \* These respondents were not ready to state their incomes

R/no: respondent's number in the questionnaire

As noted above, about 60 per cent of the respondents spend between TShs.1000/= (1U\$) and 3000/= (3U\$) for transport per week; less than 20 per cent spend between TShs.3,000/= (3U\$) and TShs.5,000/= (5U\$) per week.

One of the most striking observations derived from Table 3.2 is that it is the people with the least income who spend the most on public transport costs. This underlines an important correlation, for it is also the same (lower-income) people whose livelihoods are more closely linked to the public transport because they have little or no choice but to travel to their livelihood destinations with public transport support. Improved and affordable public transport would appear to be one of the critical inputs if poverty among the lower-income urban dwellers is to be addressed and reduced.

### **3.8 Public transport improvement**

From the discussions and interviews conducted with the users on how public transport services in the area and city at large could be improved, a number of proposals were given. These include measures to reduce fares so that they are affordable by most people, increased transport modes (bicycles), an increase in bus stops, improved bus stations, reduced accidents, monitoring the conduct of *daladala* operators and enhanced safety and hygienic conditions in the buses. The proposals given by the users are summarized on table 3.3.



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**Table 3.3. Users views on how to improve public transport**

S/N	Proposal	Reasons	Remarks/ measures
01	Reduce tax on fuel, check overcrowding and solve transport problems for school children.	<ul style="list-style-type: none"> <li>– the current <i>daladala</i> fare charges, TShs.150/= per trip, are not affordable by the majority of poor people, although these depend on transport to earn their livings.</li> <li>– the <i>daladala</i> buses are overcrowded.</li> <li>– the <i>daladala</i> operators avoid school children during peak hours because they pay TShs50/= compared to TShs.150/= paid by adults.</li> <li>– some drivers cut bus routes short during peak hours e.g. a bus running between Charambe and Buruguruni terminates at Rangitatu.</li> </ul>	<p>The government should reduce fuel tax. <i>Daladala</i> operators should reduce bus fares once fuel prices are reduced. <i>Daladalas</i> should only take passengers who get seats.</p> <p>The Municipal council should strive to provide more schools/ expand existing schools to reduce the number of students who have to travel long distances to school. Traffic police should prevent <i>daladalas</i> from cutting routes short.</p> <p>NB: Reduction of fuel tax would have adverse effects on the revenue collection and maintenance of roads.</p>
02	Standardize fares for children and adults and introduce a school bus system.	<ul style="list-style-type: none"> <li>– <i>daladala</i> operators avoid school children during peak hours, leading to poor attendance and late arrivals at schools.</li> <li>– female students are forced to engage in relationships with <i>daladala</i> drivers and conductors so as to get favourable treatment.</li> </ul>	<p>The central government should review the decision to charge lower fares to students.</p> <p>The government should facilitate the establishment of a private company to manage school buses; possibly one company regulated by the authorities. Methods for providing subsidies could be worked out in collaboration with parents/ guardians.</p>
04	Bus fares should be based on the length of the trip.	<ul style="list-style-type: none"> <li>– <i>daladala</i> users travelling short distances, e.g. one km from one stop to another, should not pay the same fare as those travelling long distances, e.g. 5 km or more. It is unfair for a person travelling from Rangitatu to Zakhem (3–4km) and the one travelling from Rangitatu to Mwenge or Ubungo (12 km) to pay the same fare.</li> </ul>	<p>The local government, in collaboration with city Transport and Licensing Authority and bus operators should work so as to review <i>daladala</i> fares to reflect distances.</p>
	Provide for a mechanism to subsidize students.	<ul style="list-style-type: none"> <li>– most of the <i>daladala</i> operators do not take school children during peak hours.</li> </ul>	<p>The municipal council should explore options for subsidizing school children in their respective areas of jurisdiction.</p>
05	Extend bus routes.	<ul style="list-style-type: none"> <li>– residents from Machinjioni, Nzasa A and Nzasa B sub-wards walk long distances to Rangitatu.</li> </ul>	<p>The Dar –es Salaam Transport and Licensing Authority should extend the bus routes to cover these destinations. The municipal council should establish and equip public transport departments.</p>
06	Increase the number of bus stops.	<ul style="list-style-type: none"> <li>– from Bendera Tatu to Kariakoo the distance is too long. Many people walk long distances to the bus stop.</li> </ul>	<p>The Dar –es Salaam Transport and Licensing Authority should increase the number of bus stops in accordance with passengers' demand.</p>
		<ul style="list-style-type: none"> <li>– people who are employed by institutions around DAWASA/ Gerezani area walk long distances because there is no bus stop between Bendera Tatu and Rems bus stops.</li> </ul>	<ul style="list-style-type: none"> <li>– The municipal councils should play a leading role in assessing and providing new routes and bus stops.</li> </ul>

**Table 3.3. Users views on how to improve public transport**

S/N	Proposal	Reasons	Remarks/ measures
07	Widen Kilwa road into a dual carriageway and provide exclusive pedestrian routes.	<ul style="list-style-type: none"> <li>– many accidents occur along Kilwa road because it is too narrow to accommodate pedestrians, bicycles and speeding vehicles.</li> <li>– this (Kilwa road) is a trunk road like Nyerere road, Morogoro road, Old Bagamoyo road; it has to be a dual carriageway.</li> </ul>	The central and local government should mobilize funds from different stakeholders to widen Kilwa road. Build infrastructure, such as pavements that encourage pedestrians. Build cycle lanes so that cycling becomes a safer alternative method of transport.
09	Build bus stands for the <i>daladala</i> users.	<ul style="list-style-type: none"> <li>– there are no shed to protect passengers from the rain and sun along the main roads, including Kilwa and Charambe.</li> </ul>	The local and central government should encourage private companies to build sheds where they can advertise their businesses. Pepsi Cola and Masumin Print Ways and Stationers have been doing this.
10.	Check on the use of abusive language in <i>daladalas</i> .	<ul style="list-style-type: none"> <li>– <i>daladala</i> conductors hurl insults in the buses.</li> </ul>	The local and central governments should formulate and enforce bylaws to deal with the conductors who use abusive language. Drivers and conductors should be trained/ educated to respect passengers.
11.	Construct speed bumps along Mbande road and Kilwa road at Zakhem and Kizuiani areas	<ul style="list-style-type: none"> <li>– due to lack of bumps along these areas, speeding vehicles cause accidents.</li> </ul>	Local government should construct speed bumps/ traffic calming.
12.	Remove porters from bus stops/ stands	<p>Porters (<i>wapiga debe</i>) cause inconvenience to passengers and increase chaos at bus stands.</p> <ul style="list-style-type: none"> <li>– some of them are thieves.</li> <li>– they mistreat passengers as they struggle to get them into buses.</li> <li>– they make a lot of noise.</li> <li>– they bang on buses, thus causing undue noise. There is no need for porters nowadays; all <i>daladalas</i> can be easily identified by passengers because of the recent measure taken by the DRTLA to paint buses according to destinations.</li> </ul>	The government in collaboration with traffic police should ban porters.
13.	Monitor cleanliness of bus operators (conductors and drivers).	<ul style="list-style-type: none"> <li>– most of the <i>daladala</i> operators wear dirty clothes. Passengers feel unclean because conductors and driver do not keep themselves clean.</li> </ul>	Dar es Salaam Road Transport and Licensing Authority (DRTLA), in collaboration with the traffic police, should enforce cleanliness among the operators.
15.	Formalize employment of <i>daladala</i> drivers and conductors.	<ul style="list-style-type: none"> <li>– <i>daladala</i> operators work like casual labourers. They have a fixed amount of money they have to remit to the bus proprietors. Often drivers are reckless because they have to rush so as to raise the sum fixed by the owners.</li> </ul>	The DRTLA should formulate policy guidelines for engaging drivers and conductors. This includes conducting regular training workshops.
16.	Monitor route shortening or cutting tendencies by operators.	<ul style="list-style-type: none"> <li>– In the evening, operators along Charambe–Tandika route terminate at Rangitatu bus stand. This implies that passengers travelling along Tandika–Charambe have to pay double the normal fare. Similarly, those buses operating along Buguruni–Charambe terminate at Rangitatu bus station.</li> </ul>	The Transport and Licensing Authority, in collaboration with traffic police, should monitor operators so as to ensure that <i>daladala</i> operators do not cut short their routes.

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**Table 3.3. Users views on how to improve public transport**

S/N	Proposal	Reasons	Remarks/ measures
17.	Register more buses running to operate in Charambe.	<ul style="list-style-type: none"> <li>- the number of buses along the Kariakoo, Stesheni, Posta and Kivukoni routes is inadequate, particularly during peak hours. This leads to overcrowding, threats to public health, pick-pocketing and harassment of women on buses.</li> </ul>	<p>The city council and city public Transport and Licensing Authority should regularly check on the demand for buses along the main routes.</p> <ul style="list-style-type: none"> <li>- Municipal councils have to facilitate and support private public transport fleet operators to provide transport services in the city.</li> </ul>

Source: Field studies, August/ September 2001



## Section 4

### **The case of Mabibo**

#### **4.1 Background**

Mabibo ward covers an area of about 580 hectares. The ward comprises the five sub-wards of Mabibo, Matokeo, Azimio, Kanuni and Makutano. The local population census that was conducted in the year 2000 registered a total population of 41,998 people, of whom 21,704 are female and 20,294 are male (Municipal local census, 2000)<sup>19</sup>.

Mabibo is a mixed settlement consisting of formal and informal housing. The formal part is located on the southern area of the settlement. Most of the buildings in the settlement are in a good condition<sup>20</sup>. The settlement comprises both 'low-' and 'middle'-income people. Low-income people dominate, as was revealed by livelihood activities people are engaged in.

About 24 per cent of the respondents are female whereas the rest are male aged between 16 to 65 years. The majority of the transport users (i.e. 68 per cent) are between 22–40 years. This is not surprising because this is the active age group, comprising people engaged in various livelihood activities whose operations and sustenance are directly related to the use of public transport. About 80 per cent of the residents of Mabibo use public transport daily throughout the week, while 10 per cent use it for five days<sup>21</sup>. The remaining 10 per cent use public transport for less than 3 days a week. The fact that nearly 90 per cent use public transport routinely or daily indicates the significant role public transport plays for their livelihoods.

As revealed from interviews, almost all trips made are geared towards sustaining household livelihood activities. Only a few trips were made for other purposes, such as going to school or leisure activities.

About 37 per cent of all trips were made by combined modes of walking and bus, 39 per cent by bus only, 13 per cent by a combination of buses, bicycles/ tricycles and walking and the remaining 11 per cent included those who either used walking and bicycles. Although bicycles and other non-walking modes constitute a significant portion in this

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19. These statistics have been drawn from Mabibo Ward office (2000). The decrease in the ward population between 1988 and the year 2000 may be attributed to the changes in ward boundaries following the creation of new wards that was necessitated by the establishment of the three municipalities of Temeke, Ilala and Kinondoni within the city of Dar es Salaam.

20. 'Condition' here refers to houses built up with permanent materials such as sand cement blocks for walls, corrugated iron sheets for roofs and timber or wood for windows and doors.

21. Mainly this category includes household members working in offices or formal employment; therefore such people do not travel during weekends.

modal split, walking and bus transport constitute the major part of all other modes used by residents of Mabibo settlement. This implies that public bus transport plays a major role in ferrying both passengers and the light goods from which many commuters earn their livings. Residents also walk because some sections of the settlement are not served by bus routes. This means people have to walk a considerable distance before they can catch a bus.

Most of the interviewed residents acknowledged the significance of public transport to their livelihood activities. The following excerpts illustrate their views:

**Significance of public transport for people's livelihoods**

- 'I use *daladalas* daily to go to the Ferry fish market at the city centre and then go back to my fish-selling location. I have limited options and means in terms of public transport to travel to the fish market, so I totally depend on the *daladalas*'.
- '*Daladalas* are so basic and necessary a service since there is no alternative means of transport from our residential areas to the work places'.
- 'I go to Manzese, Tandale and Urafiki to buy goods every day using *daladala* buses and *gutta* [tricycles]. I buy goods on daily basis because commodities are sold daily and customers' prefer fresh vegetables and fruits. On the other hand, because my capital is small and I sell perishable items, I have to buy goods in accordance with my operational capital and in accordance with the preferences of my customers'.
- 'I usually go to Manzese or Tandale three to four times a week to buy cereals and other goods. I therefore use public transport to and from these wholesale centres. You know the fluctuating nature of goods, which necessitates the number of trips I make'.

Interpreting the above explanations, it is clear that most of the residents who reside far away from their sources of livelihood depend on public transport to ferry commodities or travel from their homes to work places. Also the nature of goods bought and sold (that is, perishables) and the scale of their operations (limited capital) necessitates daily or multiple journeys in a week. It is also notable that employees and students solely depend on public transport to travel to and from their work and studying areas respectively.

**4.2 Modes of transport**

Transport modes for the city of Dar es Salaam fall into two categories, namely motorized and non-motorized. Motorized is dominated by bus transport, comprising small and medium-sized minibuses. Also included are taxis, light trucks and pick-ups. Apparently, there are almost no large buses (60-seaters and above) operating within the city. Non-motorized transport is dominated by the limited use of bicycles, tricycles (locally known as *gutta*), pushcarts and walking.

**4.2.1 Motorized transport**

**Medium-sized minibuses**

Medium-sized buses are 30–36-seater passenger minibuses, mainly Japanese made DCM, Isuzu Journey and Toyota Coaster types. They operate between Mabibo Mwisho and

## SECTION 4: THE CASE OF MABIBO

Kariakoo or Luhanga and Kariakoo. They also operate between Ubungo and Buguruni along Mandela road. Others operate between Ubungo and Temeke. Residents of Mabibo catch buses along Mandela road at Relini bus stop.

Recent estimates from the DRLA indicate that there is a total of 8,000 buses operating within the city of Dar es Salaam, out of which 2,500 comprise medium-sized minibuses while the remaining 5,500 comprise small minibuses<sup>22</sup>. According to the interviews with bus owners, the price for a used DCM or Toyota Coaster bus ranges from Tshs.8.0 to 14.7 million (about U\$9,000 to 15,000)<sup>23</sup>. The variation in price depends on the age and condition of the vehicle. Many of the DCM and Coaster buses provide overhead carriers where sizeable luggage can be carried (see Appendix d).

### Minibuses

The second category of buses is the Japanese made 15- to 16-seater Toyota Hiace minibuses. These are locally known as *vipanya*<sup>24</sup>. They are the most available buses on all routes. The majority of Hiace minibuses carry passengers, although they also carry a limited amount of goods, such as big baskets and buckets of fish. Most conductors and drivers are reluctant to carry passengers with large amounts of luggage because many of the minibuses do not have space for luggage. In some of the minibuses, re-arrangements have been made to provide for more seats, thus carrying up to 20 passengers. This often leads to complaints from passengers.

#### Peoples' opinions on seat arrangements in minibuses

'Sometimes we are told to carry our luggage while seated in the bus. During peak periods, conductors force people to pay for their luggage. In some instances, minibuses that are supposed to carry 16 passengers carry as many as 25 passengers'.

Trends show that there has been a shift from large and medium-sized buses to small (mini) buses. Apparently this shift is attributed to the fact that smaller buses move faster, takes less waiting time for passengers and can manoeuvre through difficult sections of the roads without much delay. Besides, the capital cost of buying Toyota Coaster and DCM buses is higher than that of smaller buses (see photograph in Appendix d showing Toyota Hiace buses at Mabibo).

### Taxis

Discussion with the residents of Mabibo settlement revealed that taxis are not frequently used; rather they are only used for emergency cases, such as when people falls sick and has to be rushed to hospital. Some residents also use taxis occasionally during the night. Taxis are not frequently used because most people cannot afford this mode of transport.

22. There is no up-to-date figure on the current number of buses operating within the city of Dar es Salaam. Current figures are based on the DRLA, who have been issuing routes for new operators of buses in the city.

23. The exchange rate for 1USD to Tanzanian Shillings stood at 900 as at August 2001.

24. *Vipanya* is a Swahili word meaning 'small rats'. These buses are so called because of their small size and ability to move and meander through narrow paths and parking spaces.

**People's opinions on the use of taxis**

- 'If someone falls sick we hire a taxi because *daladalas* are not comfortable. But this is also an expensive option. The cost of hiring a taxi to Muhimbili or Ilala hospital (about six to ten kilometres) for example, ranges between TShs.4,000/= to TShs5000/= '.
- 'I only use a taxi when I have luggage that I cannot carry with me on the bus'.
- 'I rarely use taxi transport. I hire a taxi if I have an emergency situation or when I arrive from an upcountry safari'.

