

Deloitte.

Final Pre-Feasibility Report

Development of Uyole Bus Terminal in Mbeya City (Uyole Ward), Mbeya City Council



October 2018

Submitted to: The World Bank

Submitted by: Deloitte Consulting Ltd

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List of Acronyms and Abbreviations

Acronyms	Description
BOT	Build Operate Transfer
DSCR	Debt Service Coverage Ratio
EIA	Environmental Impact Assessment
EIAAR	Environmental Impact Assessment and Audit Regulations
EIR	Environmental Impact Review
EIS	Environmental Impact Statement
EMA	Environmental Management Act
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
IBC	International Building Code
IFC	International Finance Corporation
IMF	International Monetary Fund
IRR	Internal Rate of Return
LAPF	Local Authorities Pension Fund
LGA	Local Government Authority
MCC	Mbeya City Council
NBDC	National Building Design Code
NHC	National Housing Corporation
NHIF	National Health Insurance Fund
NEMC	National Environment Management Council
NPV	Net Present Value (NPV)
OSHA	Occupational Safety and Health Authority
PPF	Parastatal Pensions Fund
PO-RALG	President's Office Regional Administration and Local Government
PPP	Public Private Partnership
RFQ	Request for Qualification
SDR	Social Discount Rate
SIR	Social impact Review

Acronyms	Description
SLM	Straight Line Method
HBS	Tanzania Household Budget Survey
TTCL	Tanzania Telecommunication Company
ToR	Terms of Reference
VfM	Value for Money
WB	World Bank
WDV	Written Down Value Method

1 Executive Summary

1.1 Background of the Engagement

The World Bank Group contracted the Deloitte consortium to undertake Pre-Feasibility studies of 14 municipal projects. The consortium is led by Deloitte Consulting Limited (Tanzania).

In line with the identified interventions required for the successful delivery of the 14 identified projects, the objective of the consultancy is two-fold:

- Determine the viability of the shortlisted projects on the basis of demand assessment, site assessment, infrastructure assessment and prepare a commercially viable and bankable PPP project.
- Build capacity of the LGAs in the aspects relevant to PPPs.

The Pre-Feasibility studies assesses these projects in terms of their economic, legal, financial, socio-environmental, value for money standing; highlight key constraints and possible challenges; and actions for the way forward.

1.2 Summary of the findings of this report

In addition to comments from the World Bank the Pre-Feasibility report has been prepared in consultations with the LGA, interactions with different stakeholders during site visits, regional and site assessments, and best practices from similar projects implemented internationally.

Based on the assessments and interaction with the stakeholders, cost and revenue assumptions have been made and the project viability has been accordingly assessed from various perspectives and procurement options, such as PPPs, traditional Government delivery, etc.

1.2.1 Strategic Case

The project is driven by lack of a bus terminal to accommodate parking and moving spaces for vehicles (such as buses, mini buses, and daladalas), especially for the residents of Uyole and nearby Nsalaga, Itezi, Iduda, Igawilo and Iganjo wards.

As a result, the buses, mini buses and daladalas collect passengers along the road, which poses safety risks. Furthermore, daladalas from Igawilo and Nsalaga do not have an allocated area for boarding of passengers and freight. Furthermore, there is no facility to cater to the buses plying from Dar es Salaam to Kyela and Malawi.

Despite the above mentioned need for a terminal, its development is not feasible from a socio-economic standpoint because of issues related to land usage. The proposed site is adjacent to the Uyole Primary School creating inconsistency in land usage. The LGA made an attempts to relocate the school and has been unsuccessful to date. In view of this, the LGA has now decided not to pursue the development of the bus terminal.

1.2.2 Economic Case

In order to assess the economic feasibility of the project, the evaluation is done using an incremental approach wherein the "with-project" scenario is compared with the "without-project" or the present scenario, such that only the differences in costs and benefits of the two scenarios are considered in examining the economic viability of the project. The following table summarises the key results of the economic analysis.

Table 1: Economic IRR and Benefit – Cost Ratio

Estimated Economic IRR	Benefit-Cost Ratio
24.5%	3.0

The economic assessment meets both the hurdle rates required, namely the Economic Internal Rate or Return (EIRR) is greater than the Social Discount Rate (SDR) of 12% and a Benefit Cost Ratio greater than 1. However, in order to complete the viability analysis the financial implications need to be understood and these are explained below.

1.2.3 Commercial Case

In line with the overall objective of the larger programme, the project is proposed to be developed as a PPP. In order to determine the most-suited mode of procurement, the project has been measured against certain norms. These are:

- Funding capacity of LGAs and Financial affordability
- Optimality of Risk Sharing with regards to capacity to bear delivery and operations risk of project
- Prevalent models in the sector

Based on the above considerations, Build Operate Transfer (BOT) Mode of PPPs with User Pays was found to be the most suitable commercial arrangement.

1.2.4 Financial Case

The financial assessment was carried out for the selected PPP commercial arrangement of BOT with User Pays. The financial analysis also draws upon the project configuration. As identified under the legal review, 'small-scale' PPP projects (total project value less than USD 70 million) may have a duration of 15 years (upper limit). Accordingly, a project duration of 15 years was considered.

The following table summarizes the results of the financial analysis:

Table 2: Project Viability Indicators

Particulars	Build, Operate and Transfer (BOT) – User Pays	Build, Operate and Transfer (BOT) – User Pays
	<i>Concession Period of 15 Years</i>	<i>With Viability Gap Funding Concession Period of 15 Years</i>
Project IRR	10.98 %	18.61%
Equity IRR	5.9%	20.0% (Target Equity IRR)
Affordability/ Net financial implication for the Government	Unviable unless a Grant/Viability Gap funding is provided	Capital Grant of 42.25% of total project cost at an NPV of TZS 2,861 mn required

1.2.5 Summary: Basic financial project data

Following is a summary of the main financial parameters of the analysis.

Table 3: Summary of financial project data (in mn TZS)

Parameters	Total	Construction Period		Operations Period			
		2020	2021	2022	2027	2032	2034
CAPEX	7,993	4,801	3,192	--	--	--	--
Revenue per annum	--	--	--	360	1,542	2,472	2,905
O&M Expenses per annum	--	--	--	191	233	288	314

In addition to the EIRR, the analysis further shows that based on the assumptions used the Project is financially viable, and relies on Users to fund the Development (Capex) and Operational Costs (OPEX).

1.2.6 Management Case

From an institutional standpoint, to assess the maturity of the Contracting Authority – the Mbeya City Council (MCC, LGA of Mbeya City), a detailed assessment was conducted. It is revealed MCC is currently at developing level with an average score of 4.6 points out of 12 points. The highest score is on Organizational Structure (8 points) and the lowest score is on Financial Management and Sustainability (3 points), and Information Communication Technology (3 points). The low score in Financial Management and Sustainability is attributed to lack of revenue collection and resource mobilization strategy as well as high dependence on central government funding.

The results of the analysis of the LGA's finances shows that Council is more dependence on external budgetary/financial support than its own sources of revenue.

The project site has a school building in the proposed plot for development, creating inconsistency in land usage. The Contracting Authority (LGA) was in the process of relocating the school; however this could not be achieved it has been decided by the LGA not to pursue the development of a Bus Terminal on this site.

1.3 Conclusion

Given the above findings of the study, it may be concluded that the 'Development of a bus terminal facility' in Uyole ward, Mbeya City project is unviable due to the configuration and conditions outlined in this report. The financial analysis indicates a Project IRR of 10.98%, however with support in the form capital grant of 42.25% of total project cost at an NPV of TZS 2,861 million, the Project IRR achieved is 18.61% (with target equity IRR of 20.0%). The economic analysis indicates an EIRR of 24.5% with a benefit to cost ratio of three.

A major roadblock for the project is that the Uyole Primary School is situated on part the expanded site. There were efforts by the LGA to gain access to the site either via co-location or relocation of the school, however, the school authorities and the community are opposed to the proposal. Construction of a bus terminal poses security and health related risks for the people and children of the school and considerable resistance from the community. The land use proposed for the site i.e. bus terminal is not consistent with the current land usage. Therefore, the bus terminal project is not being pursued on this site, an alternate site would need to be identified and evaluated for suitability.

2 Background

This chapter introduces the project and provides an overview of the report's structure.

2.1 Background of the Project being studied

Government of Tanzania has prioritized advancement of its economy via National Development Plans such as 'Long Term Perspective Plan (2011/12-2025/26)' and 'Tanzania Development Vision 2025'. The latter aims to achieve high quality livelihood for its people, good governance, and a strong and competitive economy. One of the means of achieving these goals is improving the national and/or municipal level public infrastructure and services. In order to help realize this, the World Bank Group has implemented a Consulting Engagement to undertaking Pre-Feasibility studies of 14 municipal projects. These projects concern development/expansion of bus terminals, truck terminals, markets, city parks, and abattoirs across the cities of Arusha, Mbeya, Moshi, and Mwanza.

These projects shall help improve the standard of living in these cities and ideally generate new revenue streams for the Local Government Authorities (LGAs), as envisioned in the concept notes of the respective projects, thus providing resources for further investments.

Following is the list of the 14 identified projects:

Table 4: List of 14 Projects which form part of the Consulting Engagement

No.	Name of Project	LGA of City/District	Type of Project
1.	Development of a new market facility in Baraa ward	Arusha City Council	Market
2.	Development of a new market facility in Njiro area, Engutoto Ward	Arusha City Council	Market
3.	Development of a new modern abattoir in Ilemi ward	Mbeya City Council	Abattoir
4.	Development of a City Park in Sisimba Ward	Mbeya City Council	City Park
5.	Re-development and expansion of existing bus terminal in Sisimba ward	Mbeya City Council	Bus Terminal
6.	Development of a new market facility at Sisimba ward	Mbeya City Council	Market
7.	Re-development and expansion of existing bus terminal in Uyole ward	Mbeya City Council	Bus Terminal <i>Subject of this report</i>
8.	Re-development of an existing slaughterhouse in Korongoni Ward	Moshi Municipal Council	Abattoir
9.	Development of a new market facility at the Shanty Town, Kilimanjaro Ward	Moshi Municipal Council	Market
10.	Re-development and expansion of existing Central market facility in Bondeni Ward	Moshi Municipal Council	Market
11.	Re-development and expansion of existing Mbuyuni market facility in Bondeni Ward	Moshi Municipal Council	Market

No.	Name of Project	LGA of City/District	Type of Project
12.	Development of a new International bus terminal in Mfumuni ward	Moshi Municipal Council	Bus Terminal
13.	Re-development and expansion of existing bus terminal at Nyegezi	Mwanza City Council	Bus Terminal
14.	Development of a Truck terminal at Buhongwa	Mwanza City Council	Truck Terminal

With this background, the World Bank Group has contracted the Deloitte consortium to undertake Pre-Feasibility studies of the 14 municipal projects.

In line with the identified interventions required for successfully delivering the 14 identified projects, the objective of the consultancy is two-fold:

- Determine the viability of the shortlisted projects on the basis of demand assessment, site assessment and infrastructure assessment and prepare a commercially viable and bankable PPP project.
- Build capacity of the LGAs in the aspects relevant to PPPs

Project Background

Mbeya City Council (MCC), the LGA of Mbeya, has envisioned the development of bus terminal in Uyole ward in Mbeya City to address the lack of a bus terminal serving Uyole and provide a safe and hygienic transport and retail space that is accessible by all income groups, especially lower income groups. Thus, this development is expected to address basic transport and retail related needs of the larger community.

The transportation industry has been growing rapidly in Tanzania over the past couple of years. As the country witnesses rapid growth and widespread economic activities, the need to travel increases both in frequency and quantum of trips. Growing industrial and commercial sectors across the country necessitates work-based travel. A growing economy and increased per capita income also enable its people to travel for social purposes as well as to avail educational, medical and trade benefits. The tourism sector is buoyed due to higher disposable incomes of the citizens.

To facilitate this travel, the vehicular industry has grown by over 10% during the past decade.¹ Most of this growth is in the private vehicle domain. This upsurge puts pressure on the country's infrastructure as well as degrades the environment by contributing to rising air pollution. To counter this, the government is promoting public transit for intra-city as well as inter-city travel.

Illustration – Modern Bus Terminals in Tanzania

- The City Council of Dar-Es-Salaam is constructing a modern mega bus terminal to cater to the growing traffic of the Tanzanian metropolis and to relieve the old terminal at Ubungo which is facing capacity constraints as well as congestion issues. The new Terminal at Mbezi Luis will have all important services, including a shopping complex to provide travelers for all their necessities from one point.
- The Tanzanian capital of Dodoma is constructing a mega bus terminal cum commercial complex. The new terminal shall have the capacity to host more than 200 upcountry buses, 600 medium-sized buses, and additional 300 taxis and rickshaws.

Buses are the most common form of public transit in Tanzania, intra-city as well as inter-city. To promote more bus travel, the government is investing in new bus terminal facilities across all major hubs in the country. To encourage people to travel by bus, the terminals need to be aesthetically designed and should serve as nerve centers of the City. Modern facilities for travelers, retail outlets and commercial spaces create an overall positive experience for the traveler. This is integral to the success of public transport.

