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Thesis

Title: The effects of institutional framework on urban public transport
service provision in Dar es Salaam - Tanzania

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Title

The effects of Institutional Framework on Urban Public Transport Service
Provision in Dar es Salaam - Tanzania

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Summary

Transport is a universal sector and a key enabler in an urban context. It facilitates mobility and accessibility to different needs with affordability being a vital element for transportation to be termed sustainable.

In Tanzania, the conventional modes of transport include roads, rails, air, water, and pipeline. In the urban context, the dominant mode is road transport which has been facing many challenges over many years.

The prevailing challenges of urban public transport, specifically inadequate provision of services, is mainly contributed by the nature and institutional set up of the sector. Institutional factors claimed of being the reason for the persistence of challenges are mostly related to organization structure and regulatory frameworks. As highlighted by different researchers, lack of coordination and cooperation among stakeholders; intersections, contradiction and overlapping of institutional responsibilities; and inadequate enforcement of regulations are key factors. Others include lack of accountability and transparency, unclearly defined objectives, and insufficient financial resources.

Measures to intervene have been implemented in steps on the supply side by increasing road capacity and main junction together with the adaption of BRT systems. However, due to rapid changes in cities, the measures are still inadequate because of delays in planning and decision making resulting in slow paces in intervention implementation.

Passengers transport issues in Dar es Salaam involves different stakeholder institutions despite the ineffectiveness of the urban public services provided by the sector. It is, therefore, necessary to study the current Institutional framework for the urban public transport and how it affects the provision of services.

This study aimed at explaining the current institutional framework for urban public transport and how it affects service provision. The research question was "*How does the Institutional Framework affect the provision of urban public transport services in Dar es Salaam?*" The sub-questions were as follows: (1) what is the present Institutional framework structure for urban public transport service provision? (2) How does the organization framework affect urban public transport service provision? (3) How does the regulatory framework affect urban public transport service provision? And (4) which additional factors contribute to the existing challenges in urban public transport service provision?

This study was explanatory and adopted a case study strategy. A qualitative method through semi-structured interviews was used for primary data collection. For triangulation purpose, secondary data and field observations were used.

Based on the general findings, the Institutional framework was revealed to strongly affect urban public transport service provision both through the Organization structure framework and the legislative (regulatory) framework. The organization structure framework was revealed to affect Mass transit system and infrastructure in terms of availability and reliability while the regulatory framework strongly affects the financing and pricing as well as the operations in terms of fare and safety and security assurance. Additional factors revealed to contribute to existing challenges include political interference and inadequate human and financial resources.

The study findings have discovered some suggestions based on the organization structure design, policy, regulation human and financial resources as well as political interference. It recommends for consideration of institutional framework reform focusing on organization structure set up and strengthening the regulatory framework by establishment of strategic policy for urban public

transport. With an autonomous body having clear defined performance goals accountable for control of management and operations in provision of services other factors contributing to existing challenges will be overcome thus improving the provision of services. The study recommends for further studies on other Institutional Framework components; the Institutions (government tiers) and administrative (structure) frameworks as well as exogenous factors for more insight on how and to what extent they affect provision of services.

Keywords

Institutional framework, organization structure framework, regulatory framework, urban public transport, provision of services

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Abbreviations

BRT	Bus Rapid Transit
DARCOBOA	Dar es Salaam Commuter Bus Owners' Association
DART	Dar es Salaam Rapid Transit Agency
DCC	Dar es Salaam City Council
DSM	Dar es Salaam
DUTA	Dar es Salaam Urban Public Transport Authority
GHG	Green House Gases
IHS	Institute for Housing and Urban Development
JICA	Japan International Cooperation Agency
MDG	Millenium Development Goals
MOFP	Ministry of Finance and Planning
MoHA	Ministry of Home Affairs
MOWTC	Ministry of Works, Transport, and Communication
NBS	National Bureau of Statistics
PO-RALG	President's Office - Regional Administration and Local Government
PPP	Public-Private Partnership
RFB	Roads Fund Board
RS	Regional Secretary
SUMATRA	Surface and Marine Transport Regulatory Authority
TANROADS	Tanzania National Roads Agency
TARURA	Tanzania Rural Roads Agency
UDA - RT	Usafiri Dar es Salaam - Rapid Transit
UITP	Union Internationale des Transports Public
UNDP	United Nations Development Programme
UN	United Nations
UN-Habitats	United Nations Habitats
URT	United Republic of Tanzania

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Chapter 1: Introduction

The chapter presents a research overview. It incorporates the background established from a preliminary review of the literature. The problem statement and research objective are highlighted. It further, delineates the main and sub-question(s) of the research, the study significance both socially and scientifically or academically and lastly but not least, the scope as well as limitations of the study.

1.1 Background

Transport is a universal sector that highly contributes to the country's economic growth and development. It is a critical enabler in an urban context that facilitates mobility and accessibility to different needs with affordability being an essential element for transport to be termed sustainable (Finn, 2012).

The term sustainable development requires balancing the three essential elements namely social, economic and environmental development. Achieving sustainability has been a challenge due to irreparable destructions to human environment from the world where more attention is on economic growth ignoring other elements. In the sustainability context, transportation is unavoidable. However, the transport sector contributes to environmental destruction through greenhouse gas emission (GHG). It is estimated to add about 13 percent of GHG emissions and 23 percent of CO₂ emissions globally which is anticipated to increase to 57 percent by 2030 (Bongardt, Breithaupt, et al., 2010). It is a significant challenge that results from the persisting problem of congestion in the road transport especially in cities and urban areas faced by rapid urbanization, increased population, and motorization.

Rapid urbanization, in the developing process history of a good number of low to middle income nations is a sound characteristic. A problem of population increase has faced the developing world, specifically African cities during the past two decades which is anticipated to further increase, with about 55% of the total inhabitants in urban areas by 2020. This tremendous change in towns creates challenges to deal with increased demand in the provision of transport services. These challenges result from the inadequacy and insufficiency of existing infrastructure provided in most cities to meet the growing demand. Bad enough, infrastructure development plans in most cases do not reflect rapid urbanization as well as urban population increase. Therefore, this generates inefficiency in provision of essential services including transportation as a particularly pertinent example (World Bank, 2018, UITP, 2010).

Rapid urbanization in most African cities resulted from the shift regime of state-controlled to market-oriented economies. This led in high spatial expansion and population growth rates thus causing high congestion levels in most cases. Also, the notable increase of motorization as a result of population and economic growth is deemed to affect accessibility and mobility in most cities negatively. It is due to the fact that demand of transport facilities is far much higher than supply capacity caused by inadequate planning and maintenance (Melbye, Møller-Jensen, et al., 2015, Ka'bange, Mfinanga, et al., 2014). However, Meakin (2004) and Bruun, Mistro, et al.,(2016) writing about urban transport institutions in the developing world and public transport in African cities (Sub-Saharan) respectively, stipulate that, due to rapid urbanization public transport infrastructures and services experience excessive pressure. This cause increased traffic-related problems of which the result is a reduced quality of the urban public transport system, therefore, forcing users to shift to private vehicles.

More than two decades ago, many cities worldwide adopted a shift from government ownership and management of public transport services to private ownership and operations of transport systems. This resulted in declining and diminishing of formal scheduled public

transport related services with an increased dominance by informal public transport systems. The shift to private operations was stimulated by an inadequacy in financial and human resources which would be useful for tackling many challenges facing the sector as mentioned above. This consequently seeks for the need to revisit the framework for regulations to ensure proper management and provision of the required efficient and effective services (UITP, 2010, Armstrong-Wright, 1993). Additionally, Bruun, Mistro, et al.,(2016) advocates that service provision or urban public transport in urban areas is at a certain extent illegal with poor regulation enforcement.

Urban sprawl, another phenomenon in which urban cities' limits of free expression cause difficulties in planning. Despite the problems, provision of adequate public transport system is essential for enhancing accessibility and mobility. Unfortunately, assurance for provision of public transport services that meet sustainability criteria is quite tricky because of the complexity of institutional arrangements. Achievement of public transport development objectives demands to take into account the involvement of political institutions. Also, other stakeholders in the sector should be involved to precisely set roles and responsibilities on coordination mechanisms, financing issues, and operations for different transport services (Sampaio, Neto, et al., 2008, Sampaio, Neto, et al., 2008). The institutional arrangements, however, differs country by country and state by state depending on the cultural and political set up and other related factors (Ackoff, 2015, P.Vii).

The inadequacy of institutional coordination and lack of expertise especially in developing countries is among challenges in the provision of urban transport services (Gwilliam, 2002). Also, Machinej and Zwoliński (2016) stipulate that key problems in planning for urban transport include inadequacy on institutional cooperation; poor involvement and participation of stakeholders and citizens, recognition and implementation of policy interventions; and monitoring and evaluation of plans and strategies which need innovative actions for a sustainable urban transport sector.

To overcome challenges of transport, there are suggestions that several innovative measures must be taken including technological development, improvement, and reforms of the institutional framework (Bağ, 2016). Arguments have been raised that, the more difficult decision-making situation is, the more questionable it becomes on the extent to which improvement or changes in institutions can have impacts. Moreover, reforms in organizations and responsibilities are sought to negatively affect the policy implementation due to new coordination and powers created, but the justification of advantages of such institutional changes can clear the doubts (Marsden and May, 2006). It is stated that "more complex organizational arrangements might be less effective if the ability to achieve change is dependent on the alignment of several common agendas" (ibid, P.772).

Furthermore, Ackoff (2015, P.Vii) argues that *"Successful problem solving requires finding the right solution to the right problem. We fail more often because we solve the wrong problem than because we get the wrong solution to the right problem"*.

Even though there is no standard size for all, among structures existing for institutional coordination, one structure suitable for a city or country can be adopted for enhancement of proper management and planning of the urban transport service provisions. For example, Madrid Transport Consortium, the structure adopted for the institutional framework was the establishment of independent legal authority (Gwilliam, 2002). Other cities that have successfully undergone transport institutional framework reforms by establishing the lead institution include Delhi, Vancouver, Lagos, Ahmadabad, Pereira, Paris, Seoul, Santiago, and Bangalore (Kumar and Agarwal, 2013).

In this study, the institutional framework will be assessed in its weakness and strength in provision of urban public transport services.

1.2 Problem Statement

Tanzania serves as a gateway for its neighboring countries including DR Congo, Zambia, Burundi, Rwanda, Malawi, and Uganda because they access the international markets through transport connectivity. It is the nation's strategy to have a sustainable infrastructure and transport system for its economic development. The country's modes of transport include roads, rails, air, water, and pipeline. In the urban context, the dominant mode is road transport. However, the sector is facing many challenges which have prevailed over many years.

The prevailing challenges of urban public transport, specifically inadequate provision of services, is mainly contributed by the nature and institutional set up of the sector (Ngowi, 2005). The institutional factors that are claimed as being the reason for the persistence of urban transport challenges are mainly related to organization structure and regulatory frameworks. As highlighted by different researchers, lack of coordination and cooperation among stakeholders; intersections, contradiction and overlapping of institutional responsibilities; and inadequate enforcement of regulations are key factors. Others include lack of accountability and transparency, unclearly defined objectives and insufficient financial resources (Ngowi, 2005, URT, 2003, Kanyama, Kanyama-Carlsson, et al., 2004, Msigwa, 2013, Kanyama, 2016).

Other main challenges identified by different researchers include deterioration of infrastructure, environmental and noise pollution, safety, vehicular growth, inadequate parking space and poor traffic management (Msigwa, 2013, AfDB, 2013, Massami and Myamba, 2016). Massami and Myamba (2016) in their study to rank challenges encountered in public transportation, ranked significant problems in public transport with inadequate public transport services ranked second preceded by the inadequate infrastructure. Massami, Mnyamba, et al.,(2016) also, advocates that public transport in Dar es Salaam still requires improvement.

As the tendency for developing cities, these problems are intervened in steps on the supply side by increasing road capacity and adaption of mass transit systems (Kumar and Agarwal, 2013, Rahman and Abdullah, 2016). However, due to rapid changes in cities by the time they finish construction they become inadequate or insufficient. This is because of delays in planning and decision making resulting in slow paces in intervention implementation (Kanyama, 2016). For Tanzania measures explicitly taken include expansion of major roads, improvement of intersections and use of Bus Rapid Transit (BRT) system (URT, 2003, Kiunsi, 2013). Despite several measures taken to improve the public transport services, the challenges persist.

The road transport mode for Dar es Salaam, specifically urban public transport is comprised of different public transport modes including Bus Rapid Transit System (BRT), medium bus (*Daladala*¹), hired taxi, three-wheeler motorcycle (*bajajis*²), and motorcycles (*bodaboda*³). The dominant mode of urban public transport is the *daladala* which provides services for

¹ *Daladala* refers to paratransit modes of public transport privately owned buses by individual or companies which neither adhere to specific service durations nor have fixed schedules.

² *Bajajis* refers to three-wheeler motor cycles privately owned public transport with a carrying capacity of three people. It is highly costly per individual than the *daladala*.

³ *Bodaboda* refers to motorcycles privately owned providing public transport, the carrying capacity is restricted to one passenger only.

about 1.4million passengers per day equivalent to 43 percent of commuter trips while the rest covers 6percent of commuter trips (Ka'bange, Mfinanga, et al., 2014).

The Dar es Salaam public transport management is through a network of different stakeholder institutions despite the ineffectiveness of the urban public services provided by the sector (URT, 2003). It is, therefore, necessary to study the current Institutional framework for the urban public transport and how it affects the provision of services.

1.3 Research Objective

This study aims at explaining the current institutional framework for urban public transport and how it affects the provision of urban public transport services.

1.4 Research questions

1.4.1 Main Research question

How does the Institutional Framework affect urban public transport services provision in Dar es Salaam?

1.4.2 Research Subquestions

- i. What is the present Institutional framework structure for the urban public transport service provision?
- ii. How does the organization structure framework affect the urban public transport service provision?
- iii. How does the regulatory framework affect the urban public transport services provision?
- iv. Which additional factors contribute to the existing challenges in urban public transport service provision?

1.5 Relevance of the Research

1.5.1 Scientific (Theoretical) Relevance

Dar es Salaam being the economic hub for Tanzania needs innovative measures for improvement of the transport sector. The sector faces a lot of challenges which in turn affect its economic productivity and liveability. Most studies on urban transport have identified several challenges as well as causal factors. Previous studies have revealed that the institutional framework is one of the causal factor for existing challenges. However, studies have not revealed which specific institutional components affect which aspects in service provision(URT, 2003, Msigwa, 2013, Kanyama, 2016). Moreover, most interventions to alleviate the challenges are based on the supply side (Kumar and Agarwal, 2013, Rahman and Abdullah, 2016). Because challenges still exist, a need for interventions on the supply together with the demand side is inevitable. An in-depth investigation was performed on the organization and regulatory framework and how they affect the provision of services. This will contribute to the understanding of researchers, stakeholders and decision-makers hence giving a clear light on how best to improve the existing situation.

1.5.2 Societal Relevance

However, to fulfil this, it needs an effective transport system that can only be achieved by having a clear institutional framework as stipulated by different researchers (Gwilliam, 2002, Kanyama, 2016). Therefore, examining the Institutional framework and how it affects urban transport service provision will provide the way forward on how to better strengthen the sector and improve performance. The research will also add knowledge to planners, urban

managers, decision makers and researchers at large on the impact of institution framework on the urban transport.

1.6 Scope and Limitations of the Study

The study was intended at explaining the Institutional framework and its effects on the urban public transport service provision. It was narrowed to the organization structure and regulatory frameworks. This study case area was Tanzania, specifically in Dar es Salaam city. The city was chosen due to its characteristics as a commercial city of the country, highly populated with rapid urbanization. The City faces many challenges with regards to transport and therefore seemed very relevant for this study.

The study focused on the urban public transport. Because of time constraints and financial limitations, however, it was limited to two primary public transport modes among many currently used in the city. The modes focused on including the BRT system and Paratransit. In this research, the paratransit mode of transport considered is *Daladala only*. Also, the Tanzanian Government offices have been shifted to Dodoma, the new capital city of the country, so some of the interviewees were already in their new location. This affected the fieldwork schedule.

The study based on literature review together with field data/information collected by a semi-structured interview method with relevant stakeholders involved in urban public transport together with secondary data gathered by review of relevant documents. The interviewees include respondents in the Government Institutions and Agencies, Operators, and researchers.

Chapter 2: Literature Review

2.1 Introduction

Under a literature review, discussions include concepts and theories used as a guide for this research. The leading theories discussed were rooted on main study concepts which are Institutional framework together with Urban Public Transport Service Provision. Based on these concepts and relevant argument, a conceptual framework was formulated as a foundation on which a conclusion is laid down concerning effects of Institutional framework on provision of public transport services. This chapter, firstly, discussed public transport looking at the urban public transport systems, modes, and service provision. Secondly, it explained the Institutional Framework and its components and thirdly and lastly the conceptual framework was presented.

2.2 Public Transport

Stough and Rietveld (2006) define transportation as the mobility of people and goods via different modes like railways, airways, waterways, and roads. On the other hand, Beirão and Sarsfield - Cabral (2007); and Belscombe, Mackett, et al., (2004) explain that the terms "transport" and "Transit" are used interchangeably in public transport studies in different countries both referring to provision of transport services by trains, coaches, trams, ferries, buses, taxis and hired private car for public usage. Also, Walker (2012, P.13) in defining public transport states that it “consists of regularly scheduled vehicle trips, open to all paying passengers, with the capacity to carry multiple passengers whose trips may have different origins, destination, and purposes.”

Furthermore, Walker (2012) elaborates that 'public' in the given definition means being open to all public and 'Transit' reflects the ability of a single vehicle to carry a large number of passengers at once with a defined origin, trip purpose, and destination. This being the case, taxis, school buses, carpools and vanpools, and family van are not considered in this given meaning. Its broad definition further defines public transport as a general passenger transport which involves a variety of different systems and modes. This includes rail transit (metro, light, and suburban), buses (medium and large), taxis, boats and Bus Rapid Transit systems including informal public transport (paratransit) (Ka'bange, Mfinanga, et al., 2014). This definition was adopted in this research, but only BRT systems and paratransit were involved.

Rahman and Abdullah (2016) explain that public transport becomes the major problem among many facing urban areas due to complexity caused by poor management of transport and land use. They further argue that a decent system can be achieved when the public transport system is integrated whereby all modes of public transport are interconnected with defined exchanges and timetables corresponding within the city. Belscombe, Mackett, et al., (2004) also, advocates that public transport can have an enormous impact in solving urban problems associated with the sector if an effective, significant shift of private cars to public transport could be successful. This objective is not readily achievable unless there is a strong political will and common understanding of the government by all stakeholders and actors responsible. On the other hand, Korpela (2002), writing on strategies for public transport as an attractive alternative to achieve the European Union objective of sustainable transport system stipulates that cooperation among key stakeholders is crucial to facilitate such achievements. This research was focused on urban public transport service provision as a key driver for development and sustainability of cities.

2.2.1 Urban Public Transport Systems

In urban centers and cities transport is a key to growth because it facilitates access to basic needs and all potential services. Due to its importance, in developing countries, for example, enhanced accessibility and mobility for the vulnerable groups and the poor is a priority and has been earmarked as a benchmark for Millennium Development Goals (MDGs) (Pardo, 2012).

Takyi, Poku, et al., (2013, P.226) define urban transportation as "the system of transportation that provides access and mobility for people and goods within cities." The system's fundamentals mentioned include pedestrians and cyclists as non motorized; passenger transit; as well as cargo or goods. It is further stipulated that, for sustainable economic growth, the effective transportation system is a crucial factor in the modern economies due to its role of enhancing accessibility to jobs, markets subject to demand, drives supply chain and logistics and facilitate domestic and international trade (ibid). However, Pardo (2012) argues that, even though transport promotes economic growth, if inadequately managed, it can retard the growth and lead to inadequate delivery of essential social services. Therefore, it is crucial for the economic, social, environmental and cultural elements of cities to be considered in the management of the city to avoid physical breaks of communities' fabric thus affecting their life qualities. This will also activate developments towards sustainable urban public transport.

So far there is no specific, clear universal or scientific definition of sustainability and sustainable transportation. Litman (2016) *defines sustainability* generally as a balance of three pillars that is social, economic and environmental factors, including the other non-market, indirect and long-term impacts. Moreover, a broader definition for the term sustainable transportation was stipulated as a "satisfying current transportation and mobility needs without compromising the ability of future generations to meet their own needs"(Zito and Salvo, 2011, P.180). However, Hull (2008) illustrates that the definition of sustainable transport and its vision and how the two differ depends on the levels of integration and coordination in a planning practice perspective. Therefore, this paradigm of sustainability should importantly be managed in coordination among all stakeholders and actors for common understanding of the agenda and proper implementation.

For sustainable urban transport, many kinds of literature encourage the application of the Avoid, Shift, and Improve framework (Bongardt, Breithaupt, et al., 2010). These models are difficultly implemented in the industrialized societies where planning is focused more on mobility. Also, it can be hard in developing countries where population growth is increasingly high with rapid urbanization. To encourage modal shift, effective demand management is essential, whereby the available spaces at its limited capacity is appropriately planned for different uses at different times to improve accessibility for people at the same time providing an opportunity for green spaces and public transport service provision (Bannister, 2008). However, these modal shift measures and strategies must be implemented together with the involvement of all stakeholders for their clear understanding and participation that will result in the proper use of the space available (Bannister and Marshall, 1999).

In an industrialized era, cities have been prioritizing and maximizing the movement of people in planning for cities. This paradigm does not seem to be sustainable because cities are for places and people, therefore, should focus on social aspects rather than being individualistic (Cervero, 2013). The implementation of these models could be successfully applied if cities have strong and well-coordinated systems of planning with the integrated participation of all actors, stakeholders, and citizens (Wegener, 2009).

2.2.2 Urban Public Transport Modes

Globally, in urban areas and hinterlands, public transport modes like Metro, tram, commuter rail as well as bus systems are commonly used in providing passenger transport services (Finn, 2012). Modes of public transport such as mass rapid transit systems facilitate movements of large number of passengers at once thus reducing congestion and promote efficiency (Birago, Opoku, et al., 2017). Also, public transport that meets factors such as service coverage, reliability, travel time, comfort and safety and park and ride facilities can reduce the use of private vehicles (Rahman and Abdullah, 2016). However, these convenience factors cannot be relied on. The mode choice as a traveler's preference depends among other factors, on the infrastructure and economic conditions influenced by the policy, planning and financial decisions (Wener and Evans, 2011). Principally, no transport mode should be dominant over the other, but rather their determination should depend on the distance, type, volume, and purpose of transport demand and benefits under certain circumstances (Shelley, Bernard Chatelin, et al., 2016). Therefore, the focus should be on transport modes integration as long as it facilitates the provision of efficient and affordable transport services.

In most developing countries, private cars are increasing. This is perceived to have been promoted by measures taken to alleviate problems of transport especially congestion by widening the capacity of the road. It is a lesson for decision makers to employ an integrated approach and stakeholder involvement in management and planning for public transport before the implementation of any plans (Rahman and Abdullah, 2016).

Due to increased problems facing the urban transport, innovations for alternative ways of public transport to reduce usage of private cars has resulted in improvement by employing BRT systems and urban light rails. In most developing countries buses as modes of transport are still dominant and preferable to users due to their affordability, flexibility, and accessibility (Cervero, 2013). According to the study by the European Research Advisory Council, 60% of the total urban public transport in Europe are buses (ERTRAC, 2011 in (Birago, Opoku, et al., 2017). This study focused on the two modes of urban public transport systems which are BRT system and *Daladala* in Dar es Salaam - Tanzania.

2.2.2.1 BRT System mode of Transport

i) Definition and Characteristics of BRT Systems

BRT system is currently operating in most cities of developing and developed economies worldwide. Different researchers define BRT systems in different ways. Cervero (2013) defines BRT systems as bus-based systems with a large capacity that resembles urban rail systems regarding their passenger carrying capacity and high performing characteristics. They are also cheap compared to the urban rail and more or less expensive to standard bus systems. BRT systems can be classified as BRT lite (Bus Rapid System-BRS) or BRT systems depending on the nature of buses and infrastructure. Also, Cervero (2013), stipulates that the main distinguishing feature of the two types of systems is the condition of having dedicated lanes for the buses with stop station platforms and areas for boarding.