**Light trucks and pick-ups**

Light trucks and pick-ups are the least used motorized public transport means. From interviews it was revealed that only those who ferry bulky oranges from Temeke Stereo and buy chicken in large numbers from poultry keepers use this type of public transport. When asked why vans and trucks are not popular for carrying goods, the following views were given (see Appendix d):

**Views on the use of light trucks for goods transport**

'I cannot hire a shared van since such an arrangement does not exist here. Besides, it takes a long time to have adequate number of passengers to fill a shared van. For a petty trader like me it is not suitable'.

**4.2.2 Non-motorised transport**

**Tricycles (*gutta*)**

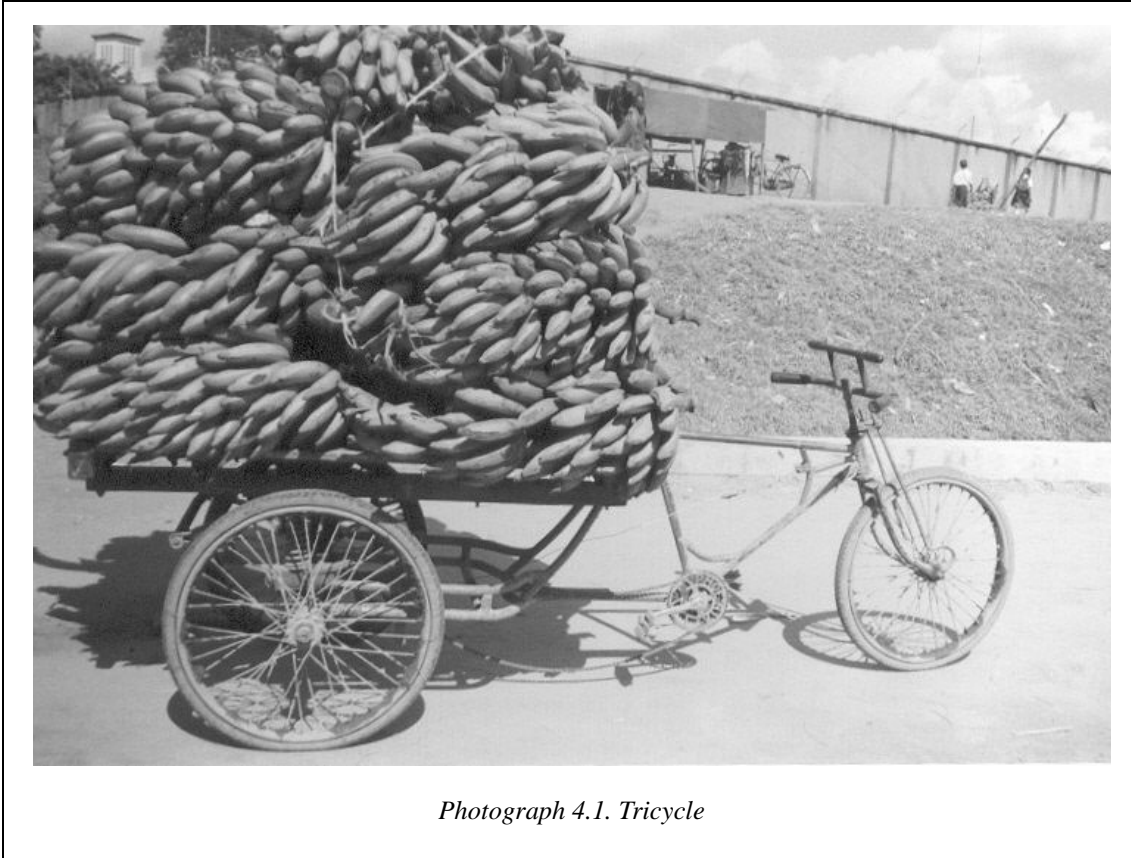
Tricycles (popularly known as *guttas*) are locally assembled in Dar es Salaam and can carry up to five sacks of 100 kilograms each. Tricycles are used to carry big baskets, popularly known as '*tengas*', from Tandale, Urafiki and Kariakoo. They are also used to carry cereals and foods from wholesale markets to Mabibo. The use of tricycles for carrying goods is becoming increasingly popular, as confirmed by the excerpts below:

**View on the use of tricycles**

- 'I use a tricycle because it is relatively cheaper, that is from Tandale to this area I pay TShs.1000 per sack. Also, I prefer a tricycle to pick-ups because pick-up operators are unwilling to come to this settlement because of the poor condition of the road. When they do, they over-charge.
- I use '*guttas*' despite its slowness because vans charge relatively higher fares. Vans are expensive because the road is in a bad condition.

The general reasons for people's preference of *guttas* as a means for goods transport are that they are relatively cheaper when compared to hiring a van, a pick-up or light trucks. Besides, *guttas* have flexibility in manoeuvrability along poor roads, are able to penetrate into informal settlements and also are able to carry both a load and its owner (see Appendix d).





Photograph 4.1. Tricycle

### **Bicycles**

A few shopkeepers and stall (*genge*) operators/ dealers asserted that they use bicycles to carry goods from wholesale centres such as Mwembechai, Luhanga, Manzese and Tandale. Bicycles are used intensively for movements within Mabibo. Residents confirm the increased preference of bicycles for intra-settlement movement as follows:

#### **People's views on the use of bicycles**

- 'Bicycles are used within the settlement only. The use of bicycles outside the settlement is unsafe because of the dangers associated with travelling on the same roads as motorized transport. Besides, the hot and humid weather conditions of Dar es Salaam makes the bicycle rider sweat and become tired.
- 'I use a bicycle to carry some goods because of difficulties in carrying those goods in *daladas*. It is also easy to move within narrow streets. However, bicycle riding is dangerous because *daladala* drivers do not respect cyclists'.
- 'I use a bicycle to go to the wholesale market because in this part of the settlement (Luhanga), we don't have bus transport'.

### **Push-carts**

Pushcarts are also one of the options for goods transport in Mabibo. Although this mode of transport is not extensively used, push-carts are occasionally used to carry luggage such as cereals from Manzese, Tandale and to and from Urafiki. The latter is the city's famous wholesale market for green bananas. Push-carts are also used to ferry water, especially during periods of water shortages, a phenomenon which is now common to many settlements in Dar es Salaam City.

## **Walking**

Although walking is by far the most dominant mode of transport, it is not used purely for a complete journey to and from destinations for livelihood activities. This limitation, especially for the settlement of Mabibo, is due to the long distances that people have to travel for their activities. However, walking within the settlement or to nearby wholesale and commercial centres is routine to many residents of Mabibo. Walking is also used by people travelling from their homes to nearby bus stations to catch a bus. In some instances people are obliged to walk relatively long distances because of the lack of bus routes in some parts of the settlement, for example in the case of Luhanga settlement within Mabibo ward.

There is no clear distinction between people walking for social and livelihood activities within the settlement. However, it has been noted that vendors who carry green vegetables from gardens to vending kiosks as far as Manzese sometimes walk all along the route. Also, there are hawkers (*machingas*) selling commodities such as household utensils who walk around and within the settlement daily.

## **4.3 Main bus routes, livelihood activities and travel times**

The following bus routes are the major ones linking Mabibo settlement with the rest of the city.

### **4.3.1 Mabibo Mwisho–Kariakoo via Manzese**

This route links Mabibo with major employment and commercial centres of Kariakoo and Manzese. Most residents working in areas around Manzese, Magomeni, or en route to Mwenge or around Kariakoo, along with children going to schools located in the Magomeni and Kariakoo areas also use this route. The Mabibo–Kariakoo route is indeed one of the busiest routes, utilized by about 50 per cent of residents of Mabibo. Petty traders, *genge* sellers, sellers of fruits and fried cassava, shopkeepers and people engaged in selling green vegetables use this route.

Buses operating along this route are, therefore, often overcrowded, particularly during the morning peak period between 6am and 9.00am, and the evening peak period, i.e. between 5pm to 8pm. The distance between Mabibo and Kariakoo is about 5 to 6 kilometres and the travel time for this route is 40 minutes. If one takes into account the waiting and walking times during peak periods, the Mabibo–Kariakoo route may take up to 2 hours of travel time during peak hours. Residents who are not in a hurry travel after peak hours. Those who have to be in the city early in the morning normally leave Mabibo before 6.00am so as to avoid peak hour delays.

### **4.3.2 Mabibo Mwisho–city centre (Posta) via Manzese**

This is one of the routes that cater for students who go to schools located in the city centre as well as fish sellers going to buy fish at wholesale prices at the Ferry market. It also supports vendors and shopkeepers travelling to wholesale markets in the city centre and around Manzese. Like on other routes, the buses operating on this route are also overcrowded.

### **4.3.3 Mabibo–Muhimbili via Manzese**

Although this route accommodates passengers going to Manzese and Magomeni, a majority of the passengers are women going to Muhimbili to visit patients at the hospital. Vendors and shopkeepers use this route to travel to Tandale and Urafiki where the two big

wholesale markets for cereals and green bananas are located. Most vendors/ shopkeepers hire a tricycle (*gutta*) from these market centres to transport their purchases to Mabibo.

#### **4.3.4 Luhanga–Kariakoo–city centre (Posta) via Kigogo**

Most of the passengers who travel from Luhanga to Kariakoo are petty traders who buy commodities at wholesale shops and markets in Kariakoo and at the Ferry fish market. A few residents use bicycles. Small-scale traders and some shopkeepers, however, mainly use bicycles to supplement the transport of goods from bus stands to their business places. The absence of *daladala* services in Luhanga has been a drawback to the livelihood activities residents are engaged in. The travel time from Luhanga to Kariakoo is 30 to 35 minutes by bus. During peak periods the travel time increases to 40 minutes. However, the walking time (15–20 minutes) from residential areas to the bus stand and the waiting time make the total travelling time slightly more than one hour.

#### **4.3.5 Commuters along Mandela road**

Although there are many buses operating along Mandela road, only a few (15 per cent) Mabibo residents use this route. Most of the users board buses at Relini bus stand en route to Mwenge (and Sinza along Sam Nujoma road), Buguruni and Ubungo. The Relini bus stop evolved informally following a request by passengers to disembark at this point so as to take a short cut (a walk along the railway line) to their residences. The users of this route include students going to schools located in Mwenge, Sinza, Lugalo (Makongo secondary school), the University and UCLAS students, as well as privately employed people working in areas such as Mbezi, Mwenge and Kimara. The maximum travel time is about 25 minutes from Relini bus stop. One of the disadvantages with this route is that it is a bit far from most of the residential neighbourhoods of the Mabibo settlement. Therefore, people have to walk long distances to the bus stop.

#### **4.3.6 Other routes**

Other routes serving Mabibo settlement include Mabibo–Temeke via Buguruni, Mabibo–Kimara via Ubungo and Mabibo–Mbagala via Temeke. The majority of the residents of Mabibo use these routes with only one interchange; however, some require two interchanges to reach their destination. For example, one resident, a tailor at Mbagala makes two interchanges with a maximum travel time of one and a half hours during peak periods to reach his destination. For residents living around Loyola and Makutano who want to travel to Kariakoo and the city centre, they can either take Morogoro road (Mabibo to Kariakoo or Posta) or Luhanga to Kariakoo or the city centre buses. The routes and respective travel times are summarized in table 4.1 below.

### **4.4 Users' assessments of the modes of transport**

#### **4.4.1 Adequacy of services and travel times**

Almost all respondents complained of the inadequacy of bus services. This was confirmed by the degree of overcrowding and the long waiting times at the bus station. For instance, while travel times to most destinations is at the most one hour, the waiting time is often about half an hour, which is half the travel time. Some residents complained that at times they wait for more than one hour.

The problem is serious in the morning rush hour. This is illustrated below:

**Table 4.1. Summary of travel routes, travel times and distance**

Route name	Approximate distance	Average travel time	
		Peak period	Off-peak period
Mabibo Mwisho–Kariakoo via Manzese	6 Kilometres	2 Hours	40 Minutes
Mabibo Mwisho–city centre via Manzese	7 Kilometres	2 Hours	45 Minutes
Mabibo–Muhimbili via Manzese	5 Kilometres	1 ½ Hours	30 Minutes
Luhanga–Kariakoo–city centre via Kigogo	8 Kilometres	30-35 Minutes	40 Minutes
Commuters along Mandela road	6 Kilometres	25 Minutes	25 Minutes

Source: Interviews with residents, September 2001.

‘In the morning between 6.00am to 9.00am, the situation becomes worse; first one has to scramble/ fight to get into the bus through windows. Moreover, the buses arrive at the station when they are already full’.

Poor roads are the main factor that discourages *daladala* operators from providing services in this area.

Asserting that there are inadequate buses in the area, one respondent residing at Loyola noted:

‘Most of the people have to stand in the bus in the morning and evening because of the few buses operating between Mabibo and the rest of Dar es Salaam. Students are severely affected by the lack of an adequate number of buses. It is even more serious for girl students. During evening periods we have to wait for them for security/ safety reasons’.

A male vendor complaining on the inadequacy of vehicles and minibuses to cater for people and goods remarked:

‘There is need to have special vehicles to carry the loads (*matenga*) of small businessmen from the city centre. Alternatively, buses should have separate compartments for carrying a small number of goods’.

Commenting on non-motorized transport (NMT), the vendor argues that safety issues remain the main problem for this mode of transport. Non-provision for NMT basic services and poor road design curtail the use of this mode.

**4.4.2 Condition of the bus stand**

Commenting on the state and condition of the bus station at Mabibo, a young male kiosk vendor remarked as follows:

Another respondent added:

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'The bus station is of very poor quality; first, the space available is not adequate for buses and cars to make u-turns. Secondly, the area is full of potholes; as a result, during rainy the season, stagnant dirty water splashes onto waiting passengers as cars pass by or make turns. The bus station lacks shelter for passengers and parking spaces for the buses. The taxi stand is a long way from where many people live. It is therefore more convenient to send a sick person to the nearest dispensary by bicycle, rather than to walk one kilometre to the taxi station'.

'The major problem for this bus stand is that it is chaotic and disorganized because buses and cars move around without any organized pattern. There are no defined spaces or demarcation or kerbstones. The station lacks toilet facilities for the waiting passengers. The environment surrounding the bus station is filthy'.

As was the case for Charambe, formal bus stops in Mabibo are rare. Existing bus stops were observed to have been informally established following the increase in private buses operating between Mabibo and the city centre and the city in general. Even Mabibo Mwisho, which is the terminus of all trips, is not provided with the basic services of covered shelter and parking lots for buses. Bus stops along the route leading to Mabibo evolved spontaneously and regulatory bodies, such as the DRTLA, municipal councils and the traffic police, seem to have been doing little to address this problem. The lack of an official policy for locating and equipping bus stops has contributed to the sporadic establishment of these stops. Participants who attended the one-day workshop also noted this observation. They attributed the situation to the lack of co-ordination among the regulatory bodies, as well as to the lack of official policy. They pointed out that the absence of specific departments dealing with public transport issues within the three municipalities further augments the poor co-ordination and poor provision of public transport in the city.

### 4.4.3 Overcrowding in buses

The general situation with public bus service delivery seems to be unsatisfactory, especially to many residents. Most *daladala* buses overload, i.e. they take twice as many passengers as the capacity of the buses, especially in the morning and evening rush hours. On Mondays passengers experience more severe overcrowding than on other days of the week. Commenting on overcrowding, a number of respondents (one student, a photographer and a tailor) commented:

- 'In the morning and evening students and others have to stand up; the 'Hiace' minibus [a 14-seater bus] takes up to 30 people'.
- 'During the morning peak period it might take up to one hour (while on average it would take less than an hour) to get a bus. Buses are already filled up before they reach the station'.
- 'In the morning the buses are full; therefore, you have to wait for a long time to get a bus, but during the afternoon there is no problem. Overcrowding in buses is inevitable since most people are in a rush. Those who are not in a rush wait for vehicles/ buses that are not full'.

Explaining why Mondays are mostly overcrowded, one woman who works as a secretary in the city centre noted:

'It is tenses on Monday mornings because the police usually apprehend a number of *daladala* vehicles on Saturdays and Sundays. These are not released until workdays of the following week. Hence the number of buses on the road on Mondays is often lower than normal'.

#### 4.4.4 Seating conditions

It was also noted that conditions inside the buses were not good and in some instances they were terrible. Commenting on the space between seats within minibuses, a number of respondents pointed out that:

'The spaces between seats within *daladala* buses, especially the Hiace type, are so small. It is therefore difficult for passengers to stretch their legs. In some minibuses, wooden stools (*kibao cha mbuzi*) are attached to provide additional seats. Sitting in these cramped seats is uncomfortable, especially for pregnant women or women with babies. An abrupt brake may cause injuries to passengers'.

