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Users' Perspective on the Quality of Public Transport Services in Dar es Salaam City: A Case of Temeke Municipality Tanzania

Mwamlangala, M. C*[1]., Francis, H. S. and Mwakapango, A.
[1]Institute of Rural Development Planning, P.O. BOX 138-Dodoma.
Email: mmwamlangala@irdp.ac.tz

Abstract: The quality of public transport in urban areas has been a challenging aspect in almost all the developing cities in the world. However, public transport is always intending to meet the demand for its users, operators and owners. The objective of this study was to determine users' perspective on the quality of public transport at Temeke Municipality in Dar es Salaam City. A total sample size of 76 public transport users was selected randomly. Methods adopted were transport users questionnaire and questionnaire guide was employed as the main tool in collection of primary data and checklist for in-depth interview with key informants, FGD and documentary review were also used. Qualitative data were analyzed through content or thematic analysis while quantitative data were analysed using SPSS. Findings revealed that most of the people in the city use public transport. But also, the study reported that the quality of public transport basing on getting to the bus stop, wait, trip, vehicles, and driver and information qualities is not achieved; hence users are dissatisfied with services rendered to them. Conclusively, the study recommends to the ministry of transport and other stakeholders within and outside the country should take serious in planning and implementing future public transport by ensuring all infrastructures are in hand and provide education to all who work in transport system like drivers and conductors to have qualities of customer care. Furthermore, policies, laws and regulations relating to transport systems should be taken serious by authorities in order to ensure safety to all users of public transport.

Key word: *Users' Perspective, Quality, Public Transport Services*

1.0 Introduction

Around the world public urban transportation is the notable challenge in both developed and developing countries (Kiunsi, 2013; Anbarasan, 2017; Shepers *et al.*, 2019). This is because it interlinks with most (if not all) sectors of the urban setting (Musa *et al.*, 2015; Deboosere and El-Geneid, 2018). However, the major challenges of public urban transportation to the users have been associated with globalization, urbanization, fiscal decentralization and economic transition (Chitauka, 2014; Shepers *et al.*, 2019). Furthermore, the growth of the population and density of the buildings in the cities it add difficulties of traffic and plague to endless congestion, grave air pollution, alarming accident rates and lengthy travel time to work (Drakakis-Smith, 2003; Nigro *et al.*, 2019).This can be evidenced from developed by countries like Canada,Australia,14% use public transport,78% use car while 10% use bus and train in Australia (Kikoyo, 2012). The reason is that developed countries during 50 years have run down their public transport now they are trying to reverse the trend because of the demand of the users (Kikoyo, 2012; Pereira, 2019).

Like other countries in Africa, Tanzania urban cities is experiencing the same challenge of public transport service to the users, specifically in fast growing cities like Dar es Salaam, Mwanza, Mbeya and Arusha (Mrema, 2011; Pereira, 2019).This is because the population of many cities

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in Tanzania has grown to the extent that cannot be controlled easily in recent years, and this increase is expected to continue in the foreseeable future .Thus, in addressing this public transport challenges in the country imitative was taken before 1949, when a private British company known as Dar es Salaam Motor Transport Company (DMT) was formed to offer urban public transport services in the city. After Arusha Declaration in 1967, DMT was nationalized and a national parastatal organization called Usafiri Dar es Salaam (UDA) was formed (Kanyama *et al*., 2004; Chengula and Komba, 2017). Due to poor management, UDA's performance started to decline since 1980s. As UDA's performance deteriorated continuously, demand for transport was on increasing rate as population grew. At one point in 1986, UDA's actual need of buses was 250 buses to operate its services but had only 65 buses. This resulted in unmanageable queues at bus terminals (Kanyama *et al*., 2004; Deboosere and El-Geneid, 2018; Pereira, 2019). To reverse this situation, the government, in 2003 enacted a transport policy and also put in place transport regulatory authorities and several institutions to address the transport sub-sector challenges. In order to increase efficiency in the public transport sector, the government established Surface and Marine Transport Regulatory Authority (SUMATRA) to regulate road, marine and railway transport (URT, 2012).