¹ Source: Challenges Facing Urban Transportation in Tanzania, Vol. 3, No. 5, 2013

Keeping in mind the above mentioned context, this report aims to conduct a pre-feasibility analysis on the bus terminal in Uyole ward in Mbeya City. This shall include aspects such as:

- the suitability of the site;
- the location of the site with focus on residential and commercial areas;
- market demand assessment establishing the demand for the Bus Terminal;
- financial assessment of the project;
- evaluation of relevant PPP procurement options; and so on.

2.2 Scope and structure of this Pre-Feasibility Report

2.2.1 Scope of the report

Overview of the scope of this report is as follows:

- Study the work undertaken in the project so far by the LGA. LGAs have prepared preliminary project concept notes for each project. Understanding of the LGA's concept notes and aims have been enhanced via site visits, stakeholder interactions, secondary research, and analysis
- Assess features of the project site and comment on its suitability
- Conduct assessment of the location of the project site—with focus on the surrounding commercial area
- Conduct market demand assessment of the project
- Develop a suitable configuration and concept of the project, in line with the estimated demand
- Conduct a legal, regulatory and institutional review of the project
- Conduct an economic review to assess the impact of the project on the economy of the community
- Assess financial viability of the project through financial modelling, risk assessment, PPP structuring, and value for money analysis—based on the proposed project concept
- Propose a preliminary implementation plan for the project

2.2.2 Structure of the report

The structure of the report is as follows:

- **Background:** covers an overview of the consulting engagement along with the project being studied. It also includes the scope and structure of this report.
- **Strategic Case:** covers the need driving the project, sector overview including the stakeholders and a brief description of the existing arrangement and site relevance.
- **Economic Case:** covers the project concept selected followed by assessment of the economic benefits and costs, and the output indicators.
- **Commercial Case:** This chapter includes the design considerations and provides concept plans/layout for the facility. It also presents evaluation of various development options and suggestions for the one best suited to the project
- **Financial Case:** covers the financial assessment of the project under the suggested mode of procurement. The financial cost and revenue have been projected to assess the financial returns, and sensitivity analysis.
- **Management Case:** covers the policy framework and guidelines existing in Tanzania for Public Private Partnerships. The institutional framework is further divided into institutions established for PPP and Urban Planning in the country.
- **Conclusion and Way Forward:** covers a summary for the project's feasibility, identifies the constraints which could be encountered in the preparatory as well as implementation phases of the project. It also include a preliminary Implementation plan covering the key activities and approvals needed to proceed.

- **Annexures:** include supporting details of the report.

2.3 Study Execution

This Pre-Feasibility report presents a preliminary analysis on the feasibility and project structure for the proposed '*Development of bus terminal in Uyole ward in Mbeya City*' project. It contains analysis of the project's site and market assessment, product mix and conceptualization, project financials, statutory legal framework, indicative environmental and social impacts, and PPP structuring and project packaging. The report suggests a broad project structure and highlights an approach to take this project forward.

This Pre-Feasibility report was preceded by a project configuration report outlining the demand for the project and the broad contours of the configuration for the same in February 2018. Following, the comments from World Bank and LGA were incorporated to finalize the project configuration and a draft Pre-Feasibility report was submitted in May 2018. During the preparation of these reports, it was highlighted that the project site has a school complex within the plot, creating inconsistency in land usage. The LGA was in the process of relocating the school, however the school could not be relocated and it was decided by the LGA that the project would be not be pursued further.

This was further affirmed in the comments received by the World Bank in October 2018. Accordingly, this report captures this aspect and further refines the report's content in light of the World Bank's other comments.

3 Strategic Case

The chapter provides an overview for the project in light of the LGA's concept note and discusses the strategic need for the facility. It also discusses the state of the existing facility and the prevalent issues.

3.1 Context and project objectives

The objective of this project is to develop the Uyole Bus Terminal in the Uyole Ward of Mbeya. In the context of MCC, a 'Bus Terminal' shall comprise space for movement and parking of public transport (including buses, mini buses, and daladalas), supplemented by retail facilities, restaurants and parking.

The Local Government Authority has prepared a 'Concept Note' for this project. It lays down the Government's vision for the project and describes important parameters of the project, such as key stakeholders, risks and initial cost estimates. Following is an overview of these parameters:

- **Expected output of project:** development of the Uyole Bus Terminal to accommodate all buses and other vehicles catering to Uyole, Igawilo, Nsalaga, Itezi, Iduda, and Iganjo wards. This shall provide for sufficient area for boarding of passengers as well as freight. Apart from this, the project shall also generate revenue for the LGA through entry fee and rental charges.
- **Location:** Uyole Ward; size² of 16,500 m² owned entirely by the Mbeya City Council
- **Physical configuration of the bus terminal:** Bus Terminal with facilities and services such as commercial spaces, passenger waiting shades, ticketing block, public utilities (washrooms), parking spaces, and an administration block.

Based on the Concept Note and interactions with various stakeholders, the needs have been broadly redefined to develop a bus terminal that caters to the needs of the public. The bus terminal is envisioned to be equipped with features such as designated parking bays for buses, minibuses and other vehicles using the terminal. In addition, there shall be provisions for commercial space, administrative area, hygienic washroom facilities, utilities, waste collection, proper drainage and internal pavements etc.

- **Main Bus Terminal Area** – A part of the plot shall be utilized for developing parking space for buses, minibuses, daladalas and other vehicles using the facility. The space shall be a part of the larger terminal complex and be adequately paved for use of vehicles.
- **Commercial Space** –The bus terminal is expected to also serve both travelers as well as traders by providing commercial space with stalls for retail area.
- **Administrative area and Other Infrastructure** – The bus terminal complex shall also feature spaces for administrative purposes and utilities such as electricity distribution area/substation, solid and other waste collection areas, water pump area, security personnel area etc. The terminal will be developed with a proper drainage network and lighting facilities.
- **Adequate circulation:** Adequate circulation to be provided for both horizontal movement (corridors) and vertical movement (stairs, ramps, elevators), if required. Adequately wide corridors and stairs are to be provided to allow convenient and safe movement of many people in one moment.
- **Washrooms:** Separate toilets for men and women. Men should be provided with urinals but same type of toilet is considered for both sexes for disabled people.

² Note: There is a discrepancy in the plot size – as per the project's Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.

3.1.1 Overview of the existing public transport network connectivity at Uyole Ward, Mbeya City

3.1.1.1 Location

The site earmarked for the development of Bus Terminal is located in Uyole Ward of Mbeya City, adjacent to the Uyole Primary School. The site is about 11 km away from the City Centre (via the TANZAM highway).

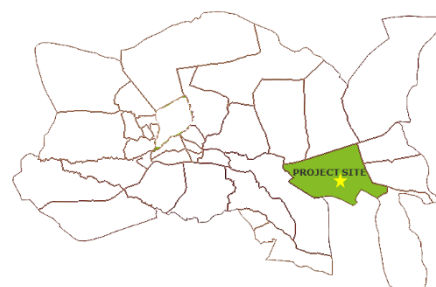


Figure 1 Project's location in Uyole Ward of Mbeya City

3.1.1.2 Relevant routes and vehicle categories

In the context of the proposed Uyole bus terminal, the site is well placed in terms of connectivity to existing public transport network for the Mbeya City and is a key hub for Malawi bound passenger traffic from Mbeya. Accordingly, the proposed terminal shall cater to inter-city/district public transport vehicles along the Tanzania-Malawi highway as well as intra-city feeder routes including:

- **Inter-city Buses:** Inter-city buses are mostly used for relatively long distance, inter-city travel.
- **Mini-buses:** Mini-buses or coasters are used for inter-district travel as well as intra-city traffic. The inter-city/district buses primarily service Malawi and Kyela.
- **Daladalas and Taxis:** Daladalas are minivans that are used mostly for intra-city travel. The routes for daladalas are allocated by Tanzania’s transportation regulator—Surface and Marine Transport Regulatory Authority (SUMATRA).

Routes → Type of vehicles ↓	From	To
Inter-City Buses/Coaches	Mbeya	Malawi
	Mbeya	Kyela

3.1.1.3 Capacity and Utilization

As mentioned above, there is no formal terminal facility in Uyole. In absence of in absence of a formal terminal facility, the passengers are serviced by Uyole daladala stand as well as the bus stand for Malawi bound passenger vehicles along the Tanzania Malawi highway

The daily number of vehicles accessing the bus stand and the daladala stand have been presented in the table below. These have been obtained based on interactions during the site visits and and have been confirmed with the LGA.

	Year 2016/2017
Type of vehicle	
Inter-City Buses/Coaches	12
Mini buses	20
Daladala	50
Private cars	20
Source: Site visits and data obtained from Mbeya City Council	

3.2 Stakeholders

The key stakeholders associated to the project have been described/outlined below:

- MCC (LGA of Mbeya City) – The Mbeya City Council is the Contracting Authority (CA) of the project from the Government’s side. It is responsible for implementation of the project and construction supervision.

- PPP Node – The PPP Node is the approving agency for all projects taken under PPP mode in Tanzania. Accordingly, the Mbeya City Council shall submit its proposal for the project to the PPP Node for final approvals.
- World Bank – The World Bank is collaborating with the PPP Node and Government of Tanzania to undertake the due diligence studies on the projects envisioned under this consultancy. The World Bank the sponsor of this pre-feasibility study and shall play an important role in selection of transaction advisor for preparation and procurement for select projects.
- Bus Operators – Bus Operators are crucial stakeholders to the project as the facility is to primarily to boost opportunities and provide the general public with access to bus connectivity.
- The Concessionaire / Special Purpose Vehicle (SPV) - The Concessionaire is the private party responsible for developing the project. The private proponent shall be expected to design, finance, build, operate and maintain the facilities under the arrangement with the Contracting Authority for the duration of the arrangement.
- Travelers/ Passengers – This are the ultimate beneficiaries of the project, partly and indirectly pay for the services provided at the terminal.
- Financial institutions – These include the banks and lending agency, which will finance the Project SPV/Developer and are critical to success of the PPP.

3.3 Need and Demand for the Project

3.3.1 Location Relevance

The project site is surrounded by some of the focal institutional, residential and commercial areas of Mbeya City. It is also served by an established network of road routes, bus terminals and bus stops. The following map shows the key intra-city routes along with the bus stops and other modes of public transport such as railways and airport.

Table 5: Distances between project site and other transport facilities



Figure 2 Public transit network related infrastructure surrounding the project site

Name of transportation facility	Driving Distance between named facility and project site
Uyole daladala stand	~1 Km
Nane-Nane bus terminal	~6.8 Km
Mbeya Main bus station	~ 14.8 Km
Meta Bus Station	~ 15.5 Km
Mfiati bus Stop	~ 12.0 Km
Mwanjelwa Bus Stop	~ 11.5 Km
Kabwe Bus Stop	~ 10.9 Km
Soweto Bus Stop	~ 10.2 Km
Iwambi Bus Stop	~ 21.4 Km
Mwisho wa Waya Bus Stop	~ 20.5 Km
Mbeya Airport	~ 11.5 Km
Mbeya Railway Station	~ 17.8 Km

The main trip generating areas include (i) residential areas and (ii) institutional areas—offices and other institutions. The trip attracting areas include (i) commercial areas and markets, (ii) hotels and lodges, and (iii) institutional areas.

In addition to buses, Mbeya City is also served by the TAZARA Railway 'express' line once a week, connecting Mbeya to Dar es Salaam and Zambia region and a 'regular' line connecting the same destinations daily. Further, Mbeya also has a dry port focusing on Malawi and Zambia bound traffic. This dry port is serviced by the MCC Limited (MCCCL) rail line. Mbeya connects to the rest of Tanzania by air through Songwe Airport which is one of four major airports available in Tanzania.

3.3.2 Demand for bus terminal in Uyole Ward, Mbeya City

The project is driven by lack of a bus terminal to accommodate parking and moving spaces for vehicles (such as buses, mini buses, and daladalas), especially for the residents of Uyole and nearby Nsalaga, Itezi, Iduda, Igawilo and Iganjo wards. As a result, the buses and daladalas pick-up passengers along the road, which poses safety risks. Further, daladalas from Igawilo and Nsalaga do not have an allocated area for boarding of passengers and freight. In addition to this, there is no facility to cater to the buses plying from Dar es Salaam to Kyela and Malawi.

This proposed bus terminal is about 15-16 km from the Main Bus Terminal in Sisimba ward. This existing terminal is proposed to be expanded and modernized by the LGA as part of another project. As per the proposed concept of the main bus terminal, due to capacity constraint and with an aim of decongesting the area, the focus shall be on encouraging decentralization of routes. The daladalas will be encouraged to use the existing Nane-Nane terminal and the Malawi bound inter-city/district buses will be gradually phased to the proposed Uyole bus terminal.

Thus, there is a need to develop a bus terminal at Uyole for holistic public transport network improvement for the City.

3.4 Existing Arrangement

3.4.1 Ownership and Availability of title

As per the legal review, the plot marked for the project is a part of the Uyole Primary School. The LGA has expressed that the school has surplus land available, and that the school as well as the surrounding community has been engaged in a conversation to process. Survey of the land shall commence upon finalization of the ongoing discussions.

As per the project's Concept Note, the project has received permits securing the land and its use.

As per the legal review, Uyole Primary School as well as the LGA are not in possession of the title deed of the project site. This shall need to be acquired before implementation of the project.