#### 4.4.5 Hygiene conditions

As regards cleanliness of the buses and operators, namely the drivers and conductors, one resident observed:

'The situation inside buses is terrible and disastrous. First, the bus conductors are very dirty, they neither wash their clothes nor take a bath. Poor hygiene in the buses can also be attributed to poor ventilation since one cannot open some of the windows. In many cases there is overcrowding in the buses. The vehicles are operated for over 16 hours a day, hence there is no time to wash the buses and they become dusty. This situation poses a risk of contracting communicable (contagious) skin diseases'.

#### 4.4.6 Condition of women and school-going children

Although there were no cited incidents of maltreatment of women, there was general consensus on harassment and maltreatment of school children and students. All the respondents who were interviewed complained strongly about the difficult situation pupils/ students face when travelling to and from school. One respondent noted:

'The issue of transport for students is a serious problem. When they want to board a bus they are told to wait for the adults/ elders to get in first and when it is full (pupils) are left waiting for another bus. Sometimes, when they are allowed to board a bus, they are told to stand (inside the bus) or near the bus doors, which is dangerous. Some buses accept only 3 students. The reason why bus conductors refuse to carry pupils is because they pay only TShs.50/= '.

Specific problems students face include refusal by conductors to let them into the buses (hence making them late for school), and use of foul language. Students also have to stand all the way to their destinations. Sometimes they are charged higher fares. This happens especially when they give a Tshs.1,000/= bill. Asserting the foregoing, one female student noted:

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'If you give them a TShs.1,000/= note, they charge you TShs.150/=, while you have been standing all the way, despite the fact that we are students'.

When students refuse to comply with their demands, in many cases the conductors do not allow the bus to leave the station. In such situations conflicts and fights between the bus conductors and students have been reported. Narrating one incident that happened at Mwenge bus terminal this year, one student reported:

'The conductor didn't allow the bus to leave the bus station because a number of students had entered the bus while other passengers (non-students) were waiting outside. The conductor tried to force the students out. As he could not, he hit at one of the students. This led to a fight between the students (boys) and the conductor'.

In Mabibo settlement, some students prefer to walk up to Morogoro road where buses are many and easier to get onto rather than waiting at Mabibo station. In this case, they have to walk between one to two kilometres.

Although there is a feeling that *daladala* operators play loud music and hoot unnecessarily, many respondents observed that such a phenomenon wasn't an important issue. Others said that the music was good because it reduces tension. Only a few users complained over the type of music played and also the volume of the radios and unnecessary hooting. Many of the complaints against conductors and their aides (porters) for use of abusive language were raised. One respondent, for instance, noted:

'When you get into the bus they [conductors] do not respect you. For example, if you tell them you will give them the fare later, they often rudely respond by saying, for example, "this is not your car or your father's car"'.

### 4.4.7 Operators' working conditions

A profile of drivers indicates that most of them are young people aged between 23 to 42 years. They all possess driving licenses of class C<sup>25</sup> and have driving experience ranging from 4 to 20 years. However, the majority of them are ex-primary school leavers (i.e. they were not educated beyond this level). Most of them got their driving skills through on-job training as conductors, while a few attended formal training from driving schools.

Commenting on their working conditions, many drivers complained over the tough and difficult conditions such as the long working days. Interviews with drivers revealed that bus owners employ drivers and let them find conductors to work with. Owners demand a daily remittance of Tshs.20,000/= to 35,000/= from drivers for small buses and large buses respectively. This excludes daily expenditure on fuel, puncture repairs and meals for drivers and conductors. Some drivers receive monthly salaries ranging from TShs.30,

25. A class C driving license allows the owner to drive all kinds of vehicles, including passenger vehicles. No driver is allowed to drive a passenger vehicle without this class of a license. It is the present requirement that all drivers aspiring to get a class C driving license should get training from recognized training schools and pass an examination that has been set by the school and the traffic police.

000/= to 60,000/=. However, the majority of them depend on daily earnings. The payment of conductors varies; some of them get TShs.3000/= per day while others get less than this amount. Most drivers and conductors work for between 15 and 18 hours per day, often starting from 5.00am.

One owner of a *daladala* who participated in the one-day workshop revealed that complaints by drivers on incomes were rather one-sided and ungrounded because his experience has shown that many drivers achieve the daily target figure during mid days. Thereafter they sub-contract vehicles to “*deiwakas*” who continue to collect their revenue. He contended that: ‘From a practical point of view, drivers normally pocket about Tshs.10,000 per day in addition to from the owner’s money and fuel costs. If they were paid a salary of Tshs.60,000/= they would still take Tshs.10,000/=. So in practice they would be pocketing Tshs.60,000/= per month plus the daily Tshs.10,000’.

All interviewed drivers explained their working environment as tough, difficult and tiresome. One driver complained that when he requested the bus owner to employ another driver so that they could work in shifts; the owner refused arguing that he (driver) was free to leave the job. Therefore, the drivers have to always be on the road in order to firstly reach the target and secondly get additional income on which to survive. Besides the tough working conditions, they do not have health care; nor do they have job security. One driver with a bus labelled *Gadi Trans* complained that his job is so insecure that he can be working at his job today but could be kicked off the next day. Drivers and conductors also face some difficulties when dealing with passengers. Commenting on such difficulties, drivers and conductors noted:

- ‘Some passengers board buses without having the full fare, or without any money at all’.
- ‘Some passengers claim to be students, but they neither show student identity cards nor wear school uniforms’.
- ‘Some passengers insist on disembarking at dangerous spots, asking the driver to stop the vehicle so that they can disembark at their convenience’.
- ‘Some policemen put on civilian clothes to conceal their identities, but just bring inconveniences to drivers and conductors’.<sup>26</sup>

Although many passengers often blame conductors for using abusive language and maltreating students, drivers and conductors pointed out that this is only the case with passengers who cause trouble for them. One bus conductor remarked:

‘Some passengers board buses without notifying the conductors or drivers that they do not have the full fare. When he or she is asked to pay the fare while on board, she/he claims that she/he does not have the full fare. How can one understand this?’

26. Usually policemen or women are exempt from paying bus fares. This is a common agreement that was reached in the early 1990s on the understanding that policemen and women are there to ensure peace and order while on board the buses. But they are recognized so if they are in official uniform .



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On the issue of school children, drivers and conductors claimed that usually they do not deny them access to buses. However, they asserted that there are problems when too many school children want to board the same bus. One driver remarked:

'We do not reject school children, but we cannot fill the buses with them, as we also have to do business and collect at least the minimum revenue for the bus owner. In our opinion if we carry school children who pay only half fare, then the revenue collected will be much less than what we have to remit to the bus owners. We therefore allow between 3 and 5 school children at a time. It is also possible that some *daladala* operators completely refuse to take them. This is the situation particularly during peak hours'.

With regard to the role of the traffic police, many drivers opined that the latter are troublesome and an obstacle to their daily earnings. They argued that traffic policemen/women are motivated by their personal interests and thus solicit bribes from drivers and conductors. One driver complained saying that '... they will find whatever minor reason just to ensure that they earn something through (bribes)'. The fine paid for an offence at the police station is TShs.20,000/=. However, in many cases a bribe ranging from TShs.2,000 to Tshs.5,000 is paid so as to avoid being taken to the station and/ or fined. One driver operating between Manzese and Posta said that 'you have to pay them, if you don't, they will send you a notification upon receipt of which one ends up paying TShs.40,000/=, while your vehicle might be impounded at the Central police station for some time'.

The traffic police demand kickbacks (bribes) because they are aware that many drivers and conductors would not be ready to leave their buses under police custody. Furthermore, operators bribe policemen/ women so as to avoid bigger fines when brought before the law.

The most dominant type of offences that attracts police action (demand for bribes) are related to route shortening and 'theft of routes', not wearing uniforms, haphazard parking, defective traffic lights, mechanical faults on vehicles and worn out tires.

This was also noted during workshop discussions. Arguing on the issue of traffic police, some participants noted the following:

'The charge per offence is Tshs.10,000/=. Now if a driver is found with four counts, even if they are very minor and only warrant a warning, the traffic police will insist that the driver be sent to the police station. Drivers prefer to give the police Tshs.10,000/= without any receipt so as to be let free. If the driver resists, he will be given a notification of four counts that will amount to paying some Tshs.40,000/= as a fine and the vehicle being impounded for some time. Now because drivers are in hurry and are not ready to waste time, they find it easier and faster to pay the Tshs.10,000/= bribe so that they can continue with their work'.

Counter arguing the driver's contention, the traffic police noted as follows:

'The bribes are essentially encouraged by drivers who strive to get away after being caught either driving vehicles with mechanical faults, or driving along routes not assigned to them or other offences'.

It is apparent from this discussion that the problem of bribes has two viewpoints, both on the part of drivers and the traffic police. If solutions were to be found to this problem, it would seem necessary to bring the two sides to a forum of discussion that will break the barriers between them and create a harmonious environment for both the traffic police and the drivers.

On the issue of collective attempts by drivers to get organized and co-ordinated, it was noted that an Association for Tanzania Drivers (TDA) was in place, with their primary objective being looking after the welfare of the driver members to this association. The TDA works closely with the DRTLA on many issues regarding the improvement of public transport and the need for training of drivers engaged in driving public transport vehicles.

## 4.5 Safety and health issues

### 4.5.1 Condition of buses versus safety

The general condition of public transport serving the settlement has been differently evaluated by residents in so far as safety and health matters are concerned. However, negative opinions stood out. Only one respondent thought that buses were in good, or at least fair, condition. The rest of the respondents are of the opinion that safety and health conditions in most *daladala* buses are poor. Commenting on the condition of *daladala* buses, one respondent had the following to report:

'Many buses have poor suspension as their springs are worn out to the extent that when they run over rough road surfaces, they bang loudly and make passengers very uncomfortable. Some of the buses have their seats fixed with exposed nails and in some cases without padding'. (The respondent showed his overcoat that had been torn after being caught by an iron nail in a *daladala* bus on the Mabibo–Kariakoo route).

A number of respondents narrated their experiences relating to bus breakdowns, many of which were caused by engine wear and poor maintenance of the buses. One respondent cited a case in which he ended up using three buses instead of one because of breakdowns. And even the last bus he boarded broke down some few metres before Mabibo Mwisho. He had to complete the journey on foot. Another respondent added:

'Some vehicles are in a very poor state, you have to push them to start and often there is engine failure on the way, which causes traffic delays and traffic jams'.

Added to these shortfalls are dusty conditions in some buses that are allegedly not cleaned regularly.

The experiences narrated above show that the quality of public transport services in Mabibo are poor. Long waiting periods, congestion, long walking distances to the bus stops, poor quality of buses (old and worn out buses, mechanical disorders, limited ventilation and overcrowding) and unclean bus conductors and drivers characterize bus conditions and general public transport services within the area.

Most respondents complained that the struggle to get into buses during rush hours, for instance, in the mornings, was chaotic; this endangers their safety and soils their clothes. During the scramble, some passengers were reported to be pushed, hurt and at times had their clothes torn. Other passengers get into the bus through the windows. One respondent cited an incident in which his spectacles were broken while scrambling to board a bus.

#### 4.5.2 Speed of buses and accidents

Speeding was reported to be a problem along roads with gravelled or tarmac surfaces, such as Morogoro and Mandela roads. This leads to accidents and injuries. One respondent elaborated this by explaining an accident that he witnessed:

'A *daladala* minibus (Hiace) full of passengers was moving at very high speed heading to Kariakoo. The bus suddenly changed lane and the driver lost control while at high speed, so it crashed into another bus. Many people were injured, although no one died. Some of the *daladala* buses along Morogoro road move at very high speeds like ambulances'.

While a third of the respondents were concerned about the speeding of buses, only a few (18 per cent) were not bothered by this. The latter argued that the nature of Mabibo and Luhanga roads does not allow high speeds, but agreed that some drivers are reckless.

Another factor relating to speeding and reckless driving was the practice of using '*shantas*'<sup>27</sup> and *deiwakas*<sup>28</sup> (unlicensed drivers or assistants). This occurs at bus terminals and in some instances when drivers take a pause for meals or while waiting for passengers. The practice was reported to be one of the causes of accidents. One respondent narrated how a *deiwaka* was involved in an accident with another vehicle causing injury to passengers and damage to property. Arguing about the incompetence of *shantas* and *deiwakas* the respondent narrates:

'It was a *daladala* that was travelling at a very high speed so the driver failed to negotiate a corner properly and crashed into another vehicle near Kigogo Randa bar, injuring many people. It was later on revealed that the bus was being driven by a *deiwaka*. In another incident a *shanta* failed to stop and properly park the bus while reversing. Again this happened near Kigogo Randa. Consequently, he crashed into another *daladala* back-to-back, thus injuring people and causing damage to property.

This implies that although the issue of high speed could be related to unlicensed driving and therefore lack of driving skills, it can also be said that it is a result of too much stress on the drivers. Drivers find no alternative other than assigning untrained or unqualified people to drive. Consequently, this puts peoples lives at risk. Unfortunately, because bus drivers and conductors do not abide by the regulations to wear uniforms, it is often difficult for passengers (would-be victims of accidents) to differentiate between a *deiwaka* or *shanta* and a licensed driver.

27. *Shantas* refers to unlicensed drivers or *deiwakas* who assist *daladala* drivers to properly park the buses at the bus stand while waiting for passengers to board the bus.

28. *Deiwaka* refers to a person doing piece-meal work and paid on the basis of work done. For *daladala* buses, *deiwakas* are often unlicensed or occasionally licensed drivers who take or drive buses at least for one or two trips a day when the bus drivers are taking a short rest, mainly during lunch time. Drivers pay them by mutual agreement.

Another respondent using the Mabibo (Morogoro Road) route to the city centre (Ferry fish market) was involved in an accident in which several people were injured, a bicycle was damaged and two vehicles (including the *daladala*) were also damaged. The incident occurred at the junction of Morogoro and Bibi Titi Mohammed roads when the brakes of a *daladala* bus travelling at high speed failed and hit another bus and a bicycle. The driver escaped uninjured.

#### 4.5.3 Speed breakers

Speed breakers such as road bumps have been said to be very effective in controlling speed and consequently traffic accidents. Given the often hasty and unreliable character of *daladala* drivers, many people, particularly pupils at the Kigogo CCM area, were said to be at the risk of being knocked down. Despite extensive road bumps, some of the drivers swerve and drive on the hard shoulders. Expounding on this, one respondent observed:

'Bumps have been put in place to reduce speeds, but due to their being in a hurry and recklessness driving, some drivers do not pay attention to them. They drive fast across road bumps. Due to overcrowding and reckless driving, some passengers have suffered injuries'.

#### 4.5.4 Non-motorized transport and safety issues

Almost all the respondents conceded that bicycle riding is a risky mode of transport because of poor provision for a non-motorised system. The road design in most parts of the city does not provide space (bicycle lanes) and where available they have been invaded by other roadside users. A shopkeeper who owns and uses a bicycle for ferrying goods observed as follows:

'The situation is totally unsafe'. Citing a case in which two cyclists were knocked down at Manzese, he observes, 'two bicycles (with goods) were knocked down in the Manzese area, seriously injuring the riders'. He further added:

'If I had enough financial capacity I would buy a car. I use a bicycle because I have no alternative. I have a lot of problems while riding a bicycle, for example, going through crowded areas in Ilala, Kariakoo, Uhuru and Kigogo. Sometimes I get mixed up with vehicles or motorized/ non-motorised traffic, a situation which is very risky. A person who decides to ride a bicycle must bear all these risks. Anything can happen at any time'.

Like in other areas, the use of bicycles as a mode of transport is limited due to the risks cyclists are exposed to.

### 4.6 Sources of income, expenditure on public transport and willingness to pay

#### 4.6.1 Sources of income

The majority of the households (70 per cent) in the Mabibo settlement depend solely on self-employed activities for their livelihoods. Only 18 per cent of the members of households are employed in offices, but also undertake self-employment activities on part-time basis. A few are employed in offices as clerks, secretaries, machine operators, teachers and butchers.

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The income of many households ranges between 4,500/= and 70,000/= per week (US\$5 and 78) depending on the type of activity. Self-employed household members appear to earn more than employed household members.

### 4.6.2 Expenditure on transport and willingness to pay

Generally, the existing bus fare charged by *daladalas* was said to be fair. Many respondents were not prepared to pay a higher fare for an improved service. Like in other areas in the city, the rush hour fare is TShs.150/=, whereas a non-peak hour fare is TShs.100/= per trip. Passengers carrying luggage with them pay TShs.500/= for about a 40 to 50 kilogram basket and TShs.100/= for a 20 kilogram sack. The price of hiring a tricycle (*gutta*) is TShs.1,000/= per bag (100kg to 130kg) from Manzese to Mabibo and around TShs.300/= or TShs. 500/= for a basket (*tenga*) of 40–50kg from Urafiki to Luhanga (Kigogo) and other areas in Mabibo. Prices are generally negotiable between the operator and the person who is hiring the service.