To further improve the quality of public transportation services in Dar es Salaam and the country as a whole, the Government initiated the Bus Rapid Transit (BRT) project for the entire city. The proposed BRT system, branded Dar es Salaam Rapid Transit (DART) will operate on specially-designated infrastructure and is planned to replace the current inefficient and unpredictable DALADALA[1] (JICA, 2008). Reports show that as for 2014 commuter buses operated in Dar es Salaam city were 5,200. Despite the big number of buses, motorcycle and tricycles in the city but traffic problems remain high (Chengula and Kombe, 2017; Deboosere and El-Geneid, 2018; Shepers *et al.*, 2019). However, DALADALA offer transport services to 43% of the city population, 6% use private vehicles and the remaining 51% which is made up of the aged, the poor and people with disabilities has no access to public transport facilities. Again, statistical report shows that about 70% of vehicles registered in Tanzania remains in the growing cities (TRA, 2010, Awad, 2012). This cause urban transportation problem, especially traffic jams which eat up to 20 % of the annual profit of most businesses, Road Traffic Accidents (RTAs) in cities are estimated on average to cause 3400 deaths per annum and about 20000 serious injuries (Nyambacha, 2011; Anbarasan, 2017). For example, fatalities caused by traffic crashes in Dar es Salaam city for the year 2016 was 325 lives an increase of 2.8% compared to the year 2015 (Lwangili, 2016; Nigro *et al.*, 2019). Furthermore, over 50% of car users fatalities die pre-hospitals in the first hour succumb and in the following, four hours at the hospital due to urban transport problems occurring in major cities of Tanzania (Kikoyo, 2012; Chitauka, 2014; Deboosere and El-Geneid, 2018; Nigro *et al.*, 2019).

In spite of the workable national transport policy of 2003 which stipulate the safety of transport system, cost-effective operations and transport development and good environmental for a sustainable transport system still the situation appears to be worsen with time and is not promising to an end, which creates serious debate among the transportation stakeholders, policy makers from government and planners about the causes of urban transportation problems and under what circumstances do the innovative, effective, reliable technique, and methods can be

[1] The term DALADALA in this study meant

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applied in order to solve the prevailing problem in growing cities (World Bank, 2002; Anbarasan, 2017; Nigro *et al.*, 2019). Therefore, the study is interested to assess users' perspective on the quality of public transport services in Dar es salaam, Tanzania.

2.0 Methodology

2.1 Study area and selection criteria

The study was conducted at Temeke Municipality in Dar es Salaam City. This municipality is among the three administrative municipalities in Dar es Salaam city of Tanzania. The study area was purposively selected because Temeke District is very known administrative municipality in Dar es Salaam City Council but claimed to have poor transportation service in comparison to Kinondoni and Ilala Municipalities. This study specifically focused into two routes of Mbagala to Kariakoo via Kilwa road and Mbagala to Ubungo via Mandela road. A sample of 76 commuters was randomly selected for data collection whereby a cross-sectional design was conducted to obtain both quantitative and qualitative data. Some of the qualitative data were generated through in-depth interview using checklist. The study involved in-depth interview with key informants including; two bus drivers, two conductors and one staff from SUMATRA as a representative. The key informants were purposively included in this study so as to get insight understanding of the users' perspective on public transport and the general challenges of public transport. Quantitative data were analyzed using International Business Machines-Statistical Package of Social Science (IBM-SPSS. 20.0) software programme to produce descriptive statistics in terms of frequencies and percentages. Qualitative data were subjected to content analysis to present peoples' opinion on users' perspective on the quality and challenges of public transport in Dar es Salaam City.