3.4.2 Authority of the Mbeya City Council for undertaking the project on PPP Basis

The current PPP projects falls within the mandate of the PPP Act (as amended) and its governing regulations. There is a constitutional and statutory basis for LGA to participate and handle the proposed Project on PPP basis. Further, the projects under consideration can be handled and administered by LGA as per the project value threshold set under the laws (i.e. USD 70 million). The LGA have power to engage in the project subject to complying with the law.

The provisions of the Local Government (Urban Authorities) (Development Control) Regulations, 2008 indicates that the main licensing authority of the PPP projects in reference to bus terminals is the LGA.

Further, while dealing with applications for licenses, licensing authorities are obliged under section 29(2) of the Urban Planning Act, 2007 to consider planning consents as a condition precedent for issuance of licenses.

Thus, in terms of the Project cost and authority of the MCC, the Project is a good fit for PPP mode of development.

3.4.3 Tariff/Fee Fixation

MCC by virtue of section 63 of the Local Government (Urban Authorities) Act, 1982, is vested with express powers to enter into contractual relationship with any other person so as to discharge any of its functions under the Local Government (Urban Authorities) Act, 1982. In addition to the powers of procurements,

under section 66 (1) of the Local Government (Urban Authorities) Act of 1982, MCC has powers to charge fees for various services or facilities offered by the authority. To better exercise its powers to charge fees, MCC been given statutory mandate to make by laws as per section 88 of the Local Government (Urban Authorities) Act of 1982. Therefore, once the PPP projects under review becomes operational, it may be necessary for the responsible LGAs to agree with the private party on the applicable fees, and the mechanism so devised can be enshrined in the PPP Agreement.

Further, based on the provisions of section 6 and 13 of the Local Government (Finances) Act, 1982, the LGAs have made by-laws which impose fees for parking in their area of jurisdiction.

3.4.4 Land use, encroachment, encumbrances, legal claims and permits required

As previously highlighted, there were efforts by the LGA to gain access to the site either for either co-location or relocation of the school, however the school authorities and the community are opposed to the proposal. Construction of a bus terminal poses not only security, and health related risks for the people and children of the school but also considerable resistance from the community. The land use proposed for the site i.e. bus terminal is not consistent with the current land usage and the LGA has withdrawn the project from list of projects under this assignment/study.

As per the legal review, this land can only be used if the LGA manages 'a change of use' of the said land and divest it from the school. For this purpose, the LGA has consulted with the school where the site is located to get their consensus and alignment. This process is legally possible and the LGA had started the process of engaging the school and other stakeholders. However, as highlighted above discussions with the school to relocate or co-locate have been unsuccessful. Given the existing situation, the site is encumbered for purposes of using it for PPP.

3.5 Site Assessment

This chapter undertakes an assessment of the site of the project and comments on its suitability and potential issues.

3.5.1 Site description

The site is located in Uyole Ward about one km from the TANZAM highway junction along the Mbeya (Uyole) – Malawi border highway. The distance from the site to the City centre is about 11 km via TANZAM highway.

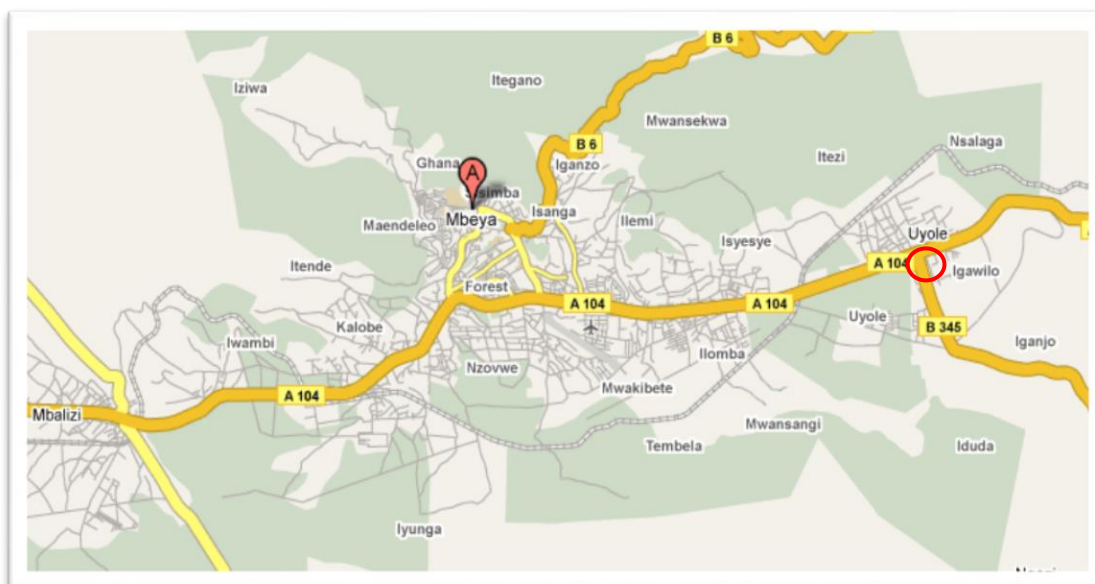


Figure 3 Location of the Site in Mbeya City

The site covers an area³ of about 23,206 m² is owned by the LGA. As shown in the figures below, the site comprise of an undeveloped Greenfield on the western side of the highway and borders a Primary School on the northern side. Uyole is a fast developing suburb of the City and the area around the site is vibrant with many economic activities.



Figure 4 Photos of the Site

3.5.2 Planning considerations

3.5.2.1 Classification of the site as per Master Plan

The site is located outside the City center where the Mbeya Central Area Redevelopment Plan (2003) applies. Currently, there is no City plan which covers Uyole ward.

3.5.2.2 Present use of the site

The site is an undeveloped Greenfield alongside a major highway. The area marked in the satellite image (presented below) is owned by the LGA. There is a Primary School and its related facilities in the middle of the land. According to the LGA, land use of the area will be planned to include development of the proposed bus terminal.

³ Note: There is a discrepancy in the plot size – as per the project’s Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.



Figure 5 Satellite image of the site

3.5.2.3 Land Availability vis-a-vis Requirement

The plot has an area⁴ of 23,206 m² which is owned by the LGA. The surrounding areas, which include the existing school, are also owned by the LGA. The area on the plot earmarked for the project is considered adequate but there is also possibility of acquiring additional surrounding areas which are also owned by the LGA.

3.5.2.4 Consistency with the master plan / zoning

The area is not in the Mbeya City Master Plan, which covers the City center only. The Authority shall decide on the land use of the area and include it in future plans.

3.5.3 Site Characteristics

3.5.3.1 Existing Physical Infrastructure at Site

There is no development on the area earmarked for the project, which is evident in the satellite images. The primary school in the background is outside the proposed site.

⁴ Note: There is a discrepancy in the plot size – as per the project's Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.



Figure 6 Site scene

3.5.3.2 Topography and Drainage

The topography of the area varies from undulating to flat with gentle slopes, which facilitate surface drainage.

3.5.3.3 Soil/Substructure

Soils within the City and surrounding areas are clay loams with good drainage characteristics. The surface soils are volcanic pumice thrown from nearby mountains. Below the surface soils, there are soft rocks and boulders resulting from deposition from erosion that occurred along Loleza ranges in the past.

Geotechnical, soil, and materials investigations will be done in later stages of the project during the detailed design to establish exact subsoils characteristics including the soil bearing capacity for design of foundations for the structures and for pavement design as well. No challenges are expected with regard to subsoil and subgrade conditions for building foundations and pavement structure.

The area is within the earthquake zone. This should be considered in the detailed design of the structures.

3.5.3.4 Vegetation

The site is green field with substantial vegetation including trees and open grassland.

3.5.3.5 Any other site constraints

Natural conditions of the site do not pose any challenges or constraints to the proposed development.

3.5.4 Site Accessibility

3.5.4.1 Transportation

TANZAM highway and Mbeya (Uyole) – Malawi Border highway link the project site to the Mbeya City and other locations.

Buses, trucks, and other means of road transport ply the highways which link the project area. The junction of the two highways makes the area very vibrant with many socio economic activities taking place in its vicinity.

3.5.4.2 Site Access

The site is alongside the Mbeya – Malawi Border road which shall be the main access for the proposed bus terminal. To further improve the access, it is proposed to have access road on the north side of the plot

thereby providing a more convenient access for the bus terminal. The access road may be separately undertaken by the LGA.

3.5.4.3 Existing Roads

Apart from the highways passing through Uyole Ward, the road network in the area is not well developed. Most of the residential and commercial developments in the ward are unplanned settlements creating challenges related to poor infrastructure.

3.5.4.4 Public transportation

A major mode of public transport in the City, including Uyole ward, is small buses (daladala). Inter-city and inter-district buses pass through Uyole making it an important terminus.

Other means of public transport are taxis. A recently emerging and popular mode of transport are tricycles/rickshaws and motorcycles. These should be well integrated in the planning of the bus terminal.

3.5.5 Access to the utilities

3.5.5.1 Water supply

There is reliable water supply in Uyole Ward similar to the rest of the City. Exact location of water transmission and distribution pipes is not known at this stage of the study; however, these can be investigated in detail during the preparation of detailed design of the facility.

3.5.5.2 Sanitation

Uyole ward is not served by the City sewerage system. Sewerage disposal in the form of septic tank and soak pit or oxidation ponds which can serve as a larger neighborhood can be considered in the detailed design.

3.5.5.3 Power supply

Mbeya City including Uyole ward is connected to the National power grid.

The envisaged development shall, however, require connection to a 33 Kv substation or power line and be provided with a step down transformer to supply the required voltage. With considerable power cuts or fluctuations, the facility should be provided with generator for power back up. Use of solar powered systems shall also be explored in the detailed design.

3.5.5.4 Telecommunications

The site can be easily connected to the Tanzania Telecommunication Company (TTCL) landline telephone system. Mobile phone and data services are also adequately available in the area.

3.5.6 Access to supporting infrastructure and amenities

3.5.6.1 Health

Government owned Mbeya Referral Hospital is the largest in the City. There also several other public and private health centers and dispensaries in the City Council.

3.5.6.2 Education

The site has good access to the educational institutions in the City.

3.5.6.3 Banks

Existing banks and other financial institutions are not far from the site. To support passengers, further space for banking services could be considered in the planned facility.

3.5.7 Environmental and Social considerations

3.5.7.1 Resettlement and relocation needs

Since there is no kind of encroachment or development on the site, there will be no resettlement or relocation issues.

However, proximity to the school is a concern, when the project started the Advisors were advised that the discussions were underway by the LGA to relocate the school, later during the project analysis the Advisors were informed that this was unsuccessful.

3.5.7.2 Expected Social Impacts

Some identified impacts have local and regional effect while some impacts are negative social impacts of low and medium significance. The expected negative and positive social impacts during and after construction of the facility are listed below.

- Disturbance at borrow sites or sources of construction materials (sand, aggregates, stones)
- Impact from establishment of workers' camps
- Risk of injury to workers and their general safety
- Increase in HIV/AIDS cases
- Project revenue creation as a medium-to-long term impact of moderate significance
- Jobs creation and increased income of the local community which is the most positive significant impact to the local community
- Improved local community living standards
- Improved accessibility, and increased property and land value in the vicinity of the project area

3.5.7.3 Expected Environmental Impacts

The site is not on an area which is subject to sensitive environmental issues.

Some environmental impacts which may occur during the construction of the facility are listed below.

- Vegetation clearance
- Contamination of water from leakages (oil and grease) of fuels and lubricants from the construction equipment
- Poor air quality from dust and emissions around the construction site and material hauling routes
- Generation and poor disposal of solid and liquid wastes
- Vibrations due to compaction
- Increased noise pollution from vehicles and equipment
- Debris deposition in storm water drains causing blockage and flooding, increased runoff and soil erosion on construction site
- Contamination of surface and ground water from operating machinery leakages.

The environmental impacts expected during operation and maintenance of the facility are:

- A bus terminal will be accessed by large buses, mini buses, utility vehicles, and passenger cars generating a dense traffic during operational hours. Not only does that increase traffic substantially in the vicinity of the terminal, but cars are usually driven at slow speeds when most of the toxic exhaust is generated.
- Fuel and oil spillage from parked vehicles is one of the environmental impacts of potential concern. These spillages may find way into nearby streams and the ground, causing contamination of soil and

water. An oil separator should be considered in the detailed design of the bus station. The oil separator inhibits direct flow of the surface runoff to the nearby watershed, which is the existing stream. The surface runoff from the station may be contaminated with fuel and oils.

- Noise pollution may also be an issue for nearby residences.
- Plastic waste pollution is also one of the environmental impacts of serious concern. The plastic bags that usually pile up in and around markets may be a major cause of pollution.
- A bus terminal will be a big energy consumer and thus generate greenhouse gases. Due to the effect of this, the bus terminal will contribute to global warming.

The environmental impacts have been identified including those that will occur during the construction phase and those that may occur during operation and maintenance of the facility. The proposed project shall have multiple impacts of varying spatial and temporal significance. Geographically, some environmental impacts identified are local and some are global like those related to pollution, particularly global warming. Impacts of risk to workers and their safety have an effect beyond the project sites (regional).