Moreover, Cesar, Castro, et al., (2007) also defines BRT systems as bus-based transit systems that facilitate fast and comfortable mobility at high quality and cost-effectiveness and advocates that this mode of transport has changed cities into livability. It is stated that BRT costs a maximum of 100 times cheaper than the metro system and 20 times less expensive than tram/light rails. Deng and Nelson (2011) further advocate that BRT systems are reliable and operate at high speed. It is also termed to be flexible and cost effective. Despite the advantages and characteristics of BRT systems, Babalik-Sutcliffe and Cengiz (2015) in

analyzing and assessing the BRT systems and their performance worldwide, explains that light rail and metro in Istanbul are more preferable than BRT systems. The mode preference is influenced by accessibility which is an impact of lack of integrated planning.

ii) Challenges facing the BRT Systems

Lindau, Hidalgo, et al., (2014), highlight challenges the performance of BRT faces which are political, financial, legal and institutional sector based. Particularly issues concerning the planning include the complexity of institutional arrangement and inadequate technical skills, poor coordination among stakeholders, the perception of passengers, rivalry from other public transport service providers, and inadequate citizen participation. Moreover, the major barriers pinpointed to affect the implementation of BRT is the lack of policies to support the system's development and inadequate financial resources.

Moreover, Mallqui and Pojani (2017) advocates that, despite the popularity of BRT systems in a global context, based on the case of Lima and Brisbane, its planning and implementation still faces challenges which include fragmentation of the institutional framework, political interferences and rivalry, poor management of public transport modes system and inadequate financial resources. Furthermore, Bruun and Behrens (2016) explain the case of South Africa that the implementation of BRT as well faced some barriers which include resistance from the paratransit owners, inadequate institutional capacity (regulative and planning authorities frameworks) and insufficient financial resources. However, some of the West African countries successfully achieved the goal of urban public transport systems improvement by undergoing some institutional reform. Example of these countries include Ivory Coast in Abidjan City where an authority named as "Agence de Gestion du Transport Urbain (AGETU)", Senegal- Dakar as "Conseil Executive des Transports Urbains de Dakar (CETU)" In Ghana, Urban Passenger Transport Units (UPTUs) for Accra City and the Greater Accra Passenger Transport Executive (GAPTE) for Great Accra, and Nigeria - Lagos as Lagos Metropolitan Area Transport Authority(LAMATA) (Bruun and Behrens, 2016).

iv) BRT System in the Dar es Salaam City

BRT system's first phase operations started in 2015, with a 20.9km route. For proper management and operations of the project, institutional reform was made whereby an agency named DART was established. Operations are still facing challenges of rivalry from *Daladala* which still operate along the same route. Also, it is difficult to encourage modal shift from private cars to BRT systems due to poor accessibility by passengers from the peri-urban areas. Only 9% of passengers along the route have shifted to the use of BRT system (Matata, Kitali, et al., 2017). Moreover, Nkurunziza, Maarseveen, et al., (2013) argue that that policies should accommodate stakeholders' interest by allowing user participation in equity and effective utilization of scarce resources. It will encourage behavioral change and modal shift.

2.2.2.2 Paratransit

i) Definition of Paratransit

Paratransit plays an imperative role in the provision of urban transport for most African cities, with market dominance especially in most Sub-Saharan cities. It occupies between 50% to 100% market share of the total public transport (Shelley, Bernard Chatelin, et al., 2016). Paratransit is defined as the "public transport unscheduled services supplied by private operators without standard accountability running small to medium capacity vehicles (including motorcycle taxis, collective taxis, and mini-buses with various sizes from 12 to 45 seats)"(ibid, P.65).

Moreover, Joewono and Kubota (2007) define paratransit as the mode of public transport owned and operated by private individuals and companies. In a review of different kinds of literature, it is revealed that the naming of paratransit goes differently all over the world. For example, in India, they are named as *Jeepneys* or *Polaamboos*, in Ghana as *Trotro*, in the Gambia as *Tanka Tanka*, in Siera Leone as *Poda Poda*, in Benin as *Kia Kia* and Kenya as *Matatus* (Khayesi, Nafukho, et al., 2016). In Tanzania, they are named as *Daladala*. Private car public transport is currently observed to dominate over other modes of public transport services globally (Finn, 2012). Also, Bruun and Behrens (2016) state that, the emergency of paratransit in most countries including Sub Saharan Africa resulted from the decline of extensive public transport bus services in half of the previous century. While in some countries public transport services are subsidized with formal settings either by the government or public-private partnerships, others depend on *Daladala* like means of public transport (Khayesi, Nafukho, et al., 2016). Paratransit is a common and famous mode of transport worldwide and is observed to serve a large fraction of passengers to and from urban localities.

ii) Characteristics for Paratransit

The major feature of paratransit is its operations of a fill go bases without a fixed schedule but mostly with a fixed price and designed routes (Shibayama, 2017). This is a common practice in developing countries. Kayi (2016) characterizes *Matatus* in Kenya not in its size but noncompliance of traffic rules by boarding and off boarding passengers at non-designated bus stops, rough riding and overlapping and route shortcuts to avoid traffic congestion. Also, chaos, recklessness, and violence describe this mode of public transport. Poor quality of buses with emission and overcrowding are other factors characterizing the paratransit mode of transport (Kiunsi, 2013).

iii) Challenges facing the Paratransit Operations

Given its characteristics, it is associated with problems that affect the transport system, the people's health, environment and cause inequalities among cities and regions. These challenges are mostly experienced in urban areas due to the rapid emergence of paratransit modes of public transport. However, Finn (2012) argues that professionals and authorities do not pay much attention to this transport mode viewing it as an informal sector using poor quality vehicles with untrained driver and less safety assurance. Additionally, Joewono and Kubota (2007) explain that rapid innovations and challenges in the public transport service provision threaten the future of paratransit existence due to their inherent nature and problems associated. However, there is a chance of improvements through proper regulatory frameworks and transport planning and management for this mode type of public transport to offer good quality of services. Also, changes in structures of governance, institutions, and skills can foster the formalization of paratransit and improve the public transport services. A good example is seen through *Matatus* cooperatives in Kenya and measures taken in South Africa (Bruun and Behrens, 2016, Behrens, McCormick, et al., 2016b, Behrens, McCormick, et al., 2016a).

iv) Paratransit in Dar es Salaam

Bus services in the city, begun in 1949 before independence by the British private investor - Dar es Salaam Motor Transport Company (DMT). Behrens, McCormick, et al., (2016a) explains that, before 1960's the urban area was 2 - 3 km² and migrations to the urban area were strictly prohibited by laws. Therefore, the existing transport by then was adequate. After independence in 1970s rapid urbanization was experienced and the DMT was split into "Shirika la Usafiri Dar es Salaam (UDA)" and "Kampuni ya Mabasi Tanzania (KAMATA)" or National Bus Services (NBS) semi-autonomous companies. Since the UDA operated at

low cost as a nonprofit organization, it faced challenges of inadequate resources for operations and maintenance thus created a gap for the private operators to take over. Due to the poor quality of services, the government in 1983 officially decreed the *Daladala* operations. The name *Daladala* originated from the illegal transport service offered at 5 Tanzanian Shillings (Dala equivalent to 1USD by then).

The *Daladala* is a dominant mode of the city's public transport (Sohail, Maunder, et al., 2004). It comprises of buses with the passenger carrying capacity of 25 and above. The city is ranked the third topmost with 98% among cities with a large share of paratransit (*Daladala*) in public transport service provision as of 2014. There are more than 7000 mini - buses in Dar es Salaam and most passengers rely on *Daladala* for daily commuting (Joewono and Kubota, 2007). However, Kiunsi (2013) highlights challenges facing this mode of transport thus influencing passengers to use private cars. The challenges include bus overcrowding, lack of fixed time table and poor condition of buses.

2.2.3 Urban Public Transport Service Provision

2.2.3.1 Definition for Urban Public Transport Services

Urban transport service is defined as the public transport network service demands anticipated by citizens of governments as an outcome of societies staying in proximity with the aim of improving the health and welfare of community members by enhancing accessibility and mobility (Hodge, 2007).

The good public argument explains that goods and services are termed as public based on their nature meaning that private individual or organizations, formal or informal, cannot provide such services on their own either in adequacy or at all and therefore requires the government interventions. Public services can be provided in many different ways either direct or indirect ensuring that the government objectives are met. The direct provision involves physical production (planning, construction, maintenance) and service delivery while the incidental provision refers to when the government ensures that services are provided. It might involve decisions concerning policies, service standards, organizational arrangements, financing, coordination and creating an enabling environment for direct providers (Batley, 1996). Further, he stipulates that provision of public services may perform inefficiently due to specific characteristics which vary depending on institutional arrangements, market conditions, and technologies.

2.2.3.2 Provision of Urban Public Transport Services

Public transportation is among the services and basic public utilities (Vuchic, 2005). In service provision, where many actors are involved, some issues need to be addressed appropriately to avoid conflicts which may cause failure in the sector. Definition of roles and responsibilities, financial resources management, description of objectives, coherent policy, and service operations have to be taken into account (European Union, 2003).

Provision of effective public services requires proper organization as an element of proper management. The organization theory focuses more on the organizational structure, their functions and performance and the behaviors of individuals within the organizations (Cole and Kelly, 2011). For this study, the theory is applicable within the context of the institutional frameworks about urban public transport service provision. In this context, organizing reflects on identifying tasks and assign responsibilities to stakeholders for the implementation and achievement of targets. It is about coordination and communication including the mobilization of resources required to fulfill the functions.

Dan (2013) explains that coordination is vital in inter and intra organizational structures. It is assumed that organizational structures, as well as other structures employed to facilitate coordination, can cause problems of the same. In this manner, attention should be paid to coordination and control for effective organizational performance.

Providing urban public transport services can be organized in two different forms namely, the market led initiative and authority led effort. In a market-led regime, the market entry originates from the market process with more or fewer entry regulations. In authority led system responsible public transport authorities have legal mandates for control of initiatives (European Union, 2003). Performance failure of both the regulated and deregulated system may result into self-regulation as an alternative to ensure continuous provision of services. However, self-regulation in most cases involving many private operators is characterized by fragmentation, ownership, and competition which may result in poor quality of service with high prices. This, therefore, calls for the government intervention. The Government involvement in the market of transport is also crucial for the protection of users and workers by ensuring quality standards and safety, service availability and price control (Sohail, Maunder, et al., 2004).

(i) Mass Transport Systems

Mostly, mass transport systems ownership and operations may be individual or under partnerships between the nonprofit organizations such as government and government agencies and profit-oriented organizations (Anin, Annan, et al., 2013). In most developing countries, urban public bus transport services are offered by the government. However, public transport services offered by private bus owners are said to dominate the sector globally. These are mostly paratransit, commonly informal small and large buses. The dominance of paratransit service providers is much contributed by the inadequacy of the urban transport services provided by the government. Some reasons may add insufficiency of the government's performance. These include confusion in cases where the government tries to regulate, make policies and operates at the same time; confusion in government seeking social goals but acting commercially; restrictions on management freedom due to procedures and norms of public services and financial constraints. All of these are caused by conflicts of objectives and poor distribution of roles and responsibilities (Amos, 2004).

It is perceived that road infrastructure is an element of the public asset and therefore need to be offered to the public and not on commercial benefits. In most countries, it is usual where the public sector owns at the same time operating transport infrastructure. However, ownership and operations of infrastructure is a legal policy choice (Amos, 2004). Strategies applied by most cities as well as urban areas in developing world is for the government financing infrastructures but avoiding the complexities of subsidies for operations. The public infrastructure consists of bus ways infrastructure, nonmotorized lanes, stop and transfer stations, terminals and depots, traffic control sign and control centers (Meakin, 2004, Wright and Hook, 2007). Poor quality of infrastructure affects the provision of services resulting in poor accessibility and mobility of the public. This, in turn, affects their economic development (Melbye, Møller-Jensen, et al., 2015, Ka'bange, Mfinanga, et al., 2014, Sohail, Maunder, et al., 2004). Infrastructure is claimed to be the major factor hindering provision of effective and efficient public transport services (Ngowi, 2005).

(ii) Financing and Pricing

Funding and financing for urban public transport are firmly related concepts because the pricing level reflects the capacity of self-financing and consequently the subsidy needs. Pricing helps in funds raising, and it is mechanisms that influence traffic volumes that use different transport methods for economic and environmental sustainability. On the other

hand, financing refers to all economic and financial instruments to ensure sufficient provision of urban transport services (European Union, 2003). Financing and Funding, however, are significant challenges in developing world mostly in African cities, and this is contributed by the poor planning thus affecting the allocation of scarce resources available (Maengesha, Rwebangira, et al., 2002). Planning refers to "formal procedures of what is to be done in future. It is about setting goals and objectives and how to achieve the target" (Cole and Kelly, 2011, P.6).

Inadequate financial resources is another major challenge in developing countries. It limits them in trying to solve problems allied with poor urban public transport provision service (UITP, 2010). Mostly, financial contributions offered by the government to formal public transport operators have subsequently declined over the years. It led to poor quality of services provided thus attracted private operators in the market. However, there are difficulties in service provision since the fare set by regulators are lower. Lower fares hinder cost recovery leading to inadequate maintenance thus poor quality. It is further stipulated that, for systems of buses that recover cost without subsidies, they are easily regulated because market competition as an incentive can be used for demand responsiveness and efficiency (Meakin, 2004). Notwithstanding, the importance of regulators, on the other hand, it has been claimed that the government performance affects the provision of services. The effects result from the government interference in setting fare exempting for nonpayment by some officials and less payment for school children. Also, high operating costs, traffic congestion, and inadequate parking facilities are other significant impacts (Ngowi, 2005).

(iii) Operations

Public transport services for passengers is well thought - out to be characterized of; openness for every traveler as an individual or in a group, clear defined route and fixed schedule, and publicly advertised with the published standard fare. In developed countries, most public bus services conform to the general characteristics. Contrast to the developing countries, in most cities; the sector is dominated by informal bus service providers with the nonconformity of the rules and regulations (Birago, Opoku, et al., 2017, Sohail, Maunder, et al., 2004).

The key aspects in the public transport operations for adequate provision of services include vehicle maintenance to ensure quality and reliability, safety and security, scheduling and control and information (Vuchic, 2005).

Jansson, Lang, et al.,(2008) highlights that the dominant characteristic of the urban public transport service providers is profit maximization. Therefore, to reduce the burden on the transport users and promote sustainable transport, regulatory control is vital by either subsidizing the service in a monopoly system or imposing a tax in competitive markets. Leong, Goh, et al.,(2016) in giving an experience of Singapore in a study for improving bus service reliability, advocates the practice on how operators are incentivized or penalized for violation of the terms of the services in adherence to schedules.

For them to excel in the public transport investment, operators are required to improve all service attributes over their competitors and be innovative with proper marketing strategies. The Government in this regards should play as an enabler by formulating attractive policies and enhancing effective enforcement of rules and regulation (Massami, Myamba, et al., 2016).

Public Transport operators are critical players in the market. Larsen (2001) in the study for designing incentive schemes for public transport, a case of Norway, explains that public transport operators are well knowledgeable about the sector than the public transport management authorities.

For better performance of the urban public transport, participatory planning and coordination among all stakeholders including operators are paramount. In private, public transport operators, self-regulation, if well established with the support of a government can improve the quality, quantity and prices control thus improving the life and economy of the poor (Sohail, Maunder, et al., 2004).

2.2.4 Challenges of Urban Public Transport and The Contributing Factors

2.2.4.1 Challenges facing Provision of Services

The literature on transport and development of urban areas reveals that between 1900 to 1960s most Asian cities faced challenges of transport. It is due to rapid vehicle ownership that resulted from population growth and increased density (Barter, P. 1999). It is a challenge for most developing countries and cities due to an influx of urbanization and rapid motorization. Most populated urban areas can influence congestion as motorization continues despite the level of vehicle usage per capita. It is not because of poor infrastructure but because of inadequate infrastructure capacity. It should be noted therefore, that increasing road capacity is not a solution to high-density areas (Barter, P. 1999). However, high-density urban areas have a great chance to promote public transport system and nonmotorized transport. It is a new paradigm profoundly embraced towards sustainable urban transport systems.

In African cities, the rapid increase of car ownership is also a challenge which starts from low ownership base but results in increased traffic congestion and air pollution. Traffic congestion mainly affects both users and operators. For the public operators, it occurs in situations where not as many trips as possible can be generated thus leading to loss of income and high cost of operations. Moreover, increased private car usage decreases the demand use of public transport. Therefore, it affects the economy and income of operators which further leads to provision of poor public transport services because operators tend to compensate for inadequate benefits (Gwilliam, 2002).

2.2.4.2 Factors Contributing to Persistence of Transport Challenges

Not much of the attention is paid to the transport sector in the developing world. It is also very rare to conduct risk assessment and management, as well as policy evaluation, for the improvement of the industry. There is poor participation whereas planning only involves planners and experts while ignoring other stakeholders such as users and service providers (ADB, 2009). Moreover, political interference and lack of full support from the central governments add to poor implementation of plans thus affecting the provision of services (Ngowi, 2005, ADB, 2009).

The transport sector involve many institutions in the provision of services which makes it a complex system. The complexity causes inadequacy in coordination among actors if not well managed. It further leads to insufficiency in the implementation of policies thus paralyzing the sector performance (Meakin, 2004, Rahman and Abdullah, 2016). For effective transport management for better performance in service provision, there are significant issues that require much attention. Availability of a coherent policy, clear set up of public transport structure, adequate regulatory framework and its enforcement and the supervisory institutions with sufficient capacity and capability are key issues (Meakin, 2004).

According to Kiunsi (2013), despite an increase of road capacity and construction of overpasses, transport challenges especially congestion problems cannot be fully solved. More efforts associated with services redistribution and infrastructure is required with proper planning. Moreover, Kanyama, Kanyama-Carlsson, et al.,(2004) reveals that absence of transport planning section linked to the town planning unit contributes to increased problems

of the public transport sector. Other factors as identified by different researchers include financial constraints, fragmented institutional coordination, corruption, unclear objectives and lack of vision, inadequate enforcement of regulations and insufficient distribution of roles and responsibilities among key stakeholders (Ngowi, 2005, URT, 2003, Msigwa, 2013, Kanyama, 2016).

The dominance of private cars which is attracted by the poor performance of the public transport system contributes to problems facing the sector. It is further attributed by difficulty in encouraging modal shift and restricting private cars, especially in the developing countries. As argued by Pardo (2012) owning a private car is a sign of aspiration and wellbeing particularly in cities where public transport is inadequate. It needs a regulatory, institutional and policy reforms with a participatory move for a successful implementation of the strategy. Confucius, 450 B.C quoted in Bannister and Hickman (2013) states that *"Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand"*. It is evident because involvement and transparency create a sense of ownership and accountability.

2.3 Institutional Framework

ADB (2009) stipulates that most Asian cities are in a crisis of policies, planning, implementation, and governance as far as sustainable transport is concerned. Mostly the implementation done focuses on road transport within metropolitan areas of which a little about the outcome is known in advance thus resulting in misuse of resources. Also, Quim (2011) advocates that most developing countries ignores institutional related issues such as the formulation of policies, planning, coordinated interactions among critical stakeholders and allocation of resources. Paying less attention have resulted in inadequate performance for the transport sector as well as slow progress towards sustainable transport development (ADB, 2009). Therefore, proposes a new paradigm which focuses on (Policies) what to do, (Management) how to do it, and financing (what to do it with). Factors such as stakeholder involvement, plans and processes implementation and governance and institutions are suggested to be crucial for sustainable transport goal achievement. For the basis of this research, the focus was more on the governance and institutions about urban public transport service provision.

In the general context, there is no universal definition of the terms "institutions" and "transport authority." UNDP (2011, P.271) defines institutions as "formal organizations of government and public service, including government ministries and agencies, sub-national governments and other organizations of states responsible for public services, the design and implementation of policies, and the administration of the state's functions." According to Ackoff (2015, P.viii), an institution is defined as "a system of rules and organizations that formulate a regularity." On the other hand, Wapwera, Malo, et al., (2015, P.245-246) defines Institutions as "a set of norms, values and beliefs that have been formed to ensure that targets are achieved" and framework as "the linkage that supports two or more sub-systems ensuring the easy flow of information or data from one sub-system to another". The Institutional Framework refers to the form of coordination or linkages that facilitate communication and information sharing effectively among stakeholders within a system (Rahman and Abdullah, 2016). Based on the definitions of the terms "Institutions" and "frameworks" common definitions for the institutional framework is a combination of rules, policies, laws, procedures that enable cooperation and coordination among different legally mandated agencies or organizations in public transport service provision. This definition was used in this research.

2.3.1 Components of Institutional Framework

Institutions supporting transportation systems can be viewed in many perspectives ranging from laws and regulations to informal conventions (Stough and Rietveld, 2006). In general terms, however, the institutional framework is formed by four components which include the governance Institutions (government tiers), the legislative (regulatory), the organizational structure (planning authorities) and the administrative(structure) frameworks (Rahman and Abdullah, 2016). The Institutional structure impacts on the outcome, so it plays a key role for better governance. Even though institutions are important in economic development in many countries, it is somehow unclear that it also contributes to sustainable development (Stough and Rietveld, 1997). Therefore, the impacts of institutions on sustainable urban public transport is not exceptional.

2.3.1.1 Theory of Governance

Governance theories are about the evolution of governance and their application. It involves the structures, forms, and principles of how the government should work and treat the citizens (Ekundayo, 2017). Governance is termed as " the horizontal interactions by which various public and private actors at various levels of government coordinate their interdependencies to realize public policies and deliver public services"(Klijin and Koppenjan, 2012, P.594). However, Kenneth, Meier, et al., (2007) argues that the definition of governance is still under debate. However, all arguments are focused on interactive processes towards a common objective.

Network governance is a multi actor-network which involves decision makers, formal and informal implementers and the structure of how the actors work. Klijin and Koppenjan (2012) explain that the governance network theory involves interdependent actors with different perceptions, working in complexity to plan, implement and deliver services. Moreover, Koppenjan and Klijin (2004) delineate that the interactive processes reduce cost and improve performance. However, the involvement of multi-actors with different interests and perceptions may lead to failure or reaching a win-win objective relative to the working grounds. Therefore, the successful interactive network requires proper management (Kenneth, Meier, et al., 2007). Adequate provision of services can be assured by an institutional framework which enhances sufficient coordination, with a responsive legal and regulatory frameworks, well-organized planning authorities and administrative setup.

Based on the theory of governance, the governance structure and the administrative structure as components of the institutional framework are more or less merged with the organizational structure and regulatory frameworks. Moreover, the main foundations of the effective transport system are the regulatory framework and the organization structure framework. These are further enhanced by the existence of strategic policies and institutional coordination for better performance (Meakin, 2004).

In Tanzania, the urban public transport system has been facing challenges and thus hindering the adequate provision of services. The inefficiency of the regulatory framework associated with inadequate regulation enforcement raise these problems. Also, the organization structure has been insufficient due to poor coordination in planning among actors, and unclear and overlapping roles and responsibilities (Kanyama, Kanyama-Carlsson, et al., 2004, Kanyama, 2016, Sohail, Maunder, et al., 2004, Sohail, Maunder, et al., 2006b). The study, therefore, was focused on the organization structure (planning authorities) framework and the regulatory framework, to observe how these elements affect service provision of urban public transport in the study area. However, studying other components for an understanding of how they impact on the provision of service is important but due to limited time only the organization and regulatory framework were studied.

i) Organizations (Planning Authorities) Framework

Organizations are "groups of actors that share a common interest or goal" (Stough and Rietveld, 2006 ,P.100). Organizations are subsets of institutions and their performance influences the change in institutions. Wapwera, Malo, et al., (2015) refers organizations as the authorities legally established by the government for provision of the transport services focused on planning, monitoring, implementation of urban public transport development and management. However, in involvement in different institutions, it requires a coordinated system for the achievement of the target objective. Coordination means an activity of interlinking actors within a network of organizations for decision making purpose. It is the key to success in the planning and implementation process which involve multi-stakeholders.