Only 23 per cent of the respondents said that they would be ready to pay more upon improvement of the current bus services. One respondent who owns a shop in Mabibo observed:

'TShs.200/= is not too much for an improved service, since there are some residents who hire a taxi for up to TShs.2,000/= because of poor service conditions'.

Other residents complained of economic hardships. They also pointed out that current service conditions are generally poor. They said that the current service conditions are poor, thus they recommend a charge of TShs.100/=. Elaborating on the terrible condition of public transport services in the area, another passenger, a woman resident of Mabibo, complained bitterly:

'It hurts a lot to pay TShs.150/= under the current poor situation. The buses are worn out to the extent of endangering our health. One is likely to get tetanus due to worn out seats and the rusty chassis of the minibuses if scratched'.

Household expenditures on public transport were found to be between TShs.1,000/= and TShs 8,000/= per week. Further analysis reveals that travel costs for public transport for the households range between 1.1 per cent and 38.5 per cent per household per week. The general trend shows that as household's income increases, the proportion of expenditure on transport decreases. This implies that households with low incomes spend much more on public transport.

**Table 4.2. Sources of income and expenditure on transport**

SN	RN	Income per week (TShs.)	Amount used in transport per week (TShs.)	% of expenditure on transport
6	19	**	2,000	
7	2	**	4,900	

**Table 4.2. Sources of income and expenditure on transport**

SN	RN	Income per week (TShs.)	Amount used in transport per week (TShs.)	% of expenditure on transport
8	7	**	2,100	
9	8	**	4,000	
10	10	**	1,000	
11	14	**	3,200	
12	15	**	3,600	
13	16	**	3,400	
14	17	**	1,800	
15	18	**	6,000	
16	20	**	1,500	
17	27	**	**	
18	39	**	**	
19	30	**	600	
20	33	**	600	
21	36	**	600	
22	24	**	**	
23	28	4,000	None	
24	29	5,000	1,800	36.00
25	26	8,750	2,100	24.0
26	25	10,000	2,000	20.0
27	1	10,500	2,100	20.0
28	6	13,000	3,000	23.1
29	21	14,000	5,600	40.0
30	23	14,000	2,100	15.0
31	3	15,000	2,750	18.3
32	12	15,000	3,600	24.0
33	11	17,500	2,800	16.0
34	13	17,500	2,100	12.0
35	22	18,000	3,600	20.0
36	31	18,000	4,200	23.3
37	34	25,000	4,600	18.4

**Table 4.2. Sources of income and expenditure on transport**

SN	RN	Income per week (TShs.)	Amount used in transport per week (TShs.)	% of expenditure on transport
38	5	30,000	3,000	10.0
39	38	30,000	4,000	13.3
40	40	30,000	2,100	7.0
41	35	42,000	8,000	19.1
42	37	65,000	25,000	38.5
43	32	70,000	24,500	35.0
44	9	200,000	2,100	1.1
45	4	200,000	7,900	4.0

NB: RN Refers to Respondent's Form Number

\*\* Respondents could not state their income.

Source: Field Studies August / September 2001

#### 4.7 People's views towards public transport improvement

The key problems associated with public transport in Mabibo area are related to the inadequate number of buses, overcrowding, the poor condition of buses, roads and bus stations, maltreatment of students, unsafe driving, lack of facilities for non-motorised transport and high bus fares for poor households. From discussion and interviews with residents of Mabibo, a number of suggestions to improve public transport services were put forward. The main issues that emerged are listed below.

##### Road condition

The local roads linking Mabibo with Morogoro road, and eastwards (Luhanga) up to Kigogo Mwisho are overall in poor condition. The main link from Mabibo to Morogoro road used to be via the National Institute of Transport road, which was tarmac, but at the moment it has deteriorated and has huge potholes. The road is so poor that *daladala* buses diverge to other routes, such as Muleba and Makutano access road. Commenting on the incidence of poor road conditions and their effect on people's lives, a woman who sells cassava within Mabibo noted with grief:

'A pregnant woman died on the way to hospital due to the poor road conditions. Her life could have been saved had the road been tarmac.'

##### Shortening of routes

Route shortening is predominant along the Luhanga–Muhimbili route. It is more pronounced during rush hours. Other proposals, as put forward by residents of Mabibo are as summarized in table 4.3 below.

**Table 4.3. Emerging issues and proposals for improvement**

Sn	Issue	Proposal for improvement	Remarks/measures
1.	Poor road conditions between Luhanga and Mabibo and between Mabibo and Morogoro roads	The road link between Luhanga and Mabibo to Morogoro Road should be improved.	Both the central and local governments should mobilize funds to improve sections of roads that are frequently used as main bus routes.
2.	Absence of public bus services between Mabibo and Kigogo along Luhanga road	The Mabibo–Luhanga link should be recognized and allocated to bus operators for services.	The government, particularly the DRTLA and respective municipalities, should provide incentives to <i>daladala</i> operators so as to have a well-established route along this underprovided but important route.
3.	Old and worn out <i>daladalas</i> with a lot of mechanical problems	The traffic police should institute effective mechanisms for regularly checking the roadworthiness of <i>daladalas</i> .	The traffic police in collaboration should carry out concerted but co-ordinated efforts with the DRTLA to crackdown on the poor condition of <i>daladala</i> vehicles.
4.	Students denied access to public bus transport, especially during peak periods	Streamline transport access to students so that it is also practical to transport providers.	The central government (MTC), DRTLA and the municipalities should solicit and evolve practical mechanisms that motivate transport providers, but also provide easy access of students to transport facilities.
5.	Relatively low bus fares paid by students, therefore discouraging bus operators	Bus fares for school children should be raised to 100/=.	The government (MTC), the DRTLA and other stakeholders should contribute towards evolving practical solutions to the problems of student fares and demands from <i>daladala</i> operators and owners. A bus fare for students could be revised but with a view to the government providing a kind of subsidy to students' transport. The purpose here would be to minimize the gap in fare between adults and students.
6.	Lack of by-laws that could safeguard students from harassment and denial of access to public transport	By-laws should be made and enforced to allow students, women and the handicapped to board buses without restrictions, disturbances and harassment, particularly during rush hours.	The government, the DRTLA, residents and other stakeholders should participate in the formulation of by-laws that safeguard all those involved in public transport provision or use, but with more attention to students.
7.	Diminishing capacity of employers to provide public transport to their employees	Employers should be encouraged so that they assist their employees with fares or transport.	The government should encourage employers to facilitate their workers with access to public transport, such paying a transport subsidy as part of a package in their salaries, etc.
8.	Absence of designed, developed and well-maintained bus terminals	Structures and necessary services should be constructed at bus terminals and bus stops	The government, the DRTLA, MTC and municipalities should develop strategies towards constructing bus terminals and bus stops. One possible way that seems to be working even at the present time is to motivate the private sector to make these provisions on agreement that they can incorporate advertisements and other related commercial undertakings.



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**Table 4.3. Emerging issues and proposals for improvement**

Sn	Issue	Proposal for improvement	Remarks/measures
9.	Route shortening, overcrowding, noise, operators' cleanliness, abusive language and the poor condition of buses	Route shortening, overcrowding, noise, operators' cleanliness, bad language and the poor condition of buses should be monitored.	Traffic police and the DRTLA should work together to control and ensure that <i>daladala</i> operators adhere to their designated routes.
10.	High revenue targets set by bus owners to bus operators	Need for a forum to discuss relations between bus owners and operators. The intention is rationalize bus owners' targets and drivers' incomes with a view to improving service delivery to the passengers, while at the same time meeting the expectations of the owners and operators.	A forum for discussion, bringing together operators, owners and regulators should be established that would facilitate the problems to be discussed and, where necessary, resolved.
11.	Lack of organized collective public goods transport	Encourage the private sector to establish collective (public) transport for goods/commodities separately.	The government, municipalities and the private sector should also discuss the possibility of evolving new strategies towards goods transport, such as collectively hired transport and promotion of non-motorized goods transport.



## Section 5

### **The case of Buguruni Mnyamani**

#### **5.1 Background**

Buguruni Mnyamani forms one of the four hamlets of Buguruni Ward. The other hamlets are Kisiwani, Madenge and Malapa. Buguruni Mnyamani is located 5 kilometres from the city centre of Dar es Salaam and covers 42 hectares. It is predominantly a low-income residential area with most households spending less than one US dollar per capita per day. An earth road (Mnyamani–Vingunguti) running from east to west traverses the settlement. This provides the main access to the area. The road is also the main commercial area in the settlement. The settlement had a population of about 16,100 according to a ward census conducted in the year 2000.

#### **5.2 Main livelihood activities and routes**

Most residents are self-employed (Kyessi, 2000) in a variety of formal and informal economic activities that support their livelihoods. Livelihood activities include retail shops, the sale of used clothes, food vending (*mama lishe*), tailoring shops, vegetable stalls (*genge*), the sale of perishable commodities such as fruits, coconut, bananas, tomatoes, vegetables, onions, cabbage, spinach and fish.

Livelihood activities are scattered in various areas in the settlement, but most of them are concentrated along the Mnyamani–Vingunguti road, the main shopping and market corridor in the settlement. Most of the public transport users comprise residents engaged in informal (livelihood) activities. These individuals commute to various areas in the city in search of commodities. See also the Mnyamani Buguruni map.

Most of the commodities are bought in the main shopping areas in the city centre, and in Kariakoo and Manzese markets. In general, Kariakoo is the most visited area with almost half of the respondents buying commodities for *genge* businesses there.

#### **5.3 Modes of transport in the settlement**

Most of the respondents (90 per cent) said that petty trading is the main source of their income and employment. The transport modes available in the settlement include motorized and non-motorized modes. Motorized transport modes comprise buses, minibuses, trucks, pick-ups, delivery vans and taxis. Most residents use buses and minibuses. Non-motorized modes include walking, bicycles and tricycles and push-carts.

**Table 5.1. Livelihood activities that depend on public transport**

S/N	Activity	Route	No. of respondents out of 39	% Total
1	Petty trading	Muhimbili, Tegeta	2	5.2
2	Formal/ salaried employment	Drive-in Cinema Mikocheni, Masaki, Gongo la Mboto	4	10.3
3	Commodities for <i>genge</i> businesses	Mnazi Mmoja/ Kariakoo, Kongo Street	19	48.7
4	Commodities for <i>genge</i> businesses	Posta & Ferry/ Kivukoni	5	12.8
5	Charcoal	Kisarawe	2	5.1
6	Commodities for <i>genge</i>	Manzese and Magomeni	2	5.1
7	Genge commodities (fish & oranges)	Temeke/ Yombo	2	5.1
8	House/ room renting	Ubungo & Mwenge	2	5.1
9	Buying eggs for sale	Kitunda	1	2.6
<b>TOTAL</b>			<b>39</b>	<b>100</b>

Source: Field study, August / September 2001

### 5.3.1 Motorized transport modes

#### Buses

This includes Nissan, DCM and Coaster types. The carrying capacity varies between 26–31 seats. The most common public transport routes are Buguruni–Gongo la Mboto, Buguruni–Tabata, and Buguruni–Vingunguti via Uhuru road to the Post Office, Buguruni–Mnazimmoja, Buguruni–Ferry, Buguruni–Stesheni and Buguruni–Kariakoo. About 82 per cent of the respondents prefer to use large buses because they are spacious, safer and more comfortable than minibuses. At rush hours, large buses overload, some carrying over 40 passengers thus creating overcrowding. However, only a few respondents complained about overcrowding in large buses.

#### Minibuses

These are small buses operating in the settlement and other parts of the city. They include Toyota Hiace and Isuzu, locally known as *Vipanya*. The carrying capacity of minibuses ranges between 12–15 seats. In practice, however, minibuses carry between 15–25 passengers. Most respondents who commute to and from Kariakoo market, where most of the commodities are bought at wholesale prices, said that they use minibuses (see Appendix d (a) and 4 (b) for the profile of the buses).

#### Trucks and delivery vans/ pick-ups

The carrying capacity of most delivery vans and trucks ranges between one and five tons. This mode is mainly used to carry bulky goods from wholesale shops to the retailing areas. Trucks are normally used to transport commodities from market centres, such as Kariakoo and Manzese to Mnyamani. They are also used to carry charcoal from fringe areas to the settlement. The mode is therefore used in cases where the goods cannot be carried by

commuter buses. Only 17.5 per cent of the respondents use trucks to transport goods from Kariakoo market to the settlement. Most of those who use this mode are the better off business people who buy goods in large quantities. Most of the latter have a weekly gross income of TShs.40,000/= or above. The price for hiring a truck varies depending on the size and weight of the goods and the distance to the destination. On average business people pay TShs.6,300/= for hiring a truck from Kariakoo market to Buguruni. Trucks for hire park at Buguruni and at the wholesale markets in Kariakoo and Manzese. Appendix d (c) portrays a profile of a truck.

### **Taxis**

This is the most expensive and therefore the least commonly used mode of transport. It is mainly used in emergency situations. The cost per trip for taxis varies depending on the distance and negotiation with the driver. On average a person pays about TShs.3,000/= for a trip to the city centre. This is too expensive, as earnings per week for most petty traders selling commodities such as fruits and vegetables is about Tshs.3,000/= (3U\$).

### **5.3.2 Non-motorized transport modes**

#### **Tricycles (*guttas*)**

*Guttas* are mainly used to transport commodities from wholesale markets such as Manzese, Kariakoo and Temeke to Buguruni. According to respondents, hiring costs of *guttas*/ tricycles range between TShs.1,000/= and 1,800/= per trip. This mode is cheaper than light trucks or taxis, and thus preferred by the poorer petty traders.

#### **Pull-/ push-carts**

Push-carts are used to transport commodities from bus stops to retail areas such as stalls and retail shops located in the settlement. The pull-/ push-carts seem to fill in the gap created by the absence of buses in some parts of the settlement. About 17.5 per cent of all the respondents use pushcarts in their daily activities. The charge per trip depends on the weight of the luggage. The rate ranges between TShs.200/= and 500/= per trip. This is a cheaper mode than tricycles and taxis.

#### **Bicycle use**

Only a small proportion of residents in Mnyamani (about 7.5 per cent) use bicycles for their daily transport needs. These include the retail eggs sellers, water vendors, and casual labourers. About 75 per cent of the respondents in Mnyamani settlement said they do not like to use bicycles because drivers do not respect cyclists. Besides, residents are discouraged from using bicycles on major roads because they are afraid of reckless drivers.

#### **What people say about the use of bicycles**

- 'People use bicycles within the settlement because there are few cars. On the highways, such as Mandela and Uhuru roads, bicycles are not used very much because there are too many fast moving vehicles, which may knock a person down. The drivers do not pay attention to cyclists'.
- 'I don't use a bicycle because of lack of safety on the roads. There is a high risk of being knocked down by cars due to the heavy traffic and narrow roads. I witnessed one eggs seller on a bicycle being knocked down at Bungoni in 1998, so I am afraid of cycling'.
- 'There is also a problem with cyclists who are not courteous towards pedestrians'.

## 5.4 Transport modes and livelihood activities

The easy connection by public transport to various city destinations has facilitated an increase in petty trading. About 92 per cent of the respondents reported that petty traders use minibuses, which start to operate early in the morning at around 4 or 5am. The traders board buses to Kariakoo market and the Ferry fish market to purchase their daily supplies.

A small proportion (about 17.5 per cent) use light trucks to transport commodities from Kariakoo market to the settlement. Otherwise, most traders use buses. Besides transporting commodities, tricycles and push-/ pull-carts also provide employment for the operators. People employed or engaged in other activities, including salaried people, own most of the tricycles and pushcarts. The owners rent out the carts to the operators. Tricycles are normally parked at bus stops where people can access them easily. There are also parking areas for carts at the Kariakoo and Manzese markets.

About 95 per cent of respondents have access to one or more transport modes. Most of them asserted that the fares charged were affordable.

## 5.5 Livelihood activities, incomes and expenditure on public transport

There are different livelihood activities that depend on public transport. These include petty trading, retail shopkeepers, casual labourers and engagement in formal employment sectors, such as factories and offices.

### 5.5.1 Petty trading

The petty trading activities include food vendors (*mamalishe*), sellers of used clothes, charcoal fish, cosmetics, eggs and fruits. About 57.5 per cent of the respondents are involved in these activities. Most of the petty trading activities are located along the existing streets. The household incomes for most of the on-street commodity sellers range between TShs.8,000/= and 60,000/= per week, depending on the type of commodities or goods sold (see table 5.2)

### 5.5.2 Retail shop operators

Most of the retail shops are located on both sides of the main Mnyamani road and along Nelson Mandela highway. A few shops are located at the intersections of access roads in the settlement. Retail shop owners spend between 3 and 7.5 per cent of income on public transport. Generally, retail shop owners have high incomes in comparison with other livelihood activities.