Impacts such as contamination of surface and ground water have mid-term impact while the remaining impacts are short lived. Impacts that are negative, of low-to-high and low-to-moderate significance are increased dust and air pollution, increased waste generation, and damage to existing public utilities and services. Others are risk to workers and their safety, debris deposition in storm water drains and associated floods, contamination of surface and ground water, and resulting impact from operation of plant and camps operation.

Long-term positive impacts include aesthetic view, and improved services of the bus station, which is of high significance.

Long-term negative impacts with high significance include those mentioned above related to operation and maintenance of the bus station.

3.5.7.4 Summary of environmental and social considerations

Most of the negative impacts associated with project implementation could be mitigated to optimize the project benefits, on the assumption that the school would be relocated.

Mbeya City's plan for the aforementioned development project is the right step to meet current and future demand in its areas of jurisdiction. However, before implementing this project, it is vital to assess multiple parameters that constitute its viability.

From environmental and social perspectives, it is recommended that when decisions over which projects are most viable have been made, a detailed Environmental and Social Impact Assessment should be conducted as required by the law.

3.5.8 Overall Site Suitability to the Project

The assessment of suitability of the site has been done by weighing relevant suitability parameters. The main criteria of assessment are as follows:

- Legal suitability
- Planning criteria with consideration of compliance with land use plan and zoning in accordance with applicable master plan
- Site characteristics
- Transport infrastructure
- Utility services
- Social infrastructure and amenities
- Environmental characteristics

The overall suitability of the site has been concluded by rating each of these parameters and aggregating these ratings. In this analysis, the rating 'High' implied most suitable, 'Medium' implies relatively less suitable and 'Low' implies least suitable.

Based on the evaluation of the site the aggregate rating of the site is '**Medium**' however due to inconsistent land usage the site is deemed non-feasible for development of the bus terminal.

4 Economic Case

From the public sector perspective, economic assessment is the key test which demonstrates the public use and public justification for the project. The project which offers an economic return greater than the threshold provides an economic rationale for undertaking the project irrespective the delivery model.

4.1 Critical Success Factors

Project demand

Ability of Project to attract consumer base and ensure offtake of operating space is an important factor which impact the viability of the Project and ensuring private sector interest. The Project demand alignment of Project concept to user preferences; for instance, there is a clear preference for safe and hygienic space for waiting and small retail stalls.

Another aspect which will be important for ensuring demand of the retail space is regulation of stalls in the vicinity of proposed terminal. Setup of unorganized and unlicensed stalls in immediate catchment will have impact on the demand.

Willingness to pay

Willingness of operators to pay incremental charges for better services and facilities is foundation of the User pay PPP. The Consultant, along with LGA representatives, undertook a willingness to pay survey and the same was separately validated by the LGA through consultations. The survey details and observations are detailed in the annexure along with other consultations undertaken by the LGA.

Funding gap and affordability

Ability of the Project to generate sufficient revenue to ensure cost recovery will be critical given the fact that LGAs in Tanzania are heavily dependent on central government funding for financing of developmental projects and operational requirements⁵. A report from the National Audit Office reveals that most of the LGAs could finance themselves by only 9% and this, coupled with under release of capital development grants by 61% of the approved budget⁶, this underlines the importance of the Projects to be self-funding.

Optimum risk allocation

The underlying essence of PPP is allocation of risk to the party best suited to undertake the risk. The value for money in this PPP projects is contingent on ability of Private sector in better managing the Project development and operations leading to lower cost overruns.

Bankability

Willingness of banks to fund LGA promoting PPP Projects is a key factor which will determine the success of the PPP program for the municipal projects. We have interacted with various banks and financing institutions and the key concern in terms of bankability remains (i) Unencumbered availability of land free of any third party claims; (ii) ring fencing of the Project revenues; (iii) Clear support obligations of LGAs in terms of regulations; and most importantly (iv) Payment mechanism backed by PO RALG.

Institutional capacity of LGAs to manage the post-award phase

As clearly highlighted in earlier points, the role of LGAs post the award of the PPP agreement in terms of regulations, public awareness and communication, contract management, meeting contractual obligations

⁵ Source: Final Report - A study on LGAs own source revenue collection, PMO-RALG, Tanzania

⁶ Source: Report of the National Audit Office titled "The annual general report of the controller and auditor general on the financial statements for the financial year ended 30th June, 2016 – Local Government"; Published March 2017

etc. will be critical to the success of the PPP project. As per the Institutional assessment undertaken by the Consultant, PPP contract management is identified as one of the key capacity building need.

4.2 Project technical options

This subsection discusses the various project configuration/development option.

4.2.1 Option 1: Do not develop any facility

This option shall retain the status quo. This could widen the gap between demands and actual infrastructure provided shall only widen in the coming years. Hence, this option shall not be considered further.

4.2.2 Option 2: Development as per demand estimation

Based on demand analysis, feedback from the interactions with the stakeholder and competition assessment, there is a strong preference for modernized transport facilities. This option has been considered as the chosen technical configuration.

Accordingly, the facility may comprise the following:

- **Bays for different types of vehicles**

This shall be the main component of the bus terminal. Bays shall be provided for buses, mini-buses and daladalas and temporary parking spots shall be provided for cars/taxis.

Along with the bays, there shall also be space for circulation of vehicles and for streamlined entry and exit from the terminal.

- **Retail area**

It has been substantiated by the primary as well as secondary research that retail stores/shops/stalls/frames shall be developed at the bus terminal. Going along with stakeholder expectations, the space shall be exclusively dedicated to retail set-ups.

Area for ticketing, administration and other amenities

The primary interactions reveal that there is need for improved ticket counters, better passenger waiting areas as well as increased vigilance at the terminal. Thus, these facilities shall be specially demarked at the terminal.

4.3 Economic assessment of proposed technical option

Mbeya Municipal Council has identified and earmarked development of bus terminal, in Uyole Ward in the city.

The economic analysis model reflects the economic merit in pursuing a particular project. The economic analysis is a key determinant in deciding whether a project contributes positively towards the economy of the country. Government agencies base their decision on whether to develop the project based on the outcome of the economic analysis. There are many ways of looking at economic viability, and in the method proposed and adopted here; the evaluation is done using incremental approach wherein the "with-project" scenario is compared with the "without-project" or the present scenario, such that only the differences in costs and benefits of the two scenarios are considered in examining the economic viability of the project. In case of redevelopment project such as the bus terminal project under assessment, the incremental benefits of redevelopment are considered. Project benefits and costs in the public sector are generally considered broader than in the private sector.

Unlike the private sector which accounts for only costs and benefits occurring inside an investment project, the Public sector takes into account all the costs and benefits accrued inside and outside the project, i.e. economic and non-economic costs and benefits accruing to the project and all the third part costs and benefits. Therefore, economic viability of the project includes financial and non-financial costs and benefits, which have been consolidated to determine the internal rate of return of the project – both financial and

economic, and the benefit cost ratio. To this effect, several plausible assumptions have been made to gauge the shadow prices of some of the costs and benefits of the project.

4.3.1 Approach for Economic Analysis

The envisaged project will have two types of costs and benefits. On one side, there will be capital and operating costs – the direct economic costs of the project, and project revenue – or direct revenue from the project. The direct economic costs and benefits will be directly attributable to the project and thus accrued to the project owner. These have been estimated for the entire estimated project useful economic life considered as 30 years. Since the financial flows relating directly to the project do not reflect the true opportunity costs or their economic value as explained earlier; adjustments have been made accordingly to get their economic values.

The indirect costs and benefits of the project, on the other hand, include the direct and indirect employment benefits, which have been identified and analysed and projected throughout the project lifetime. Therefore, assessment of economic viability in the context of the envisaged project includes both economic indices – for the direct costs and benefits, and economic indices – for more comprehensive costs and benefits to the community at large.

Economic Costs: The first step in undertaking the Economic Analysis for the proposed project involves estimating the project's economic costs. For this, the financial costs associated with the project under various phases were first adjusted to reflect the project's true cost to the economy. This involved incorporating the effects of applicable economic externalities such as foreign exchange component of the capital costs, skilled and unskilled labour, etc. Transfer payments such as taxes and debt service were excluded from the financial costs. Further, because economic costs are to be calculated in real terms or constant prices, the accounting for inflationary impacts as embedded in price contingencies was also ignored.

To arrive at the economic costs, the financial capital costs were translated into constant prices and VAT, other indirect taxes are excluded. The resultant costs are segregated into materials, labour and equipment components, which are further segregated into local and foreign exchange components for shadow pricing purposes. To arrive at the economic costs, VAT and of other indirect taxes are excluded and a standard exchange rate factor of 1.1 and shadow age factor of 0.65 was used in line with accepted practice in the region.

Economic Benefits: Subsequently, the project's true benefits to the society were assessed and quantified. This involved identifying the benefits purely attributable to the project under the "with-project" scenario as compared with the "without-project" scenario. Such benefits were then quantified by assessing the value-add to the society through direct measurement and / or using proxy references.

The estimates of economic benefits are based on constant values because it is assumed that nominal growth will be born from inflation. As such, all the estimates are free from inflation because they are benchmarked on the first year of the project. The financial flows of the project have been converted into economic values to adjust for market and tax distortions of economic values. It is anticipated that 20% of the construction costs will be imports while the remaining 80% will be domestic resources. To this effect, the imported portion has been multiplied by 0.95, which is the standard conversion factor for imported capital goods in Tanzania. The domestic inputs have been multiplied by 0.85, which is the applicable conversion factor for construction costs.

Discount rate: A Social Discount Rate (SDR) of 12% was used to discount the net stream of economic benefits attributable to the project. The SDR is the rate at which the social value of project costs and benefits decline over time.

The overall economic desirability of the project was then assessed by comparing the stream of economic benefits vis-à-vis the economic costs using three indicators, namely:

- a) **Benefit-Cost Ratio (B/C)** – The B/C ratio is the ratio of the NPV of economic benefits to the NPV of the economic costs, discounted using the social discount rate. The B/C ratio indicates the economic return per TZS of expenditure. The decision rule is to accept a project with B/C ratio greater than 1.

- b) **Net Present Value (NPV)** – The NPV of economic flows is the discounted stream of net economic benefits (i.e., benefits minus costs) arising from the project. The decision rule is to accept projects with significant positive NPV.
- c) **Economic Internal Rate of Return (EIRR)** – This is the discount rate at which the annual stream of net benefits due to the project is equal to zero. The SDR of 12% is the hurdle rate for a project's EIRR for the project to be considered economically viable.

4.4 Assessment of the Economic Costs and Benefits

4.4.1 Economic Benefits of the Project

The proposed new bus terminal will be located in Uyole Ward in Mbeya City, 11 Km from the City centre. The prospective construction of the new bus terminal has an outstanding potential for serving a big number of travellers, service providers and the surrounding community at large.

Currently, Uyole ward does not have a bus terminal to accommodate parking and moving spaces for vehicles especially for the residents of Uyole and nearby Nsalaga, Itezi, Igawilo and Iganjo wards. There is no a bus terminal facility to cater for buses commuting from Dar es Salaam to Kyela and Malawi; and also city shuttles (*daladalas*) from Igawilo and Nsalaga do not have transit terminals for boarding of passengers and freight. Construction of a bus terminal will not only create comfort to travellers, but will potentially improve business, employment opportunities, and save time for the terminal users to engage in other economic and social activities.

A conservative approach has adopted to ensure that the benefits that were not mutually exhaustive or unquantifiable were excluded from the benefit stream. As such, for the purpose of quantification of economic benefits, following economic benefits were assessed, namely:

- **Consumer surplus:** The bus terminal serves both the bus operators as well as the passengers. There will be benefits to consumers including time saving from efficient terminal operations, health, environment, safety etc. However, since provision of these benefits will also result in willingness of bus operators to pay for higher terminal entry and parking fee, or willingness of passengers to bear the resultant increase in bus fares if the impact is transferred to passengers. Improved retail space and passenger amenities will result in higher propensity to spend by passengers.
- **Traders surplus:**
 - a. With provision of better infrastructure in the proposed project, the traders at the bus terminal will have an improved spatial environment for their business, which will increase their willingness to pay rent relative to the situation 'before the improvement'.
 - b. Thus, new retailers will venture into business in the facility and their willingness to pay rent will be higher than in their previous business premises (for the relocating retailers) because of the new facility and the expected volume of business.
- **Developer surplus:** The developer of the Project facility will get benefits in terms of the overall profits generated from the Project.
- **Additional wages:** In addition to above, there would be direct and indirect jobs that would be created and are not accounted for elsewhere. For the purpose of this assessment, we have considered the additional direct jobs only.

All economic benefits have been considered in real terms.

Key Assumptions

- Based on the willingness to pay survey, the bus and daladala operators have indicated that they would be willing to pay increased terminal charges. Presently the inter-city buses, mini buses and daladala are levied TZS 4000, TZS 2500 and TZS 1000 as entry charges. As per the willingness to pay survey, a blended increase of 50% has been considered.