3.0 Results and Discussion

3.1 Demographic characteristics of respondents

Results from Table 1 indicate that, more than half of total respondents (67.1%) were males making the majority of the respondents. Most of the respondents involved in this study were in the age range of between 25-45 years making 58%. About 76.3% of the respondents had secondary education while few had primary and none-formal education. Furthermore, marital status of the respondents' shows that majority of them were single that accounted for 65.8%. Results from Table 1 also indicated the occupation of the respondents where majority (43.4%) was employed in the private sector.

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Table 1: Demographic of Respondents (n=76)

Attributes	Frequency	Percent (%)
Sex of respondents		
Male	51	67.1
Female	25	32.9
Age of respondents		
13-20	24	31.6
21-24	8	10.5
25-40	44	57.9
Education level		
none or informal education	2	2.6
Primary	1	1.3
Secondary	58	76.3
Tertiary	15	19.7
Marital status		
Single	50	65.8
Married	24	31.6
Divorced	1	1.3
Widow	1	1.3
Occupation		
Civil servant	8	10.5
Informal activities	10	13.2
Private employed	33	43.4
Others (including students)	25	32.9

3.2 Existing of Public Transport Services in Study

The study was interested to know the existing types of transport in order to know the mode preference of the transport by users. It was found (Table 2) that about 100% of the respondents reported that both DALADALA and Bus/ UDA/ BRT (Plate 1and 2) were highly preferred used daily for their economic purpose comparing to other mode of transport. The results imply that these preferred public transport it might be cheap in cost and also accessible comparing to Tax which is very expensive. The results corroborated with Litman (2016) study in South Africa, identified public transport services include vanpools, buses, trains, ferries. It was similar to Belwal and Belwal (2010) study in Oman, reported that public transport services include buses, subways, rails, trolleys and ferry boats. However, the most commonly used public transport in many of the cities in East Africa including Tanzania is buses comparing to the other (Nigro *et al.*, 2019). Nonetheless, these buses have neck names that vary from country to country for instance, in Kenya they term it as matatu; in Tanzania daladala currently Bajaji, and train particularly at Dar es Salaam City. Generally, study observed that daladala and bajaji as the most existing public transport in the study area.

Table 2: The Existing Types of Public Transport Services

Attributes	Frequency	Percent
Bajaji	76	100.0
DALADALA	76	100.0
Bus/ UDA/ BRT	76	100.0
Taxicab	28	36.8

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Plate 1 Plate 2: Current public transport in study area

3.3 The Use of Public Transport

Also the study was interested to know to what extent the respondents use public transport rather than other type of transport like private transport. The results (Figure 1) indicate that 81.6% are daily commuting using public transport but only 18.4% they use other types of transport like private car in order to access basic needs. The study findings imply that, many respondents cannot afford private transport it, the study probed the reason that it might be due to the low income of the most of the respondents in relation to the economic activities which acts as a source of money.