### 5.5.3 Income from salaried people

Some of the respondents work in the factories along Nyerere road and elsewhere in the city, while others are primary school teachers or civil servants. The incomes for this category are generally low, ranging between TShs.6,500/= and 45,500/= per month.

### 5.5.4 Casual labourers

Casual labourers include push-/ pull-cart operators. Most casual labourers are young people, often men, who travel on foot and transport or carry goods on their shoulders/ heads. Buses bring such goods from the city centre. Most porters are found at bus stands where passengers with goods hire them. The household income for labourers ranges between TShs.5,000/= and 42,000/= per week.

### 5.5.5 Stall operators

About 17.5 per cent of the respondents operate stalls (*genge*). This includes food stalls, as well as others selling fruits, bananas, tomatoes, onions, rice, flour etc. The activity is carried out within the houses—mainly in front of them. Generally, food stalls operators earn more than those who are engaged in most other livelihood activities. Their income ranges between TShs.17,000/= and 120,000/= per week.

### 5.5.6 Expenditure on public transport

Spending on public transport has a direct relationship with the type and volume of activity and earnings. The study has shown that petty traders spent about 1 to 29 per cent of their gross weekly income on public transport. A few respondents, especially those in the petty trading business, argued that they often carry purchased goods on their shoulders or heads in order to reduce the amount they spend on public transport. The trend in the table below shows that low-income households rely on public transport and spend a larger proportion of their incomes on public transport than high-income households. Overall, an average of 7 per cent of income is spent on public transport.

**Table 5.2. Weekly gross income and expenditure on public transport**

S/N	Respondent number	Activity/occupation	Weekly gross income	Expenditure on public transport	% Total
1	37	School teacher	6,500	1,900	29.2
2	30	Tailoring	7,500	900	12.0
3	33	Tailoring	8,000	1,200	15.0
4	1	Selling coloured rags	8,000	800	10.0
5	2	Employee	8,500	Uses own bicycle	0
6	14	Running <i>genge</i>	10,000	900	9.0
7	26	Employee	14,000	800	5.7
8	28	Retail shop	14,000	1,050	7.5
9	29	Charcoal selling	14,000	2,100	15.0
10	27	Running <i>genge</i>	17,000	1,400	8.2
11	8	Fried fish selling	17,500	1,400	8.0
12	6	Fried fish selling	20,500	1,550	7.6
13	35	Retail egg selling	20,500	Uses own bicycle	0
14	36	Tailoring	21,000	1,400	6.7
15	9	Coconut selling	24,500	1,000	4.1
16	38	Watchmen	26,500	1,200	4.5
17	12	Banana & 'bites' selling	27,000	1,500	5.5
18	3	Running <i>genge</i>	27,500	400	1.5

**Table 5.2. Weekly gross income and expenditure on public transport**

S/N	Respondent number	Activity/occupation	Weekly gross income	Expenditure on public transport	% Total
19	15	Food vending	28,000	3,500	12.5
20	11	Food stall	29,000	1,800	6.2
21	24	Chips cook	30,500	1,500	4.9
22	16	Cosmetics selling	37,500	3,000	8.0
23	31	Selling of bananas	41,500	5,250	12.6
24	17	Running <i>genge</i>	42,000	900	2.1
25	10	Part-time teacher	42,000	1,000	2.4
26	13	Running <i>genge</i>	44,100	3,500	7.9
27	25	Employee	45,500	1,800	4.0
28	34	Tailoring	47,000	1,800	3.8
29	22	Charcoal selling	47,500	3,000	6.3
30	32	Fried fish selling	50,500	2,400	4.7
31	39	Food vendor	53,000	800	1.5
32	21	Running <i>genge</i>	57,000	5,000	8.8
33	7	Selling used clothes	57,000	3,600	6.3
34	23	Fried fish selling	61,000	3,500	5.7
35	20	Fried fish selling	80,000	3,250	4.1
36	5	Rice & juice selling	92,000	4,500	4.9
37	19	Fried fish selling	94,000	7,000	7.4
38	4	Retail shop	106,400	3,200	3.0
39	18	Fried fish selling	121,000	5,400	4.5
Average	7.0				

Source: Field study August / September 2001

NB: Respondents number reflects the number on the questionnaire form

## 5.6 Main trips and fare charges

The main trips made by the residents and the purposes of their trips are displayed in Table 5.1. Most trips are to Kariakoo and Mnazi Mmoja. These are the most frequently visited areas (48.7 per cent) followed by the post office and Ferry areas (12.8 per cent of the respondents). These areas are also the business centres and sources of most commodities and livelihood opportunities.



The fare is either TShs.100/= or TShs. 150/=. During the morning rush hour the fare is 150/=. The situation is the same in the rush hour in the evening (4pm–7pm). During non-peak periods, the fare charged is TShs.100/= per trip. Fare charges are similar, regardless of whether one is travelling shorter or longer distances.

The feeling among most residents about the current *daladala* fares varies. Some say the current fare is fair, while others say it is high and should be reduced. About 70 per cent of the respondents proposed that the amount charged should be reduced from the current fare of TShs.150/= to TShs.100/=. The following excerpts further clarify the situation.

#### **What people say about bus fares**

- 'Life is becoming difficult; a charge of TShs.100/= per trip for would be affordable by low-income earners'.
- 'The TShs.150/= rate is too high. Many ordinary people (low-income earners) cannot afford to pay. That is why many passengers wait for buses which charge TShs.100/= per trip. Once the conductor announces the fare per trip as being TShs.100/=: many people scramble to get in'.
- 'There are a good number of people who cannot even afford the TShs.100/= per trip, therefore they have to walk'.
- 'I am prepared to pay only TShs.100/= per trip for improved road conditions, because it is difficult to get money due to the poor economy. Even TShs.100/= per trip has proved unaffordable'.

#### **What people say about willingness to pay a higher bus fare**

- 'The TShs.150/= fare is quite fair. They (operators) are paying for fuel, maintenance, etc.'
- 'The TShs. 150/= is fair enough. More than that I could not afford and I would have to walk'.
- 'I think the TShs.150/= is just okay, although operators complain that it is not fair. Surprisingly enough, they are charging only TShs.100/= per trip'.
- 'The TShs.100/= charged per trip is not fair. We (passengers) are squeezing too much from them because they (operators) have to pay for fuel and other operational costs. For instance, the TShs.150/= per trip from Tabata to Chang'ombe, such a long distance on a poor road, is not fair at all. Passengers should pay TShs.250/= per trip at least'.

About 30 per cent of the respondents said that the TShs.150/= fare charged is fair and they would not mind if this was raised to TShs. 250/= per trip. They noted that if the fare charged per trip is reduced to only TShs.100/=: the operational costs might be higher than income, making public transport operators fail to provide services.

Most of those who said the current tariffs were fair and could be raised seem to be salaried people, i.e. employees who have relatively stable incomes. They do not, therefore, represent the poorer individuals in the country.

### **5.7 Users' assessments of the modes of transport**

Most (94 per cent) of the residents use large buses and minibuses (*daladala*) and trucks to meet their livelihood pursuits. Only a few people can afford taxis. In general, the use

of *daladala* remains the major mode of transport to the majority low-income earners in the settlement.

The time spent to walk from their houses to the bus stop ranges from 5–10 minutes. Walking is also a dominant mode for people’s intra-settlement livelihood pursuits.

**Table 5.3. Various modes used**

S/No	Mode of transport	Number (out of 39)	Percentage of total	Destinations/ route from Buguruni
1	<i>Daladala</i>	29	74.3	Muhimbili, Kariakoo, Posta/ Ferry, Mwenge, Tegeta, Masaki, Manzese, Ubungo, Temeke and Gongo la Mboto
2	Bus and trucks	7	18	Kariakoo, Kisarawe, Mnazi Mmoja
3	Bus and bicycle	2	5.1	Drive-In, Mikocheni and Posta (Ferry)
4	Bicycle	1	2.6	Kitunda (nearby, within the settlement)
<b>TOTAL</b>		<b>39</b>	<b>100</b>	

Source: Field Study August/ September 2001

**5.7.1 Satisfaction with the modes of transport**

The inadequacy of buses is particularly noted during rush hours. In the morning and evening rush hours, the available buses are insufficient to cater for transport demand. On some occasions, commuters spend up to one hour waiting for a bus. Because Buguruni is a transit buses stop, some buses do not pick up passengers because they are often full by the time they arrive at the settlement.

- ‘Here in Buguruni, standing in buses is common during peak and non-peak hours because Buguruni is a transit bus stop; vehicles arrive here with all the seats already full’.
- ‘On a few occasions, during normal hours, one can secure a seat. From 3pm to 8pm it is obvious that one would not get a seat; there are so many passengers that others have to travel standing.’

Generally, only a few people (10 to 39) use bicycles. The low level of bicycle use is attributed to the following reasons:

- Congestion of vehicles on most roads and the high risk of sustaining accidents due to reckless driving.
- Unfavourable weather conditions.
- The high risk of being ambushed by bandits during the night.
- Lack of pedestrian lanes or paths on the roads.

**5.7.2 Conditions at the bus stands**

There are five bus stands/ stops in Buguruni Ward, namely CCM, Sheli, Sokoni, Police and Rozana. For the Buguruni Mnyamani residents the nearest bus stand, ‘Sheli’, is

located about half a kilometre away. The environmental condition at most of the bus stands is bad. A few bus stops are provided with waiting sheds. Some of the problems associated with bus stands include lack of covered sheds and sanitary facilities, and haphazard parking. Emphasizing the terrible conditions in most bus stands, some of the respondents note:

#### **What people say about bus stands**

- 'With the exception of Tabata bus stand there is no place to shelter from the sun or rain. What some people do is to take shelter in nearby stalls or in nearby houses. But this is an inconvenience to the stall/ house owner'.
- 'At Buguruni there are no bus stops with covered waiting stands. The existing ones are in bad condition as people, vehicles and cycles operate haphazardly. Vehicles park haphazardly. When it rains a person gets wet because there is no shade'.
- 'Waiting bays are not covered and are small in size. Despite this, there are pick-pockets, coffee/ tea sellers, shoe shiners and other petty traders selling sweets and groundnuts. The station is therefore full of activities and the continuous movement of people'.
- 'Sometimes we run for refuge to nearby business kiosks, which are nevertheless not enough, as you will get wet. Sometimes the owners of these businesses drive us out, ostensibly because thieves take advantage of the overcrowding to steal from them (the stall owners)'.
- 'The bus stops are inadequate. For example, along Nyerere Road all the way to Mombasa (at Gongo la Mboti), there are no shelters (i.e. roofed waiting places); passengers are therefore exposed to the sun and rain'.
- 'The environments in the four bus stops at Buguruni are quite good. However, when it rains the weather brings a lot of chaos to passengers, as there is no shelter. Likewise, the bus stations are very small in size, thus causing congestion at the bus stands. The bus stop at Buguruni Sokoni was constructed when the population was low. Currently the population and likewise the number of *daladala*s have increased. This has brought about congestion, thus exposing passengers to accidents'.

## **5.8 General feelings about public transport**

### **5.8.1 Comfort in buses**

Views on the degree of comfort in the buses are:

- 'There is adequate comfort in large buses, because there is enough roof height so that people can stand in an upright position, (49 per cent of the respondents)'.
- 'There is overcrowding in minibuses and the low roof heights, (31 per cent of the respondents) cause discomfort'.
- 'Discomfort is also attributed to cramped seating and worn-out vehicles with damaged doors and missing windows/ shutters (10 per cent of the respondents)'.

### **5.8.2 Hygiene conditions**

The majority of the users complained that hygiene conditions in the buses were poor. However, hygiene conditions inside the buses, specifically the large buses, were satisfactory because most of them are spacious, clean and well-maintained.

### 5.8.3 Seating and standing conditions

About 70 per cent of the respondents complained that the buses are overcrowded and therefore there is not sufficient air circulating inside. Thus, a person could contract airborne diseases, for instance, tuberculosis (TB). Due to congestion, it is often difficult for a commuter to get off the bus on arrival at his or her destination.

Travelling while standing in buses was said to be critical during rush hours. The condition is worse in the minibuses, where there is insufficient space and height. About 74 per cent (29 out of 39) of the respondents said that they experienced a lot of problems and ills as a result of standing. If one is not prepared to stand he/ she has to wait for a long time.

#### What people say about rush-hour problems?

- 'Due to congestion, one often arrives at one's destination tired'.
- 'Standing while travelling is dangerous and it is not a good thing at all. When all the seats are occupied, a bus should leave the bus stop. The dangers of standing include an increased risk of accidents'.
- 'There is a danger of spreading TB to other passengers in over-crowded buses, especially in the mornings and evenings. The Buguruni–Kariakoo route is very busy at this time, all the way up to Uhuru primary school'.
- 'Standing is a big problem, especially when one is travelling in a minibus with a low roof. People board and travels all the way with their necks and waists bent. The neck aches. In case of abrupt braking, people jostle/ bump into one another, or may slip forward or fall'.
- 'Nowadays there is no difference between sitting and standing. It is really a problem. Due to standing and overcrowding, those standing lean on one another. When other passengers want to get out of the bus/ disembark, they squeeze one another so as to find a way out. In this way clothes get soiled'.
- 'Travelling while standing in Hiace (minibuses) is very uncomfortable as you have to bend and there are no supporting rails. Because you are in a hurry, you just have to travel. When one reaches one's destination, the whole back aches'.

#### What people say about inside the vehicles

- 'Most *daladalas* are in good condition. This is because of the competitive nature of the business as every operator fights to attract passengers. In most cases passengers do not board old, worn-out vehicles'.
- 'The quality of vehicles varies. Vehicles shuttling between Buguruni and the new post office are in good condition with good seats and bodywork. Those shuttling between Mnazi Mmoja and Muhimbili are in very poor condition. Some, for instance, are without windows, probably because people going to Muhimbili cannot wait because they have a fixed time to see patients at the hospital. Therefore, often they are in a hurry to board a bus'.
- 'Most buses, especially Coasters, are in good condition, and are comfortable. In most cases, these buses are well kept and maintained. The operators do that in order to attract passengers'.
- 'Some buses are not good at all. Inside, the seats are worn-out and loose, and the doors can easily detach from the bus as the vehicles move'.

#### 5.8.4 Conditions for women

There were conflicting views concerning conditions for women inside buses. Some respondents argued that women who have been subjected to harassment, especially molestation by men, have suffered this treatment because of indecent dressing. Thirty-six per cent asserted that women are being mistreated inside buses. The mistreatment includes non-consideration for the sick and pregnant women. Other problems cited include being pushed around by the stronger commuters when the women scramble for the buses, especially during rush hours.

##### What women say in general

- 'Embarrassment caused by the conductors is not gender selective. Although this happens, it is rare and is mostly provoked by women themselves. It may happen that the touts pull you this or that way in order to get you to board the bus quickly'.
- 'Women who wear skin-tight clothes that show their figures incite men to molest them'.
- 'The conditions for women in the *daladala*s depend on the type and mood of the passengers on board. If most passengers are men and are drunk, especially at night, women passengers may get harassed. Otherwise, women are in most cases respected'.
- 'At night if you are alone, your safety cannot be guaranteed. You could be raped or roughed up, although I have not experienced this. I only read of such incidents in newspapers'.
- 'The conductors push us around, but that is how they behave. There are not many disturbances, anyway, and we are just equal to men passengers'.
- 'We are equal to men. The main problem that I see is lack of safety at some of the bus stops, like in Buguruni. At night, i.e. after 8pm, robbers may attack women'.

#### 5.8.5 The conditions for school-going children

School-going children are also harassed on public transport. All the respondents said that school-going children suffer a great deal when they travel to school in the mornings or return home in the evenings. The bus conductors and drivers do not want to allow them in their buses, despite the municipal order that requires them to do so. The operators allow only adults to board buses, while barring students. If the bus is full, the conductors allow only one or two students to board. As a result, students spend longer times at bus stops, thus arriving late at school or to their homes.

##### What school children say about bus transport

- 'It is a problem to cross Mandela highway in the mornings and evenings because there are so many vehicles along the highway. There are no zebra crossings. A speeding vehicle may knock down a student'.
- 'In most cases we are denied free entry onto the *daladala*s because we pay only a third of the fare (equivalent TShs.50/=). When I am denied free entry, I normally request that an elderly person who may be around help me'.
- 'Normally, conductors do not allow us to board the buses until they are full. As a result, we spend many hours at bus stops'.

#### 5.8.6 Hooting and loud music

It was reported that hooting and loud music disturbs the peace both inside and outside buses. Some respondents complained that undue hooting causes distress to sick people

while loud music prevents communication between conductors and passengers. As a result, passengers over-run their destinations.