Also, to ensure participation and involvement for all, there is a need for innovation in communication among experts and significant stakeholders (Bannister, 2008). Moreover, coordination and cooperation among all key stakeholders influence successful integration in planning for land use, and public transport. Presence of a common Institutional framework can adequately facilitate coordination and collaboration (Rahman and Abdullah, 2016).

Under the organization frameworks, the roles together with the responsibilities of the authorities are stipulated with the apparent design of the structure. Wapwera and Egbu (2013) advocate that in most developing countries it is common to find unclear roles, overlapping and conflicting functions and responsibilities of authorities which result in increasingly complex problems. Moreover, Lámbarry, Trujillo, et al., (2016) explains that unclear and irresponsible organizational setup cause stresses to the public transport systems operators and thus paralyzing the system. It is therefore essential to promote interactive operations and stakeholders participation. Also, Kanyama, Kanyama-Carlsson, et al., (2004) and Sohail, Maunder, et al., (2006b) reveals that urban public transport in the study area, Dar es Salaam, is facing challenges due to poorly designed organization structure leading to inadequate coordination thus overlapping and conflicting roles and responsibilities.

A better structure for administration is crucial for overall control and oversee urban transport advancement as well as management of planning authorities' network (Wapwera, Malo, et al., 2015). It facilitates implementation of policy and plans stipulated by the central government to achieve the desired objectives. Inadequate administrative framework affects the performance of the network in the provision of the public transport system. Moreover, an incoherent policy with unclear objectives in parallel with inadequate administrative framework can paralyze the investors' and operators' desire in urban public transport (Meakin, 2004). Figure 2.1 below, represents a schematic circle of how policies and administrative capability affect provision of transport services.

Also, World Bank (2013) advocates that the urban transportation governance in Tanzania is almost fragmented. It is reported to comprise of many stakeholder bodies/agencies - each with responsibilities within the network. Some of the duties are overlapping and therefore recommends for the strengthening of the Institutional arrangement.

The Asian Development Bank suggests that effective transport solutions to the persisting challenges need a proper integrated and coordinated institutional structure for transport management including public transport improvements and environmental protection (ADB, 2009). Keeping in mind that, the Institutional framework may vary, the typical suggested form of Institutional structure is as shown in figure 2.2 below.

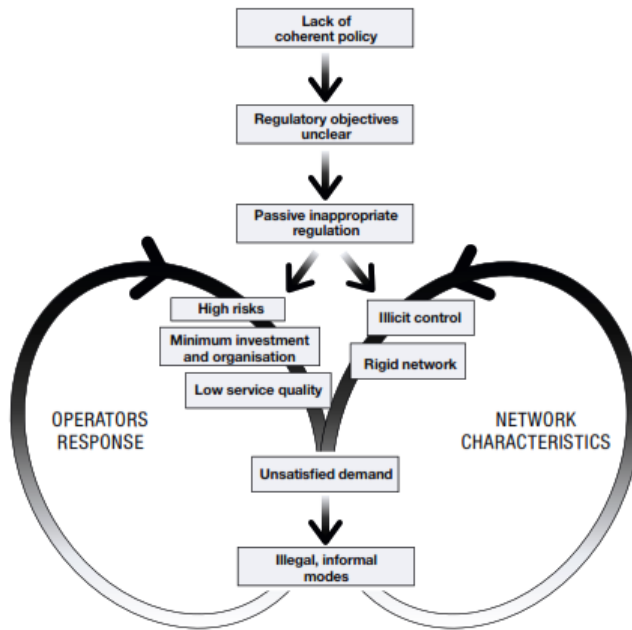


Figure 2. 1: A "Vicious cycle" showing the effect of inadequate policy and administration framework on the public transport system
 Source: Meakin (2004)

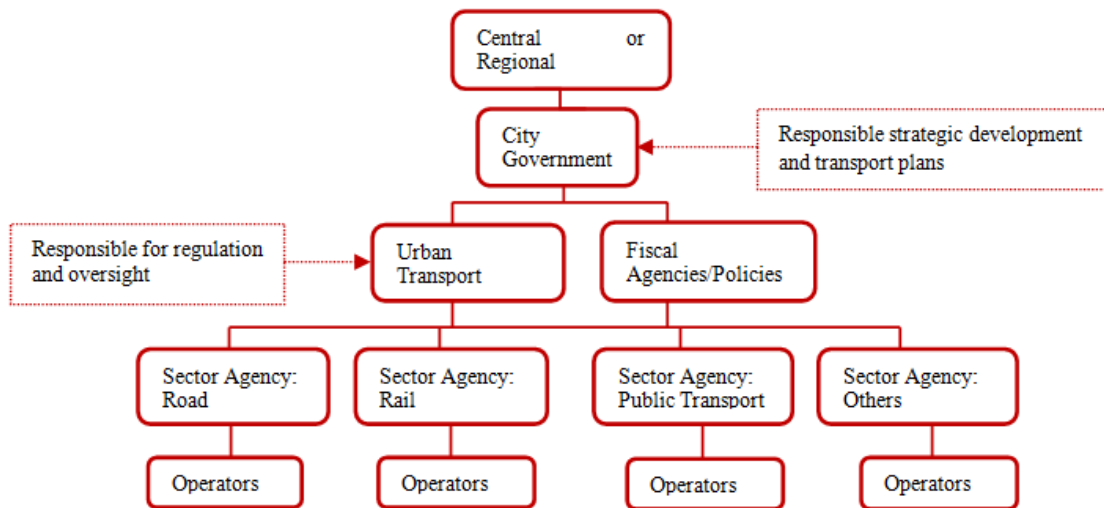


Figure 2. 2: Typical Institutional Structure Urban Transport System
 Source: Asian Development Bank (2009)

ii) Legislative (Regulatory) Framework

In any set up of the institutional framework for management and service provision of any system with multiple participants and actors, rules and laws cannot be side-lined. Also, policies are essential for the smooth implementation of different development strategies. However, for smooth and effective operations, there should be enforcement of these instruments.

Koppenjan and Klijn (2004), explains that rules influence interaction in networks that reduce transaction costs and improve performance. It is therefore evident that laws and regulations are required for the performance in the institutional framework in a network of actors. According to Bangaradoga (2000, P.36), the legal framework is defined as “The very

complex set of enactments, subsidiary laws, rules, regulations and procedures, and rights, customs, and practices.”

Generally, regulations aimed at the provision of equal grounds of protection and benefits for the public. Many developing countries over the past few years, experienced a change from public transport services to private transport services. It requires intervention with regulations and rules for effective urban public transport service provision (Sohail, Maunder, et al., 2006b).

Moreover, Wapwera, Malo, et al., (2015) stipulates that legislation guides the planning authorities and the enforcement body should be independent and incorruptible. However, there are some arguments on regulation and deregulations with regards to the provision of public transport services. As a matter of fact, in many developing countries, Tanzania being one, control has proven ineffectiveness with deregulation restricting accessibility thus emergency of self-regulation. Additionally, for effective urban public transport services in Tanzania, it needs a proper regulatory framework and effective enforcement mechanism including regulating the privately-owned transport providers (Sohail, Maunder, et al., 2006a).

In addition to that, laws and regulations are backup documents for implementation of policies for any sector. Policies are part of the legislative framework that reinforces networking among key actors and citizens. Policies refer to a set of rules, procedures, and mechanisms which present the foundation for programmes and services. Transport policies have impacts on the interests and benefits of citizens and stakeholders. Therefore, influencing the same policies promotes development though throughout the processes along with rules, formal and informal, guiding the government (Stough and Rietveld, 2006).

2.3.2 Constraints of Institutional Framework in The Urban Public Transport Service Provision

Stough and Rietveld (1997) and Suthuraman (1976) stipulates that the most exciting thing about the governance structures is their increased complexity while they are meant to be flexible for goal attainment in addressing stakeholders' needs and interests. The increased force on flexibility is due to the association of multiple actors in management to achieve transport development goals. It is further stated that today these structures of public transport service provisions are not only required to be flexible but also integrated with intermodal linkages, technology enhancement and intra organized not vice versa as in the industrial period. However, institutions differ among countries relative to how they overcome transport challenges depending on their values and culture. Shelley, Bernard Chatelin, et al. (2016) explains that, in most of the African countries, currently transport sector institutional frameworks do not address the problems and challenges facing the sector due to several constraints.

Wapwera, Malo, et al. (2015) defines constraints as any resources insufficient to meet the demand. Constraints can also refer to anything or factors that hinder one or more Institutional Framework element(s) from achieving the desired goals. The limitations to the institutional frameworks are categorized by Rahman and Abdullah (2016) and Wapwera, Malo, et al. (2015) as shown in figure 2.3 below. The indicated constraints result in the poor performance of the institutional framework due to challenges encountered. Quium (2011) explains some institutional issues hindering proper management of urban transport. These include fragmentation among critical actors, inadequate institutional capacity, centralization of powers and responsibilities as well as financial resource constraints.

Different kinds of literature have pinpointed challenges facing the urban transport which result from the institutional frameworks. Generally, Zakaria, (2003) highlights significant problems facing the urban transport management which include lack of coordination among

actors, lack of institutional capacity in planning and inadequate enforcement. Moreover, Rahman and Abdullah (2016) giving a case of Kuala Lumpur, highlights challenges which include; lack of clear public transport policy framework, poor connectivity due to lack of inclusive, integrated and coordinated planning and inadequate financial resources. These challenges result in poor public transport services.

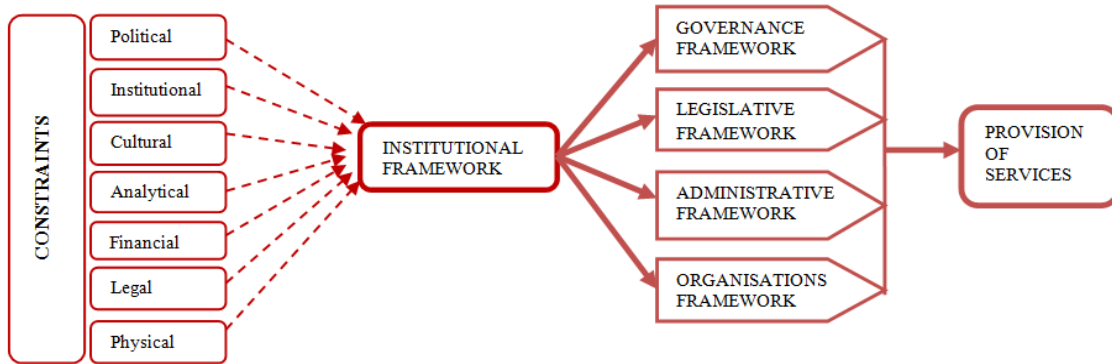


Figure 2. 3: Conceptual framework showing the Institutional framework constraints in managing transport systems
Source: Rahman and Abdullah (2016) and Wapwera, Malo, et al. (2015)

Due to challenges encountered in striving to achieve sustainable urban public transport, several interventions have been taken for situation improvement as indicated by some authors. Rahman and Abdullah (2016) suggest for institutional reform so that it can be resilient enough to the above-identified constraints. Specific areas proposed to be improved focused on emphasizing to the government to pay attention to accessibility and mobility issues by strengthening the policy and enforcement of regulations and laws. Also, each stakeholder's duties and functions should clearly be defined. Emphasize of coordination and cooperation among actors is another vital proposal together with public transport modal integration. For a practical solution, Rahman and Abdullah (2016) in the study for urban public transport institutional framework concept theorizing in Malaysia, proposes an Institutional framework with a lead authority for adequate provision of services for urban public transport as shown in figure 2.4 below. Also, Meakin (2004) writing on urban transport institutions, highlights some examples of countries in the developed and developing world that has succeeded in improving the urban public transport by undergoing institutional reforms. These countries established the entity for proper management of the sector. Example of nations includes London, Singapore, Bangkok, Brazil, and Metro manila - The Philippines. Moreover, Zakaria (2003) in the study of regulatory frameworks and legislation in public transport explains how the reform in most European countries improved the public transport.

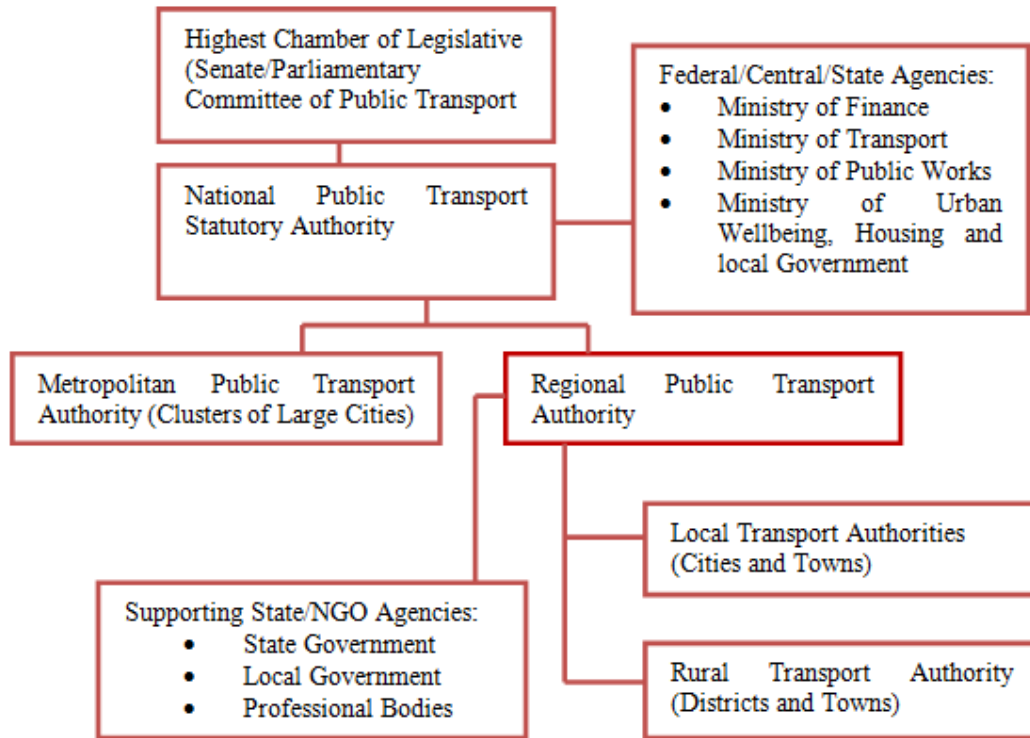


Figure 2. 4: Proposed Institutional structure for the adequate provision of services
 Source: Rahman and Abdullah (2016)

2.4 Conceptual Framework

A conceptual framework is an arrangement and coordination of ideas, hypothesis, prospects, beliefs, values and theories which supports and enlighten the research (Maxwell, 2012). Thus, it can be expressed as a theory of cause and effects. A literature review of concepts on Institutional Frameworks indicates the relationship to provision of Transport services. Moreover, institutional frameworks are explained to affect service provision regarding its organization and distribution of responsibilities, the coordination within the Government, existing rules, and policies and their enforcement controlling.

Different authors have indicated that the Institutional set up can affect the provision of mass transit systems, operations and resourcing resulting in the inadequate provision of services. Provision of mass transit systems is further conceptualized by its indicators which include reliability and service availability in quality and quantity of the public transport systems. Service availability is characterized by the bus line (route and coverage), stations and stops and frequency of services (Litman, 2016, Eboli and Mazzulla, 2012). Also, reliability is an important indicator in the provision of mass transit systems. With regards to provision of mass transit systems, reliability refers to adherence to schedule. It involves the computation of service frequencies, the required number of vehicles and the timetables for operations and supervisions (Beirão and Sarsfield-Cabral, 2007, Vuchic, 2005).

Financing and pricing as another major component for effective public transport service provision for this research are focused on the fare. For public transport services, the rates mostly set by the government does not much affect the users (Beirão and Sarsfield-Cabral, 2007). However, in some cases where the tariff is low affects the operators regarding operating costs and therefore causing them to offer poor quality services (Ngowi, 2005, Ngowi, 2006).

For the adequate operations, safety and security are to be assured both for passengers and operators. Safety is the situation where there is no injury or physical damage that may be caused by accidents. It can be conceptualized regarding vehicle design, control and movement and travel lines conditions (Vuchic, 2005). Safety generally refers to the possibilities of occurrence of road accidents (Eboli and Mazzulla, 2012). Safety means the likelihood of engagement in road accidents, while “security” is termed as the possibility of becoming a victim in the crime with regards to the subject matter. In public transport systems, it can also be defined as the safeguarding from acts and situation that may affect the system’s users, operators, and facilities. To ensure safety and security, issues like vehicle conditions, vehicle design, property security are to be guaranteed through regular checkup and control (Vuchic, 2005, Eboli and Mazzulla, 2012).

With reference to the discussion in section 2.2.3.2, regarding mass transit systems, financing and pricing, and operations, some factors have more significant effect on provision of public transport services. The factors comprise availability in terms of quality plus quantity of infrastructure and passenger transport, reliability of transport (adherence to schedule), Fare and safety and security. These factors were revealed to be directly affected by institutional factors as explained by Sohail, Maunder, et al.,(2004). However, the factors are less studied and for the case of Sub Saharan they are highly impacting on the provision of services, therefore calling for more focus in this study. Based on this discussion, the linkage between the concepts and variables are conceptualized in figure 2.5 below. The same was further operationalized in chapter 3.

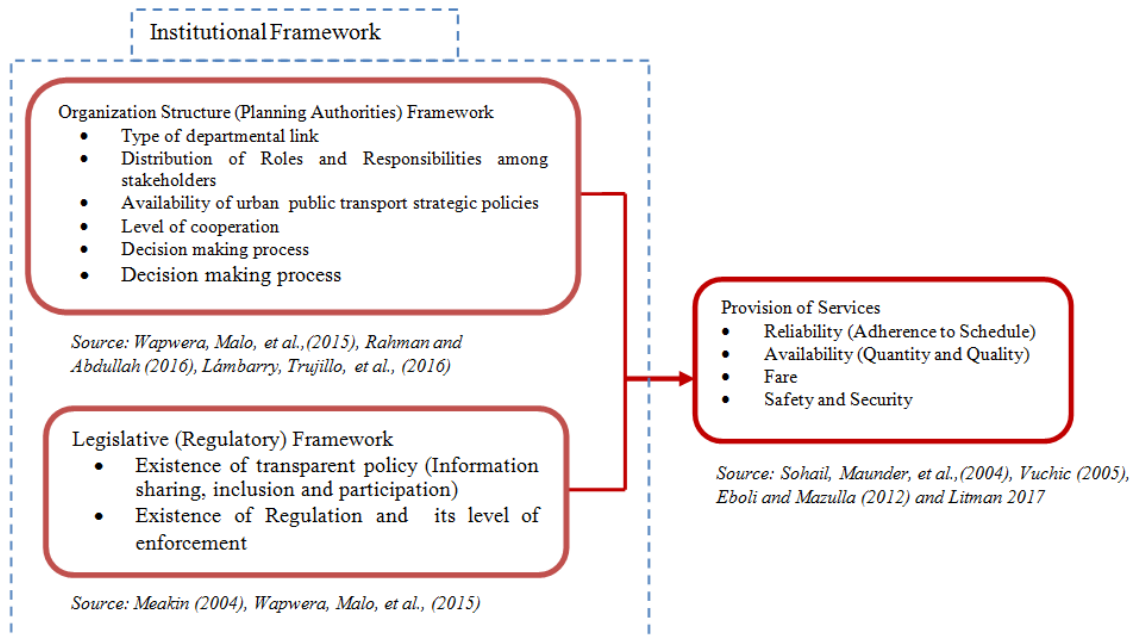


Figure 2. 5: Conceptual Framework
 Source: Author's Construct, 2018

Chapter 3: Research Design and Methods

3.1 Introduction

Basing on the research introduction in addition to theory review, a researcher provided a study methodology under this chapter. As mentioned in chapter one, the study aims at explaining the current institutional framework set up and how it affects urban public transport management in Tanzania specifically Dar es Salaam. To be more specific, only two modes of urban public transport were considered. The chapter firstly presents the operationalization of key concepts and theories applied, variables and indicators. It explains the research type and the strategy used as well as demarcating the sample size together with the study area.

The objective of the study was explanatory focusing on examining how the institutional frameworks affects urban public transport service provision in Dar es Salaam. Research questions were formulated to achieve a study's goal. These involved one main research question and sub-questions as presented below.

3.2.1 Main Research Question

How does the Institutional Framework affect urban public transport service provision in Dar es Salaam?

3.2.2 Research Sub - Questions

- i. What is the present Institutional framework structure for the urban public transport service provision?
- ii. How does the organization structure framework affect the urban public transport service provision?
- iii. How does the regulatory framework affect the urban public transport services provision?
- iv. Which additional factors contribute to the existing challenges in urban public transport service provision?

3.3 Operationalization

Operationalization is a stage of the research whereby concepts are translated into measurable or observable entities or indicators. It gives a clear picture of the study subject and the ways measurements took place (Thiel, 2014). Operationalization is defined as a thorough explanation or description of the study procedures required to allocate analysis units to the related variables for representation of the conceptual properties (Straits, 2011). It plays an essential role in selection as well as instruments formulation that are useful for data collection, analysis together with discussion of outcomes from the fieldwork rooted in the study variables. Operationalization delineates definitions of fundamental concepts and variables based on the ideas of different researchers presented in chapter two. It enables the researcher to develop simple, realistic and measurable indicators which are also time bound. Table 3.1 below presents the theory, concepts, variables plus indicators which were used in developing the interview guiding questions, for primary data collection.

3.3.1 Definition of theory, Variables, and Indicators

3.3.1.1 Governance Theory

The theory involves structures, forms, and principles of how the government should work and treat the citizens (Ekundayo, 2017). Governance has different models which include a rational model that focus on control and command, new public management model which

focus on states of purchasers and the network governance model which focus on horizontal interactions of interdependent actors in a network sharing resources and information for a common goal (Klijn, 2007). For the interest of the study, a focus was on network governance since it is applicable in situations of uncertainty where there is no central steering actor to rule on others' objective but rather cooperation is required (Koppenjan and Klijn, 2004). It is because of the provision of public transport services; there is high complexity since different actors interact and face many different external factors. Network governance is defined as a multi actor-network which involves decision makers, formal and informal implementers and the structure of how the actors work (Klijn and Koppenjan, 2012, Koppenjan and Klijn, 2004).

i) Institutional Framework

From the definition of terms forming an institutional framework, a common definition was formulated. Wapwera, Malo, et al. (2015, P.245-246) defines framework as "the linkage that supports two or more sub-systems ensuring the easy flow of information or data from one sub-system to another". UNDP (2011, P.271) also defines institutions as "formal organizations of government and public service, including government ministries and agencies, sub-national governments and other organizations of states responsible for public services, the design and implementation of policies, and the administration of the state's functions". Also, Ackoff (2015, P.viii) terms an institution as "a system of rules and organizations that formulate a regularity." Therefore, based on these concepts, for this study's purpose, the Institutional Framework means a combination of rules, policies, procedures, and regulations that enable cooperation and coordination among different legally mandated agencies or organizations in public transport service provision.

3.3.1.1 Urban Transport Services

Urban transport services are delineated as the public transport network service demands anticipated by citizens of governments as an outcome of societies staying in proximity, with the aim of improving the health and welfare of community members by enhancing accessibility and mobility (Hodge, 2007).

3.3.2 Operationalization of variables

Table 3. 1: Operationalization of Variables

Theory/ Concept	Variable	Sub - Variable	Indicators
Governance Theory	Institutional Framework	Organization Structure (Planning Authorities) Framework	<ul style="list-style-type: none"> ✓ Type of departmental link ✓ Distribution of Roles and Responsibilities among stakeholders ✓ Availability of urban public transport strategic policies ✓ Level of cooperation ✓ Decision-making process
		Legislative (Regulatory) Framework	<ul style="list-style-type: none"> ✓ The existence of transparent policy (Information sharing, inclusion, and participation) ✓ Presence of Regulation and its level of enforcement
	Provision of Services	Mass transit system and infrastructure	<ul style="list-style-type: none"> ✓ Reliability (Adherence to schedule) ✓ Availability (Quality and Quantity)
		Financing and Pricing Operations	<ul style="list-style-type: none"> ✓ Fare ✓ Safety and security

3.4 Research type and strategy

3.4.1 Research Type

As highlighted in chapter one, this research intended to explain the effect of the institutional framework on urban public transport service provision. Studies that focus on finding the causal relationship between certain phenomena or how one thing influences another and conducted based on existing theories are described as explanatory (Thiel, 2014). Based on the central research question the variables are the Institutional framework (Independent variable) and the Provision of urban public transport services (dependent variable) which were discussed thoroughly in chapter two.