- Traders have indicated that they are willing to pay between 1% and 15% of their total sales as rental cost and we have considered a conservative blended estimate of 5% of total sales.
- The willingness to pay increased rent (~25% over the prevailing rates) has been considered as incremental benefit.
- Expected Loss by Competitors due to the Planned New Business Facilities in Selected LGAs: The onset of a new business facility creates competition with the existing businesses – thereby leading to reduced or closed business operations. This will happen when the new business facility starts to operate; in such a way that there will be some customers who will shift to the new created businesses while other won't or will remain partially – and shop in both the old and the new facility. The shifting customers, and presumably in addition to new products, will create business opportunities to the business operators in the new facility – this will produce services which will add on the economic benefits of that particular community.
- It takes time before a new business facility becomes fully operational. The loss made by competitors on account of retail spaces will gradually decline as they make adjustment to get new customers/market and change their business strategies – may include relocation of the business to high demand areas. Given that the facility has already established customer base, it is assumed that the decline will be gradual and diminishing from 100% with time to zero percent over five years.
- Additional sales of 10% have been considered on account of consumer willingness to shop and as a conservative estimate, it has been assumed that 10% of the additional sales will accrue towards Consumer surplus.
- Developer surplus: Profit after tax has been considered in real terms.

4.4.2 Economic costs of the Project

The economic costs for implementing the Project have been considered in terms of economic cost towards the capital costs of the proposed project and the cost of operating and maintaining the project facilities.

For determining the economic cost from operations and maintenance, only the operating and maintenance costs due to the operation of the project were considered and were converted into their economic equivalents using the same methodology as defined above for capital costs, using the standard conversion factors.

4.4.3 Results

The results are depicted in the table below.

Table 6: Economic IRR and Benefit – Cost Ratio

Estimated Economic IRR	Benefit-Cost Ratio
24.5%	3.0

The assessment of the economic viability, based on the quantifiable costs and benefits, is depicted in the table above, which shows the viability indices for the project. The economic internal rate of return (IRR) for the project is higher than the SDR of 12% and is economically viable.

4.5 Non Quantifiable Benefit of the Project

It may be noted that while only above mentioned benefits have been quantified, there are other benefits which will be generated by the Project and may not be quantifiable at this stage. The planned bus terminal is expected to have organized and planned buses and other vehicles parking yards, commercial spaces, ticketing block, restaurants, passengers’ waiting shades, washrooms and an administration block. This will potentially improve cleanliness and consequently health status of people in the area. . The proposed bus terminal will also result in indirect business generation for small and medium enterprises and increase in trade.

The constructed bus terminal is expected to result into improved standards of handling passengers in the ward and associated areas including handling of passengers on transit as the terminal will have well organized offices to serve their customers.

In addition, the new bus terminal shall also promote income generation from transporting customers and luggage to and from the terminal. There shall also be user charges collected from the parked vehicles which will add to the revenues generated for the LGA.

4.6 Conclusion

The envisaged project is economically viable. The expected benefits to the community outweigh the costs involved. The economic viability of the Project was assessed on the following parameters and benchmark / threshold values mentioned above:

- The EIRR for the project should exceed the hurdle rate - Social Discount Rate - of 12%
- The Benefit-Cost ratio should exceed the hurdle value of 1

Both of these conditions are met for this Project.

5 Commercial Case

Globally, the infrastructure sector has been a front-runner in terms of experimenting with various procurement options. Given the project concept, this chapter presents the analysis of different procurement options for the project and discusses their suitability in context of the Uyole Bus Terminal project.

5.1 Procurement Strategy and Route

5.1.1 Procurement modalities being considered

The main objective of this project is to provide a well-built, safe and hygienic public facility that is accessible and useful to all income classes.

The key determinant of the delivery model is risk-sharing partnership between the public and the private sector to deliver a project. Considering the prevalent models, which have been deployed for delivering similar projects, following approaches can be considered for delivering the Uyole Bus Terminal Project:

1. Traditional delivery model where the project is financed, constructed and managed by the public authority; and
2. PPP delivery models.

For the purpose of this assessment, the PPP models allowed under the National PPP Policy of Tanzania have been considered and assessed for their suitability in context of the project. Keeping this as the underlying principle, following procurement modalities have been considered.

- (i) **Public sector's involvement only - Traditional Procurement:** in this case the project is financed, constructed and managed by the public authority such as the LGA.

This mode is pertinent for projects that, once developed, shall provide important public service/facility. However, they may not be commercially lucrative enough to attract the private sector.

- (ii) **Public Private Partnerships (PPPs):** In the case of PPP delivery options, a project is developed via contributions from both public and private entities with responsibility for design, construction, financing, operation, and management allocated between the public and private sectors. The division of responsibility and risks between the two parties depends on the chosen PPP mode. For example, the private entity may assume responsibility for design, construction, maintenance and operation of the facility for a pre-defined period of time, while the public entity provides the land and assumes risks related to natural disasters and political upheaval.

This mode is useful for developing projects that provide important public services and have sufficient revenue potential to attract the private sector. PPP projects also have the option of getting funding/grants from the concerned public entity and/or other agencies to enhance their viability.

For the purpose of this assessment, the PPP models allowed under the National PPP Policy of Tanzania have been considered and assessed for their suitability in context of the project. Based on the assessment, relevant procurement options have been shortlisted and have been further evaluated for:

- Financial viability and affordability; and
- The resultant Value for Money from the Government perspective

5.1.2 Relevant procurement options

The traditional delivery models include publicly funded contracts and, depending on the contractual arrangement, there may be some degree of risk transfer to the private contractor usually via some form of Engineering Procurement contract (EPC) of a fixed price or turnkey nature. However, in general the public

authority is responsible for financing the project, retains operations and maintenance and attendant risks. On the other hand, in the case of PPP delivery options, the private sector retains a greater degree of risk, especially those related to financing/funding and operations. There are many modes of PPPs, which may be adopted depending on the requirements of the project and best risk management practices.

The National PPP Policy of Tanzania (2009) allows for the following PPP options:

Table 7: PPP Options

Project Structure	Description
Option 1: Service, Management, Leasing Contracts and Concessions	For existing public assets: <ul style="list-style-type: none"> Service Contract: Government engages a private entity to provide services the Government previously performed Management Contract: Government engages a private entity to be responsible for all aspects of operation and maintenance of the facility under contract Lease Contract: Government grants a private entity a lease hold interest in an asset and the private partner operates and maintains the assets in accordance with the terms of the lease
Option 2: Design-Build (DB)	Government engages a private partner to design and build a facility in accordance with the requirements set by the Government. Post completion of construction, the Government assumes responsibility for operating and maintaining the facility.
Option 3: Design-Build-Operate (DBO)	Government engages a private partner to design and build a facility in accordance with the requirements set by the Government. Post completion of construction, the ownership of the facility remains with the Government while the private partner operates the facility according to public performance requirements. The private partner is also responsible for replacing the assets whose life has expired.
Option 4: Design-Build-Operate-Maintain (DBOM) / Build-Operate-Transfer (BOT)	This combines the Design-Build (DB) model with the operations and maintenance of a facility, for a specified period, by the private sector partner. At the end of that period, the facility is transferred back to the Government.
Option 5: Build-Lease-Transfer (BLT)	After building the asset, the Concessionaire rents or leases it from the Government and eventually transfers it back again.
Option 6: Design-Build-Finance-Operate/Maintain (DBFO or DBFM)	Private sector designs, builds, finances, operates/or maintains a new facility under a long term lease. At the end of the lease term, the facility is transferred back to the Government.
Option 7: Build-Own-Operate (BOO)	Government grants the right to finance, design, build, operate and maintain a project to a private entity that retains ownership of the project. The private entity is not required to transfer the facility back to the Government.
Option 8: Build-Own-Operate-Transfer (BOOT)	Government grants a franchise to a private partner to finance, design, build and operate a facility for a specified period of time. Ownership of the facility is transferred back to the Government at the end of that period.
Option 9: Buy-Build-Operate (BBO)	This is a form of asset sale that includes rehabilitation or expansion of an existing facility. The Government sells the asset to the private

Project Structure	Description
	sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

The main emphasis of PPP structuring is on risk sharing, however there are variations in terms of user charges, concession periods, asset ownership, delivery of public service etc. Thus, in terms of allocation of roles and responsibilities across key elements of the project lifecycle, these delivery models can be represented as in the table below.

Table 8: Role of Public and Private Entities

Risk Responsibility	Public Funded		Private Funded						
	Item Rate Contracts	DB	DBO	DBOM /BOT	BLT	DBFO/ DBFM	BOO	BOOT	BBO
Design	Public	Public	Private	Private					Private/ Public
Build/ Construct	Private	Private	Private	Private					Private/ Public
Finance	Public	Public	Private*	Private					Private
Operations	Public	Public	Private	Private					Private
Maintain	Public	Public	Public	Private					Private
* Private sector financing for construction period only, then publicly financed.									

Delivery models for the project need to be evaluated in terms of the outlined procurement objectives to determine their suitability. The selected delivery model should be that which best suits the Government’s requirements and best addresses the project risks and challenges and Government’s ability to manage the contract.

The key determinants of relevant PPP procurement options, in context of the bus terminals, are as follows:

- **Scope and Role of Public and Private Sector with respect to their respective abilities to manage risks**

As is evident from the multiple reports published by various authorities on performance of capital projects and performance of LGAs in Tanzania, the private sector, prima facie, is better equipped to manage risks associated with delivery and operations of capital projects. LGAs face issues primarily on two fronts:

- i. **In Delivery** – Report by the PPRA, Tanzania, highlights this issue in their report of procurement audits in seventy-six procuring authorities for FY 2013-14. It states “*The audits revealed significant performance gaps on contracts management which had serious negative consequences in the delivery of services, goods and infrastructure facilities including; delivery delays, cost overrun, poor quality of services, goods and works, and loss of public funds*”. For infrastructure project closure and completion, it further adds that the overall score on project completion and closure was assessed at 40.6% - which is significantly below the threshold mentioned in the report.
- ii. **In Operations** – Operations are affected by inefficiencies in managing the contracts, especially in collection of revenues. For example, out of the total expected revenue to be collected and

remitted to the councils by contracted collectors, only 67% was remitted to the audited councils⁷. Further the overall score for work supervision and contract administration of the audited LGAs was assessed to be low at 48.4%⁸.

Given the above, there is a strong preference for integrated construction and operation risk transfer to the private sector. However, in the case of Bus Terminals, this point maybe countered by the fact that this facility is one of the main public transport services in Tanzania and it is regulated to ensure that the service provision is socially inclusive (by being affordable/pro-poor). In view of this, the LGA may want to retain control of the terminal and consequent operations itself. This is also reflected as per the prevalent practice in Tanzania where the bus terminal operations are governed primarily by government.

- **Ownership of the assets**

Considering the development of project on public land, its high importance from public transport perspective and pro-poor/affordability focus of the facility, transfer of ownership and/or exclusive possession—as in the case of BOO and lease based PPP models—is not preferred. Instead, grant of usufructuary rights or right to use the project asset will be a preferred scenario.

Thus, models such as Lease, Build–Own–Operate–Transfer, Build–Own–Operate, Build–Lease–Transfer, etc. may not be preferred.

- **Funding constraint and lack of capacity of LGAs:** Availability of funding is a critical factor when selecting procurement method. LGAs in Tanzania are heavily dependent on central government funding for financing of developmental projects and operational requirements⁹. A report from the National Audit Office reveals that most of the LGAs could finance themselves by only 9% and this, coupled with under release of capital development grants by 61% of the approved budget¹⁰, implies that there may be a need to look for alternate sources of funding than the traditional government funding for the purpose of the project.

In case of the project, it is evident from the financial assessment from government perspective that the project is viable and self-funding. Procurement option such as Design-Build/Turnkey EPC or traditional procurement may also be considered.

- **Greenfield project with a strong capital investment focus:** The project requires development of a greenfield asset. Thus, the PPP model must either be suitable for construction of the greenfield asset (and not rehabilitation) or alternatively, in case the construction is undertaken by LGA, should focus on adequate risk transfer to be considered relevant to achieving the objectives of the project.
- **Prevalent models and acceptability by the private sector**

Globally, various PPP models have been discussed and experimented with for development of Bus Terminals. An important element of PPP is to fix the responsibility for the following services/aspects:

- Procurement of land
- Conception, planning and design
- Construction
- Operations, management and maintenance
- Financing of design and construction
- Management of ancillary services (retail/commercial)

⁷ Source: Report of procurement audits in seventy six procuring authorities, Public procurement regulatory authority (PPRA) Tanzania, for FY 2013/14

⁸ Source: Report of procurement audits in seventy six procuring authorities, Public procurement regulatory authority (PPRA) Tanzania, for FY 2013/14

⁹ Source: Final Report - A study on LGAs own source revenue collection, PMO-RALG, Tanzania

¹⁰ Source: Report of the National Audit Office titled "The annual general report of the controller and auditor general on the financial statements for the financial year ended 30th June, 2016 – Local Government"; Published March 2017

Following are some brief case studies about international bus terminals. These demonstrate the division of responsibilities between public and private sector in view of the above listed services/aspects.

Bus Terminal	Procurement of Land	Conception, Planning and Design	Construction	Operations, Management and Maintenance	Financing of Design and Construction	Management of Ancillary Services (Retail, Commercial)
<i>Alambagh Bus Terminal, Lucknow, U.P., India¹¹</i>						
Public	✓					
Private		✓	✓	✓	✓	✓
Remarks						
<ul style="list-style-type: none"> • Model: Design, Build, Finance, Operate and Transfer • Funding Mechanism: Shall be entirely financed by the Concessionaire • Revenue Sharing Mechanism: All revenue to be collected by the Concessionaire for the contract period of 32 years. The contract may be extended for a further 30 years depending on the performance of the Concessionaire. • Risks: The Concessionaire shall bear all the risks related to the project. 						