- 'Other people are sick and are on the way to hospital(s), so the hooting and loud music affect them psychologically.'
- 'It is important that bells are introduced in buses in order to reduce nuisance'.

Foul language was also observed to upset passengers as it humiliates them. One respondent remarked:

'... they have very dirty language and abusive words. The conductors often hurl insulting words towards passengers. They do not care who is in the bus or whether children are accompanying their parents. They just hurl abusive words. They do not care about anything. I am even afraid. I do not dare to repeat the words, because it will be as if I am insulting myself...'

#### **5.8.7 Bus conditions and safety**

Based on the interviews made, it was noted that over half the minibuses (55 per cent) on all routes originating from Buguruni via Uhuru and Mandela express highway are in bad condition. Respondents interviewed commented that most minibuses (Hiaces) have broken doors, seats without cushions and are generally unclean. However, 55 per cent of large buses are in good condition. Commenting on the general condition of buses and minibuses one respondent interviewed said:

'With regard to bodywork, the minibuses are externally attractive to win more passengers in a competitive market, but their interiors are not in good condition.'

The engines of many (55 per cent) of the large buses and minibuses were in good condition. Buses with poor engines do not get customers as they are soon noticed by passengers because they take a long time on the route before one gets to one's destination.

#### **5.8.8 Speed of vehicles and safety**

About 90 per cent of respondents said that the speeds of buses and minibuses are always too high as drivers are struggling to get more passengers. However, they admitted that speeding is prevented or reduced by traffic congestion during rush hours. During these periods there are many vehicles on the road. About 85 per cent of the respondents reported that there is a tendency for minibus drivers (Hiaces) to speed up and overtake others, even at dangerous spots.

People have varying opinions about getting into and out of the buses. About 40 per cent of the respondents said they have experienced mistreatment while getting out of the buses. It was further reported that during peak hours getting in is not safe because of pick-pocketing.

Due to competition for passengers during rush hours, some passengers have sustained injuries.

## SECTION 5: THE CASE OF BUGURUNI MNYAMANI

Almost all respondents (95 per cent) asserted that road bumps were good because they help to prevent vehicles from speeding. Commenting on the use of speed breakers, an interviewee had this to say:

'Drivers are afraid of driving at very high speeds on roads with bumps because they do not want to destroy their vehicles and this is advantageous to us passengers'.

### What people say about health risks

- 'Due to congestion and lack of air circulation (especially in Hiaces) there is a danger of contracting airborne diseases like tuberculosis. We want large buses'.
- 'Overcrowding has become commonplace on public transport. This is not good. There are so many passengers in the mornings and evenings as people are rushing to their work places or livelihood pursuits'.
- 'The passenger vehicles (DCM, Coasters and Hiace) are far better and cleaner than the trucks meant for goods (*mizigo*). These are terribly dirty; they are not cleaned at all. They [trucks] pose a great health risk, especially when they are used to ferry fruits and the vegetables (from Kariakoo to Buguruni) as the produce can be contaminated'.
- 'There is no problem because buses, especially DCM and Coasters, have enough space, which allows ventilation during travel'.
- 'Some minibuses have fixed windows [that cannot be opened], which do not allow air to circulate inside. As a result, little air circulates inside thus exposing passengers to communicable diseases.'.

### What people say about road accidents

- 'I have never been involved in an accident, but I have witnessed one that occurred at Buruguni near the Shell petrol station. In this incident a lorry crashed into three *daladala* buses, which were parked at the bus stand. The accident claimed three lives on the spot and several people were seriously injured'.
- 'I witnessed one accident in the year 2000 at Malapa bus stop along Uhuru road. Two minibuses (Hiaces) were involved in a head-on collision. One of the minibuses rolled three times. Several people were injured while five died'.

'One day, last year (I don't remember the date), a big bus crashed into the bus I had boarded, travelling from Vingunguti to Kariakoo. Although I was not injured, some other passengers were injured'.

## 5.9 Public transport improvement proposals

To remedy some of the problems observed, a number of recommendations were given, these included:

- Removal of vehicles that are not roadworthy from the roads
- Removal and ban of minibuses from transporting passengers
- Revoking licenses of reckless drivers

- Frequent maintenance of vehicles
- Provision of spacious buses, such as DCMs and Coasters
- Prohibition of operators from carrying excess passengers
- Introduction of transport companies that will co-ordinate *daladala* operators.

The respondents also showed discontent with narrow and poor roads. A proposal to widen the stretch between Ilala Boma to Buguruni was given so as to ease traffic flow.

To ensure hygienic conditions, it was pointed out that buses should be cleaned regularly; likewise, conductors should wash their clothes.

To improve students' transport situation it was proposed that each municipality should have special buses to cater for students only. It was also proposed that a subsidy be given to bus operators who volunteer to transport school children during peak hours. Other remedial measures proposed included the stationing of police officers at bus stops to ensure that operators take on board school children.

To overcome overcrowding in buses it was proposed that minibuses be barred from the roads and instead the use of large buses should be encouraged.

It was pointed out that touts should be removed from all bus stops as the buses are well marked and so are their designated routes.

As regards the quality of roads, it is the opinion of the respondents that Buguruni–Kariakoo road through Ilala Boma should be expanded and repaired to avoid accidents and to improve the quality of the road. Others proposed the introduction of speed bumps and zebra crossings so as to discourage drivers from speeding and causing accidents to people inside the buses or to pedestrians.

The DRTLA should revoke licenses to the buses found not roadworthy. It should also give priority and encourage the use of large buses to transport passengers instead of small buses (minibuses). In a bid to improve bus stands, it was proposed that the stakeholders responsible should take initiative to improve the condition. The following table gives a summary of the proposals.

**Table 5.4. Summary of users' views on how to improve public transport**

S/n	Proposal	Reasons	Recommendation
1	<b>Increase the number of bus stops along Mandela highway</b>	<ul style="list-style-type: none"> <li>• There are few (only four) bus stops from Buguruni to Ubungo</li> <li>• Drivers park haphazardly</li> </ul>	The Dar es Salaam city authorities should construct and formalize the informal bus stops after conducting traffic surveillance.
2	<b>Widen the Uhuru road into a dual carriageway and extend pedestrian walkways to the city centre</b>	<ul style="list-style-type: none"> <li>• The current dual carriageway along Uhuru road ends at <i>Kwa Malapa</i></li> <li>• There are many road accidents in the stretch between Kwa Malapa and Karume stadium</li> <li>• There are traffic delays along this stretch during rush hours</li> </ul>	The central government, in collaboration with the municipal council, should mobilize funds to extend the dual carriageway to the city centre.



## SECTION 5: THE CASE OF BUGURUNI MNYAMANI

**Table 5.4. Summary of users' views on how to improve public transport**

S/n	Proposal	Reasons	Recommendation
3	<b>Review insurance system adopted by the National Insurance Corporation</b>	<ul style="list-style-type: none"> <li>It is very difficult to get compensation when a person has been involved in an accident</li> <li>Comprehensive insurance is too costly, thus most owners opt for third party insurance.</li> </ul>	The National Insurance Corporation has to review the current system used so as to create an attractive environment for vehicle owners.
4	<b>Ban all porters at bus stands</b>	<ul style="list-style-type: none"> <li>Most of the porters, <i>wapiga debe</i>, are pick-pockets</li> <li>They are a nuisance to commuters</li> <li>They also bang buses causing undue noise</li> </ul>	The central government, the DRTA and traffic police should ban porters.
5	<b>Monitor fuel prices</b>	<ul style="list-style-type: none"> <li>Unstable fuel prices</li> </ul>	The central government should control fuel prices in order to reduce transport costs.
6	<b>Review tax system</b>	<ul style="list-style-type: none"> <li>Too many taxes and conditions are introduced without consultation with bus owners. For instance, the introduction of vehicle route identification colours, which costs TShs.86,000/= for a minibus and TShs.110,000/= for a large bus.</li> </ul>	The government, together with stakeholders, should check and review the policy pertaining to the tax system in the transport sector.
7	<b>Formalize employment for bus operators</b>	<ul style="list-style-type: none"> <li><i>Daladala</i> drivers and conductors work as casual labourers</li> <li>They are not paid salaries</li> <li>Bus owners fix a high amount to be remitted per day by operators without considering the business environment</li> </ul>	Bus owners should be required by law to have employment contracts with drivers and conductors.
8	<b>Fight corruption in the traffic police</b>	<ul style="list-style-type: none"> <li>Unnecessary seizures of vehicles by the traffic police who solicit bribes for minor offences</li> </ul>	There should be collaboration between the traffic police and the bus operators to fight corruption.
9	<b>Introduce a school bus system or a subsidized mechanism for school children</b>	<ul style="list-style-type: none"> <li>School children are being harassed by operators because they pay a third of the adult fare</li> <li>School children arrive late for school or at home</li> </ul>	The government, in collaboration with stakeholders, has to revise its policy, particularly for school children.
10	<b>Monitor overcrowding in buses and vehicle conditions</b>	<ul style="list-style-type: none"> <li>Vehicles are seldom cleaned</li> <li>Overcrowding in buses, resulting to unhygienic conditions</li> <li>Some vehicles are worn out</li> </ul>	<p>By-laws should be introduced that require operators to keep their vehicles clean to ensure a healthy environment.</p> <p>Dar es salaam Road Transport and Licensing Authority and the traffic police should introduce a mechanism for checking vehicles for roadworthiness.</p>
11	<b>Set a standard waiting time at bus stops</b>	<ul style="list-style-type: none"> <li>Buses spend long hours at bus stands waiting for passengers</li> </ul>	The traffic police should restrict unnecessary time delays by buses at bus stops. A timetable should be provided on/ at bus stands.

**Table 5.4. Summary of users' views on how to improve public transport**

S/n	Proposal	Reasons	Recommendation
12	<b>Restrict petty trading activities along the pedestrian walkways</b>	<ul style="list-style-type: none"> <li>• Pedestrian and cycle lanes are blocked by petty traders</li> <li>• Parking places are also occupied by petty businesses</li> </ul>	By-laws should be enacted and enforced by the municipal councils and other stakeholders
13	<b>Monitor behaviour of vehicle operators</b>	<ul style="list-style-type: none"> <li>• Haphazard parking at bus stops/ stands</li> <li>• Use of abusive language by bus operators and unnecessary hooting</li> <li>• Non-wearing of uniforms</li> <li>• Reckless driving</li> </ul>	Vehicle operators should follow traffic regulations and by-laws.
14	<b>Expand and improve bus stands</b>	<ul style="list-style-type: none"> <li>• Lack of shade at bus stations</li> <li>• Inadequate space for bus stops</li> </ul>	Funds should be mobilized to improve the bus stops.

## Section 6

### **Policy and operational issues**

#### **6.1 Introduction**

The significance of public transport services to the livelihoods of inhabitants in the three study areas was confirmed by the wide range of social and economic pursuits that are undertaken daily by the respondents within and outside the area. The main livelihood activities, which must involve the use of public transport, include:

- **Petty trading**—this generates journeys from the settlement to, for instance, the major wholesale markets and shopping centres, such as the vegetable and cereal markets at Kariakoo, Tandika, Tandale, Ubungu and the fish market at the Ferry.
- **Formal employment**—people from the settlements travel to the various employment areas in the city, including the industrial areas, the Central Business District (CBD) and the minor centres, such as Temeke, Mwenge, Ubungu, where they are employed.
- **Schooling, social and recreational activities**—these are activities that compel a fairly large proportion of predominantly young people, as well as some adults, to travel to the various destinations in the city. For instance, pupils from Charambe, Mabibo or Buguruni travel to attend schools in the city centre, to watch soccer at the national stadium or to attend discos in various parts of the city.
- **Farming and gardening**—many settlers who are salaried or privately employed also undertake farming and gardening activities. This was, for instance, observed in Charambe. These activities depend on public transport to ferry agro-produce to market outlets in the city.

Among these activities, **petty trading** was reported to be the most dominant livelihood activity in the three settlements. In all the three settlements, actors involved in the public transport sector are:

- **Users**—mainly passengers
- **Operators**—drivers, conductors and owners, including private individuals and public institutions such as UDA
- **Regulators and government-managed agencies**—the traffic police, Dar es Salaam Road Transport Licensing Authority (DRTLTA) and the Regional Commissioner's office.

As described in the case reports, the major problems facing public transport and the residents in the three case study areas include congestion or overcrowding in the buses

especially during peak periods, pick pocketing and mistreatment of women and school children. Others are harassment of women and school children by operators, disregard of traffic by-laws and regulations by drivers and conductors, corruption and the neglect of cyclists and pedestrians' needs. There is also a lack of terminal facilities such as sanitary utilities at the main bus station and sheds on most bus stops.

## **6.2 Policy and operational context**

From the discussion presented in the three cases, it is apparent that the few existing institutional structures for regulating private/ public transport operators (the DRTLA, traffic police) are weak or, at most, ineffective. As a result, there is no dialogue between the key actors; thus critical issues in the public transport service sector have not been resolved. For instance, at present there exists no institution or body to co-ordinate and harmonize the interests of the three aforementioned stakeholders involved in public transport. In the final analysis all actors lose, but the users suffer most.

Also, there exists no association or institution through which the proprietors of the over 10,000 *daladalas* presently operating in the city can convene, exchange views or solve common problems. Likewise, neither the drivers nor conductors have an association to defend and/ or address pertinent issues, which among other things include monitoring, regulating and improving their skills and welfare situation. As noted earlier, the literacy rate among the operators—especially drivers and conductors—is low, this being partly manifested in their attitudes, particularly towards female passengers. Yet the plight of the poor, who solely depend on public transport services for their livelihoods but cannot afford increased fares, or schoolchildren, who are denied access to buses, remains an unresolved problem that limits livelihood pursuits.

Subsequently, conflicts among the stakeholders e.g. conflicts between operators and passengers, school children/ women and conductors, porters and passengers, drivers and traffic police or the DRTLA, are increasing one day after another as each party blames the other.

To-date, public transport policy is still in draft form, constraining initiatives to improve the public transport sector by, for instance, providing infrastructure and loans for people who are able to purchase bigger buses. That most of the drivers who were interviewed possess the relevant driving licenses, but the same have not been to any formal training or driving school, further points out the institutional deficits that, in turn, limit the regulation of the private/ public transport operators.

Analysis of the views and responses from the three case studies reveals that improvement of the institutional setting is one of the most critical intervention areas, one that is long overdue. Once this issue is addressed, users, operators and regulators stand to benefit because presently these actors are more or less acting within their own sectors without liaising or taking into account the interests of the other parties.

## **6.3 Access, quality and affordability**

In the two case study areas of Charambe and Buguruni, most of the people have fairly easy access to public transport services via the nearest bus stops or bus stations. Most people in the two settlements walk for a maximum of 30 minutes in Charambe and 5 to 10

minutes in Buguruni. However, some people in Mabibo walk up to an hour or even more. Besides, they spend a lot of time at the bus station and bus stops waiting for buses.

Due to the sprawled layout of the city and poor roads, some inhabitants have to walk for about one hour to the nearest bus station or stop. This is, for instance, the case for the settlements outlying the peri-urban areas such as Charambe. Overall, the poorly accessible areas, particularly settlements that are sandwiched or in-between the major bus routes such as Luhanga in Mabibo, do not have direct access to the public transport system. Similarly, public transport users who reside along routes that are not frequently maintained, such as Urafiki Mabibo, Kitunda and Kinyerezi, experience poor public transport services, particularly during rainy season, because most proprietors and/ or operators are reluctant to provide services in such areas. Vans and light trucks occasionally serve the poorly accessible areas that are abandoned by buses and minibuses. Informal service operators provide most of these vans and trucks.<sup>29</sup>

Whilst walking is the main intra-settlement mode of transport, generally the use of non-motorized modes such as bicycles and tricycles is limited in all the three settlements. This is mainly because of lack or poor provision of non-motorized traffic facilities. For instance, most of the major roads, including Kilwa road, Kigogo road and Uhuru road, which provide public bus transport in the three settlements, do not have cyclist or pedestrian paths. At the same time, because most of the *daladala* drivers drive recklessly, many people are reluctant to use non-motorized modes such as bicycles. Pull- or push-carts and tricycles are increasingly becoming important transport modes, particularly for hauling bulky goods and commodities from the major bus station and market/ shopping areas in the settlements to the outlying retail stalls and shops.

Overcrowding or congestion in buses, undue noise made by porters, pick-pocketing and harassment of women and school –children, particularly during rush hours, filthy operators and poor upkeep of the buses (for instance, those operating in Mabibo), make the quality of services provided in the study areas unsatisfactory. However, the operational quality of most minibuses and buses was satisfactory. In some cases, seats were worn-out, there was no glass in the windows, while some buses were poorly ventilated. Most respondents repeatedly expressed their reservations and detested the indecent appearance of most *daladala* conductors and drivers. Unclean (poor upkeep of) buses and disreputable conductors/ drivers were particularly bad during peak hours when buses were overcrowded, making some passengers feel suffocated and experience nausea due to the foul smell.