3.4.2 Research Strategy

The research adopted a case study strategy. This strategy was selected because it gives a broad knowledge and an in-depth investigation of urban public transport service provision in the study area. The approach applies to research cases conducted on fields (real-life setting). It also focuses on studies with small units and large variables (Thiel, 2014, Zaidah, 2007, Yin, 2009). Moreover, in public transport institutional analysis, variables are easily analyzed qualitatively thus requiring broader methodologies (Stough and Rietveld, 2006). Using this type of strategy also, enables a single or few observation(s) to be conducted relative to causal factors and outcomes are investigated and explanations captured at face value as a direct proof for the concrete concept (Blatter and Blume, 2008). It renders information collected more detailed since they are obtained through the collection of people's opinions using many sources and issues regarding actors, their relevant groups, and their interactions are taken on board (Tellis, 1997b). Also, this further justifies the choice of this strategy for better achievement of the study aim with valid and reliable results.

Using a case study strategy enabled the researcher to concentrate in Dar es Salaam and keep a holistic real-life perspective on the transport sector. Concentration on this specific case simplified the study though much attention was required to ensure validity and reliability (Thiel, 2014, Stake, 1995). A case study strategy also is categorized by the inability of generalization along with the researcher's biasness due to subjectivity (Yin, 2009). However, the limitations and challenges of consistency and accuracy were addressed as described under validity and reliability in this chapter.

In this study, the co-variation approach was used to analyze the impacts of the institutional framework on the provision of services focusing on the road based two modes of urban public transport (Blatter and Blume, 2008).

3.5 Data collection and instrument

The research used a case study strategy and therefore required more of primary data. However, secondary data were used where necessary for responding to the research question(s). A principal research method used was semi-structured interviews to obtain primary qualitative data from people's perceptions, opinions, and knowledge about the subject. Other different ways employed in gathering information include observations and review of documents which helped in the triangulation process (Blatter and Blume, 2008). The interviews were conducted with respondents from the stakeholder institutions involved in a network of actors providing the urban public transport services. Review of documents was performed to obtain other relevant information regarding the current institutional framework (Tellis, 1997a).

3.5.1 Primary Data

Semi-structured interviews as the primary technique were employed to gather primary information. The interview refers to the conversation. It is about questioning and listening where the researcher builds up the certainty of an interview situation where answers are given (Punch and Oancea, 2014). Interviews helped in capturing perceptions and opinions of respondents on the subject of study. Using semi-structured system facilitated the researcher in gaining more insight and knowledge in details adding to the prior knowledge acquired through literature review and theories. It is because this method allows interaction and discussion for a clear understanding (Thiel, 2014).

The interviews were conducted with informants from the relevant institutions where selection dwelt on nonprobability purposive sampling based on their expertise and experience. From the relevant institutions, the heads of departments/sections were interviewed. Also, interviews were conducted with focal professional officers responsible for transport planning and management or operations. The conversation further, was held with representatives from the urban public transport modes operators and owners for their views and opinion regarding the Institutional framework and provision of services. These involved persons at the management level in the relevant associations. These respondents were sought to be informants because of their positions and therefore anticipated to be more knowledgeable of the study subject.

Another method employed was observations where the researcher visited few selected locations to observe how operations are conducted and how the enforcement and control are being practiced. In addition to that, key researchers or independent experts in the transport engineering and planning field were interviewed for the experience and perceptions about the study (Thiel, 2014).

3.5.2 Secondary Data

It is the data obtained from another researcher's work. Secondary data were collected from the stakeholder institutions through documents review. Documents reviewed include the relevant policy briefs, transport-related regulations and bylaws, strategic plans and another relevant official/organizational reports and studies, published and unpublished. The information gathered helped in supplementing the primary data and also in answering the question regarding the current institutional framework for urban public transport.

3.6 Unit of study

Researches that focus on an in-depth understanding entails for qualitative data, therefore concentrate on a single case or a few cases and how they enlighten the essential features of the subject being studied. As highlighted above, the study units include all institutions (principal actors) and operators representatives of *Daladala* and BRT System.

Due to time and financial constraints, only two modes of urban public transport were involved. These are the BRT Systems and the *Daladala* public transport. The BRT System was chosen because it is the only formal passengers transport system with uniqueness in services provision. The *Daladala* was selected because within the city it is among the informal modes of transport but dominates serving a large percentage of the city dwellers. However, for the private service providers, specifically the *Daladala* drivers, conductors and bus owners, interviews were conducted with their representative management associations. For the BRT System, they have a single bus operating company, so interviews were conducted with the Management representative.

Respondents or interviewees were selected by a non-judgmental or purposive approach (Thiel, 2014, Neuman, 2007). A clear list of institutions and the number of respondents is as shown in Table 3.2 below.

Table 3. 2: List of Institutions/Organizations and Number of Respondents

Institution/Organization		Category	Department	No. of Respondents
Ministry of Works, Transport, and Communication (MOWTC)				
➤	Transport Sector	Government	✓ Policy and Planning ✓ Transport Services - roads	3
➤	Works Sector	Government	✓ Roads - Urban and Rural ✓ Safety and Environment	3
	Tanzania National Roads Agency (TANROADS)	Government	✓ Planning	3
	Surface and Marine Transport Regulatory Authority (SUMATRA)	Government	✓ Road Transport Regulation ✓ Economic regulation- Planning, research, and development	3
President's Office - Regional Administrative and Local Government (PO - RALG)				
	Dar es Salaam Rapid Transit (DART) Agency	Government	✓ Operations and Infrastructure Management ✓ Transportation Planning	2
	Dar es Salaam City Council (DCC)	Government	✓ Planning	1
Ministry of Home Affairs (MoHA)				
	Dar es Salaam Regional Police Authority	Government	✓ Traffic Control and Management	2
	Usafiri Dar es Salaam Rapid Transit (UDA-RT)	Private Operators - BRT System	✓ Management	2
	Dar es Salaam Commuter Bus Owners Association (DARCOBOA)	Private Operators- Daladala	✓ Management	3
	Tanzania Road Transporters Workers Union (TAROTWU) - Head Office			
	Transportation researchers	National Institute of Transport (NIT)	✓ Transport Planning	2
		World Bank - Tanzania Office	✓ Infrastructure	1
TOTAL Number of Respondents				25

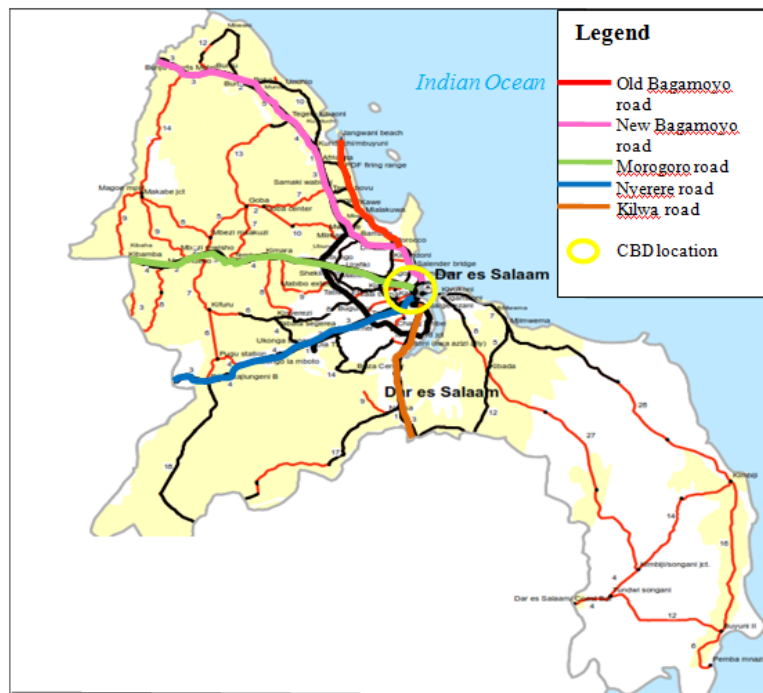
3.7 Area of study

The case study area was Dar es Salaam, Tanzania. The city locates on the coastal plain in the eastern part of Tanzania, along with the Indian Ocean bordering the Pugu Hills on the west. It is the largest regarding population and economy and commercial city of the country. Also, an essential terminal of transportation where the busiest port in East Africa is located (Kanyama, Kanyama-Carlsson, et al., 2004). The city's population is about 10% of the total country's population, and it has noticeably shown a rapid increase over time. The city's population was 2,487,288 in 2002 and increased to 4,364,541 in 2012, an increase of 5.6% (URT, 2013).

The city's urban form is mono-centric with a significant single central business district (CBD) connecting the center together with the major shopping zone named Kariakoo where most business activities are concentrated. The city's development is sprawled, and movements to and from the CBD depends on five major roads which are Morogoro, Kilwa, Nyerere, Old and New Bagamoyo roads in a radial connection (Kiunsi, 2013). The BRT system is only operating along Morogoro road whereas the *Daladala* operates over all the radial routes. Map 3.1 below presents the study area location including significant roads towards the CBD.

The study focused on the transport sector and more specifically on urban public transport. Targeted modes of passenger transport are *Daladala* and BRT system. Stakeholder institutions involved in this study are those critical actors in urban public transport service provision.

Dar es Salaam was preferably opted for this study due to the fact that it is a good representation of urban cities fast growing accommodating a significant proportion of poor inhabitants, different level and types of individual public transport operators. The city is characterized by high usage of motorized transport with diverse cultural context which enabled the researcher to acquire a broad set of information. Also, based on different previous studies, the area of research has been indicated to be increasingly facing urban public transport challenges in the provision of services (Sohail, Maunder, et al., 2006a).



Map 3. 1: Showing Study Area location (Dar es Salaam) with major roads to the CBD
Source: TANROADS

3.8 Field Visit Experience

This section generally explains how the whole process of data collection was conducted. It includes the challenges and obstacles in obtaining relevant data.

The data collection process started on 25th June 2018 and ended up on 21st July 2018. The challenges encountered first was time constraints. It required much commitment to reach all 25 respondents within a month. Most of the respondents did not observe the appointments; some did not immediately accept conversational interviews. Also, in two organizations an interview was conducted in parallel with two respondents at a time claiming that there was no

time to do an interview separately. However, they were very cooperative, and each of them responded to almost every question.

In addition to that, in Tanzania the official language is Swahili, but English is also used. So, for better response to the questions, most interviews were conducted in Swahili. So, the Interview Guide questions had to be translated in Swahili by the National Swahili Council (Baraza la Kiswahili Tanzania) abbreviated as BAKITA. The official translated copy with an official seal is attached in Annex 1.2. Despite few challenges, the exercise was successful and relevant data obtained as required.

Site observation was conducted to observe how traffic control is performed at the junctions, vehicle inspection is performed and the general infrastructure management including bus stations and walkways. It was done on peak and off-peak hours. Also, observations focused on how public safety and security is ensured.

3.9 Validity and reliability

This section talks about validity in addition to reliability of research findings. Case study research is applicable for studies with a small number of units thus ensures high internal validity but less external validity hindering the possibility of generalization. Also, since it requires an in-depth study, more detailed information from different sources was used as explained earlier. This information were also used in a triangulation process (Thiel, 2014). Validity and reliability are salient factors in any study that ensures credibility and trust of outcomes. Even though they cannot ideally be assured, every researcher strives to achieve reliability and validity of the study results as much as possible (Yin, 2009). Notwithstanding acknowledging that the aim of getting it correct is unworkable, it is better to aim at not getting it wrong (Miles, Huberman, et al., 1994).

The two terms, validity and reliability, are closely linked, whereby reliability is readily achievable, and it is essential for a study to be valid though the former cannot guarantee the latter (Yin, 2009). The author further defines reliability as consistency and validity as accuracy and how best the concept matches the reality (ibid). Further description of each term was presented below.

3.9.1 Validity

In case studies, ensuring validity of findings is vital. Generally, validity is the extent to which study results are trustworthy. There are various forms of validity which include internal validity, external validity and construct validity (Miles, Huberman, et al., 1994). However, this research, discussed and observed internal and external validity only.

Internal validity means that the study results can clearly explain the studied subject. It can be constructed through the acknowledgment of causal factors and possible competing theories (Yin, 2009). Since in this study, a deductive approach was opted for, and a comprehensive set of contextual information was gathered thus increasing its internal validity. It was furthered through counterchecking of the data collected. After all, with anticipation that, during interviews, respondents would subjectively interpret actions, this would have weakened the internal validity as well. Also, secondary data obtained from reports produced by similar critical respondents with the same context of subjectivity would affect internal validity in case they were prepared with biases. To improve objectivity and increase internal validity, secondary data were as much as possible obtained from different sources including websites, annual reports, academic journals, policy briefs, and regulations. Also, triangulation of data was applied. In addition to that, the comparison between the research findings and the observations during the site visit, interviews and perusal of relevant documents was done for consistency of the results (Thiel, 2014).

External validity is another central focus of the study to be able to give constructive recommendations for further studies and improvement of service provision in public transport. External validity means that the results can be used in other cases, that is, study findings can be generalized. External validity is a significant limitation in case study strategies due to scope limitations. However, the external validity was improved through various measures. Firstly, choosing a case study that represents the urban area with dominance in main characteristics of the study subject was an attempt to achieve external validity. Through the case study selected, it was possible to gather to a more considerable extent, the general knowledge about the study subject. In addition to that, conducting interviews with experts and other researchers, enabled gathering a wide range of information concerning other case study areas which increased the generalizability of the findings (Thiel, 2014, Yin, 2009)

3.9.2 Reliability

Reliability evaluates whether other studies would probably have achieved the same outcomes. Even though it is a challenge to assess achievement of other findings, in this research, reliability was ensured through clearly described methodology and case study approach. To assure consistence, case study protocol procedures and methods were applied for transparency and process tracing by keeping data records. The database for the case study was generated whereby primary qualitative data were developed in ATLAS ti while the secondary provided in hard and soft copies were handled with care and included in the reference database. Moreover, the triangulation process also improved the reliability of the study findings (Thiel, 2014).

3.10 Data Analysis

The researcher mainly used the qualitative data analysis approach. Qualitative data obtained through interviews are non-numeric and unstructured thus could hardly be organized hierarchically and challenging to circumscribe (Thiel, 2014, Punch, 2013). Through the content analysis method, qualitative data were analyzed and specifically for data obtained by semi-structured interviews, a narrative analysis was applied.

Content analysis means analysis of data presented in verbal, written or visual communication material (Thiel, 2014, Elo and Kyngäs, 2008). Before the analysis stage, the information gathered were structured and grouped in sub-themes or categories through a narrative analysis and after that they were coded. This enabled the researcher to quickly retrieve and follow up. The process was facilitated by the computer program known as ATLAS.ti. However, all of these steps were guided by the indicators identified during operationalization (Thiel, 2014).

During semi-structured interviews, the discussions were recorded (under the interviewee's permission) and then transcribed to code them into ATLAS ti 8.0. Coding was designed pertaining to indicators presented in Table 3.1. Some codes were added for the anticipation of new ideas and themes obtained from the data collection and research questions which were not in the indicators. A total of 30 codes were generated, clustered into five different groups. A list of codes and groups against their respective variables is presented in Annex 2.1 while Annex 2.2 presents a list of codes as generated using ATLAS ti. A brief summary on the analysis outcomes is as follows

On clarity of distribution of roles and responsibilities, most respondents (21 out of 25) were negative. They explained that the distribution is unclear. Most of them were from the government institution side. On level of cooperation and decision making process (18 out 25 respondents) stated that it is inadequate. Moreover, 14 out of 25 respondents commented that

the organization structure design is unclear thus leading to inadequate coordination. The respondents further explained that lack of strategic policy for urban transport affects the performance in service provision.

The analysis also indicated that there are existing policies which advocate transparency and regulations for control and monitoring provision of services, but they claimed of inadequacy in enforcement of regulations. This was explained by 20 out of 25 respondents. However, the analysis shows that, the policies are poorly implemented. Not only that but also, 13 out of 25 respondents explained that the regulations are weak, not clearly addressing urban transport issues.

In provision of services the analysis indicated that, the safety and security assurance is not adequately fulfilled for the Daladala but ensured for the BRT System. 22 out of 25 respondents commented on this. Regarding availability, 18 out of 25 respondents had comments, and 13 out of 25 on reliability. The BRT system was explained to perform better than the Daladala. The effect of fare rates and setting procedures was explained by 14 out of 25 respondents. Procedures are similar for both BRT system and Daladala and have huge impact on quality of services.

Other codes were on the existing challenges in provision of services were challenges mentioned by majority of respondents are inadequate infrastructure, overlap and conflicting responsibilities and inadequate professionalism by Operators. They were explained by more than 50% of the respondents (more than 12 out of 25 respondents). Also, a group of additional factors contributing to existing challenges was included. Most factors mentioned were institutional factors that were mentioned by more than 50% of the respondents. These include poor planning and lack of integrated planning (19 out of 25), poor coordination among stakeholders (17 out of 25 respondents), poor enforcement of regulations (17 out of 25 respondents), Inadequate financial and human resources (15 out of 25 respondents), lack of strategic policy for urban public transport (14 out 25 respondents) and lack of accountable institution for urban transport. Other factors that are critical, even though they were mentioned by less than 50% of the respondents include political interference (10 out of 25 respondents), institutional set up fragmentation (9 out of 25 respondents) and lack of Dar es Salaam transport Master Plan (3 out of 25 respondents). The results of the analysis and the frequency of respondents is shown in the Table presented as Annex 3.

For the secondary data, documents that were reviewed include policy briefs, regulations, and strategic plan and study reports. Moreover, through observations, some relevant information on operations and enforcement of regulations were obtained.

Chapter 4: Research Findings

The chapter presents results of information gathered on fieldwork. It includes the description of the institutional framework with its main two components and then the provision of urban public transport services. Further, it discusses existing challenges and additional factors contributing to the problems. This chapter provided a road map for answering the research questions in chapter five. It also explains the effect of the institutional framework on the urban public service provision.

4.1 Institutional Framework for Public Transport Service Provision

The study and assessment of the Institutional Framework were through different methods. Reference to the discussion in chapter 2, for the basis of this study, sub-variables of the Institutional framework are organization structure (Planning authorities) framework and the legislative (regulatory) framework. The section presents the explanations for the general performance of the present institutional framework.

4.1.1 General Synopsis for the Existing Institutional Framework

The Dar es Salaam city is facing extraordinary challenges in overcoming and managing the population growth impacts and mostly the increased number of vehicles. Among others, one significant implication of increased population and number of cars are poor transport sector performance. However, encoded in findings, service provision in urban public transport performance was found to be affected by the existing Institutional Framework as well. Explanations revealed fragmentation of the Institutional framework. The urban public transport so far seems to belong to no one. It is because the transport sector is treated countrywide irrespective of the type of transport. On top of the opinions from respondents, secondary data also revealed that treatment of the urban public is as another intercity public transport. Furthermore, explanations indicated that management of the sector is through several institutions each performing their responsibilities in isolation thus causing overlaps and non-implementation of some plans and strategies. Giving views on how the existing institutional framework has ensured quality and availability of urban public transport services, one respondent from the government institution explained that, there is no accountable institution for urban transport and that is anticipated to be the main reason for its poor performance. He stated as follows;

“Overall the so-called urban transport sector is hanging around; it is not surely determined of where it belongs. Each stakeholder institution plays a part, but when it comes to accountability none is responsible”

Respondent 6

In a review of the study report for transport Master Plan of Dar es Salaam, a researcher noticed that the study proposed the reform in the Institutional framework in order improve urban transport management and overcome challenges facing the sector. The report further pinpointed out that, there is tremendous increase of vehicles within the city. It is rapidly increasing where statistics has changed from about 80,000 in 2007 to 200,000 vehicles in the year 2014 with the growth of 14% per year. With the straight-line projection, there is anticipation that the number will increase twice as much in every five years (JICA, 2017).

Previous researchers commented that the challenges facing urban transport specifically congestion, have been tackled by increasing the road capacity which is also the case in Tanzania (Kumar and Agarwal, 2013, Kiunsi, 2013). In examining the current institutional framework for the sector, through document review and interviews, the researcher revealed that many stakeholders are involved. Among these stakeholders, two agencies under different Ministries deal with roads development. The two agencies work independently, and each deal

with a different road class though they need to be integrated. Also, planning is done differently thus revealing doubts on whether a challenge of road infrastructure can be resolved.

It was further advocated by respondents that, there is a rapid increase in population as well as developments in the City. It was also supported that vehicle ownership being pride in the country; it leads to increased congestion. The significant problems also lie in the road capacity that, planning did not cater for future development. Lack of integrated planning with the slow or non-implementation of plans is a major reason for insufficient infrastructure. 10 out of 25 respondents, revealed that poor planning and non-implementation of programs and strategies are among the challenges in the provision of service. One of the respondent from the government institution explained that;

"One of the reasons is a rapid increase of population in the city of Dar es Salaam. Also, vehicle ownership in the city is increasing. In addition to that, vehicle ownership is a pride for most Tanzanians, so everyone feels proud to drive despite congestion caused. Another reason is that the city's infrastructure planning was not sought to be improved for so long to accommodate the rapid changes. In addition to that, there is poor implementation of the existing plans and some not implemented at all because of lack of accountable institution".

Respondent 17

The National Transport Policy (2003), also acknowledges that the City growth regarding population and coverage area has not been in parallel to the infrastructure development and general implementation of the transport strategies. It also correlates with researchers' views, which explained that the infrastructure supply in most cities is not equivalent to the demand. The primary cause of all these is anticipated to be poor planning and non-implementation of plans and strategies (Melbye, Møller-Jensen, et al., 2015, Ka'bange, Mfinanga, et al., 2014).

4.1.2 Organization Structure and Framework

Under this subsection, information gathering based on several indicators. The institutions involved in the sector of transport define the organization structure framework as well as how their inter-linkage and their level of coordination. Also, their roles and responsibilities, level of cooperation along with the decision-making process were studied. The following sections below present the study findings.

4.1.2.1 Distribution of Roles and Responsibilities

The Tanzanian government operates under the decentralization by devolution system. It has two tiers at central and local level. Generally, central government's responsibility is policy formulation while the local government authorities are responsible for implementation of policy directives. However, the Ministries under the central government are sector based with institutions/agencies under the industry for implementation of the plans and strategies as directed by sector policies.

Based on the fieldwork conducted, through document review and interviews, a researcher noticed that the transport sector is more or less a cross-cutting issue. Despite the presence of the mother Ministry, other many stakeholder institutions are playing a part in the provision of services. Each Stakeholder institution has some roles and responsibilities according to their establishment act. The mandate and responsibilities are as summarised in Table 4.1 below and after that, the presentation of general discussion and opinion and perceptions from the respondents on the distribution of duties and functions follows.