Bus Terminal	Procurement of Land	Conception, Planning and Design	Construction	Operations, Management and Maintenance	Financing of Design and Construction	Management of Ancillary Services (Retail, Commercial)
<i>Buses Terminal of Danlí-Paraiso, Honduras¹²</i>						
Public	✓			✓		✓
Private		✓	✓		✓	
Remarks						
<ul style="list-style-type: none"> • Model: Design, Finance, Construction and Transfer • Funding Mechanism: Shall be entirely financed by the Concessionaire. • Revenue Sharing Mechanism: The Concessionaire shall sell, lease or give on rent the commercial spaces within the Terminal to SMEs as a way of recovering its investment. The operations and maintenance activities shall be carried out by the public entity. • Risks: The Concessionaire shall bear all the risks related to the project. 						

¹¹ Source: Adapted from Draft Concession Agreement for 'Development of Alambagh Bus Terminal in Lucknow, Uttar Pradesh on Design Build Finance Operate and Transfer (DBFOT) basis'

¹² Source: Adapted from <http://ppp.worldbank.org/public-private-partnership/library/buses-terminal-and-municipal-market-of-danli-el-paraso-honduras>, accessed in April 2018

Bus Terminal	Procurement of Land	Conception, Planning and Design	Construction	Operations, Management and Maintenance	Financing of Design and Construction	Management of Ancillary Services (Retail, Commercial)
<i>Geeta Mandir Bus Terminal, Ahmedabad, India¹³</i>						
Public	✓					
Private		✓	✓	✓	✓	✓
Remarks						
<ul style="list-style-type: none"> • Model: Design, Build, Operate and Transfer. Concession period of 31.5 years (1.5 years for construction + 30 years for operations) • Funding Mechanism: Shall be entirely financed by the Concessionaire. • Revenue Sharing Mechanism: The Authority shall receive Concession Fee from the Concessionaire as well as the Transfer Fee from end users. The Concessionaire shall collect revenue in the form of one time lease rental from end users and various charges associated with commercial and retail facilities. • Risks: The Concessionaire shall bear all the risks related to the project in the form of performance guarantee security deposit to the Authority. 						

Bus Terminal	Procurement of Land	Conception, Planning and Design	Construction	Operations, Management and Maintenance	Financing of Design and Construction	Management of Ancillary Services (Retail, Commercial)
<i>Třebíč bus station, Czech Republic¹⁴</i>						
Public	✓					
Private		✓	✓	✓	✓	✓
Remarks						
<ul style="list-style-type: none"> • Model: Design, Build, Finance and Operate. Operation period is to be 25 years • Funding Mechanism: Shall be entirely financed by the Concessionaire. • Revenue Sharing Mechanism: Infrastructure availability payments and income from the lease of the commercial areas shall be the main sources of income. • Risks: Transfer of the construction, financing and availability risks and risks associated with the operation of the commercial zone to the Concessionaire. 						

Amongst the various service-sharing options that have been implemented internationally, predominantly two sharing options gain prominence:

The first is in which all the services are offered by the private party as per the performance parameters set by the public authority and the authority assumes performance monitoring. The private party is allowed to operate the bus terminal. In this option, the demand risk and/or revenue risk may be assumed by the private party.

The second option, which has also been successful, is in which the private party provides for all the services except operation services and the public authority assumes the operation services. In this

¹³ Source: Adapted from sector profile on 'Road Transport: Connecting Lives' for Vibrant Gujarat 7th Global Summit 2015

¹⁴ Source: Adapted from Information on PPP Project 'Revitalization of the Třebíč Bus Station', May 2009

option, the payments to the private party are linked to performance and service/facility availability. It may also be noted that demand and revenue risks are not assumed by the private party.

While the above factors present a strong case for risk transfer to the private party, it is also pertinent to note that the one of the key objectives of this project is ensuring delivery of public service and pro-poor focus. In order to fulfill this intent, it is critical either the public sector have adequate control over the public service delivery or operational control over the service, or alternatively there are safeguards in place – both regulatory safeguards and safeguards in terms of having competitive/comparable facility/ facilities that shall ensure fair service delivery.

5.1.3 Selected procurement modality and role allocation

Based on the above discussion, the **Build, Operate and Transfer (BOT)** may be considered as the preferred procurement option. This combines the Design-Build (DB) model with the operations and maintenance of a facility, for a specified period, by the private sector partner. At the end of that period, the facility is transferred back to the Government.

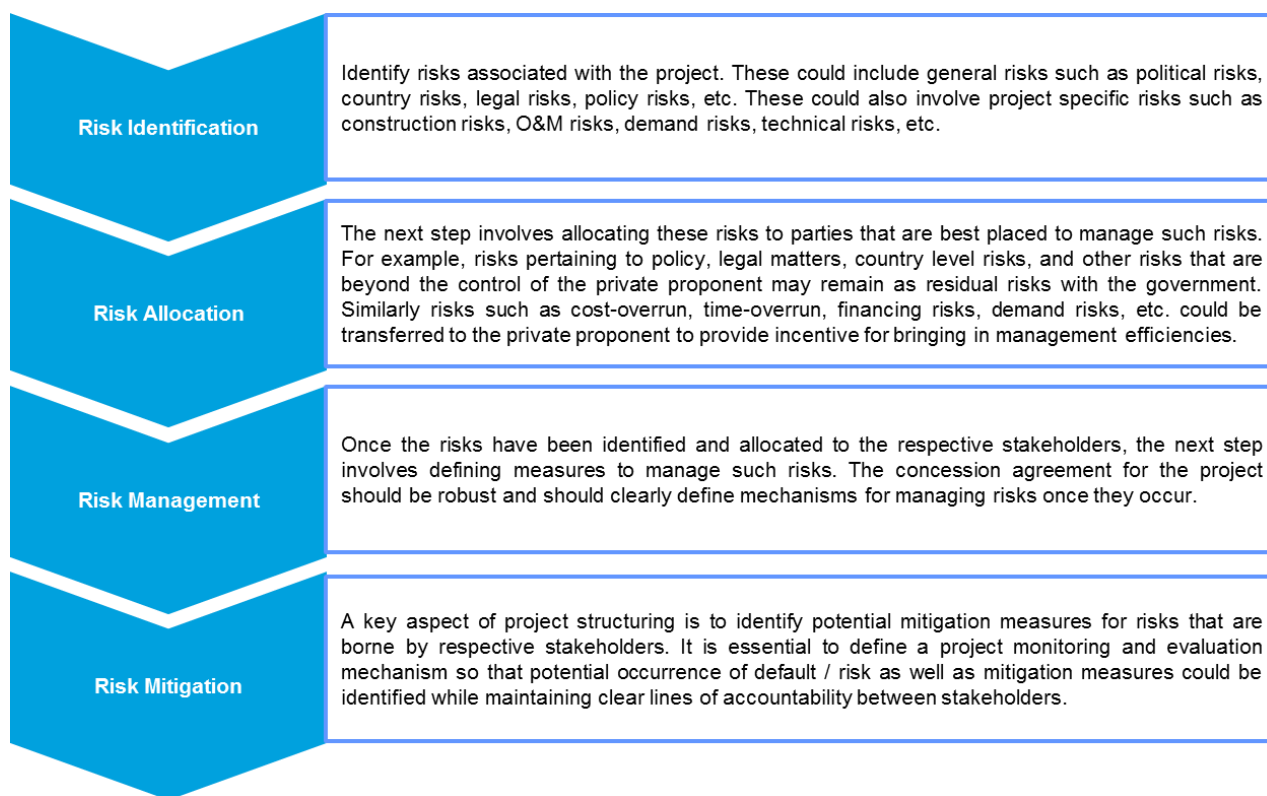
Further, considering the funding constraint of LGA and optimum risk sharing, availability based payment PPPs may not be suitable

Table 9: Suggested Procurement Modality

Operating Model	Description
<p>Build, Operate and Transfer (BOT)</p>	<p>In this procurement option the Private Party is responsible for Design, Construction, Finance, Operation and Maintenance of the project. This include responsibility for:</p> <ul style="list-style-type: none"> ▪ Hard infrastructure (new or refurbished facilities) ▪ Associated hard infrastructure lifecycle maintenance services including ‘hard’ facility management services including equipment and facility maintenance ▪ Soft or facility management services such as cleaning, catering and other support services ▪ Commercial operations including tenancy management, marketing and sale function <p>The services are offered by the private party as per the performance parameters set by the public authority and the authority assumes performance monitoring.</p> <p>The private party is allowed to collect direct user charges, based on the agreed parameters. In this option, the demand risk and/or revenue risk may be assumed by the private sector.</p> <p>Financing support mechanism: Viability Gap Funding in form of capital grant (if required)</p>

5.2 Risk Allocation framework

Risk assessment for a PPP project essentially involves the following key steps:



5.2.1 Risk Identification

The risks associated with the project can be broadly classified into four categories:

- (i) **Project specific risks:** These risks are project specific and to some extent are controllable by the project proponent/private party. These risks include design risks, site risks, construction risks, operation risks, insurance risks, etc.
- (ii) **Sponsor or counterparty risks:** These risks to some extent can be mitigated by the Authority/Public party and the sponsors
- (iii) **Economic and Financing risks:** These risks impact the project financials and returns
- (iv) **General and country risks:** These risks are associated with the political, economic and legal environment of the host country and over which the private party would have little or no control

These risks have been further detailed in context of the project in following sections.

5.2.2 Risk Allocation

Once the risks have been identified, they have to be allocated and managed efficiently to ensure the success of the project. There are three overriding considerations when deciding upon the risk allocation for a PPP project:

- a) Risks should be borne by the party most suited to deal with it, in terms of control or influence and costs.
- b) All substantial project risks that have been identified earlier should be allocated optimally between the parties and should be bound by contractual obligations.
- c) The risk structure has to be sufficiently sound to cope with a combination of pessimistic scenarios for the project.

Risks involved in the project have to be allocated and managed on a case-by-case basis. Normally, however, the private party will agree to bear the risks that they are familiar with, such as most development risks, construction and completion risks and operating risks. The private party will hesitate to bear uninsurable risks that are unquantifiable and outside their control, such as some political risks, indeterminate demand

risks and uninsurable force majeure risks. If the LGA still wishes to transfer some of these risks to the private sector, the private sector will factor in the costs associated with such risks and price the same into their financial bids to the extent it does not impact their 'go' / 'no-go' decision on the project. This will make the project more expensive and will offer lower value for money to the LGA.

For instance, in case of the Uyole bus terminal the risk pertaining to regulation of unregistered traders/middlemen and enforcement of rent/tariffs has been identified as key risk which shall be borne by the LGA.

5.2.3 Risk Management

The basic allocation of risk would need to be defined in the Concession Agreement between the Private Party and the LGA. This agreement would need to define the commitments of each party, including how risks are to be allocated or shared between them. Subsequently, the Private Party will proceed to negotiate and sign a series of contracts with other project participants. These contracts will also define how the risks allocated to the project will be distributed between the other project participants. The set of contracts relevant for risk allocation normally include the following:

- a) The shareholders agreement;
- b) Various credit agreements with project lenders;
- c) The construction contract;
- d) Equipment supply contracts;
- e) Where applicable, long-term materials supply contracts; and
- f) The operations and maintenance contract with the facility manager.

The combination of the concession agreement and all of the additional contracts will define the basic risk structure of the project.

5.2.4 Risk Mitigation

While developing the PPP structure, it may be possible to provide for certain risk mitigation mechanisms so as to improve the general attractiveness of the project and ensure its bankability and interest from potential private sector partners.

Following is an overview of the allocation and mitigation measures of these across the shortlisted project structure:

Table 10: Risk Allocation and Mitigation measures

Type of Risk	Brief description	Distribution of risks based on procurement option BOT (PPP)	Mitigation Measure
Project specific risks			
<u>Design risks</u>	These risks are primarily associated with the design phase of the project life cycle and include risks pertaining to change in design standards, output specifications, failure of design, delays in design approvals, etc. Most of these risks could be mitigated by the Private Party and the exposure to risks depends upon the capability of the Private Party. In some cases, risks associated with the approvals required from the Authority’s counterpart would be allocated to the Authority and those related to procuring approval from other government bodies may lie primarily with the Private Party.	Private Party	<ul style="list-style-type: none"> • Design approvals / consents: The Authority can provide reasonable assistance to the Private Party for obtaining any consents / approvals after signing of the Concession Agreement. • Risk of delay in design approval: If the Authority does not grant such approval within a specified time period or provide any observations, the approval could be deemed to have been provided. • Change in design and construction standards: The period between contract signing and start of construction should be relatively short, minimizing the risk of changes in standards affecting the project. However, if a change in design is required on account of an issue with the original design of the concessionaire then that risk would have to lie with the Private Sector. • Output specifications not being met: The Private Party could be required to furnish a design warranty vis-à-vis approved output specifications. An Independent Engineer (IE) could determine if the proposed design meets the approved specifications. • Failure of design: The desired specifications and design standards shall be set in the contract. Failure of design is likely to reduce the payment available to the Private Party. The design shall be vetted by IE and Authority.
<u>Site risks</u>	These include risks pertaining to land acquisition, right of way, title claims, access rights, ground conditions, discovery of hazardous materials, etc. The Private Party	LGA	<ul style="list-style-type: none"> • Land acquisition including Right of Way: This risk is highly significant. The land acquisition process should be started immediately.