Response on the use of public transport

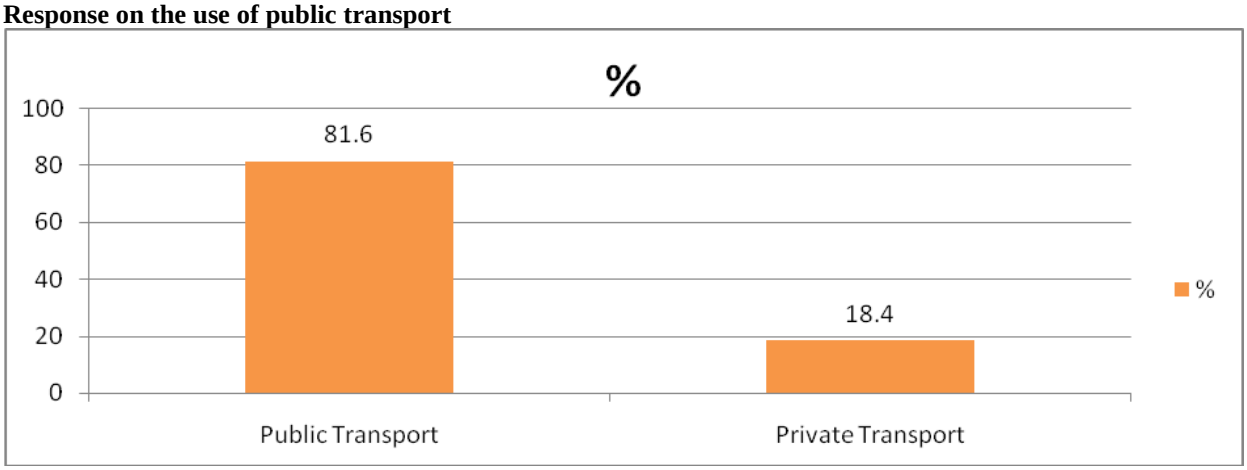


Figure 1: Response on the use of public transport

It was observed during the interview with one of the respondents from the studied area 31 years old, who were quoted by reporting that "*...You know in this big city the challenge is low income to many residents which limit to use taxes and private car in order to access the basic needs from home to town, thus we are proud with the government to bring Bus/UDA/BRT which actually has lower cost payments..*"

In comparison with report by Pendakur (2005) study in Tanzania, noted that 45% of the populations in Dar es Salaam do walk due to limited access to public transport .But, It was opposite to BRT manager and chairperson of buses (DALADALA) both reported "that the government and other stakeholders who are implementing projects of public transport in the country have simplified the life of people to be sophisticated comparing to past decades.." The

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general observation from the study it shows that many urban residents in Dar es Salaam use public transport to access their basic needs to other places within the city. Furthermore, the reason was reported by SUMATRA officer who said that many people they don't own private transport thus they use public transport.

3.4 Factors for the Quality of Public Transport Services

There is no single factor used to determine public transport service quality (Vanhanen and Kurri 2007).Results from content analysis Table 3 showed that, several factors may be considered to determine the quality of services provided. However, quality of services depends on the agreed standards (Stopka et al., 2015). Despite, the standards, it is not simple to define the quality of public transport services rendered. This is because quality is a relative term as different users may have different perception and satisfaction on the services provided (BOTZORIS *et al.,* 2011; Grujičić *et al.*, 2014; Hensher, 2015; Stopka *et al.*,2015; Pereirs, 2019) pointed out that, transport service quality is determined by the increased level of satisfaction of an individual. Satisfaction is more subjective, as different individual person may experience different satisfaction.

Contrary to BOTZORIS *et al*. (2011) and Nigro *et al.* (2019) further argued that, the quality of transport services differs, as "the objectives are not always determined. Again, the results also depend on the user's perception while, the services provision can be considered in a satisfactory level only few of the time". With these view, therefore, the quality of services is arbitrated differently basing on customer's standpoint. Hensher (2015) discussed comprehensively factors for public transport quality services. The most factors discussed are presented in Table 3.

Table 3: Response on factors for the quality of public transport services

S/n	Factors	Users perceptions
1	getting to the bus stop	Ease, safe, time(distance), knowing where the bus stop
2	Wait quality	Wait time at stop, punctuality of bus wait comfort, wait safety
3	Trip quality	Time to board a bus, time to get a seat, moving to a seat, travel time and trip cost
4	Vehicle quality	Cleanness, comfort of seats, temperature control, noise, safety, modernity, ease of use for those with disability
5	Driver quality	Appearance-hopefulness
6	Information quality	Pre-trip information

This study also used Hensher factors to determine user's perceptions on the quality of public transport services provide in Dar es Salaam city. Thus, the above six factors were looked at, such as, getting to the bus stop (if convenience) and it satisfied the need or spoiled the users 'quality of public transport services; wait and trip qualityand how it affects the public transport quality among users, if vehicle qualityand driver quality was a challenge of the quality of public transport services or not; and finally, if communication qualitywas could satisfy the users desire. Analysis in Table 4 indicates the views of the respondent on how they perceived the quality of public transport services at Dar es Salaam city.