Table 4. 1: Roles and Responsibilities of the Stakeholder Institutions in Transport Service Provision

Ministry/Institution		Roles/Responsibilities
PO-RALG		<ul style="list-style-type: none"> ✓ Formulation of policies and regulations for local government authorities
	RS-DSM	<ul style="list-style-type: none"> ✓ Carrying out the Government functions within the Dar es Salaam Region and to advise the LGAs in implementing their plans. ✓ Represents the PO RALG at the regional level and in Setting the strategic policy and assign responsibilities to the authorities under his jurisdiction
	DCC	<ul style="list-style-type: none"> ✓ Coordination of crossing cutting issues within the city, the transport sector being one of them ✓ City land use and urban planning in collaboration with Municipal councils. ✓ Management of bus stations ✓ To provide for the control, use and licensing of vehicles other than motor vehicles. ✓ Construction of urban road infrastructure; ✓ Construction and operations of bus terminals with adequate facilities such as toilets, electricity, and water; ✓ Control and Issuance of licenses, taxi parking permit, and management of parking facilities ✓ Advising the central government and its institutions on short and long-term plans related to road transport in their areas of jurisdiction (Dar es Salaam City)
	Municipalities	<ul style="list-style-type: none"> ✓ Management of Parking facilities, road cleaning
	TARURA	<ul style="list-style-type: none"> ✓ Maintenance and development of urban roads ✓ Management of Parking facilities
	DART Agency	<ul style="list-style-type: none"> ✓ Establishment and supervision of the BRT system operations
MOWTC	Works sector	<ul style="list-style-type: none"> ✓ Formulation of Construction Industry Policy, planning, and overseeing trunk and regional roads development ✓ Formulation of the road safety policy and strategies and oversee its implementation
	Transport sector	<ul style="list-style-type: none"> ✓ Formulation and review of the road transport services policy and strategies ✓ Formulation and evaluation of policies, legislation, and standards for road transport safety and security ✓ Guidelines and procedures formulation for traffic management data regarding transport safety and security
	RFB	<ul style="list-style-type: none"> ✓ Financing maintenances activities of roads
	TANROADS	<ul style="list-style-type: none"> ✓ Responsible for trunk and regional roads in the City ✓ In collaboration with TEMESA, they are also responsible for traffic and street lights
	SUMATRA	<ul style="list-style-type: none"> ✓ Control and regulation of public transport services ✓ Issuance of licenses for transport service provision ✓ Route allocations ✓ Fare settings ✓ Setting standards of the daladala operations
MOHA	Police	<ul style="list-style-type: none"> ✓ Enforcement of Traffic Laws, regulations, and rules ✓ Vehicle inspection ✓ Traffic control, regulation, and management in all roads
MOFP		<ul style="list-style-type: none"> ✓ Registration of Motor Vehicles ✓ Road Tolls collecting

Source: Author's Construct, 2018

Based on Table 4.1 above, there is a duplication of responsibilities. For example, under MOWTC, there are two sectors (Transport and Works sector) both dealing with the road safety issues. In the Works Sector, it is under the department of road safety, and Environment and in the Transport, Sector is under the Section for Road Transport Services. Therefore, at the end, a little or nothing is done because each of the sectors assumes that the other has implemented such issues or strategies.

On the other hand, implementation of the same programmes in the different institution was explained to be a misuse of resources. In addition to that, SUMATRA and the Police operate under different Ministries but are all concerned with inspections of vehicles and regulations enforcement in transport services. In addition to that, the Local government authorities (Municipalities and DCC) together with TARURA have the mandate in the management of parking facilities within the city. Therefore, it creates conflicts, overlap, and duplication of responsibilities.

The respondents also gave opinions that, there is a need to reduce some institutions involved and harmonize distribution of responsibilities under fewer or one authority for better performance. 21 out of 25 respondents provided opinion on the overlapping, duplication and conflicting roles and responsibilities among the stakeholders and how it leads to unaccountability as well as non-implementation of plans and strategies. The respondent from the category of researchers explained as follows:

"So, this is a major weakness, and it was identified a long time ago. In reality, you have somehow every stakeholder have a responsibility and some two or more-institution responsible for the same issue but when it comes to accountability, there is nobody who is really accountable. For example, if you find some traffic signals not working, it may be because there is no LUKU (Power units), it may be because there is a technical problem to be fixed by TEMESA, it may be because of some development works done by TANROADS. But who is to fix that? So, this is a major issue" **Respondent 18**

One respondent from the local government authority also cited a real scenario of how same responsibilities are allocated two different institutions due to the establishment of a new road agency in almost two years back (TARURA). Some of the responsibilities are overlapping and conflicting because of non harmonization in distribution of such duties. One respondent from government institution explained as follows:

"TARURA was established and given the mandate to collect the parking fees. Which have been the responsibility of the City Council, where they used to collect such fees in all municipalities and retain a certain percentage. I think there will be complications because what the City Council is implementing, is according to their establishment act, but TARURA is highly claiming for this activity. So, there is a need for harmonization and review of those responsibilities. We are more implementing politically than legally and professionally" **Respondent 22**

Review of the National transport policy (2003) also revealed that, distribution of roles and responsibilities among stakeholders is a challenge and therefore set directions on how to reorganize responsibilities and functions of stakeholder institutions for an effectual institutional arrangement as well as proper administration of urban transport (URT, 2003).

The empirical findings correlates with different previous researchers, who stipulated that, the existing institutional framework performs insufficiently because of unclear defined objectives and distribution of functions and duties among stakeholders (Kanyama, Kanyama-Carlsson, et al., 2004, Msigwa, 2013, Kanyama, 2016)

4.1.2.2 Type of Departmental Link

This section discusses regarding the organization structure design and level of coordination. The key stakeholders in the provision of urban transport services include several institutions from government both central and local with their respective agencies as well as their authorities. Urban public transport provision also includes private sector as operators both for the Daladala and BRT System. However, the BRT System operations are formally managed by a specific semi-autonomous agency though it still operates under the overall common regulations and policies.

Rooted in the study results, the institutional structure design for the Dar es Salaam urban public transport is undefined. Institutions involved in the transport sector, include Ministries (Central government), agencies, regulatory authorities and local government authorities each working in isolation in contributing to the provision of services. Figure 4.1 below shows the Institutions involved and their linkage. Findings revealed that the interlinkage among stakeholder institutions could not be clearly defined. What is stipulated is the intra coordination within the Ministries and their respective agencies and authorities (Connection is between each Ministry to its underlying agencies/authorities in its jurisdictions. They are all indicated by similar colors). There is no clear link among Ministries. It indicates that, coordination in planning and implementing different strategies and program in Tanzanian cities is a critical problem which hinders developments in the country. The empirical findings further revealed that the institutional framework is fragmented and lacks a clear organization structure design which in turn leads to inadequate coordination in the planning and implementation of policy strategies. 9 out of 25 respondents gave opinions on how non existence of the organization structure for urban public transport and fragmentation of the institutional set-up affect the sector performance with duplication of responsibilities. One of the respondents from the government institution explained as follows:

"Generally speaking, the Institutional framework of urban transport is not adequate to achieve the medium to long-term policy objectives on urban transport system not only in Dar es Salaam but also all over Tanzania. We have got a poor institution structure for urban transport causing duplication of work among key transport actors". Respondent 10

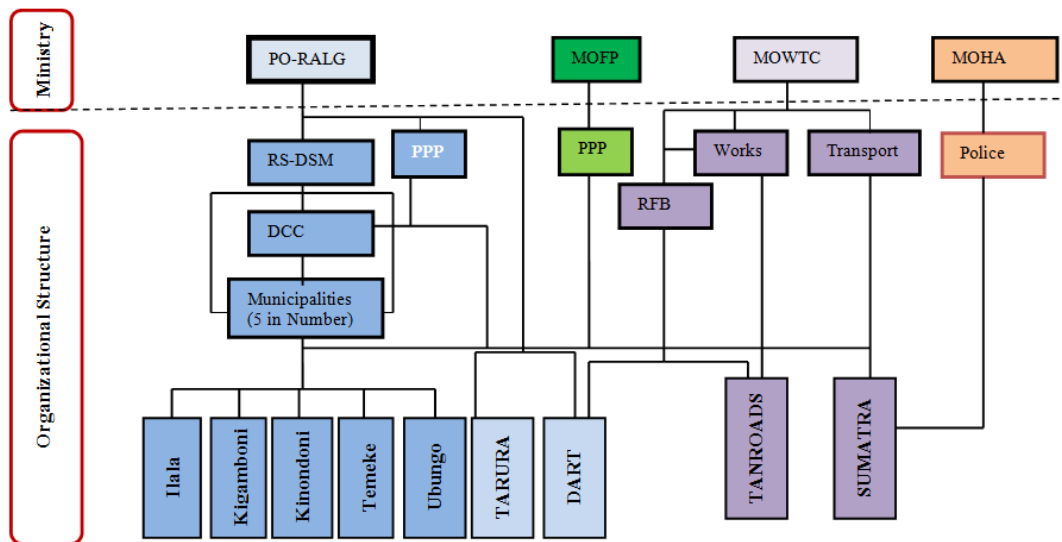


Figure 4. 1: Organization structure showing all stakeholder institutions

Source: Author's Construct, 2018

Key: DART: Dar es Salaam Rapid Transit Agency
DCC: Dar es Salaam City Council

MOFP:	Ministry of Finance and Planning
MOHA:	Ministry of Home Affairs
MOWTC:	Ministry of Works, Transport, and Communication
PO-RALG:	President's Office - Regional Administration and Local Government
PPP:	Public-Private Partnership
RFB:	Roads Fund Board
RS-DSM:	Regional Secretary- Dar es Salaam
SUMATRA:	Surface and Marine Transport Regulatory Authority
TANROADS:	Tanzania National Roads Agency
TARURA:	Tanzania Rural Roads agency

Due to the organization structure design, managing the transport sector specifically urban public transport is revealed to be faced by inadequate coordination whereas each of the stakeholders works independently.

In some cases, it was explained by respondents that, things are not worked out for those with similar responsibilities since each of them thinks the other one is implementing the task and end up with non-implementation. Also, this results in the replication of activities and sometimes conflicts in plans and implementation. Lack of an accountable organ to bring together all stakeholders and oversee their performance in the sector by taking each stakeholders goals and objectives on board is a reason for this. 14 out of 25 respondents explained that the lack of clear organization structure design results in poor inter coordination among stakeholders. Findings further revealed that the existing institutional framework is more fragmented due to the complexity of multi-stakeholder involvement. Fragmentation affects the level of stakeholder cooperation in planning and implementation thus causing a lot of challenges. 18 out of 25 respondents claimed of participation being inadequate because of unclear existing organization structure. Two of the respondents, one from the government institution (respondent 1) and the other from the category of researchers (Respondent 23) explained as stated below.

"Urban transport is comprised of complexity with many institutions. Generally, in the provision of urban public transport, the existing system is fragmented. Talking specifically about road safety component, for example, we have more than five institutions involved in road safety issues. Now, you find that we must have a lead agency to coordinate these institutions and provide guidance because we do not work cooperatively"

Respondent 1

"This is all because of conflicts among the Institutions. When one presents an idea of integrated planning, each institution will say, I deal with this, no this is not my responsibility. There is lack of sense of cooperation because of the nature of the institutional set up".

Respondent 23

Through reviewing the National Transport Policy (2003) and the National Transport policy (2003), findings revealed that the institutional set-up is highlighted to be among the constraints in addressing road transport issues. The primary concern was about safety issues and linkage among main actors to facilitate coordination (URT, 2003, URT, 2009).

These findings correlate with different previous researchers, locally and globally. Literatures advocate that lack of coordination and fragmentation among stakeholders renders the existing institutional frameworks inadequate to deliver the required services for urban public transport (Gwilliam, 2002, Msigwa, 2013, Kanyama, 2016). Moreover, Kanyama, Kanyama-Carlsson, et al.,(2004) explained that urban public transport for Dar es Salaam lacks clearly defined body and management system which would be accountable for overseeing all issues regarding the public transport and coordinate other relevant stakeholders.

4.1.2.3 Availability of Urban Public Transport Strategic Policy and Decision-Making Process

The findings revealed that there is no specific policy for urban public transport sub-sector. It highlighted this as a foremost problem facing urban transport. The sector is treated like other sectors implementing the national plans concentrating on increasing road capacity which is anticipated not to be of much help. Respondents further explained that, since the mother Ministry is responsible for the national policy, it pays less attention at the regional level. And since at local and city level transport is taken as a cross-cutting issue and is not their primary responsibility, it is less prioritized. 14 out of 25 respondents commented on the effects of lacking the strategic policy for public transport specifically for urban transport. It was further clarified that ignoring urban transport has enormous impact on the city's fiscal development. A respondent from the government institution explained as follows.

"Actually, in general, all stakeholders are performing their duties on their own. We lack something like coordination. And we have no policy that addresses urban transport as a sector. This cause stakeholders to lack harmony and cooperation, because there is no guiding policy directions or responsible institution to facilitate that. Every stakeholder has a part to perform in urban transport, so they focus on their role. This is an existing gap"

Respondent 8

Different kinds of literature also, delineate the importance of strategic policy and interactive coordination in a network of actors for smooth decision making and effective performance. It is explained that cooperation towards a common goal not only improve performance but also reduces cost (Meakin, 2004, Quium, 2011, Klijn and Koppenjan, 2012, Kenneth, Meier, et al., 2007, Koppenjan and Klijn, 2004). However, despite lacking a strategic urban transport policy, findings revealed that there are existing policies which govern the implementation of plans regarding public transport services provision. Discussion on key Policies currently determined relevant for the facilitation of the provision of services is under section 4.1.3 below.

4.1.3 Regulatory Framework

In this study, the regulatory framework is discussed regarding existing policies and regulations relevant to urban public transport. The policies and regulations determined relevant for public transport service provision were gathered like secondary data directly from the government Institutions' websites. However, the respondents mentioned them during conversations and provided links for accessibility. Further discussion of the findings is as follows.

4.1.3.1 Existing Policies

Key Policies currently determined relevant for the facilitation of the provision of services include the following;

(i) The National Transport Policy (NTP) (2003)

This policy was established in the year 2003 under the Ministry of Transport currently named as the Ministry of Works, Transport, and Communication. This Ministry is divided into three sectors which are Works, Transport, and Communication. The transport sector is the one responsible for the establishment and supervision of the implementation of this Policy as well as the underlying strategies and other relevant regulations. This policy addresses all issues regarding transport services for all modes that are roads, railways, marine, air, and pipeline countrywide. Its Vision states as follows: *"To have efficient and cost-effective domestic and international transport services to all segments of the population and sectors of the national economy with maximum safety and minimum environmental degradation"* (URT, 2003, P.1)

The policy has a mission of developing sustainable transport infrastructure as well as operations which meets the needs of mobility and accessibility. Moreover, the policy includes one section (Section 5.0) for urban transport directions as one of the objectives and goals for the transport sector. Under that section, it addresses issues of Road Infrastructure and services, land use planning, Traffic flow and Management, Public Vehicle Design Standards and Specification, Institutional Arrangement for Urban Transport Management and Urban Transport Planning and Financing.

Despite having policy directions and specific objectives for the urban transport, the sector still performs poorly. It indicates that there is inadequate or non-implementation because it is almost 15 years since the formulation of the policy. It was also explained by 10 respondents out of 25 that, poor planning and non-implementation of urban transport strategies is an existing challenge.

In a review of the study report conducted by JICA on the Dar es Salaam Urban Transport Master Plan in 2008, findings revealed non-implementation of plans and strategies. The study by JICA based on the Policy Objective regarding urban transport, but some of the study recommendations were not implemented until they became outdated. One of the suggestions was Institutional setup reform (JICA, 2008). Due to fragmentation of the existing institution arrangement, it was proposed for a change by the establishment of a single lead authority. The proposed body would be autonomous and independent with the significant role of establishing the Dar es Salaam strategic urban transport policy. It would play a coordinating role among all stakeholders. The proposed Institutional set up, and organization structure was focused on management and supervision of urban road transport only.

Due to the non-implementation of the proposal and the increased city transport challenges, the Government then thought of implementing the proposed plans. However, the city urban form and vehicle statistics together with population had already changed. JICA was, therefore, requested to review and update the study which during the fieldwork, it was in its final stages. The revised research still recommends for the Institutional set up reform but have been improved to incorporate all transport modes. The proposed organizational structure design is as shown in figure 4.2 below.

As stated in section 4.1.2.1, lack of accountability among the stakeholders affects the decision-making process. During the interviews, 18 respondents out of 25 also commented on how the decision-making process affects the achievement of target goals. And this mainly was claimed to be caused by the involvement of several institutions in the same issue where they end up in conflicts. Therefore, this slows down the decision-making and thus strategies implementation. The respondents from government institutions explained that there had been negotiations and conflicts of who should initiate the establishment process of the proposed authority.

"We already had a proposal to have the Dar es Salaam Urban Transport Authority, but we have not reached far because officials from the PO-RALG still think that transport issues are not under their jurisdiction. But we have tried to convince them to direct the regional authority for such responsibility. We are still working on the process. But the gap is clearly seen, and the need for an urban transport authority as an organ is vital"

Respondent 9

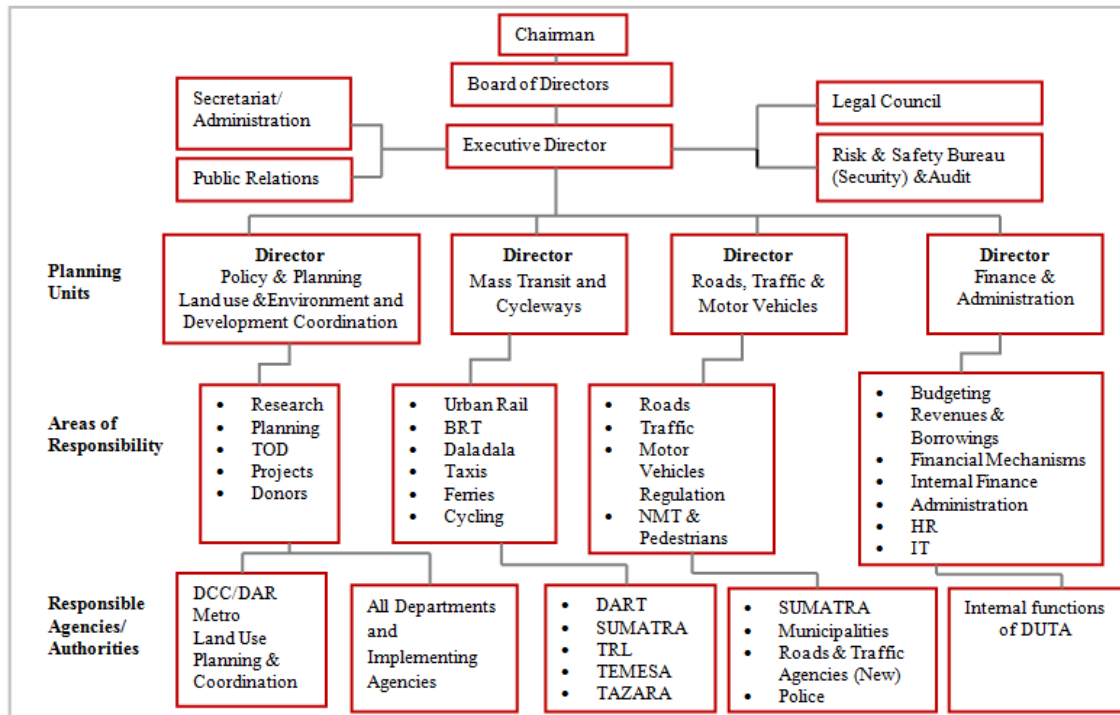


Figure 4. 2: The Proposed Organization Structure for the DUTA
Source: JICA (2017)

Previous researchers also advocate that having an institution in charge of management together with general oversight over urban transport system leads to effective performance. Some examples were also cited for countries which achieved the reform in a positive way (Meakin, 2004, Rahman and Abdullah, 2016, Rahman and Abdullah, 2016, ADB, 2009, Zakaria, 2003).

(ii) The National Road Safety Policy (NRSP) (2009)

This policy was established in the year 2009 under the Ministry of Infrastructure Development currently named as the Ministry of Works, Transport, and Communication with three sectors. Works Sector has full mandate to oversee the implementation of this policy. The policy's vision states that *“To ensure that nobody is killed or seriously injured as a result of a road traffic crash”* (URT, 2009, P.13). Its mission explains improving safety by ensuring the reduction of injuries and death rates due to road accidents through education, engineering, emergency care and enforcement measures. This policy is also applicable countrywide and not specifically for the urban areas or passenger vehicle transport.

Despite having clear policy objectives and directions, the study revealed non-implementation of most of the policy. The NRSP further, includes a goal of Institutional framework reform that would enhance the full and proper performance. It contains provisions for the establishment of a Road Safety Agency but has not been implemented to date. Through the interviews conducted, a respondent categorized as a researcher claimed that there are sound policies and strategies but poorly executed because of lack of seriousness and sense of accountability. He stated as follows.

“The official National Transport policy is dated 2003. There is another policy called the national road safety policy of 2009. If you check how much that policy has been implemented, you can cry because nothing had been done. Funds have been provided for the establishment of the Road Safety agency and another one was the Drivers and Vehicle

Examination Licensing Agency. But none has been established, and it is already ten years"

Respondent 18

Other supporting policies include A National Environment Policy (1997) and Construction Industry Policy (2003).

Previous researchers correlate with these empirical findings. Researchers explained that being familiar and implementing policy strategies and directions is a challenges which lead to poor service provision (Machnej and Zwoliński, 2016). Meakin (2004) further, defines an effective institution as one capable of following and achieving its target objectives. It must also be able to manage transitions to any changes in established goals. On the other hand, an institution is deemed not effective when it muddles through, with minor or incremental measures as issues arise. However, the effectiveness would be supported by the presence of, among other, a coherent policy which highlights urban transport objectives and priority areas and an independent, capable institution to coordinate implementation.

4.1.3.2 Policy Transparency

Transparency of the existing policies was analyzed through three main characteristics. These include the means and procedures of information and data sharing, inclusion, and stakeholders participation in planning, implementation, monitoring as well as evaluation in public transport service provision. From interviews conducted, 20 out of 25 respondents advocated that the existing policies are transparent enough. The main problem is how the transparency is practiced within and among institutions and stakeholders. It was claimed by respondents on the operator's side that, they are generally involved in stakeholders meetings, but their opinion is not incorporated in the final decision making. One respondent explained as follows.

"The problem is on implementation. We discuss and give our comments, but they implement their own. They normally call meetings and read everything for us, when we complain, they request us to meet as service providers and submit our comments, but when they compile the final drafts, you find no comment from our side has been incorporated".

Respondent 13

i) The National Transport Policy (NTP) (2003)

The policy has provisions stating two issues regarding inclusion and participation as follows: "Ensure private sector participation in the provision of services while the government continues to retain the role of ownership and development of the key strategic transport infrastructure." And "apply a participatory approach in the provision of transport infrastructure and services by involving all the stakeholders (i.e., government, operators, and users) in playing their role in the development of the sector" (URT, 2003, P.10).

ii) The National Road Safety Policy (NRSP) (2009)

This policy also provides directions for the participation and involvement of all stakeholders. Among the core values of the policy, transparency is mentioned first. It further stipulates the participation of private sector, though very specific to the vehicle inspection system only. It explains that the Government shall encourage and ask for private individuals' or companies' contribution in the process of the safety and security assurance through vehicle inspection arrangement (URT, 2009).

However, the policy does not elaborate on how the involvement will be facilitated. Moreover, the policy has a section for education and information whereby public awareness of safety issues is aided. Under this section, the policy also has an objective of improving data system where it provides for the development and maintaining a comprehensive and accurate crash data system made available to all relevant stakeholders. Regardless of having such provisions

in the policy, still some respondents explained of unawareness to such policies and existing regulations. Six(6) out of 25 respondents explained that there is a lack of awareness by operators and bus owners of the policies, laws, and regulations which affects the provision of services. Respondents categorized as operators further advocated unawareness to regulatory tools but also stipulated that not all of their objectives and opinion are taken on board in the decision-making process though they are involved in the stakeholder's meetings. One respondent from the operator's category stated as follows

"What I can add is about education. Okay, they do not incorporate our comments, but there is something like canceling and awareness. Our goal is not to go against laws and regulations but to provide quality services. They should take the time to take us through their regulations and laws for a common understanding. Training and awareness campaign are essential rather than relying on fines and penalties. These are paralyzing the service"

Respondent 14

Apart from these findings, Machinej and Zwoliński (2016) explains that involvement, participation and achievement of common goal stakeholders, users, operators and experts is a challenge in provision of services. However, it is important to practise transparency for a sustainable transport system (Sampaio, Neto, et al., 2008, European Union, 2003).