As regards the fairness of the current fares, a close examination of the responses from the three cases depicts varying views. A significant proportion of the users, i.e. 45, 43 and 30 per cent in Mabibo, Charambe and Buguruni respectively, considered the present peak hours fare charge (TShs.150/=) and non-peak hours charge (TShs.100/=) to be fair. Nearly the same proportion find these fare charges unfair, and therefore would wish that they be reduced. Only a few passengers said that they could pay more than TShs.150/=, e.g. TShs. 200/= or 300/=, for an improved service. The majority of those who complained that the fare rates were too high and thus unfair were, as expected, the lower section among the poor, most of whom earn less than TShs.2,000. per day or have unstable incomes. Despite

29. Informal because these routes are not officially designated for public transport (*daladala*); besides, vehicles operating on such routes are not registered or authorized to operate or provide public transport services.

the varying responses, the most striking observation that cuts across all the three cases is that overall the lower income earners pay proportionally more for transport than those in the upper income bracket. The general trend is that expenditure on public transport declined with the increase in households' incomes. For instance, some of the people earning less than TShs.10,000/= per week, i.e.  $\approx$  1.4US\$ per day, pay up to 45 per cent of their income on public transport, whereas those earning between TShs.30,000/= and 100,000/= pay less than 10 per cent.

For their part, most operators complained that the present rates were low and that they would like the fare to be raised to TShs.200/= per trip. As regards the TShs.50/= fare charged for students, all operators protested, arguing that it was unfair and not realistic, and thus the source of unresolved disputes between the operators, students and the regional authorities. The operators also complained of harassment by the police.

As noted in the case studies, public transport plays an indispensable role in the livelihoods of most urban residents. Indeed it is in many cases the only (convenient) mode accessible to the majority of low-income people who have to travel or depend on transport so as to reach the sources of their livelihoods.

As noted earlier, without the public transport system many low-income people, including petty traders, subsistence farmers, school children, sick people, expectant mothers, small-scale business operators, low-income salaried people and, not least, women engaged in various food and vegetable selling stalls, would not reach their daily pursuits.

Public transport services are the backbone for the livelihoods of people, not only in the three areas studied, but also for a larger proportion of the low-income population in the city. The data from the three cases evidently shows that the livelihood opportunities (including income and employment), which are increasingly being pursued by the people in the three settlements, are largely facilitated by public transport. Besides, a large proportion of young people in the city is employed in the public transport sector. In total, the sector is estimated to directly provide employment to between 40,000 and 50,000 people.<sup>30</sup>

#### **6.4 Emerging directions for future action**

As individual respondents and comparative analysis of the cases show, despite the numerous problems observed, public transport is the 'prime mover' for livelihoods pursuits of the majority of inhabitants in the city. It, therefore, follows that the future of the majority of the city inhabitants in social and economic terms strongly hinges on improved performance of the public transport sector. In all the three cases, and indeed all over the city, public transport problems, including congestion/ overcrowding, poor accessibility to public transport for some people, filthy buses and reckless driving etc., were reported to have increased with the settlements' population growth. In other words, as the population that depends on the public transport system increases, hardships also increase. Since the majority of people who use or depend on public transport comprise the poor, those same people suffer most when transport performance is poor or the fares are unaffordable.

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30. This includes people employed as drivers, conductors or porters in the buses. There are also many young people who are engaged as push-/ pull-cart and tricycle operators. Each *daladala* bus generates 2-3 employment opportunities. This excludes mechanics, car washing and the like, who also make a living from *daladala* operations.

In view of the observations made in the case study areas, improvement of public transport services has to be addressed taking into account the following policy and action areas.

#### **6.4.1 Regulating private/ public transport operators**

Admittedly, in a liberalized economy it is generally difficult to control prices for services offered by the private sector. However, because of the indispensable role public transport plays in the livelihoods of the poor, the state has to step in and ensure fair play among the key actors. Such action includes provision of a policy framework for instituting differential fare charges according to the distance travelled, as well as safeguarding or taking care of the interests of the most vulnerable e.g. women and children.

Furthermore, it is also the role of the state to provide a platform or forum for the various stakeholders in the sector (including operators and users) to meet and exchange views and derive options for addressing problems facing the sector. Without round-the-table discussions, problems facing school children or harassment of women are unlikely to be resolved. Stakeholders are intended to complement and not to replace the initiatives being taken by the DRTLA, the traffic police, the Regional Commissioner and City Council in enforcing public transport by-laws and regulations and taking to task non-complying operators.

#### **6.4.2 Providing more public transport modes**

The present modes, which are dominated by a motorized system, namely large buses, medium-sized and small minibuses, do not meet the demand (during rush hour) or needs of some of the passengers/ users who often have goods with them. On the other hand, low-income people or passengers do not have much choice, both in terms of mode and price. As noted, in the case studies (viz. Charambe and Mabibo) those who cannot afford the current fare charges have little or no choice but to walk part of, or the whole, journey. Limited choice is a problem that has to be addressed if the livelihood opportunities of the poor are to be improved commensurate with the national poverty alleviation strategy.

Low-cost transport modes such as the rickshaws and motorcycle trailers that are popular in some countries in Asia, such as India, offer some options worthy exploring. Exploitation of water transport to link the city centre with areas such as Kurasini, Charambe South and Tegeta and Mbezi to the North, and railway transport via the line that traverses the densely populated areas of Ilala, Buguruni, Vingunguti, Tabata, Mabibo and Ubungo, are alternative modes that could offer cheaper options as well as relieve traffic on the already congested city roads.

#### **6.4.3 Mapping of routes and timetabling**

Mapping and display of the public transport routes and the provision of a timetable along the routes would be a necessary step to organize traffic flow. This could help to check unnecessary speeding and over-taking, which are some of the main causes of accidents. These measures ought to be supported by improved bus stops and education of drivers and conductors to respect the timetables as well to improve their social standing towards the public they are serving.

#### **6.4.4 Explore private sector potential to improve bus stations and stops**

The environmental conditions at the bus stations are generally terrible, while most bus stops do not give any shelter against the scorching sun and rain. Bus stations also lack

basic infrastructure facilities, including sanitary facilities. Involvement of private actors to improve and manage bus stations should be encouraged.

#### **6.4.5 Mapping out the population distribution and re-designating bus routes**

Improvement of local roads, particularly in the densely built up but poorly accessed housing areas, has to be preceded by a mapping of the city's population distribution. Thereafter, the existing bus routes should be extended, as well as more buses allocated along the routes traversing the densely built up neighbourhoods. Priority should be given to the low-income settlements, where settlers have little or no alternatives to using the public transport system.

#### **6.4.6 The role of civil society**

Overall, the present civil society is not playing any significant role in the public transport sector, even in cases where there is glaring harassment and abuse of individual rights. Common actions by people nearby are rarely taken. Many active passengers are on-lookers of harassment issues. It is of utmost importance that people are educated to team-up and act in unison against ill-mannered men, drivers and conductors.

#### **6.4.7 Making non-motorized modes an integral part of the city public transport system**

A mandatory provision for non-motorized modes (bicycles, pull-/ push-carts) in new road design and construction projects in the city, as well as during the improvement of the existing local and arterial roads, should be instituted so as to provide for enhanced use of non-motorized modes of transport.

### **6.5 Emerging perspectives from actors**

From the analysis of the three case studies, particularly the responses from the key actors in public transport, namely the users, owners and operators, perspectives and action areas to improve public transport services in the city were identified as below.

#### **6.5.1 The users perspectives**

- Settlement sections that are presently not served by public transport should be provided with such a service. Where poor road conditions have been the cause of the lack of service, efforts should be made to improve the road.
- *Daladala* buses should be checked or inspected regularly for roadworthiness.
- Public transport for school children needs special attention. Both regulatory measures and bus transport facilities ought to be established to alleviate problems involving harassment, denial of access and insults students face from drivers and conductors.
- Regulations and by-laws governing operations and conduct of public transport bus operations need to be more effectively enforced. Specific issues, which require immediate attention, include route shortening, unwanted noise caused by loud music and hooting, cleanliness of bus operators and the use of foul language by conductors.
- There is a need for an alternative means of goods transport. A number of residents recommended the establishment of shared goods transport so as to transport goods from the wholesale markets to settlements where the poor households require such goods to sustain their livelihoods.



- There is an urgent need to establish a forum for discussion whereby bus owners, operators and users would meet to discuss pertinent problems on public transport. One of the issues that need urgent attention includes, for instance, a provision for employment contracts or agreements between bus owners and operators so as to safeguard the interests of both parties, but at the same time to improve the quality of public transport services to the users.

### **6.5.2 The owners' perspectives**

- Provide tax relief on the running costs to the owners of *daladals*, especially on some of the levies and other operational costs related to spare parts and fuel.
- Bus fares should be raised from the current TShs.100/=–150/= to Tshs.200/= to cover operational costs.
- The traffic police should also monitor bus movements at terminal points so as to prevent route shortening, instead of focusing on minor offences made along some roads.
- Roads and terminals should be improved so as to improve the quality of public transport services and accessibility. Improvement and provision should include issues such as provision of sheds, benches for passengers, public toilets, storm water drains, bus stops and parking bays at terminal points.
- The issue of uniforms for bus operators should be left to the bus owners, instead of ordering them to purchase uniforms from institutions identified by the DRLA. The DRT-LA should only prescribe the requirements for the uniforms, but their procurement should be the owners' responsibility.
- The DRLA should be more transparent, especially on the issue of allocation of bus routes.
- There is a need to establish an educational course on public transport issues focusing on primary and secondary schools, so as to impart knowledge on the use of transport services by students.

### **6.5.3 The operators' perspectives (drivers and conductors)**

- There is a need for bus owners to set reasonable daily revenue targets that do not oblige drivers and conductors to work under stressful conditions. A ceiling of, say TShs.20,000/= for a 25-seater bus is recommended.
- The traffic police should focus on educating road users (including drivers and conductors) instead of searching for offences and demanding bribes.
- The traffic police should monitor and enforce the provision in the regulations that all buses be regularly checked for roadworthiness.
- There is a need to change the type of uniforms so that the drivers' and conductors' uniforms are durable and comfortable with respect to the climate.
- The DRLA and traffic police should enforce route assignments so as to avoid route invasion by some operators.
- The terms of employment for drivers and conductors (temporary) should be changed to ensure security of employment, including specification of working hours. This will provide time for servicing the vehicles and leisure time for drivers and conductors.



# **Appendices**

**APPENDIX (a): A PROFILE OF LARGE BUSES**

Vehicle type	Acquisition Price TShs.	Fare per trip in TShs.	Gross income per month	Expenditure			Summary of expenditures	Net income
				Taxes & salaries	Maintenance	Fuel Cost		
Double Coaster. Operating between Buguruni and Mbagala Rangitatu	19.6 million, second-hand vehicle	Peak hour 150/= Non peak hours 100/=	TShs 45,000/= per day or TShs. 1,350,000/= per month	<b>Taxes &amp; salaries</b> <b>1. TLB:</b> TShs.1250/= per month <b>2. City roads fee:</b> TShs.835/= per month <b>3. Income tax:</b> TShs.25,000/= per month <b>4. Sales tax:</b> TShs.835/= per month <b>5. Salaries:</b> TShs.150,000/= per month	TShs.25,000/= per week or TShs.100,000/= per month	Fuel = TShs.18,200/= per day or TShs.546,000/= per month	TShs.823,920/= per month	TShs.526,080/= per month
<b>TOTAL 1</b>			<b>1350,000/=</b>	<b>177,920/=</b>	<b>100,000/=</b>	<b>546,000/=</b>	<b>823,920/=</b>	<b>526,080/=</b>

Source: Field study, August / September 2001

Note: The net income excludes major maintenance, such as replacement of tyres or the battery

APPENDICES

APPENDIX (b): A PROFILE OF MINIBUSES

Vehicle type	Acquisition price	Fare per trip	Gross income	Expenditure			Summary of expenditures	Net income
				Taxes & salaries	Maintenance	Fuel cost		
Toyota Hiace. Operating between Buguruni-Ubungo	Brand new TShs.6.5 million	Peak hour TShs.150/=	TShs.660,000/= per month	<b>1. TLB:</b> TShs.1,250/= per month <b>2. City roads fee:</b> TShs.835 per month/=	TShs.40,000/= per month	TShs.513,000/= per month	TShs.719,670/= per month	TShs. 90,330/= per month
		Non-peak hours TShs.100/=		<b>3. Income tax:</b> TShs.13,750/= per month <b>4. Sales Tax:</b> TShs.835/= per month <b>5. Salary:</b> TShs. 150,000/=				
TOTAL (TShs.)			810,000/=	166,670/=	40,000/=	513,000/=	719,670/=	90,330/=

Source: Field study, August / September 2001

**APPENDIX (c): PROFILE OF TRUCKS**

Type of vehicle	Acquisition price	Fare per trip	Running costs	Revenue per month	Legal formalities
KIA make 3 tones	TShs.9 .0 Million	Within the settlement: TShs.4000/= To and from the city centre: TShs.6300/= To and from airport: TShs.8000/=	<b>Insurance third party:</b> TSh.35,000/= per year or TShs.3,000/= per month  <b>Income tax:</b> TShs.165,000/= per year or TShs.13,750/= per month  <b>Maintenance/service:</b> Twice per month TShs.50,000/=  <b>Fuel:</b> 25 litres per day @ TShs.520/= equivalent to TShs. 390,000/= per month	Owner driven Total revenue after deduction fuel cost is TShs.15,000/= per day or TShs.450,000/= per month.	<ul style="list-style-type: none"> <li>Registration for insurance</li> <li>Income tax clearance</li> <li>Vehicle inspection</li> <li>Application for TLB from Dar es Salaam Road Transport &amp; Licensing Authority (DRTLA)</li> </ul>
Total			<b>456,750/=</b>	<b>450,000/=</b>	