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Table 4: Perception on the quality of public transport

Variable	Response	Frequency	Percent
Getting to the bus	Highly satisfied	0	0
	Satisfied	26	34.2
	Neutral	2	2.6
	Less satisfied	5	6.6
	Not satisfied	43	56.6
Wait quality	Highly satisfied	0	0
	Satisfied	10	13.2
	Neutral	12	15.8
	Less satisfied	28	36.8
	Not satisfied	26	34.2
Trip quality	Highly satisfied	1	1.3
	Satisfied	18	23.7
	Neutral	3	3.9
	Less satisfied	12	15.8
	Not satisfied	42	55.3
Vehicle quality	Highly satisfied	0	0
	Satisfied	20	26.3
	Neutral	15	19.7
	Less satisfied	33	43.4
	Not satisfied	8	10.5
Driver quality	Highly satisfied	3	3.9
	Satisfied	4	5.3
	Neutral	7	9.2
	Less satisfied	38	50
	Not satisfied	24	31.6
Information quality	Highly satisfied	4	5.3
	Satisfied	33	43.4
	Neutral	32	42.1
	Less satisfied	4	5.3
	Not satisfied	3	3.9

3.5 Getting to the Bus

Furthermore, Users were asked if getting to the bus stop was convenient or not. Findings (Table 3) with respect to convenience showed that almost 56.6% of the respondents were not satisfied with process of getting to the bus stop (see, Plates 3). The reason given was that sometimes bus/daladala come while late at the bus stop, during peak hours due to traffic road congestions (Plate 4), some of the buses do not use the appropriate stand, thus one has to move sometimes with no direction. Others (34.2%) of customers were satisfied, and only (2.6%) were neutral on getting to the bus stop quality of the transport service. A study by Zeithaml *et al*. (2006) and Pereira (2019)indicate that conveniences is a key way in getting proper service because it is creating easier, with which a customer is able to use a particular service. The more convenient the service to the users, the higher the level of quality of service and vice versa.

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Plate 3: Shows the way people get to the bus at Dar es Salaam City



Plate 4: Traffic road congestion in Dar es saalam

3.6 Wait time and trip quality

Furthermore, the study noted that wait time as well as trip quality seem not to meet the expectation of public transport users. This was because of the results (Table 3) showed that 34.2% and 55.3% respectively, are less or not satisfied with services rendered. This was noted following the complains given by some of the respondents. For example, respondent A said that,

"Most of Daladala do use to diverge their normal routes at the expenses of the users."

Respondent B said that*, "Services are not at all pleasing as there is traffic jam during peak hours which make us delay in most of activities undertaken in this city."*

The results findings correspond to Chengula and Kombe, (2017) study in Tanzania, Dar es salaam found that Daladala is a chaos to most users of the city because are always deviating the root which cause them to spent more time at stops.This argument was supported by Awad (2012) reported that users are in trouble with Daladala in most of the countries because driver are not serious following regulations during their work which affect most of the users in their cities. Generally, it was observed that many users of the public transport are being affected by wait time at the stops.

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3.7 Vehicle Quality and Driver Quality

Vehicle quality and driving quality were among aspects included in the assessment on how users were satisfied with the quality of services rendered. Findings on vehicle quality shows that there is less satisfaction by 43.4%; as most of them are not in a good condition and lack routine maintenance as indicated (Table 3). Driving quality also was assessed; the results show that 50% of the respondents were less satisfied with poor driving of drivers with bad language. Majority complained that poor maintenance of vehicles led to breakdowns and inconvenience to customers. In the study by Kyessi (2006); Chengula and Kombe, (2017) and Shepers *et al.* (2019) revealed that apart from bad language and dirtiness of bus led to misunderstanding and therefore, resulting in bad relationship between bus conductors and passengers which results to discomfort of the users toward the public transport.