4.1.3.3. Existing Regulations and Its Level of Enforcement

(i) Existing Regulations

The findings indicated that several regulations are governing the provision of transport services. The existing regulations were formulated based on the existing relevant policies and Acts. The main acts include The Road Traffic Act, 1973; Transport Licensing Act, 1973; The SUMATRA Act, 2001 and The Roads Act, 2007. Based on these acts, and the policies above, several regulations related to the transport sector have been developed for control and monitoring of the public transport. These include;

- The Transport (Road Passenger) Licensing Regulations Regulation 2007
- Passenger Vehicle - Technical safety and Quality of Service Standard Rules of 2008
- Tariffs Regulations of 2009
- Transport licensing (Pubic Services Vehicles) Regulations, 2017
- The Road Traffic (Motor Vehicle Retro Reflective Markings) Regulations, 2015
- The Road Traffic (Periodical Mandatory Vehicle Inspection) Regulations, 2015
- The Road Traffic (Notification of Offences) (Amendment) Regulations
- The Road Traffic (Examination and Re-Testing of Drivers) Regulations, 2015
- The Roads Use Regulations of 2009 and
- The Roads Management Regulations, 2009

Most of them are implemented by the SUMATRA or Police or both collaboratively. Also, for the Roads Use and the management of the road regulations, they are implemented mostly by TANROADS and TARURA. In some cases, the police are required for assistance since they have the full responsibility for laws enforcement.

The findings revealed that most of the existing regulations are relevant for the provision of services. However, these regulations are not strategically for urban public transport but instead applies to the entire general transport sector. In this case, therefore, they lack some provisions for addressing critical urban issues. It was highlighted that there is a need for harmonization to accommodate all the urban issues. A respondent from the government institution explained as follows.

"There is a need to harmonize them. For example, in areas for speed control, there is a need to harmonize laws to be clear on speed limit in urban areas. It should identify congested areas, risk area (black spot areas)".

Respondent 1

(ii) Enforcement of Existing Regulations

The findings revealed that, for the two modes considered in this study, the enforcement of regulations is differently conducted. For the BRT System, operations and general regulation and control are administered by the DART Agency, and it is through the performance contract. The contract includes the performance criteria of which if they are not met, the bus operator (UDA-RT) is penalized. For the case of Daladala mode of transport, there are no specific performance criteria. Instead, the general regulations guide them, and SUMATRA regulates them like any other transporters.

Noncompliance of the performance criteria (for the BRT System) was explained that sometimes it is caused by the institutional setup and mode of traffic control management as stated below.

"There are challenges with the existing Institutional framework. Looking at the availability and punctuality, we have an obstacle of signalized junctions where sometimes delays are caused. You find that buses at junctions have no priorities because of mixed traffic flow despite the BRTs having their lane. Coordination is missing between the operations management and the traffic flow management team. All the traffic including private cars, Daladala and BRTs are treated equally. Similarly, this affects the services".

Respondent 7

It was further explained by 20 out of 25 respondents that, there is an inadequacy in the enforcement of the regulations. Explanations revealed that the incompetence was contributed by several challenges from the operators as well as the government or regulator's side. Significant problems result from the unawareness of the operators on the existing regulations. Also, professionalism, shortage of funds, inadequate infrastructure and workforce affect enforcement. Another, major issue raised as to affect regulation enforcement is political interference which was advocated by 10 out of 13 respondents. One of the respondents from the government institution stated as follows.

"However, enforcement of these regulations is sometimes faced by challenges of political interference and resistance from the community. Also, lack of professionalism and unawareness to regulations by conductors and drivers is a major challenge in enforcing regulations. We are aware of existing regulations, but their enforcement is hard "

Respondent 4

It was further argued by respondents that, the existing regulations have some weakness and therefore causing challenges in enforcement. 13 out of 25 respondents commented on the weakness of existing regulations. The operators complained of the fines/penalties imposed on the offenses and the license fees. Explanations revealed that offense penalty rates by the Police, SUMATRA, and TANROADS are different, but they might be on the same offense. Similarly, regarding licenses, it was explained that there is no uniformity of license fees. Similar vehicles charges, of the same capacity, operating on the same route can be different.

Other weaknesses highlighted is that the regulations are not clear on the involvement of officers from the government institutions other than SUMATRA on engaging in operating as bus owners for daladala. Officers owning buses affects the control and enforcement due to conflicts of interests. Also, vehicle examination and the drivers' professionalism are critical

factors in ensuring safety in the provision of services. However, they are taken for granted. A respondent categorized as a researcher explained as follows.

"One of the weakness which everybody knows is the Vehicle Examination. In this country, probably people are going to change but currently what were are doing is unethical and unprofessional. Drivers are buying stickers for vehicle inspection outside and put it on your windshield, and it is written that it is valid while the vehicle was not examined. Apart from the enforcement, nobody is looking at the driving profession. Nobody is looking at the curriculum and professional ethics of drivers. It is another area also you find very weak".

Respondent 18

Review of policy briefs also revealed the weakness in the regulation of the transport services and therefore sought of some measures to be taken. It states that *"Major weaknesses in the regulation include poor coordination between authorities, poor governance (corruption) and poor enforcement. Therefore, the challenge is to streamline the functions and increase coordination, and to link organically, policy formulation, regulation and implementation oversight"* (URT, 2003, P.6)

Review of the research conducted by SUMATRA on needs and management of public transport services, advocated that there is an inadequacy in the enforcement of regulations due to the nature of the Institutional set up in urban transport service provision (SUMATRA, 2011).

Previous researchers also highlighted on the poor enforcement of regulations. They explained that, poor traffic control and management, inadequate vehicle inspection and regulation and control of operators' professionalism are among challenges in provision of services (Msigwa, 2013, Massami and Myamba, 2016).

4.1.3.4 Summary on the Institutional Framework

Based on the empirical findings, it was revealed that the organizational structure framework involves a multi-stakeholder network where each stakeholder has a role in service provision. However, allocation of some of the responsibilities is to more than one institution creating overlaps and conflicts. Regarding the inter stakeholder linkage, no apparent organization structure design defines a coordination mechanism. Thus, the framework is defined fragmented with each stakeholder performs their duties in isolation.

Moreover, it was noticed that the urban transport is not considered as an independent sub-sector but instead treated as the general transport sector. The decision-making process and the level of collaboration among stakeholders also were found to be inadequate. This was explained mainly to be contributed by poor organization structure design because there is no institution specifically accountable for this subsector and no strategic policy. However, the existing policies have provision for urban transport though the policies are poorly implemented.

The existing policies were determined transparent facilitating information sharing, participation, and inclusion. The major weakness resulted from the non-implementation of the strategies and plans. In addition to that, the findings revealed that there are existing regulations but are determined weak with a low level of enforcement. The low level of/inadequate enforcement was highlighted in vehicle examination, control and regulation of operators and traffic flow management. Weaknesses in regulations were explained in the identification of urban black spot areas and speed controls and permission to government official being involved in passenger vehicle ownership.

4.2 Urban Public Transport Service Provision

As discussed through previous chapters, based on literature and the operationalization of variables, the provision of services was looked at regarding the mass transit systems and infrastructure, Financing and Pricing and Operations. These factors were observed based on the modes considered in this study. Under this section, the research findings based on the modes are discussed, and at the end, a subsection for the conclusion concerning other researchers is presented.

4.2.1 BRT System

The data collection on the mass transit system and Infrastructure were based on the reliability regarding adherence to schedule; availability using quantity (adequacy/sufficiency), and the quality of the services provided.

(i) BRT system Overview

The BRT system initiatives began during the year 2002 by the DCC. The Council prepared a proposal in collaboration with the Urban Authorities Support Unit (UASU) under the mother Ministry by then named as The Prime Minister's Office-Regional Administration and Local Government (PMO-RALG) currently named PO-RALG and the Institute of Transport Development (ITDP). The idea was positively supported by the Global Environment Fund (GEF). After acceptance of the proposal the project Management Unit was established within the City Council. The central government then conceptualized the idea and thought of going further thus in 2006 establishment of the DART Agency was tabled and implemented. The establishment was based on the Executive Agencies Act and its amendments (1997). The primary functions of the Agency were to establish, implement and operate the BRT system on commercial business management principles.

The functions of the DART Agency are not to be interfered by politics, and its operations are PPP based on contracts concessionaires in service delivery which include a collection of fares, the operation of buses and funds management. The organizational Set Up for the DART Agency is as shown in figure 4.3 below

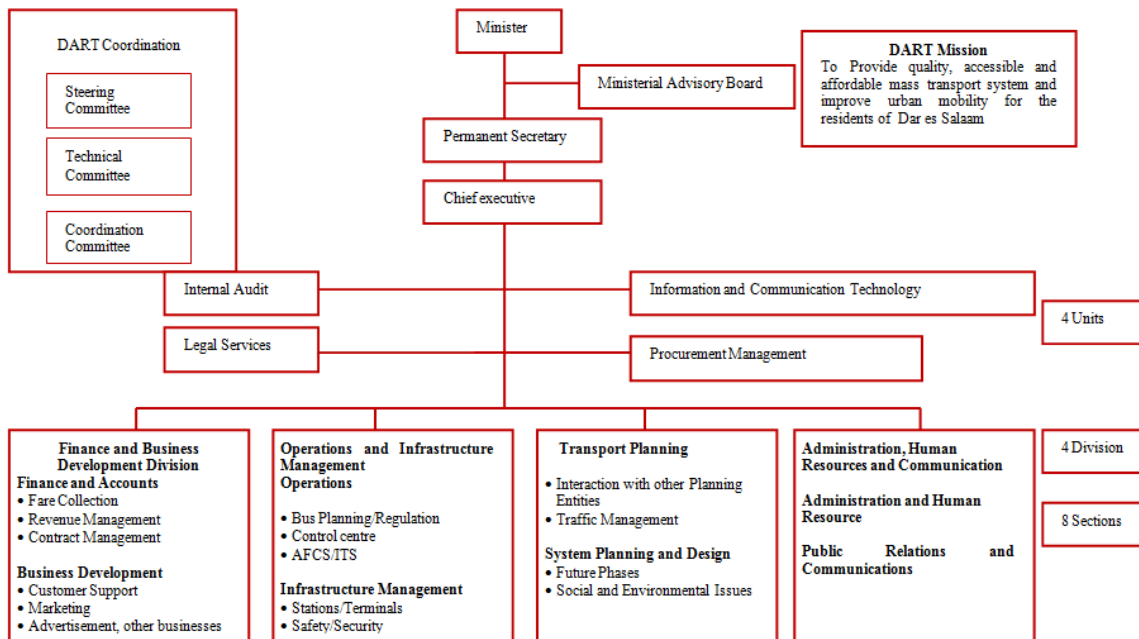


Figure 4. 3: The Organization Set Up of DART Agency

Source: DART Agency website

The findings revealed that the management of the BRT system is organized differently from other modes of transport and even the general urban transport sector. The provision of services involves three parties, and the DART Agency is the lead Institution. The provision of services through BRT System is guided by the service contract which was signed between the DART Agency and UDA-RT the private company bus operator. Other parties in the operations include the fare collector who also signed the contract with DART Agency. The Contracts provides a schedule with performance criteria to be met by the operators. The BRT system in the city was planned to be implemented for six phases covering a total of 130Km that is anticipated to save about 90% of the total city's population. Phase 1 covering 20.9km which is about 16.1% of the length to be covered, started operations in 2016.

ii) Availability and Reliability

The findings revealed that the BRT System's service provision is formalized. Through the performance contract, some guidelines are followed in the provision of service and in case of breach there are penalties to either of the parties. The instructions are the primary tools for control and supervision of service provision. Among others, reliability and availability are the performance criteria that are to be observed.

Availability was studied regarding quantity and quality of infrastructure as well as public transport service. It specifically focused on the bus lanes and coverage, stations for loading and offloading as well as parking and the service frequencies.

For the infrastructure, the findings revealed that the BRT buses operate in dedicated separate lanes with special bus stations that are accessed through automated systems. The routes cover a total of 20.9km for the current operations (Phase 1). The bus lanes are constructed along the trunk roads in which on either side, there are lanes for mixed traffic together with walkways. Also, the routes include pedestrian crossings demarcations. The buses also are of special design, articulated with euro type 3 engines. They also have special parking and depots. It was also observed that, along with the same route in the mixed traffic lanes, the Daladala operates.

The findings further, revealed that in some few areas the BRT lanes were built in such a way that buses cannot overtake the other because the roads are narrow. So in case of a breakdown the general route is affected. This is a challenge faced by operations. However, it was explained that, because regular checkup is done before and after daily operations breakdowns rarely occur. And if it happens still emergency actions are taken for services to continue as usual. Also, during fieldwork, it was found that the bus control automated system was not in order, so the control was done manually. Not only that but also, the fare collection system was not operating. So long queue of buying tickets was observed because even those having chip cards (travel card) could not use them. This was not explained by respondents as a significant problem since operations are conducted manually and do not cause many troubles as they are thought to be.

Moreover, the infrastructure specifically walkways were observed to be misused. This was also testified by the respondents, and it was claimed that political interference contributes to this. The sidewalks are occupied by street vendors but also, the motorcycles. Any attempt to get rid of them, stop orders from the leaders are sent to implementers. Hence, the regulatory authorities do not perform their duties as required. Photograph 4.1 below shows a picture of street vendors on walkways. Use of pedestrian walkways by street vendors, forces people to walk on the bus lanes which may lead to accidents.



Photograph 4. 1: Showing Walkways Occupied by Street Vendors at Bus Stations

Source: Field observation, 2018

The respondents from both the operator's side and government side generally testified that infrastructure is good. However, one respondent from the operator's side explained the effect of poor planning and maintenance. It was revealed that, during the rainy season, the areas along the BRT route become flooded including one central depot thus affecting the availability of services. In a review of secondary data through websites and newspaper, it was also revealed that services are affected by infrastructure flooding. Box 1 shows the flooding scenario along the BRT lane which led to road closure. The flooding challenges affects the operator because even if they do not operate because of unforeseen conditions, they do pay the access fee charges (they operate buses and have to pay for the use of infrastructure on a daily basis). Regarding planning in this case, all of the institutions responsible in provision of urban transport services (Organization structure framework) are included and not DART Agency only. One respondent categorized as operator stated as follows.

"The infrastructures are really affecting our services. And bad enough is that, after the flooding, no measures are taken to prevent the same problems in future. And the problem is whether we are operating or not, we must pay the access fee through the DART agency. Even if we have losses for not operating due to poor infrastructure and flooding, we must pay because the contract states so".

Respondent 20

Box 1: Effects of Flooding on transport Service and BRT System Infrastructure

<p>FRIDAY, MAY 4, 2018</p> <h2>UDART suspends rapid transport services to city centre</h2> <p>By Louis Kolumbia @Collouis1999 lkolumbia@tz.nationmedia.com</p> <p>Dar es Salaam. The Usafiri Dar es Salaam Rapid Transit (UDA-RT) has suspended its services to and from the city centre following the ongoing downpour.</p> <p>A statement issued on Friday, May 4 by the head of communications department, Mr Deus Buganywa says transport between Kimara and Morocoto and the route to the city centre has been suspended because floods at Jangwani area along the Morogoro road.</p> <p>"Transport between the two sides have been suspended with effect from noon. The nonstop rains that have been pounding the city have caused floods, prompting closure of the Morogoro road," reads part of the statement.</p> 	<p><i>As shown in the photo on the left, the road floods to the extent of being closed. Along the same road (Morogoro road) at Jangwani Area, the is a depot for the BRT Buses where the major maintenance workshop is located. In case of flooding the area is inaccessible and so buses can neither be maintained nor taken out of the depot because of road closure.</i></p>
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Source: The Citizen Tanzania, 2018

The effect of flooding was claimed to be caused by lack of coordination during planning as well as on implementation. The flooding was explained to be caused by several reasons. First, it was stated that during the planning stage the flooding problem was to be taken into account because the area is prone to floods. Secondly, during implementation, some stakeholders do not perform their duties in flood preparedness. This ends up to affecting the provision of services.

Reliability was studied focusing on the buses' adherence to schedule. Issues that were looked at, include the presence of fixed operating time, frequencies, number of vehicles per route (required and operating) and control and supervisions of bus operations.

The control and regulation of buses is at large based on the contract rather than the general regulatory authority (SUMATRA). It was explained that, reliability is determined through punctuality as per contract. There are fixed scheduled time for buses to start and stop operations. Also, the number and frequency of buses per route is fixed for peak and off-peak hours and it is monitored. In case of noncompliance, the operator is charged, but it depends on the reasons for breach of contract. It was stipulated that, adherence to schedule faces some challenges due to lack of coordination among stakeholders, specifically regulators. Respondents advocated that, despite BRT systems operating in the exclusive lanes, at the junctions they are controlled like other mixed traffic. At times when the control is by the traffic police, the buses spend more than the required minutes, this affects the frequency and cause congestion along the BRT lanes. Photograph 4.2 below shows the BRT system bus in a typical lane at a signalized junction. Further, the respondent from the government side commented as follows:

"The operators may not meet the requirements but sometimes it can be because of some reasons which are beyond his control. Let say we set that we need a frequency of two minutes, but you find a traffic police at the signalized junction controlling manually, so instead of the bus spending two minutes they spend five or more minutes. This causes delays, leading to non-adherence to schedule".

Respondent 6



Photograph 4. 2: Photo Showing BRT System Buses at Traffic Control Signalized Junction
Source: Field Observation, 2018

However, it was revealed through interviews and observation that, there are times when passengers spend more than ten minutes at the bus station. It was further explained by a respondent that, the automated control system is not operating, and so operations monitoring are conducted manually. This may persuade the operator reluctant in adhering to schedule due to the weakness in control thus affecting the provision of services. The respondent from the government institution stated as follows;

"Regarding punctuality and availability, we could be getting the reports from the system, but currently it is not working so we do it manually. Because of limited resources, we do this mostly during peak hours. When the service begins at 5.00 am, we observe the

punctuality. We monitor the first and last bus on the route. So, we look at whether the starting and ending service time is within the range and if not, we check at the tolerance"

Respondent 7

(iii) Fare and its Effects on Service Provision

The procedures for setting tariff are generally similar to other urban public transport modes. The Service providers submit the fare application whether it is setting new rates or for revision to SUMATRA for determination and approval. However, the respondents both on the operators' side and other stakeholders, claimed that the fare system is over-regulated in such a way that it affects the quality of services. Fare rates are set only for public transport not other transporters. The rates set were declared to be low to cover the operation and maintenance costs basing on the fact that, the bus owners and operators are business oriented, so they need profits.

Empirical findings revealed that the system of setting fare is not friendly to the service provision. This was explained by 14 out of 25 respondents. Respondents further advocated that the fare rates are rarely reviewed irrespective of changes in market values and price fluctuations. The authority does not take time to study the market and come up with measures to facilitate the provision of services.

An issue of political interference also surfaced on the setting of fare. Findings revealed that political leaders are focused on pleasing the users by keeping the user charge rates low. This interference affects the regulator who is responsible for review and monitor tariffs as per market values and needs. A respondent from the operators' side explained that most service providers do not last in the market because the revenues are low compared to the maintenance and operating costs. He stated as follows:

"In this sector, price regulation is the biggest challenge though it might be good for the voters (Citizens) and the politicians despite being awful for the service. Because continuity of service is complicated. Our government thinks that they are favoring the citizens by regulating prices but in a real sense, they are making the situation worse by making them get poor services".

Respondent 19

The empirical findings further revealed that there are times especially on off-peak hours, buses arrive at the station, but the driver does not open the bus doors. So, passengers accumulate and when it is time to boarding they rush like in informal transport. The respondent from the government institution explained that it could be a means of saving fuel consumption by reducing the number of trips because of being over-regulated in user charges.

iv) Security and Safety assurance

Security and Safety in this research were determined regarding the possibility of accident occurrence and involvement in injury for both passengers and operators. Therefore, checkup and control of buses and operations was the primary target in the study. The empirical findings revealed that the BRT System ensures safety and security as much as possible. The DART Agency in collaboration with other stakeholders (Operators, police/security firms) plays their role in this regard. Security for users, and operators both in stations and in the buses is ensured. Maintenance of buses is conducted according to the schedule and every after operations buses are checked before the next day's operations.

In a review of documents, findings revealed that assurance of safety and security is precisely regulated. This is easily achieved because of the performance contract. The contract includes a guideline manual for the bus specifications, stating the quality standards. In the case of nonperformance in ensuring safety and security as per contract, there are deductions to the operator (DART Agency, 2015).

The respondent explained that the buses are determined to operate for a total of eight years and after that, they have to be replaced. However, in case the bus is noticed to be out of order for passenger carrying bus qualities, it is phased out immediately for the sake of passengers' safety. A respondent from the operator's side explained as follows:

"Maintenance is the heart of the bus operations. First, for our buses, we have set for every after a certain number of kilometers traveled, buses have to be serviced and checked for maintenance. And at the end of each day, all vehicles have to be checked, and in case of any default, it has to be fixed ready for operations on the next day. And early in the morning before the start of operations, the road worth vehicle inspection report has to be submitted to the management. This helps to know the number of vehicles that will be operating on a particular day."

Respondent 20

Moreover, the driver's professionalism is regulated as per the contract. Employed drivers are required to have licenses from recognized institutions, and in case of misconduct, they are punished as per agreement. This further, assures the passenger of their safety and security.

4.2.2 Daladala

(i) Overview of the Daladala

The findings revealed that the Management and regulation of Daladala is different from the BRT System. Despite use of the same national policy and regulations, the Daladala do not have a formal organization structure. The overall control of Daladala is under SUMATRA. However, the operations are under private individual bus owners and some by few companies. The performance is informal, and the contract is between the bus owner and the driver. This informal mode of transport was observed to dominate the provision of services because it operates in all major routes within the city, unlike the BRT system which operates along two trunk routes totaling 20.9Km only. Apart from that, on the routes that the BRT system operates still, there are mixed traffic lanes where the Daladala operates as well.

(ii) Availability and Reliability

Regarding infrastructure availability considering quality and quantity, the empirical findings revealed that Daladala operates on all trunk and feeder routes all over the city. The road infrastructure in some areas was explained to be inadequate affecting the services. The bus operators highlighted infrastructure challenges which include bus stations being located at a distance from the main roads with poor access road. This causes frequent breakdown of their vehicles. Also, the respondents claimed that the location of many stations on transit consumes them a lot of money because they are forced to enter the bus station irrespective of whether they are loading or offloading passengers. Each time they access the station they have to pay the access fee. It was further explained that, in some of the routes, there are no clear road markings and road signs. Also, on some routes there are inadequate bus stops. An example was cited on the roads along the BRT lanes, there are few stops for mixed traffic lanes. This causes congestion because the Daladala stops along the main lane to pick up or drop passengers.

Availability of buses and their quality is hardly regulated. Findings revealed that the procedures for market entry are regulated by SUMATRA, but when the operators leave the service, they do not necessarily report to the Authority. This is because, after they have started operations, none is responsible for monitoring whether the licensee is operating or not. Monitoring was advocated to be difficult because the Daladala are individual owned private vehicles so cannot easily be controlled. Procedures followed for formal market entry is as presented in Table 4.2 below

Table 4. 2: Procedures for obtaining the Transport Service Operating Licenses

Step Activity	Responsible Person/Institution	Required Documents/ Other Remarks
1. Application Submission to SUMATRA	Bus Owner (Private individual or Company)	<ul style="list-style-type: none"> ✓ Copy of vehicle registration card obtained from TRA ✓ Business Clearance license certificate ✓ Driver's driving license
2. The vehicle was taken to the traffic police for road worthiness inspection	Bus Owner (Private individual or Company)	
3. Submission of the inspection report together with the vehicle to SUMATRA	Bus Owner (Private individual or Company)	✓ The vehicle is presented for physical inspection to see whether it meets the standards for the provision of services as a passenger vehicle
4. The vehicle was taken to the designated authority for painting	Bus Owner (Private individual or Company)	✓ The license is offered for a bus with the operating route allocated by SUMATRA. Each route has the color codes required to be painted on the bus. The designated Authority for bus painting is the Vocational Education Training Authority (VETA).
5. License issuance	SUMATRA	✓ The license is issued after the above requirements have been fulfilled.