Type of Risk	Brief description	Distribution of risks based on procurement option BOT (PPP)	Mitigation Measure
	<p>may not be able to control or mitigate such risks and these risks could substantially impact the project viability.</p> <p>Delay in land acquisition is one of the major issues for delays or termination of infrastructure projects. The Authority has to play a significant role to ensure that land acquisition is smooth and that encumbrance-free land is provided to the Private Party.</p>		<ul style="list-style-type: none"> • Title risk: This includes risk of any adverse title claims or any other encumbrances affecting the smooth possession of land. To avoid such risks, sufficient due diligence to be performed on local sites prior to land acquisition. • Access rights and site security: It should be ensured that suitable access rights are granted to the Private Party. If additional access rights are required after contract signing which were not requested by the Private Party, this should be a Private Party risk. • Site / ground conditions: Under the Concession Agreement, the Private Party shall undertake that it has satisfied itself to the site conditions and that it shall have no recourse against the Authority in the event of finding of any such inadequacy at a later date. At the RFP stage, the shortlisted bidders shall be given access to the Project Site to conduct necessary due diligence and inspection as the bidders may deem fit at their own cost. • Discovery of hazardous material: The discovery of any hazardous substance which makes the project unviable shall be treated as a force majeure event. Regular caveats shall be included to provide that the event is “beyond reasonable control of a party or is unavoidable despite the exercise of due diligence”.
<u>Construction risks</u>	<p>These risks are associated with the construction phase of the project life cycle and include risks pertaining to time overruns, cost overruns, failure to meet technical specifications, etc. Most of these risks could be mitigated by the Private Party except in cases where the risks such as overruns</p>	Private Party	<ul style="list-style-type: none"> • Cost overrun – not force majeure: Contracts to be at pre-estimated price and should limit circumstances in which variations to that price may be permitted (i.e. such as variations requested by the Authority). • Cost overrun due to variations: The Authority shall pay for variations it instigates – the risk is mitigated by having certainty of design / output before contract signing. • Cost overrun – force majeure: Force Majeure due to political events in the country, from where a lot of support and project inputs shall be sourced, can be

Type of Risk	Brief description	Distribution of risks based on procurement option BOT (PPP)	Mitigation Measure
	<p>are due to factors beyond the control of the Private Sector (for example, in case of force majeure or relief events).</p>		<p>considered to be moderately likely. Need to consider the magnitude of cost sharing between the Private Sector and the Authority.</p> <ul style="list-style-type: none"> • Delay in completion: Performance bond to be provided by the Private Party during the construction period to secure proper performance of construction works. In consequence of delay and / or non-completion, there would be a penalty for delay in achievement of the construction milestones as well as completion of construction, in the form of liquidated damages. Delay of more than specified months shall be a Private Sector event of default enabling the Authority to terminate the agreement. However, the Private Party shall be liable for delay only for the items that are under its control. The Concessionaire shall require appropriate relief and / or extension of time where the delay is caused by the Authority. • Failure to meet technical specification: Failure to do so could be linked to defined penalty. • Relief events: During a relief event, the Private Party shall be entitled to relief from its obligations under the Project Agreement to the extent its ability to perform them is adversely affected by the event. There may be limited recourse for compensation, which shall be calculated in accordance with agreed compensation principles. The Private Party shall not be subjected to Key Performance Indicator (KPI) deductions which otherwise arose as a result of the relief event and shall not be liable to the Authority for any losses or claims arising directly from the relief event. • Compensation events: Category of risks to be limited to specific instances which cannot be expected to be borne by the Private Party.

Type of Risk	Brief description	Distribution of risks based on procurement option BOT (PPP)	Mitigation Measure
<u>Operation risks</u>	The risks include performance / availability risks, demand, tariff risks, etc. The Private Party is required to meet the performance / availability standards for the project. Such risks could be mitigated by ensuring selection of capable and efficient private party for the project and setting criteria for penalties in case the Private Party does not meet the performance / availability requirements.	Private Party	<ul style="list-style-type: none"> • Operation and maintenance (performance / availability risks): Incorporate appropriate criteria to ensure selection of experienced operators / entities for the concession. Specifying equity lock-in period for key sponsors who participated in the bidding process ("Evaluated Entities") during the implementation of the project. Specifying output specifications in the CA to monitor the performance of the Private Party and imposing penalties in case of failure to comply. • Demand risk: In the present arrangement, the demand risk is to be retained by the Private Sector. Thus the demand risks pertaining to the project is mitigated. • Tariff risk: In the present arrangement, the revenue risk is retained by the Private Party. The Private Party has the flexibility of changing the tariff rates in compliance to government norms for the selected project concept. Thus tariff risks pertaining to the project is mitigated, however in many cases the tariffs are set via amendment of by-laws and this involves a political process, so this risk might revert back to the LGA. • By-law enforcement: in order to ensure that the economic and financial benefits from the facility accrue as outlined, the LGA will need to enforce its by-laws for example, not allowing busses to stop anywhere but designated bus terminals. This would also apply to truck terminals.
<u>Insurance risks</u>	The project must be suitably insured during both the construction and O&M phases of the project. The insurance should ensure sufficient coverage of all project assets.	Private Party	Insurance policies to be subject to lender review for the project.
Others			

Type of Risk	Brief description	Distribution of risks based on procurement option BOT (PPP)	Mitigation Measure
<u>Economic and financing risks</u>	These include risks pertaining to inflation, foreign exchange, interest rates and financial closure of projects. These risks could have substantial impact on the project returns and financial viability of the project. For instance, if the project assumes substantial financing from foreign debt market, it may become prone to foreign exchange risk.	Private Party	<ul style="list-style-type: none"> • Inflation: Private Party to bear the risk except beyond a level where an indexation may be considered by reference to indices. Tariff rates to be inflation indexed – to be passed on to users. • Foreign exchange: Payments are expected to be denominated in local currency. In case any foreign currency is used, necessary forex hedge may be procured by respective parties. • Financing risk: Financing risk to be mitigated through proper structuring of the project.
<u>General and country level risks</u>	These risks include country level risks, change in law, political sabotage/terrorism, force majeure, etc. While generally such risks are unlikely to occur during the course of the project, certain steps and measures need to be taken to assure the interest and active participation from the bidders. For instance, the mechanism and amount for termination payments in case of force majeure should be transparent and as per industry best practices.	LGA	<ul style="list-style-type: none"> • Change in law risk: The Authority shall be responsible for any additional costs arising due to a change in law after the execution date, provided such change was not reasonably foreseeable on the execution date. If the financial impact of the project specific change in law is more than a pre-agreed threshold, then the Authority shall compensate the Private Sector. The method of compensation shall be mutually decided and can be any of the following: <ul style="list-style-type: none"> ○ Rescheduling of the construction schedule ○ Extension of the concession period ○ Any other mutually agreed remedy agreed upon by the Parties • Force majeure: The affected party shall be relieved from performing the affected obligations. There may be monetary compensation, if stipulated in the Concession Agreement.

Type of Risk	Brief description	Distribution of risks based on procurement option	Mitigation Measure
		BOT (PPP)	<ul style="list-style-type: none"> • Country risk: The Authority shall be required to compensate the Private Sector through a pre-estimated damage amount (as agreed in the Concession Agreement), as well as giving it termination rights.

Given the above discussion, the next chapter assesses the suggested procurement mode from a financial viewpoint. The financial assessment provides valuable insights into the funding and affordability of the project. Given a certain project configuration, a financial return greater than the required threshold indicates that the project cash flows over the project lifecycle can recover the capital costs and sustain the operating costs. Lower financial returns may indicate funding gap

5.3 Output Specifications

This sub-section provides indicative output specifications for the Private Party/Concessionaire, which are expected to be fulfilled/met under the agreement with the Contracting Authority (LGA). The overall output standards and specifications have been aligned to the lifecycle of the Project and have been categorized in four stages i.e. Project concept and description, Planning and design, Construction, Operation and Management.

It is pertinent to note that Output Specification and standards shall be finalized based on the detailed feasibility undertaken in the subsequent stages, and need to be incorporated in the final project agreements, the following may be used as an indicative reference.

5.3.1 Project Concept and Description

The Private Party/Concessionaire shall be responsible for financing, designing, building, operating and maintaining the Project facilities. The Project is expected to be constructed in a two-year period.

The aim of the Project is to develop a bus terminal with facilities which shall provide reliable connectivity to the public. The terminal is envisioned to be equipped with facilities such as designated spaces for buses and minibuses. Space for ticketing officers, area for small and medium traders, hygienic washroom facilities, market stalls and stands, administrative spaces, car parking facilities, etc. In addition, there shall be provisions for other utilities, waste collection, proper drainage and internal pavements etc.¹⁵

Minimum Development Obligations:

The Private Party/Concessionaire shall be responsible for development of Project Facilities in consultation and input from the LGA /LGA's Engineer, according to Good Industry Practices and as per provisions of relevant design standards, specifications and local by-laws. However, design risk remains with the Private Party/ Concessionaire.

The Terminal shall be equipped with but would not be limited to the following facilities:

Sl.	Item	Considerations
1.	Terminal Bus Bays	<ul style="list-style-type: none"> • Based on the initial project concept notes prepared by the LGA, the proposed bus terminal shall have the following facilities: <ul style="list-style-type: none"> ○ Inter-city bus bays for boarding and unloading of passengers; ○ Inter-district bus bays for boarding and unloading of passengers; ○ Area/Bays for City buses (including daladalas) for dropping and picking passengers • Loading, idle and unloading at the same bay • Common bus bay has been considered in which the loading / off-loading operations take place at the same bay. • The other type is segregated bay in which loading / off-loading operations take place at different bays • Bus bay width will depend on the mode of bus parking either parallel or at an angle (60o, 45o, or 30o). • Angular bays, which allow easy docking of buses with shorter curb length, have been considered.

¹⁵ The high level Concept Plan is provided as guidance in the Annexure to this report. Bidders will need to develop their own designs in order to meet the final Output Specifications and assume the risks relating to their designs throughout the entire project lifecycle.

Sl.	Item	Considerations
		<ul style="list-style-type: none"> 150 m² per bay for 45° angular parking has been considered..
2.	Terminal operating capacity	<ul style="list-style-type: none"> Small terminal for peak bus flow of 60 and less at the design year (25 years design period) Estimated capacity: 81 buses (in 2034) Operations in two shifts
3.	Bus characteristics (size)	<p>The terminal is designed to serve the inter-city buses with at least following standard dimensions:-</p> <ul style="list-style-type: none"> Height:3.20 m Length: 12.42 m Overall width with mirrors: 3.14 m Overall width without mirrors: 2.59 m Number of passengers: 50 – 65
4.	Bus turning radius	<p>A standard bus needs minimum inner wheel radius of 8.5 m and outer wheel radius of 15 m for turning. These parameters are needed to establish required pavement width and possible vehicle encroachment. Additional allowance to be made with consideration of the following:</p> <ul style="list-style-type: none"> Bus speeds above 15 km/h Reverse turns Sight distance limitations Bus overhang (distance between front axle and front face)
5.	Axle load weight	<p>Road and terminal pavements need to be strong enough to accommodate the repetitive vehicle axle loads. Only heavy vehicles to be considered for the purpose of structural pavement design, which is defined as those having a registered un-laden weight of 3 tonnes or more including large buses having a seating capacity of 40 or more. Further, the damaging effect of an axle passing over the pavement is expressed by the equivalency factor related to the equivalent standard axle of 8160 kg load.</p> <p>The actual axle loading shall be confirmed during detailed pavement design to establish the proportion of axle loads above 13 tons.</p>
6.	Clearance requirements	Minimum overhead clearance 4.5 m
7.	Design speed	At least 20 – 25 km/h for bus entering and moving inside the terminal.
8.	Disabled requirements	Bus platform design needs to accommodate movement of disabled people such as raised platform to allow wheelchair movement
9.	Private vehicle parking	It is observed that at present there is inadequate capacity, witnessed by overcrowding in the terminal to accommodate parking for vehicles. At grade, parking to be provided inside the bus terminal with consideration of at least 23 m ² per bay adequately paved for use of vehicles.
10.	Feeder service	City bus dropping and picking of passengers to be provided at a dedicated area of the bus terminal