Source: Field study, August / September, 2001

**Appendix (d):**  
**Maps and photographs**

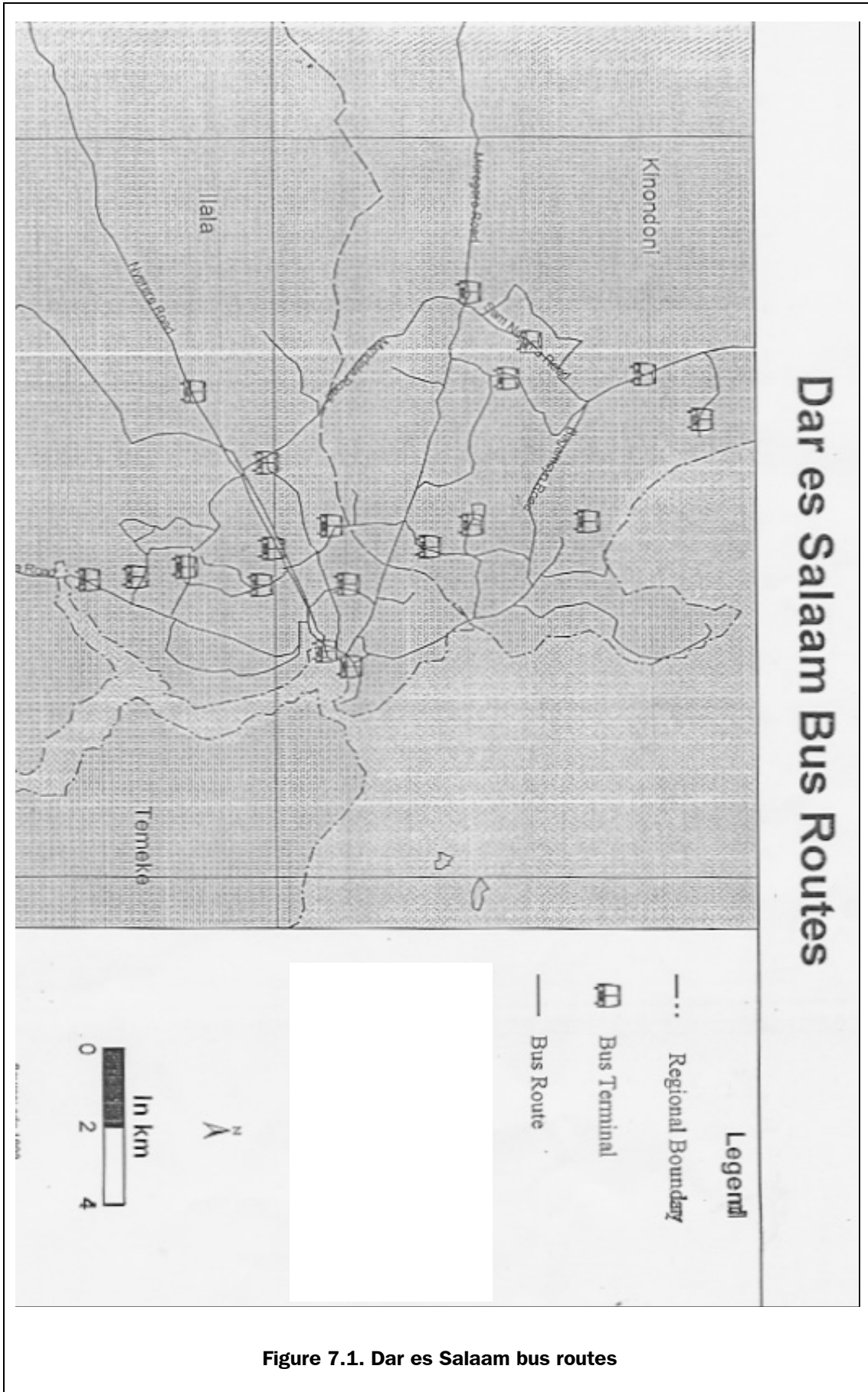


Figure 7.1. Dar es Salaam bus routes



APPENDICES

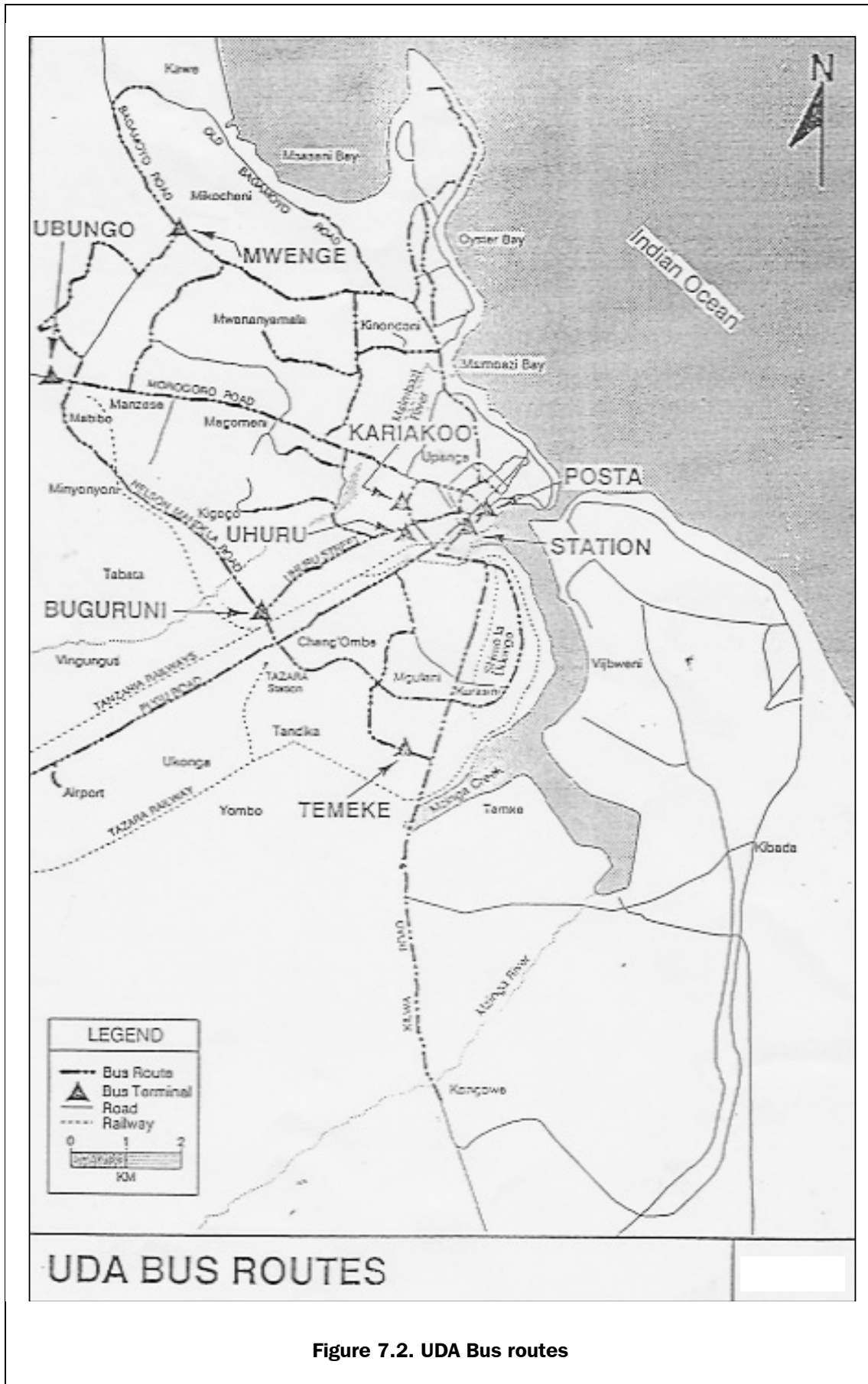
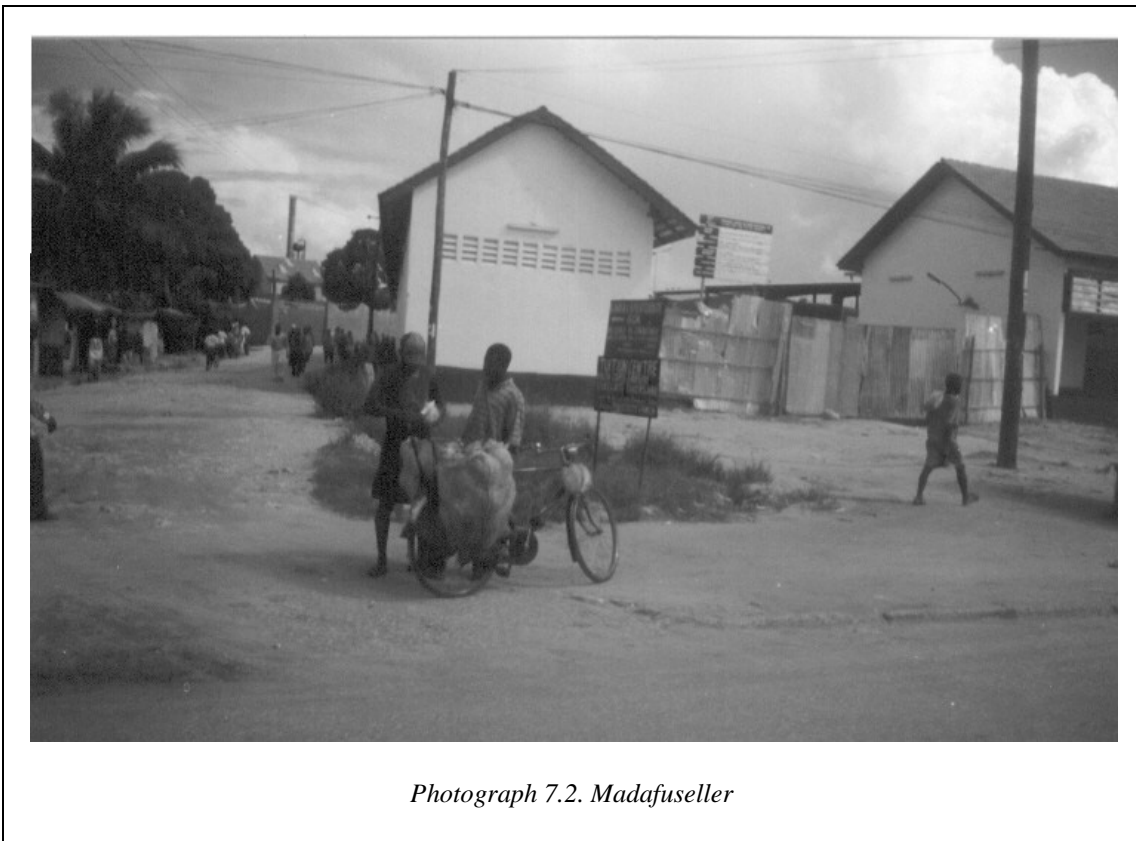
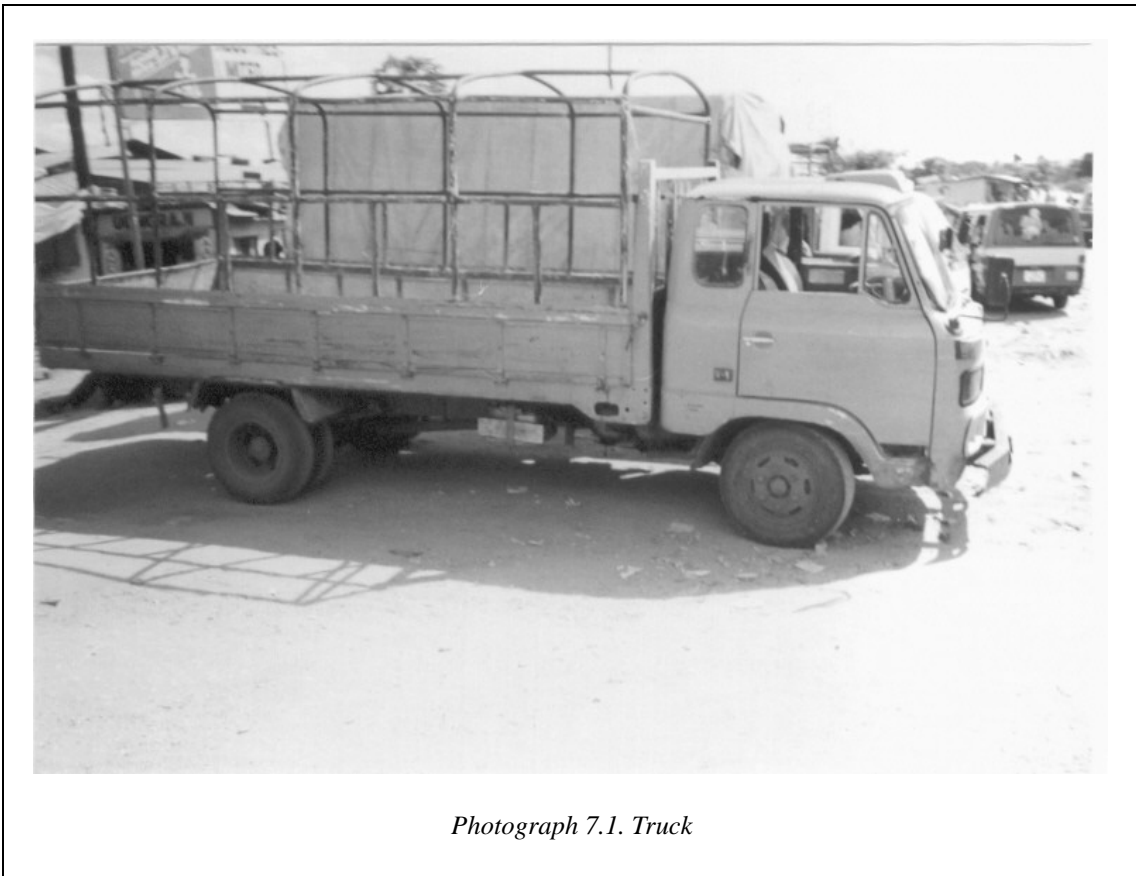


Figure 7.2. UDA Bus routes



APPENDICES





*Photograph 7.3. Medium sized mini bus*



*Photograph 7.4. Medium sized mini bus*

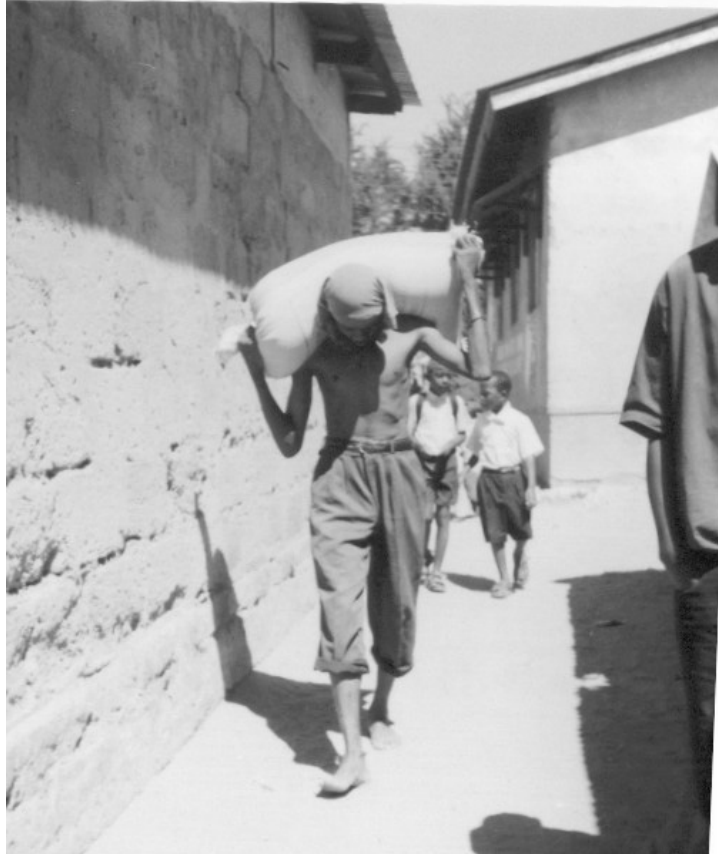
APPENDICES



*Photograph 7.5. Light trucks*



*Photograph 7.6. Taxi*



*Photograph 7.7. Transporting goods on foot*

## References

- JICA, (1994), Study on Dar es Salaam Road Development Plan, Japan International Cooperation Agency Engineering Consultant Co. Ltd., Nippon KOEI Co. Ltd. Japan.
- Kombe W.J., (1995), Formal and Informal Land Management in Tanzania, The Case of Dar es salaam, Spring, University of Dortmund, Dortmund.
- Kombe W.J and Kreibich V., (2001), Formal Land Management in Tanzania, Spring, University of Dortmund, Dortmund.
- Mamuya, I., (1993), Structural Adjustment and the Reform of the Public Sector Control System in Tanzania. Hamburg Institute fur Afrika, Kunde.
- Maunder D.A.C., (1990), The Impact of Bus Regulatory Policy in Five African Cities, Overseas Unit, TRRL Crow Thorne, Berkshire.
- Mwingira, A.C., (1980), Budget Speech for Ministry of Communication and Transport 1980/81, Government Printer, Dar es Salaam, Tanzania.
- National Transport Corporation, (1989), A Review of Urban Passenger Transport in Dar es Salaam, Dar es Salaam.
- National Transport Corporation, (1991), Dar es Salaam City School Buses Project, Dar es Salaam.
- O'Connor, A., (1988), The Rate of Urbanisation in Tanzania in the 1970' in Hood (ed), Tanzania After Nyerere, London & New York Printer Publishers, p 136 - 142.
- Sicard S. V., (1970), The Lutheran Church on the Coast of Tanzania 1887 - 1914, p.199. Dar es Salaam.
- Stren R., (1989), The Administration of Urban Services; Boulder, London & Son Francisco, West view Press, p 37-68.
- UDA, (1995), A Short Report on UDA and its Performance Presented to the Newly Appointed Board of Directors on 22/8/95), Dar es Salaam.
- UDA, (1995), A Short Report on the Performance of UDA, Presented to Dr.Maua, Deputy Minister of Communication and Transport, on the Occasion of Her Visit to UDA), Unpublished Report, Dar es Salaam.
- UDA, (1999), Shirika la Usafiri Dar es Salaam, Company Plan and Budget 1999/2000, Unpublished Report.
- URT, (1974), Exclusive License Granted to Shirika la Usafiri Dar es Salaam to Operate Passenger Services in Dar es Salaam.
- URT, (1973), The Transport Licensing Act, 1973, Government Printers, Dar es Salaam.

URT, (1977), Budget Speech, 1977/78, Government Printers, Dar es Salaam.

URT, (1979) Budget Speech, 1979/80, Government Printers, Dar es Salaam.

URT, (1980), Budget Speech, 19880/81, Government Printers, Dar es Salaam.

URT, (1983), Budget Speech, 1983/84, Government Printers, Dar es Salaam.

URT (1984), Budget Speech, 1984/85, Government Printers, Dar es Salaam.

URT, (2000), Poverty Reduction Strategy Paper (PRSP), Government Printers,  
Dar es Salaam.

***Newspapers***

Daily News, 18th June 1991.

Daily News, 10 March 1992.

Daily News, 28th May 1993.

Daily News, 17th May 1994.

Daily News, 8th July 2000.

Daily News, 24th October 2000.

Daily News, 13th September 2000.