Source: Field Data Findings, 2018

It was explained that currently bus owners are encouraged by regulators to form associations or corporations for easy control and regulation of the service provision in a more formal way. This would also help in the assurance of quality and quantity of buses. The drivers and conductors are supporting the idea because it is an advantage for the security of their employment and other human resources rights. Unlike the bus owners, do not support the idea because most of them depend on the daily revenue from the bus operations for other personal or family expenditure. The respondent from the government institution explained how challenging it is to regulate several private operators in the market. It was explained as follows:

"It is a challenge to regulate individual service providers. For the bus owners in urban areas specifically in Dar es Salaam, we want to harmonize and advise them to form associations. Whoever needs a license to operate as Daladala service provider, will first have to join an association. In case of any default, we deal with the association, not an individual owner".

Respondent 8

The study report by SUMATRA also, advocates for the existence of challenges in control and regulation enforcement to Daladala operators. It, therefore, recommended for encouraging formulation of associations. The report indicated that most of the vehicles registered were not operating. It was discovered that more than half of the routes in the study were determined to have many buses than the number required according to statistics. However, on-site it was observed that there is an inadequate supply of buses (SUMATRA, 2011). This is an indication that, control and regulation are not clearly implemented. It could be that they had diverted the routes allocated or failed to sustain the market and quitted due to some reasons as explained in section 4.2.1(iii) above.

The Daladala is a dominant mode of transport operating all over the city but the approximate number could neither be told by the regulators nor the operators' representative. However, during peak hours, it was observed that the buses are inadequate because passengers are always clouded and scramble on boarding buses. The quality of service provided by Daladala was observed to be insufficient. There is no ticketing system, but user charges are paid on the bus. The buses have no specific designated bus standards that should be met as for the BRT systems. The only criteria are the sitting capacity of the bus, which is 25 passengers and above.

Regarding reliability, through empirical data, it was revealed that the Daladala transport services are unscheduled. The time to start and end the operations is determined by the bus owner, and the performance contract is between the bus owner and the driver. The buses leave the bus stations or stop whenever they feel so and, in most cases, when the bus is full to the satisfaction of the conductor and the driver. Routes can be longer to almost 30km.

(ii) Effects on Fare Rates and Setting Procedures

The fare procedures are as described above in the BRT System section in item (ii) above. Similar procedures are applied, and the approval of fare rates is done by SUMATRA. The procedures followed are transparent and followed by every transporter. However, the findings revealed that the public transport sector is over-regulated different from other services. Only the public transport rates are regulated not for other transporters or services. An example was cited for schools or health services that these services are not much regulated and expenses change regularly by the service providers, but that cannot be applied to the transport services. The operators raised a concern that regulating the sector leads to poor quality of services and market failure. It was also explained that some operators fail to continue with the service provision because the running cost is much higher than the revenues.

One of the respondents from the government institution also advocated that in reality, the user charge is low compared to the running cost of Daladala business. This was explained to be among the reasons for poor quality of service provided by the Daladala. Not only that but also, he explained that some operators sustaining in the business have other different business that subsidizes the running costs of Daladala. The respondent stated as follows.

"We are being charged a little amount as fare (not little that we can afford it but, in the sense, that it is not enough for transport operators) which cannot sustain the service provider and operators in the market. The problem here is that we are importing everything including fuel, spare parts, etc. this makes the operating costs extremely high for transporters. With this amount of fare, getting the quality transport services is not possible. It will take us some years to improve the urban public transport services".

Respondent 4

(iii) Security and Safety assurance

The findings revealed that the operations by Daladala is not very safe and secure because of the nature of the operations and the quality of buses. However, the operators ensured that their slogan is the provision of quality and reliable transport, but they are let down by the spare parts and infrastructure. It was claimed that the country has no genuine spare parts stores and because of poor road infrastructure, they face frequent breakdown.

In ensuring safety also, the respondent from the operators side explained that they are also creating awareness to passengers on their rights. So, when they observe misconducts by a driver or conductor or any discrepancy in the vehicle, they should report to the relevant authorities. The regulators also, that is SUMATRA, and the Police explained that they do conduct periodic and routine vehicle inspections and road patrol. SUMATRA is required to perform the operations quarterly, 7days each month and for the Police primary inspection is required to be done 4times a year, with several routine checks. This was termed by respondents as a control and monitoring mission according to their annual plans. This is to ensure safety and security of the passengers, other road users, and operators. These operations are only conducted to the Daladala and not for the BRT System.

During field observation, it was observed how vehicle inspection is conducted. Photograph 4.3 below shows a photo taken during field observations showing the inspection activity on the Daladala by the Police. It was further explained by the respondent from the operators that, inspection by regulatory authorities helps because bus owners are ordinarily reluctant on

maintaining their vehicles. Sometimes not because they do not like to do so but because the costs are very high. It was explained that revenues are meager but spare parts, fuel, and labor charges are very high and spare parts are not genuine, so they do not last long.

"I support the regulator's operations, on how they conduct inspections of vehicles. Though some do complain that, they don't notify them, but I am sure for some of the owner when they are notified they order the drivers to park the buses instead of maintaining them"

Respondent 15



Photograph 4.3: Photo Showing the Inspection Operations on Daladala by the Police
Source: Research findings, 2018

Respondents categorized as operators further, advocated that vehicle maintenance is done on individual bases depending on the arrangement by the bus owner. It was explained that maintenance is done after a specific mileage coverage but also in case of any breakdowns. The services life of the vehicle was said to be determined by its operating costs versus the income generation. When the maintenance cost is higher than the revenues, then the car is phased out from operations.

However, other respondents argued that the enforcement by the regulatory authority is inadequate. The inspection and other measures were explained not seriously conducted. It was claimed that, notwithstanding examination performed, there are vehicles operating which in reality their condition is inadequate for carrying passengers. Not only that but also, operators are highly misbehaving on the road. They pick and drop passengers in any places other than designated stops causing blockage to other vehicles. This also endangers the safety and security of passengers. The respondents from the government institution further explained that, regarding safety, there should be specific regulations for urban areas.

Despite having regulations and guidelines on how to ensure safety and security for all in the provision of services together with what was observed on site, 22 out of 25 respondents explained that safety and security are inadequately ensured. This was mainly said to be caused by the level of enforcement of the regulations and other factors including lack of professionalism. A respondent from the government institution stated as follows.

"We can look at safety in the sense when the passenger is on the bus and when they are outside the bus. This means from home to the public transport, within the public transport and from the public transport to the endpoint and vice versa. Most of our drivers, a bit their professionalism is very poor. They need to be trained because they might over speed and cause accidents and some mistreat passengers. Also, regarding infrastructure, there are clear crossings and walkways but are occupied by street vendors. So, the passenger is unsafe throughout the journey, especially for the Daladala. Talking of security now,

the passenger on the bus has no mechanism to feel secured. Another, thing is that our infrastructure and buses do not favor people with disabilities" **Respondent 12.**

4.2.3 Conclusion on the Urban Public Transport Service Provision

Service provision by consideration of the modes of transport is more or less similar. The conclusion summary is presented regarding the indicators for service provision based on the modes of transport concerning the Institutional framework.

(i) Availability and Reliability.

BRT System: For the case of availability, the study findings revealed that the BRT System's infrastructure regarding quality and quantity meets the demand for the route it operates. Discrepancies were determined in the automated control system, ticketing system and road infrastructure in some locations. The infrastructure (bus lanes are narrow in some spots and also during rainy seasons, flooding blocks the services). Findings revealed that the control system and ticketing system are monitored manually to ensure that the transport services are provided as required. For these discrepancies, the supervising agent, as well as the operators, have the emergency response plan where in case of road blockage, an immediate solution is thought of, to ensure continuous provision of services. In case of reliability, the system performs better than on availability. Reliability is also guaranteed through the performance contract of which noncompliance leads to penalties for the operators as per contract. However, it was revealed that non-adherence to schedule in some cases, is caused by the traffic control and flow management system.

Provision of services regarding availability and reliability is performing better because of clearly defined roles and responsibilities among stakeholders with a well-structured organization framework. This facilitates accountability among stakeholders. Also, performance-based contracts enhance effective regulation enforcement.

Daladala: The findings revealed that generally the quantity and quality of infrastructure which include bus stations and stops, access roads to bus stations, road markings and road signs, were explained to be inadequate. Moreover, the existence of many operators in the markets hinders proper control and regulation of service provision. In addition to that, the findings revealed that the performance contract of Daladala is between the owner and the driver. Thus, the quality of the vehicle can hardly be ensured. Even though, inspection is conducted by the regulators before issuance of licenses and sometimes in operations, the quality is not guaranteed because there are neither database nor vehicle standards set for the Daladala buses.

It was further revealed that the daladala buses have no fixed schedule. However, in off-peak hours, they are accessible because there no congestion despite non-adherence to program and use of mixed traffic lanes. They start or stop operations whenever the driver feels so. Operations have no schedules, and their operations regarding schedule adherence are not regulated. Generally, non-formalization of this mode of transport affects the service provision because it is the dominant mode in the city. Not only that but also, the enforcement of regulations is inadequate because there is no effective means of managing and controlling the Daladala operators.

The empirical findings reinforce on the previous researchers findings. Researchers advocated that, clear defined organization structure facilitates accountability hence adequate performance (Rahman and Abdullah, 2016). It is the reasons for better performance of BRT system in terms of availability and reliability. Also, Leong, Goh, et al.,(2016) explains that, performance contract with provision for penalties is an important tool for achieving reliability. On the other hand, the negative attitude of authorities to Daladala due to non-

adherence to schedule, lack of professionalism and poor quality vehicles, leads to non-formalization of this mode of transport and less attention is given to them. Given that, they dominate in service provision, it renders general inadequate service provision. However, researchers highlight that, political interference, inadequate financial and human resources and inadequate planning can affect service provision (Finn, 2012, Bruun and Behrens, 2016, Joewono and Kubota, 2007).

(ii) Effect of Fare Rates and Setting Procedures

The empirical findings revealed that the fare rates and setting procedures are similar to all modes of transport. SUMATRA is mandated in determination and approval of fare rates. However, the operators initiate the process through application for fare setting or review. Most of the respondents advocated that the user charges are affecting the provision of services. It was explained that these tariffs are rarely reviewed, and the rates are kept low compared to the running costs of the transport services. Moreover, it was stipulated that most Daladala operators, disappears in operations without notice to the regulatory authority. Failure to concur the market was explained to be caused by inadequate financial resources due to low revenues with high maintenance and operating costs. Anchored in the findings, regulation enforcement should go in line with the market value. There is a need for the regulatory authorities to conduct studies and come up with measures on how best to regulate the market keeping a balance to both the supply and consumer without jeopardizing the provision of quality service.

Review of the study report by SUMATRA advocated poor enforcement as well as consideration of fare rates and tariffs as challenges facing the provision of services (SUMATRA, 2013)

Theoretical findings also support the argument that, user charges have impacts on the quality of services. The authorities are advised to consider a balance when setting fares so that both the users and operators are benefiting at the same time the desirable service is attained (Ngowi, 2005, Beirão and Sarsfield-Cabral, 2007, Ngowi, 2006). Furthermore, theories stipulated that efficient provision of services should meet the fare system standards. Previous researchers highlight that the fare system is politically oriented in the sense that, the rates set are focusing on pleasing the passengers without considering the market value for the running costs. Not only that but also, it dedicates for school children to pay half a price without any subsidies to the services. This, in turn, affects the quality of service because operators are doing business on an individual basis (Ngowi, 2005, Beirão and Sarsfield-Cabral, 2007). Moreover, previous studies advocated failure in the market by transporters which indicates that the government in one way or another do not play its part in creating an adequate environment for the provision of services (Massami, Myamba, et al., 2016).

(iii) Safety and Security Assurance

BRT System: For this mode of transport, the empirical findings revealed that safety and security are highly ensured. Through the performance contract, the safety and security indicators are monitored during travel and outside the bus but within the BRT corridor. This is enhanced due to a clear organization set up with a strong sense of accountability among stakeholders.

Daladala: The findings revealed that generally, the Daladala system of operations renders inadequate safety and security assurance. It was found that there are no specific standards for the vehicle except for the seating capacity. Not only that but also, due to private individual ownership of Daladala, it was revealed challenging to control and regulate them. Moreover, regardless of the inspections conducted before issuance of licenses, the periodic inspection is not guaranteed. This is because there is no monitoring mechanism for knowing which vehicle

is operating or not. This leads to inadequate enforcement of regulations thus non-assurance of safety and security.

Previous researchers also advocate that safety and security are can be assured by the condition of vehicles (Vuchic, 2005, Eboli and Mazzulla, 2012). On the other hand, other researchers highlight that, poor control and management of the operators, inadequate financial resources and inadequate infrastructure further leads to non-assurance of safety and security (Finn, 2012, Bruun and Behrens, 2016, Kayi, 2016).

4.3 Additional Factors Contributing to Existing Challenges

4.3.1 Challenges in Provision of Services

Several challenges were identified through primary and secondary data analysis. From the interviews, the respondents highlighted many problems of which include: Non-implementation or partial implementation of plans and strategies, lack of awareness to the public, poor quality of services due to low user charges versus higher operating costs and drivers' recklessness or lack of professionalism. Others are inadequacy of transport infrastructure which includes bus stops especially for Daladala, traffic signals, and street lights. Poor coordination in planning and implementation of plans surfaced from most of the respondents as a challenge which leads to poor performance of the sector. In addition to that, it was explained that the existence of multi-actors in urban transport services leads to duplication of responsibilities which results in conflicts and thus the untimely implementation of the plans. Another challenge that paralyzes the provision of services and even failure of some operators was revealed to be the over control of fare. Fare control without regulating other areas like spare parts and cost of fuels leads to higher operating costs.

Of all the highlighted present challenges, there are three challenges of which more than half of the respondents mentioned. These include inadequate infrastructure supported by 18 out of 25 respondents; overlap and conflicting responsibilities among stakeholders, 16 out of 25 respondents; and insufficient professionalism by Operators (Drivers, conductors and bus owners), 13 out of 25 respondents. Even though, Poor planning and inadequate or non-implementation of plans and strategies was mentioned by 10 out of 25 respondents, over control and regulation of fare eight out of 25 respondents, and congestion 3 out of 25, they still mostly affect service provision.

Review of different reports and policy briefs also revealed several challenges in the provision of services as well. These include the frequency of fare and tariff review, lack of safety and security culture, inadequate infrastructure and poor enforcement (SUMATRA, 2013).

Some of these findings correlate with previous researchers whereby the urban public transport sector is determined to face several challenges in the provision of services. These challenges have been identified as significant constraints in the provision of services. Gwilliam (2002), Msigwa (2013) and Massami and Myamba (2016), explained challenges which include vehicle growth and congestion, deterioration of infrastructure, environmental and noise pollution, safety inadequate parking space and poor traffic management.

4.3.2 Additional Factors Contributing to Existing Challenges

The findings revealed that the above mentioned challenges are contributed by several factors. More than 50% of the respondents (more than 12 out of 25 respondents) highlighted most of the factors to contribute to existing challenges. These include Inadequate financial and human resources; lack of a specific accountable Institution for urban transport; Lack of specific strategic policy for urban public transport; Poor coordination among stakeholders; Poor enforcement of regulations; and Poor planning and lack of integrated planning. Other factors explained by less than 50% of the respondents (Less than 12 out of 25 respondents) include: Institutional set up fragmentation; political interference; and lack of Dar es Salaam transport master plan. Regardless of the three factors being cited by few respondents, they were explained to have strong influence on the provision of services.

Empirical findings revealed that political interference is observed in the enforcement of regulations and fare settings. For example, on the expansion of urban roads or eviction of street vendors on the road corridor (walkways), when the operation starts the political leader within that jurisdiction defends the tenants thus affecting the enforcement. Also, the fare setting was explained sometimes to be over ruled by political leaders. It was further stipulated that mostly the implementation of activities is mostly through political leaders' directives rather than sticking on the long and short-term plans and policy priorities.

Another additional factor identified is inadequate financial and human resources. This was also advocated to contribute to present challenges but hindering effective enforcement of regulations and policy strategies. One of the respondents from the category of the researchers explained as follows.

"There are existing regulations, but I think they are fragile, I have never noticed any strength. For example, looking at these Daladala min buses providing public transport services, regarding comfortability, safety and security, I am not sure if SUMATRA has enough capacity to control this. Let say; there is a breakdown or the bus' condition is not recommendable for the provision of passenger carrying services, it is not clear of who is responsible for that."

Respondent 23

The strategic plan for SUMATRA further, highlighted some critical issues that need to be addressed. Among others, inadequate financial and human resources and the existence of multiple transport service providers were stipulated to affect regulation enforcement (SUMATRA, 2013).

Previous researchers also pointed out that strong bureaucracy and political interference is a significant obstacle to achieving an effective transport system. It is explained that the government dictates over operations and fare settings without any subsidies. As a result, there is poor performance and even mistreatment by operators especially for school children because they are entitled to pay less the amount. Researchers explain that the government should intervene for a balance between users and service providers but not to go beyond regulations (Ngowi, 2005, ADB, 2009). Gwilliam (2002) and Finn (2012) also stipulate that inadequate human and financial resources contribute to poor enforcement of regulation as well as planning and implementation thus affecting provision of services.

4.4 Effect of Institutional Framework on Urban Public Transport Service Provision

From explanations and discussions above, the effect of the Institutional framework on urban public transport service provision is assessed. It is evaluated in two components of the framework which are the Organization structure (planning authorities) framework and the legislative (Regulatory) framework.

4.4.1 Effect of Organization Structure (Planning Authorities) Framework

The effect of the organization structure was observed based on its characteristics. These include the distribution of roles and responsibilities, inter stakeholder linkage, existence of a strategic plan for urban public transport, level of coordination as well as the process of decision-making. About services provision, based on discussions in previous sections of this chapter, these characteristics were observed based on the modes of transport considered in this study. The provision of services also was studied regarding availability and reliability of infrastructure as well as services, effects of fare and setting procedures and safety and security assurance.

For the BRT System, the findings revealed that there is a single accountable agency with a clearly defined organization structure. The agency is responsible for overseeing all operations by the system. Bus operations and services are performed by private companies under the performance contract. This enhances clear distribution of roles and responsibilities for each stakeholder. The existence of clear organization design also facilitates coordination, cooperation and proper decision-making process improving the smooth provision of services. The performance contract stipulates all performance criteria and penalties for noncompliance.

With regards to the organization structure, more impact was observed on the availability, reliability and safety and security assurance. Based on the fact that the organization structure is clearly defined with a performance based contract, it was revealed that reliability, as well as safety and security, are enhanced better than availability. For reliability, the system is formalized, and buses operate under fixed time with defined frequency. Also, safety and security assurance is improved through a performance contract which includes predefined criteria.

Regarding availability, the System was observed to have discrepancies which were precisely on the infrastructure. For the case of ticketing and automated control system, it is under the jurisdiction of the DART agency of which regardless of the manual operation they still provide the service. For roads infrastructure and other related infrastructure, other stakeholders are involved in planning and development. This is one of the reason why they are affecting the service, by interrupting the smooth flow of traffic through traffic control and road blockage by flooding.

For the Daladala, the findings revealed that the Daladala mode of transport has no clear organizational structure. This mode of transport is managed like any other transporters. Ownership of the buses is on private individuals, and the performance contract is only between the bus owner and the driver. The regulatory authority is just involved in the issuance of operating licenses. Other stakeholders are involved as per their roles and responsibilities. However, the findings stipulated that the distribution of roles and responsibilities is duplicated, overlapping and conflicting. Also, the level of coordination, cooperation, and the decision-making process is inadequate due to unclear organization structure design. This also leads to a lack of accountability among stakeholders leading to non-implementation of plans and strategies.

Based on the findings, the nature of the organization structure framework was revealed to affect the availability and reliability in the provision of services. The Daladala operates informally and the operating time and frequency are set by the bus owner in collaboration with the driver.

The empirical findings correlate with other theories on the impact of organization structure on the provision of services. It is stipulated that Institutional structure design facilitates achievement of better governance due to its perspective in promoting changes in results

(Rahman and Abdullah, 2016). Also, adequate cooperation and coordination among stakeholders is determined an essential component for better performance and is determined to be facilitated by a proper organization structure design (Ngowi, 2005). Additionally, it is highlighted that the inadequate structure can lead to stressing operators ending to the poor quality of services (Rahman and Abdullah, 2016, Lámbarry, Trujillo, et al., 2016). Thus a proper management is emphasized in a network of stakeholders for better performance (ADB, 2009, Kenneth, Meier, et al., 2007, Koppenjan and Klijn, 2004).

4.4.2 Effect of the Legislative (Regulatory) Framework

The legislative (Regulatory) Framework was studied regarding existing policies and their level of transparency, the existing regulations, and level of enforcement as well as weaknesses. Based on these indicators, the study observed how the framework impacts on the provision of services. These were mainly found to have substantial implications regarding effects of fare rates and setting procedures and security and safety assurance. Slight impacts, however, was seen on the availability and reliability as well. The assessment of effects was based on the two modes of transport considered in this study as discussed below.

BRT System: The empirical findings revealed that slightly the framework has an impact on the reliability. The findings stipulated that adherence to schedule is sometimes affected by the traffic control and flow management system. This was determined to cause delays thus affecting the performance.

Daladala: The empirical findings revealed that the provision of services by this mode of transport is poorly regulated. It was stipulated that, due to the existence of many individual private service providers, controlling and monitoring becomes difficult. It was specified that safety and security assurance is inadequate. There is no specific standard for the vehicles and inspection and operators' professionalism is hardly controlled. This was claimed to be caused by inadequate enforcement of regulations as well as inadequate or non-implementation policy directions and strategies. Moreover, insufficient financial and human resources were also highlighted to contribute to poor regulation enforcement.

Regarding the effect of fare rates and setting procedures, it was revealed to be similarly impacted by the regulatory framework both for Daladala and BRT System. The study further stipulated that the fare rates are inadequate for the sustainability of operators in the provision of quality services. This was explicitly explained to be due to over-regulation of fares. It was also demonstrated that policies facilitate participation, but not all of the goals and objectives are considered. This affects the level of enforcement because the needs of all stakeholders are not considered as the result the quality of services provided is inadequate.

Previous researchers also advocate how the regulatory framework have impacts on provision of public transport services. Researchers stipulated that for effective and efficient provision of services, a proper regulatory framework is to be considered. This should observe transparency and innocence as well as non-corrupt (Sohail, Maunder, et al., 2006a).

Chapter 5: Conclusion and Recommendations

Under this chapter, a study conclusion through answering the research question is presented. The research questions include four sub-research questions which after being addressed, the main question is answered. Then the recommendations based on the conclusion is given.

5.1 Conclusion

The research aimed at explaining the Institutional Framework and how it affects urban public transport services provision in Dar es Salaam. It focused on two public transport modes which are BRT System and daladala. It involved examining the current institutional framework in the city and how it affects the provision of services. Therefore, based on the theoretical review, the research described what it means by the institutional framework, public transport together with urban public transport service provision. Further, with empirical data, the current institutional framework, the effect of organizational structure and regulatory frameworks on the provision of services and the additional factors contributing to the existing challenges in the provision of services have been examined. Finally, the discussion on how the Institutional framework affects urban public transport service provision was presented. In consistency with a research objective, necessary results of the questions are as displayed below.

Firstly, regarding the question of **what is the present Institutional framework structure for the urban public transport service provision?** It was revealed that the current institutional structure design is not clear. The frameworks were disclosed fragmented with multi-stakeholder involvement. Due to unclear structure design, there is a poor coordination among stakeholders leading to inadequate performance in the provision of services. It was also revealed that there is unclear distribution of roles and responsibilities which results in overlapping and conflicting responsibilities. The urban public transport sub-sector lacks a strategic policy, and there is no specific institution entirely responsible for the sector.

Lack of strategic policy for urban public transport was also identified to contribute to the inadequate service provision. Urban public transport in the city was explained to belong to no one thus not given priority. However, the existing policies consider this urban public transport sector, but the strategies and plans are poorly implemented. This is because the level of cooperation among stakeholders and the decision-making process are inadequate.