According to an interview carried out with Daladala conductors, it was revealed that conductors recruited by drivers accounted to 90% while those recruited by owners were 10%. This implies that Daladala owners have very minimal rapport (relationship) with conductors thereby reflecting control by the drivers. The owners on the other hand have no knowledge about the competence of the conductors. Furthermore, interviews were carried out with Daladala drivers, it showed most of them lack driving skills which are very essential in reduction of traffic accidents and secure commuters' safety. This was a drawback in improving of quality of service. Also the study during interview with SUMATRA officer reported that, the agency knows that there is poor quality of service offered in the transport sector in Tanzania.

During the interview he stated the problems associated with poor quality of public transport as follows: "Accessibility is not easy for everyone, especially people with disabilities as there is no provision available for them within the transport system. Affordability of fares, SUMATRA sets price caps in order for commuters to afford the transportation costs. Availability of services is a big hindrance as there is no common ground since the sector is individually owned and this results in to poor service quality delivery because sometimes is difficult to monitor them all the time," . Generally, the study noted that quality of the vehicles and drivers were not satisfied by most of the users of public transport.

3.8 Communication Quality

Unlike other aspects on public transport service quality, communication quality was observed to have no much problem with customers. Results indicate that 43.4% of the respondents were satisfied with communication services like in each bus stop customers could be informed. Apart from that were also informed the destination of the bus. Again 42.1 % were neutral on communication service while few 3.9% were not satisfied with the quality of communication services. Some of the agent dealing with transport issues declared that public transport services are not good simply because transport services and operation is left to the hand of individuals. According to the interview with government official noted that SUMATRA are aware of the poor quality of services. SUMATRA remains as the national regulatory authority that oversees both land transportation services as well as marine transportation. During the discussion with Official A, said that, "Accessibility is not easy for everyone, especially people with disabilities as there is no provision available for them within the transport system.

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Furthermore, affordability of fares, SUMATRA sets price caps in order for commuters to afford the transportation costs. Availability of services is a big hindrance as there is no common ground since the sector is individually owned and this results in to poor service quality delivery because sometimes is difficult to monitor them all the time" Official A had this opinion concerned provision of public transport services: there is a need for introduction of very few companies to run Daladala business in Dar es Salaam like DART deed in BRT system, whereby every company should own not less than 150 Daladala of high capacity and quality.

3.9 Factors Considered by Users in Selecting Quality of Public Transport Services

Furthermore, quality of roads has a paramount effect on delivery of quality service because good road infrastructure determines the level of transport quality and accessibility in the city. Thus the study was interested to ask obstacles hindered users preferences of the public transport. Results (Table 5) indicates that about 96.1% of the commuters' preference reported that poor infrastructures hinder the quality of the road while 93.4% were claimed that they are not satisfied with conductors' abusive language, poor hygiene conditions of the buses and filthiness of crew uniforms they said poor customer service by bus conductors also hinder their preferences in quality of public transport services. The results was in line with Vanhanen, (2007) and Shepers *et al.*(2019) argued that, the design of most roads does not match with rapid increases in traffic volume and other road related problems include inadequate parking spaces; illegal parking at the curbside and parking spaces not marked, lack of maintenance and room for future expansion; lack of modern bus terminals.

Table 5: Obstacles hinder user preference in quality of public transport services

Attributes	Frequency	Percent (%)
Poor customer service by bus conductors	71	93.4
Poor remuneration for bus conductors and drivers	26	34.2
Poor maintenance of vehicles	69	90.8
Poor driving behavior	65	85.5
Poor infrastructure	73	96.1
Poor management of public transport companies	24	31.6

4.0 Conclusion and Recommendations

The study concluded that most of the majorities in Temeke were not satisfied with the quality of public transport and services render by conductors and drivers. The study recommends to ministry of transport and other agencies like SUMATRA and institutions should ensure close and regularity management on the public transport service through either fully own the public transport sector or enter into partnership with a private company whereby the government will have majority shares, likely they do introduce on UDA services and BRT rather than the public transport being privately owned creates challenges on quality service to have uniformity of services. This will result in efficient transport services as the quality of public vehicles will be monitored regularly.

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