Secondly, on **how does the organization structure framework affect the urban public transport service provision?** The organization structure framework for urban public transport of Dar es Salaam, was revealed to strongly affect the provision of services regarding availability, reliability, safety and security assurance. The impact is through providing a proper organization structure design, with precise distribution of roles and responsibility among stakeholders which creates a sense of accountability thus facilitating smooth implementation of plans and strategies. Not only that but also, proper organization structure design enhances cooperation and smooth decision-making process, resulting in the effective provision of services. For example in this case the BRT system was revealed to perform better than the Daladala because of having a clear organization structure design.

Thirdly, regarding **how does the regulatory framework affect the urban public transport service provision?** Based on findings, the study revealed that the regulatory frameworks strongly jeopardize the provision of services regarding the effects of fare rates and setting procedures as well as safety and security assurance. The slight impact was revealed on availability and reliability factors. It was highlighted that the fare rates are over-regulated and are hardly reviewed to match the market values. The user charges were claimed to be low compared to the running costs of operations thus leading to poor service quality and failure

by operators to sustain in business. Regarding safety and security assurance, it was explained that the existing regulations are weak with a low level of enforcement. Not only that but also, the current policies are poorly implemented leading to the inadequate assurance of safety and security.

Fourthly, regarding **which additional factors contribute to the existing challenges in urban public transport service provision?** As the basis of the study, several Institutional factors were identified to be crucial and cause persistence of current problems in urban public transport services provision. Apart from the institutional framework factors contributing to existing challenges, the study findings revealed other exogenous factors. These factors are political interference and inadequate financial and human resources. Political interference was explained to have substantial impact on availability and fare rates and setting procedures. It also interrupts the enforcement of regulations resulting in poor quality of service provision. On the other hand, inadequate financial and human resources also was explained to hinder proper enforcement of regulations by insufficient control and monitoring as there are less technical capabilities for monitoring and inadequate finance for payment of salaries and purchase of needed facilities.

Finally, in responding to the main research question of **how does the Institutional Framework affect the urban public transport services provision in Dar es Salaam?** Based on general findings to above questions, the Institutional framework is revealed to strongly affect urban public transport service provision both through the organization structure framework and the legislative (regulatory) framework. The organization structure framework was revealed to affect Mass transit system and infrastructure in terms of availability and reliability while the regulatory framework strongly affects the financing and pricing as well as the operations in terms of fare and safety and security assurance.

5.2 Reflection to Literature

The observation into literature brings a flashback on the study by Rahman and Abdullah (2016). The study stipulates that the poor management of public transport leads to complexity which in turn renders the sector a significant problem in urban areas. The study further advocates that lack of adequate institutional framework affects integrated planning for public transport.

Coordination and cooperation are determined to be critical components for an Institutional framework involving many actors. This can only be ensured by having a clear design of organization structure (Korpela, 2002). The uncertainty of the latter further, leads to unclear roles, overlap, and conflicts in functions and responsibilities of stakeholder institutions which result in increased complexity problems (Wapwera and Egbu, 2013). Not only that but also, strategic transport policy is a crucial instrument for adequate provision of urban public transport (Meakin, 2004). Also, the significance of regulations is equal grounds provision for protection and benefits for the public. They assist in guidance in the implementation of several policy issues in the provision of services.

Based on several previous studies conducted regarding the subject matter in the same case study area, the Institutional framework for urban public transport is defined fragmented. This fragmentation is characterized by factors that cause inadequate provision of services. These include lack of coordination and cooperation among stakeholders; intersections, contradiction, and overlapping of institutional responsibilities; and inadequate enforcement of regulations. Others include lack of accountability and transparency, unclearly defined objectives and insufficient financial resources (Ngowi, 2005, URT, 2003, Msigwa, 2013, Kanyama, 2016).

However, in the case of Dar es Salaam, despite having an unclear designed organization structure and inadequate enforcement of regulations, there have been efforts for improvement. As stipulated in National Transport Policy of 2003 and the National Road Safety Policy of 2009 several provision for urban transport were clearly stated. It is because of inadequate human and financial resources and lack of accountability that leads to non or poor implementation. Furthermore, political interference has been highlighted to be among factors that contribute to the challenges. It has been revealed that this affects effective implementation and enforcement of regulations. Moreover, developing countries are claimed of undermining institutional issues thus ending up with poor performance in the transport sector (Quium, 2011).

Several countries have undergone institutional reforms that lead to successful management of urban public transport. Among others, the Tanzania National Transport Policy (2003) also have a provision for undergoing an Institutional setup reform to improve urban public transport. This goes in hand with previous researchers, who stipulated how the change facilitated the achievement of sustainable development (Rahman and Abdullah, 2016, ADB, 2009).

The empirical findings of this research are basically in line with literature in terms of institutional framework fragmentation, unclear distribution of functions and duties, poor coordination plus cooperation, unaccountability among stakeholders and lack of transparency. Also, inadequate human and financial resources as well as poor enforcement of regulations. These factors largely affect the provision of services. However, the study indicates that the causal relationship between the organizational structure factors and the provision of services is relatively strong in terms of availability, reliability and insignificant in terms of fare and safety and security assurance. The main component is the organizations structure design which facilitate effectiveness of other factors. On the other hand, the causal relationship between the regulatory framework factors and the provision of services is strong in terms of fare and security and safety assurance. The relationship is less strong in terms of availability and reliability. Based on the findings, interventions to improve the situation should focus on the respective factors. The main factor significantly affecting the provision of service is the level of enforcement and implementation of regulations and policies respectively.

Apart from that, the study findings revealed that political interference and insufficient financial capabilities as well as human capital also affect service provision. These largely affect the regulatory framework in terms of fare and level of regulation enforcement as well as policy implementation.

5.3 Recommendations

5.3.1 Practical Recommendations

Given that outcomes have revealed impacts of the institutional framework to the provision of urban public transport services, the decision makers, professionals and other stakeholders are urged to consider several issues for improvement of the existing situation. The study findings have discovered some suggestions based on the organization structure design, policy, regulation human and financial resources as well as political interference as stipulated below.

Firstly, consideration for institutional framework reform should focus on organization structure design set up. Clear designed organization structure creates a sense of accountability among stakeholders. It will also facilitate distribution of roles and responsibilities with defined inter stakeholder linkage. Proper coordination will further enhance adequate cooperation and the decision-making process.

Secondly, there is a need for strengthening the regulatory framework by establishment of strategic policy for urban public transport. This will guide development of regulations specifically for urban transport thus proper enforcement.

Lastly but not least, the results indicated that human and financial resources as well as political interference also contribute to inadequate provision of services. It is imperative to take into account these factors when striving for improvement of the existing situation. There is a need for an autonomous body, with clear defined performance goals that will control management and operations in provision of services for an effective urban public transport system.

5.3.2 Recommendations for Further Studies

The study revealed exogenous factors contributing to the inadequate urban public transport service provision. The factors are political interference and inadequate human and financial resources. However, owing to limited scope and time, the study did not go in detailed investigation on how and to what extent these factors impact on the provision of services. Further studies can go in depth for more understanding.

In addition to that, the institutional framework comprises of four components, governance Institutions (government tiers), the legislative (regulatory), the organizational structure (planning authorities) and the administrative (structure) frameworks (Rahman and Abdullah, 2016). This study focus on the two components because of the existing situation of the case study area as well as the scope and time limitations. It is recommended that further studies focus on the other two components that were not studied for more insight on how they affect the provision of services.

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Annex 1: Semi Structured Interview Guide Questions and Time Schedule

Annex 1.1: Semi Structured Interview Guide Questions - English Version

I am Liberatha Rujweka Alphonse pursuing a MSc. in Urban Management and Development at The Institute for Housing and Development Studies-Erasmus University, Rotterdam in the Netherlands. I am carrying out a research on the *Effect of Institutional Framework on the Provision of Urban Public Transport Services* specifically in Dar es Salaam.

I would like to seek your opinions and experiences regarding this study. Our discussion will consume about 30 minutes of your time and it will focus on the *Daladala* and BRT Systems mode of transport.

Before we start, I would like to request for your permission to record this discussion. It will help me in coding and analysis of data. Please be assured that your opinions and information you will provide, will be treated with high confidentiality and will be used only for this research.

Date and time of the interview

Name:

Telephone:

Email:

Position:

Institution:

S/No	Questions
	General Questions
	<p>Can you please tell me how long you have worked in the sector of transport.....</p> <p>Which activities have you been involved in?</p> <p>What are your views on how the existing institutional framework has provided quality and availability of the urban public transport services?</p> <p>What are the challenges in the provision of services?</p> <p>What do you think are the major reasons for the persistence of these challenges?</p>
	Specific Questions
A	<i>Organization Structure</i>
	<ol style="list-style-type: none"> i. Could you explain how the institution is organized? How does it coordinate with other stakeholders involved in the provision of services? ii. Could you briefly explain the roles and responsibilities of your organization regarding provision of public transport services? iii. Who are the other stakeholders involved in the provision of urban public transport and what are their roles?
B	<i>Policies</i>
	<ol style="list-style-type: none"> i. What policies are determined by the organization, about the urban public transport service provision and its overall quality? ii. Could you explain briefly how relevant are the policies with regards to the urban public transport service provision

S/No	Questions
	<ul style="list-style-type: none"> iii. Could you briefly give your general opinion regarding the provisions of existing policies and its implementation. iv. Could you explain how the planning, implementation, monitoring and evaluation of the service provision is conducted. v. Could you explain how each of the stakeholders' goals and objectives are being incorporated in the decision making process vi. Could you briefly explain the level and procedures of information and data sharing vii. Could you explain how the general stakeholders' meetings are being organized and how often viii. Could you explain how you involve/your organization is being involved in planning for the provision of the urban public transport services
C	<i>Regulations</i>
	<ul style="list-style-type: none"> i. Could you explain how generally the urban public transport is regulated including the procedures for controlling the provision of urban public transport services ii. Which existing regulations are in place in relation to the provision of urban public transport service? How clear are they in relation to participation for the stakeholders and the public? iii. What are your organization's performance criteria in the provision of public services? iv. Could you describe how are the existing regulations enforced to ensure that service provision meet performance criteria? v. Which challenges are encountered in enforcement of regulations? vi. What do you think are the strengths and weakness of the existing regulations? Could you explain how the existing regulations affect the provision of services
3	<i>Provision of Services</i>
	<ul style="list-style-type: none"> i. Could you describe the available guiding tools used to ensure quality, availability and reliability (adherence to schedule) in the provision of public transport services. ii. Could you explain how the control or regulation of bus operations is conducted for assurance of proper service provision iii. Could you explain the challenges of mass transit system and infrastructure provision? In your opinion, how does the quality of infrastructure and mass transit system affect the provision of services? iv. Could you explain the procedures for setting the pricing standards, who is involved and how often? v. Could you explain the existing guiding tools for setting the fare. vi. Could you explain how the pricing mechanism affect the provision of services vii. Could you explain, who is responsible for ensuring safety and security in the provision of public services

S/No	Questions
	<p>viii. Could you describe briefly, how the operations of buses are monitored and the guiding tools used</p> <p>ix. If it is applicable. Could you explain how you normally assess the service life of the bus for consideration of replacement (If possible can you make available of the schedule for each vehicle)</p>

Thank you very much for your time Mr/Ms.....

Our discussion have reached the end of our discussion. But before I leave, please welcome if there is any comments, suggestions or opinion you would like to add.

Again, I appreciate for your contributions and comments. Have a nice day.

Time schedule for research

Activity	Time				
Planning and preparations	April - June 2018				
Data collection	June - July 2018				
	Week 1	Week 2	Week 3	Week 4	Week 5
Identifying key respondents					
Contact with key respondents					
Conducting Interviews					
Physical Observations					
Data processing					
Data collection and analysis, recommendation and conclusion	July - September 2018				
Final submission	September 2018				

Annex 1.2: Semi Structured Interview Guide Questions - Swahili Version

Kiambatisho cha 1: Maswali ya mwongozo wa usaili

Ninaitwa Liberatha Rujweka Alphonce ninasoma Shahada ya Uzamili ya Sayansi katika Usimamizi na Maendeleo ya Miji katika Taasisi ya Taaluma za Maendeleo ya Makazi na Miji – Chuo Kikuu cha Erasmus, Rotterdam nchini Uholanzi. Ninafanya utafiti kuhusu *Athari ya Mfumo wa Kitaasisi katika Utoaji wa Huduma za Usafiri wa Umma Mijini* hususani Jijini Dar es Salaam.

Ningependa kupata maoni na uzoefu wako kuhusu utafiti huu. Mazungumzo yetu yatatimia takribani dakika 30 za muda wako na yatalenga katika njia ya usafiri wa *Daladala* na ile ya mfumo wa mabasi yaendayo haraka (BRT).

Kabla hatujaanza, ningependa kuomba ruhusa yako kurekodi mazungumzo haya. Itanisaidia katika kuficha na kuchanganua data. Tafadhali ninakuhakikishia kuwa mawazo na taarifa zako utakazozitoa, zitatunzwa kwa siri na zitatumika kwa ajili ya utafiti huu tu.

Tarehe na muda wa usaili

Jina:

Simu:

Baruapepe:

Cheo:

Taasisi:

Maswali ya Jumla

- i. Tafadhali, unaweza kuniambia umefanya kazi kwa muda gani katika sekta hii ya usafiri.....
- ii. Ni kazi gani ulizowahi kushirikishwa?
- iii. Maoni yako ni yapi kuhusu mfumo wa kitaasisi uliopo unavyotoa huduma za usafiri wa umma mjini ulio bora na wa kuaminika?
- iv. Je, kuna changamoto gani katika utoaji wa huduma hii?
- v. Je, unadhani ni sababu zipi za msingi za kuwepo kwa changamoto hizi?

Maswali Mahususi

A: Usimamizi na Majukumu

- i. Je, unaweza kueleza jinsi taasisi inavyosimamiwa? Je, inahusishaje wadau wengine wanaohusika katika utoaji wa huduma?
- ii. Je, unaweza kuelezea kwa kifupi wajibu na majukumu ya shirika lako kuhusiana na utoaji wa huduma ya usafiri kwa umma?
- iii. Je, nani ni wadau wengine wanaoshirikishwa katika utoaji wa usafiri wa umma na majukumu yao ni yapi?

B: Sera

- i. Je, ni sera zipi zinazotumiwa na shirika, kuhusu utoaji wa usafiri wa umma mjini na ubora wake ukoje kwa ujumla?
- ii. Je, unaweza kuelezea kwa kifupi namna sera hizo zinavyofaa kwa utoaji wa huduma za usafiri mjini?
- iii. Je, unaweza kutoa maoni yako ya jumla kuhusu vifungu vya sera zilizopo na utekelezaji wake?
- iv. Je, unaweza kuelezea jinsi mipango, utekelezaji, usimamizi na tathmini ya utoaji wa huduma inavyofanyika?
- v. Je, unaweza kuelezea kila malengo na madhumuni ya wadau yanavyoingizwa katika mchakato wa kufanya uamuzi?
- vi. Je, unaweza kuelezea kwa kifupi kiwango na taratibu za ushirikishwaji wa taarifa na data?
- vii. Je, unaweza kuelezea jinsi mikutano mkuuu ya wadau inavyopangwa na inafanyika mara ngapi?
- viii. Je, unaweza kuelezea jinsi unavyoshirikisha/shirika lako limekuwa likishirikishwa katika mipango kwa ajili ya kutoa huduma ya usafiri wa umma mijini?

C: Kanuni

- i. Je, unaweza kuelezea jinsi usafiri wa umma mjini ulinavyosimamiwa ikijumuisha taratibu za kudhibiti huduma za kutoa usafiri wa umma?
- ii. Je, ni kanuni gani iliyopo inayohusiana na huduma za kutoa usafiri wa umma mijini?
- iii. Je, kanuni hizo zinaeleweka kwa kiasi gani kulingana na ushiriki wa wadau na umma?
- iv. Je, vigezo vya utendaji wa shirika lako ni vipi katika utoaji wa huduma za usafiri wa umma?
- v. Unaweza kuelezea jinsi kanuni zilizopo zinavyotumika kuhakikisha kuwa utoaji wa huduma za usafiri wa umma zinafikia vigezo vya utendaji?
- vi. Je, ni changamoto gani zimejitokeza katika utekelezaji wa kanuni?
- vii. Je, unadhani kanuni zilizopoo zina nguvu na udhaifu upi?
- viii. Je, unaweza kuelezea namna kanuni zilizopo zinavyoathiri utoaji wa huduma?

D: Utoaji wa Huduma kwa Ujumla

- i. Je, unaweza kuelezea nyenzo zilizopo zinazotumika kuhakikisha ubora, upatikanaji na uhakika (kulingana na ratiba) katika utoaji wa huduma ya usafiri wa umma?
- ii. Je, unaweza kuelezea jinsi udhibiti au kanuni ya uendeshji wa basi inavyofanyika kwa ajili ya uhakika wa utoaji mzuri wa huduma?
- iii. Je, unaweza kuelezea kwa ujumla namna mchakato wa udhibiti wa basi unavyofanyika na jinsi unavyofanya kazi?
- iv. Je, unaweza kuelezea changamoto za mfumo wa usafiri wa umma na miundombinu?
- v. Kwa maoni yako, ubora wa miundombinu na mfumo wa usafiri wa umma unaathiri utoaji wa huduma?
- vi. Je, unaweza kufafanua hatua za upangaji wa viwango vya bei, nani anahusishwa na mara ngapi?
- vii. Je, unaweza kuelezea nyenzo ya mfumo unaoongoza kwa ajili ya kupanga nauli?

- viii. Je, unaweza kuelezea mfumo wa upangaji w bei (utaratibu) unavyoathiri utoaji wa huduma?
- ix. Je, unaweza kueleza, nani anayehusika kuhakikisha ulinzi na usalama katika utoaji wa huduma za usafiri wa umma?
- x. Unaweza kuelezea kwa kifupi, namna uendeshaji wa mabasi unavyosimamiwa na nyenzo za mwongozo zinazotumika?
- xi. Kama inafaa. Unaweza kuelezea jinsi kwa kawaida mnavyotathmini huduma ya basi kwa kuzingatia kuyabadilisha (kama inawezekana unaweza kunipatia ratiba ya kila basi)?
- xii. Je, unaweza kuelezea taratibu za viwango vya kupanga bei, nani anayehusishwa na mara ngapi?
- xiii. Je, kazi yako kuu ni ipi katika kuhakikisha ulinzi na usalama katika utoaji wa huduma ya usafiri wa umma?

Asante sana kwa kutumia muda wako Bw/Bi.....

Mazungumzo yetu yamefikia mwisho. Lakini kabla sijaondoka, niko tayari kukusikiliza kama una maoni, mapendekezo au mawazo ambayo ungependa kuyaongeza.

Pia, ninakushukuru kwa mchango na maoni yako. Ninakutakia siku njema.



Annex 2: Code List and Code Groups

Annex 2.1 A list of codes and groups against their respective variables

Variable	Group	Codes
Institutional Framework	Organization Structure Framework	<ul style="list-style-type: none"> ✓ Clarity of Organization Structure Design and adequacy of coordination ✓ Clarity distribution of roles and responsibilities ✓ Existence of Strategic Policy for urban transport ✓ Adequacy of level of cooperation ✓ Adequacy of decision making process
	Regulatory Framework	<ul style="list-style-type: none"> ✓ Existence of adequate and transparent policy (Information sharing, inclusion and participation) ✓ Adequacy in enforcement of existing regulations ✓ Weaknesses in regulations
Provision of Services	Mass transit system and infrastructure	<ul style="list-style-type: none"> ✓ Reliability (Adherence to schedule) of Public Transport ✓ Availability (Quality and Quantity)
	Financing and Pricing	<ul style="list-style-type: none"> ✓ Effect of Fare rates and setting procedures
	Operations	<ul style="list-style-type: none"> ✓ Adequacy in Safety and security assurance
	Existing Challenges in the Provision of Services	<ul style="list-style-type: none"> ✓ Congestion ✓ Inadequate Infrastructure ✓ Increased vehicles and population ✓ Lack of awareness to regulations and policies ✓ Over control and regulation of fare ✓ Overlap and conflicting responsibilities ✓ Poor planning and inadequate or non implementation of plans and strategies ✓ Poor quality of services provided ✓ Inadequate professionalism by Operators (Drivers, conductors and bus owners)
	Additional factors Contributing to the existing challenges in the provision of Services	<ul style="list-style-type: none"> ✓ Inadequate financial and human resources ✓ Institutional set up fragmentation ✓ Lack of a specific accountable Institution for urban transport ✓ Lack of a specific strategic policy for urban public transport ✓ Lack of Dar es Salaam transport master plan ✓ Political Interference ✓ Poor coordination among stakeholders ✓ Poor enforcement of regulations ✓ Poor planning and lack of integrated planning

Annex 2.2 Code List as Generated Using ATLAS. ti 8

Project: THESIS - 488872

Report created by use on 8/30/2018

Code Report – Grouped by: Code Groups

All (30) codes

Additional Factors Contributing to Existing Challenges

9 Codes:

- Inadequate Financial and Human Resources
 - Institutional Set up Fragmentation
 - Lack of a Specific Accountable Institution for Urban Transport
 - Lack of Dar es Salaam Transport Master Plan
 - Lack of Specific Strategic Policy for Urban Transport
 - Political interference
 - Poor Coordination Among Stakeholders
 - Poor Enforcement of Regulations
 - Poor Planning and Lack of Integrated planning
-

Existing Challenges in Provision of Services

9 Codes:

- Congestion
 - Inadequate Infrastructure
 - Inadequate Professionalism by Operators(Drivers,Conductors and Bus Owners)
 - Increased vehicles and Population
 - Lack of Awareness to Regulation and Policies
 - Over Control and Regulation of Fare
 - Overlap and conflicting responsibilities
 - Poor Planning and Inadequate or Non Implementation of Plans and Strategies
 - Poor Quality of Services Provided
-

Organization Structure Framework

5 Codes:

- Adequacy in Decision Making Process
 - Adequacy in Level of Cooperation
 - Clarity of Distribution of Roles and Responsibilities
 - Clarity of Organization Structure Design and Adequacy of Coordination
 - Existence of Strategic Policy for Urban Transport
-

Provision of Services

4 Codes:

- Adequacy in Safety and Security Assurance
 - Availability (Quality and Quantity)
 - Effect of Fare Rates and Setting Procedures
 - Reliability(Adherence to Schedule) of Public Transport
-

Regulatory Framework

3 Codes:

- Adequacy in Enforcement of Existing Regulations
- Existence of adequate and transparent Policy
- Weaknesses in Regulations

Annex 3: The results of analysis showing codes and frequency

Variable	Groups	Codes	Frequency (out of 25 respondents)
Institutional Framework	Organization Structure Framework	Clarity of organization Structure Design and Adequacy of coordination	14
		Clarity of distribution of roles and responsibilities	21
		Existence of Strategic Policy for urban transport	14
		Adequacy in level of cooperation	18
		Adequacy in decision making process	18
	Regulatory Framework	Existence of adequate and transparent policy (Information sharing, inclusion and participation)	20
		Adequacy in enforcement of Existing regulations	20
		Weaknesses in regulations	13
Provision of Services	Mass transit system and infrastructure	Reliability (Adherence to schedule) of Public Transport	13
		Availability (Quality and Quantity)	18
	Financing and Pricing	Effect of Fare rates and setting procedures	14
	Operations	Adequacy in Safety and security assurance	22
Existing Challenges in the Provision of Services	Existing Challenges in the Provision of Services	Congestion	3
		Increase vehicles and Population	2
		Inadequate Infrastructure	18
		Lack of awareness to regulation and policies	6
		Over control and regulation of fare	8
		Overlap and conflicting responsibilities	16
		Poor planning and inadequate or non implementation of plans and strategies	10
		Poor quality of services provided	6
		Inadequate professionalism by Operators (Drivers, conductors and bus owners)	13
	Additional factors Contributing to the existing challenges in the provision of Services	Inadequate financial and human resources	15
		Institutional set up fragmentation	9
		Lack of a specific accountable Institution for urban transport	12
		Lack of a specific strategic policy for urban public transport	14
		Lack of Dar es Salaam transport master plan	3
		Political Interference	10
		Poor coordination among stakeholders	17
		Poor enforcement of regulations	17
		Poor planning and lack of integrated planning	19

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