Sl.	Item	Considerations
11.	Passenger and bus staff amenities	<ul style="list-style-type: none"> • Bus Terminal Building – A part of the plot shall be utilized for developing Bus Terminal building accommodating bus bays/parking space for buses, minibuses and other vehicles that shall utilize the facility, passenger waiting areas, ticket booking offices, eating places, rest rooms and other basic amenities.. The space shall be a part of the larger terminal complex. • Ticketing Counters: The Bus Terminal building shall feature ticketing counters for the travelers. As per prevalent norms, the ticketing counter/office should be a minimum of 5 m² in size and 0.75 m² per 100 passengers <ul style="list-style-type: none"> ○ Food service (restaurant) - 1.5 m² per person for 15% terminal occupancy • Washrooms: Separate toilets for men and women. While both the type of toilets shall have toilet seats, additionally in Men toilet, urinals would have to be provided. Both the toilets shall have facility for disabled people also. <ul style="list-style-type: none"> ○ Male - 4 WC for first 1,000 persons and 1 for every 1,000 subsequent persons; 6 urinals for first 1,000 persons and 1 for every subsequent 1,000 persons ○ Female - 5 WC for first 1,000 persons and 1 for every 1,000 subsequent persons
12.	Internal Movement area/ Circulation and safety	Adequate internal movement area to be provided for both horizontal movement (corridors) and vertical movement (stairs, ramps, elevators), if required. Adequately wide corridors and stairs are to be provided to allow convenient and safe movement of many people in one moment, for example space for the Stand holder to stand/ sit behind the counter while allowing space for customers to circulate.
13.	Support / Other Infrastructure Utilities –	The terminal complex shall also feature spaces for utilities such as electricity distribution area/substation, solid and other waste collection areas, water pump area, security personnel area etc. The market will be developed with a proper drainage network and lighting facilities.
14.	Commercial Area	<p>The bus terminal is expected to serve both travelers as well as traders by providing stalls for retail sales. These shall be within the terminal building. They may include food stalls, Passenger amenities etc. A commercial area with single (ground) floor has been proposed as a part of the designs.</p> <p>Since, there are no specific space guidelines for market stalls and frames, in line with existing practices, following may be adopted:</p> <ul style="list-style-type: none"> ○ 'Kiosk'/ 'Stands': Sales tables built in the market, wherein each table is a concrete slab/bed (100mm thick) with cement mortar finish on top. The top of each table is ~0.9m from the floor level and width of table is be 0.9m. Each stand will be ~1.5m wide (for one trader) and can have shelves/cabinets underneath for storing goods / groceries. The construction will be a combination of masonry walls and concrete bed with plaster wall finishes and mortar table top finish. Alternatively, stall may

Sl.	Item	Considerations
		<p>be is a temporary facility for selling goods. The area required for stalls may be approximately 3 m²</p> <ul style="list-style-type: none"> ○ 'Frames'/Large stalls: an enclosed room with an area of about 10-15 m², depending on available space. The shops shall have a door (of steel) at front covering entire width of the shop
15.	Administration	a suitable space/ offices for the market manager should be contemplated to facilitate the efficient operations of the market, for example, a cashier's office could be included.

The Project area and proposed planning details are tabulated below:

Table 11: Proposed planning details

Sl.	Parameter	Value
1.	Plot size ¹⁶	23,206 m ²
2.	Inter-city bus bays	24 No.
3.	Inter-district bus bays	11 No.
4.	Commuter bus bays	17 No.
5.	Private cars parking bays	22 No.
6.	Main Passenger Block	945 m ²
7.	Passenger Amenities	1,680 m ²
8.	Warehouse	840 m ²
9.	Bus service	840 m ²
10.	Total built-up area	5,145 m ²
11.	Total floor area	5,145 m ²
12.	Plot coverage	22 %
13.	Plot ratio	0.22

Project Facilities forming part of the Project should be completed on or before the Project Completion Date. Construction, development and maintenance of the Project Facilities forming part of the Project shall be the responsibility of the Private Party/Concessionaire as per the applicable norms, local or national laws and prevalent rules and regulations.

An indicative concept plan has been provided in the Annexure to this report, for reference.

¹⁶ Note: There is a discrepancy in the plot size – as per the project's Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.

5.3.2 Planning and Design Aspects

5.3.2.1 Design philosophy

The philosophy of the conceptual design has followed the general design philosophy, which guides a design of any transport related facility.

The following is normally considered:

- Quality of the design;
- Adoption of appropriate standards;
- Operation and maintenance of the facility;
- Sustainability of the facility; and
- Energy performance of the facility.

The facility has been designed with flexibility in mind whereby over the life of the facility, the functions may change and the spaces can be reconfigured.

The design of road related facilities has adhered to the available Tanzania Ministry of Works geometric and pavement design standards.

The design of buildings has adhered to the guidelines established in the local authority Master Plan as well as other guidelines. In the event of a conflict between standards established in a Master Plan and other documents, the Master Plan has governed.

Systems and materials to be incorporated into road works and buildings are selected based on long-term operations and maintenance costs. The design has incorporated ease and efficiency of operation and allowance for easy and cost effective maintenance and repair.

The design of the facility has also incorporated established principles of sustainable design and energy efficiency.

5.3.2.2 Design standards

There are no specific guidelines or standards for design and construction of bus terminals / stations either nationally or by the local City /municipal authorities.

Since bus terminals consist of roads, pavements and buildings, some available road design and construction standards and building codes are adopted.

The following documents and standards are considered appropriate for adoption in the design of the bus terminal:

Sl.	Documents / Standards	Remarks
1.	Tanzania Road Geometric Design Manual (2012)	Terminal geometric design of bus bays and traffic lanes
2.	Tanzania Pavement and Materials Design Manual (1999) and the American Association of State Highway Transport Officials (AASHTO)	Terminal pavement design
3.	Tanzania Standard Specifications for Road Works (2000)	Specifications for road materials and works which are part of the terminal facility
4.	LGA Master plan if available at the time of Development	Local Master Plan Guide

5.	Tanzania Building Research Unit – Technical Guide – Loads for Structural Design	Technical guide for structural design of buildings
6.	British Standards e.g. BS 8110, CP110	Basic data for structural design of buildings
7.	Metric Handbook by David Littlefield	Planning and Design Data

5.3.2.3 Land development works required

Apart from site clearance, no other land development works are envisaged for the planned project.

5.3.3 Project Construction Aspects

- 1 The Private Party/Concessionaire shall construct buildings, internal pavement/ roads, onsite infrastructure and all other facilities in the Project area as per the detailed drawings and design prepared by Private Party/Concessionaire and approved by LGA or LGA's Engineer. The Private party/Concessionaire has to finalize the detail drawings and Detailed Project Report (DPR) based on the design and drawings and site plan provided by LGA for the Project. For this purpose, the relevant Tanzania Standards/Specifications shall be followed and if such Tanzania Standard/ specifications are not available International standard/ specifications shall be followed.
- 2 The Project report and other information collected/prepared by Feasibility Consultant and provided by the LGA shall be used by the Private Party/Concessionaire only for reference and for carrying out further investigations. The Private Party/Concessionaire shall be solely responsible for undertaking all the necessary surveys, investigations and other data with due diligence, and shall have no claim against LGA for any loss, damage, risk, costs, liabilities or obligations arising out of or in relation to the project report and other information provided by LGA.
- 3 The Private Party/Concessionaire shall draw up a Quality Assurance Manual (QAM) covering the Quality System (QS), Quality Assurance Plan (QAP) and documentation for all aspects of work. Quality Assurance Plan of the Private Party/Concessionaire will also include the tests for materials, responsibilities of key personnel involved, adequate control and checking procedures and the operation and maintenance of the building. The Private Party/Concessionaire shall submit work plan and manpower deployment chart and also a chart listing major equipment to be used at different stages of the Project development, this is also to track local labour used.
- 4 The Private Party/Concessionaire has to comply with all the relevant Acts, Regulations and Codes/ Standards and Specifications for approval and the design/ development of the Project. Such Acts, Regulations and Codes/ Standards and Specifications shall include the following but not limited to:
 - i. Urban Planning Act, 2007
 - ii. Urban Planning and Space Standards Regulations, 2011
 - iii. Local Government (Urban Authorities) (Development Control) Regulations, 2008
 - iv. Approved Master Plan, if available at the time of development.
 - v. Relevant Building Codes and By-laws
 - vi. Tanzania Building Research Unit – Technical Guide – Loads for Structural Design
 - vii. Relevant British Standards or International Standards
 - viii. International Building Code (IBC)
 - ix. Tanzania Road Geometric Design Manual (2012)
 - x. Tanzania Pavement and Materials Design Manual (1999) and the American Association of State Highway Transport Officials (AASHTO)
 - xi. Tanzania Standard Specifications for Road Works (2000)

- xii. Tanzania Building Research Unit – Technical Guide – Loads for Structural Design
 - xiii. British Standards e.g. BS 8110, CP110
 - xiv. Metric Handbook by David Littlefield
 - xv. Fire and Rescue Act Cap 427
 - xvi. Environmental Management Act, 2004
 - xvii. Employment and Labour Relations Act, 2004 (ELRA)
 - xviii. Occupational safety and Health Act, 2003 (OSHA)
 - xix. Workers Compensation Act, 2008 (WCA)
 - xx. Any supplement issued with the bid document
- 5 In the absence of any specific provision on any particular issue in the aforesaid Acts, Regulations, Codes or Specifications read in conjunction with this Specifications and Standards contained in the relevant Schedule of the Agreement, the international standards (British or American standards) or any other specifications/ standards as proposed by the Private Party/Concessionaire shall apply with prior approval from the LGA/ LGA's Engineer.
- 6 The Private Party/Concessionaire shall ensure that materials and finished products are tested and comply with prescribed in relevant codes.
- 7 Review and Comments by LGA/ LGA's Engineer/ Terminal Officer: Private Party/Concessionaire is required to send all designs, drawings and documents to the LGA or LGA's Engineer for review and comments, and in the event such comments are received by the Private Party/Concessionaire, it shall be duly considered in accordance with the Public Private Partnership Agreement and Good Industry Practice for taking appropriate action thereon.
- 8 Design of all component of the Project shall confirm to the relevant codes. All the final design and drawings for the Project will have to be submitted and approved by LGA through the relevant approval process.
- 9 Mix designs for concrete to be used for the Project shall be certified from a government approved laboratory. Samples of all materials used for the design mix must be kept in a Project sample room. No concreting shall be carried out unless the LGA or LGA's Engineer has inspected the reinforcement and certified in writing that concreting may proceed. Proper records for all pours along with cube test reports, etc. shall be maintained.
- 10 The material to be incorporated in the building for various items of works shall be procured by the Private Party/Concessionaire in advance and samples thereof reviewed by the LGA/ LGA's Engineer. All materials shall be the best of its kind designated in the contract.
- 11 The approved sample shall be retained in a sample room constructed at site of work by the Private Party/Concessionaire till completion of work. Normally no deviation in size, grade and quality of material shall be made by the Private Party/Concessionaire during construction.
- 12 The LGA or LGA's Engineer shall be entitled, at any time, to inspect and examine any materials intended to be used in or on the works, either on the site or at the factory or workshop or other place(s) where such materials are assembled, fabricated or manufactured and the Private Party/Concessionaire shall provide for such facilities as may be required for such inspection and examination.
- 13 Notwithstanding the fact that the Project is being overseen by LGA/ LGA's Engineer from time to time, the overall responsibility for structural soundness and quality of the Project facilities/ components will rest with the Private Party/Concessionaire.
- 14 Post Construction Inspection and Testing: After completion of the work and during maintenance period, the work shall also be subjected to 'Post construction inspection and testing'. In case the

materials or articles incorporated in the work are found to be inferior, though the sample collected for the same might have been passed at the time of execution, it shall be the responsibility of the Private Party/Concessionaire to replace the same at his own cost, failing which the Authority may rectify the same at the risk and cost of the Private Party/Concessionaire.

- 15 All necessary statutory clearances, approvals and permits shall be obtained by the Private Party/Concessionaire prior to execution of work. The entire quality standard, tolerances and other technical requirements shall be strictly adhered to by the Private Party/Concessionaire.
- 16 Obtaining the water supply and electric connections for above structures from the LGA and payment of water supply and electric energy charges to the concerned authorities shall be the responsibility of the Private Party/Concessionaire which he shall discharge at his own cost for the entire Project period.

5.3.4 Operation & Maintenance Requirements

5.3.4.1 General

- 1 The Private Party/Concessionaire will be responsible for maintenance, up gradation, repairs, replacement and operations, of all works of the project facilities and site area during the Project period as per the maintenance requirement mentioned in the maintenance manual and final service levels. Private Party/Concessionaire will be responsible for procurement and supply of all consumables required at the Project for all equipment and components including but not limited to diesel, oil, fixtures and fittings for water supply, sanitation and electrical work, etc., Supply of required water and payment of Water usage charges, Supply of required power and payment of Electricity usage, cable connectivity usage charges, other Local authority charges etc.
- 2 Private Party/Concessionaire will be responsible for supplying the required qualified manpower as required for the works of the Project during the Project period and the Private Party/Concessionaire will also be responsible for the employees and payment of their wages deputed on project and compliance of the employment acts and provisions.
- 3 Operation and Maintenance (O&M) Requirement
 - i. In the design, planning and implementation of all works and functions associated with the operation and maintenance of the Project and Project Facilities, the Private Party/Concessionaire shall take all such actions and do all such things (including without limitation, organizing itself, adopting measures and standards, executing procedures including inspection procedures and engaging contractors, if any, agents and employees) in such manner, as will:
 - Ensure the safety of personnel deployed on and users of the Project and Project Facilities or part thereof;
 - Permit unimpaired performance of statutory duties and functions of any party in relation to the Project and Project Facilities;
 - ii. During the Project period, the Private Party/Concessionaire shall ensure that:
 - Applicable and adequate safety measures are taken;
 - Minimum delay is caused to users of the Project and Project Facilities;
 - Adverse effects on the environment and to the owners and occupiers of property and/or land in the vicinity of the Project and Project Facilities, due to any of its actions, are minimized;
 - Elected members of the public are treated with due courtesy and consideration by its employees/agents;
 - Users are provided with adequate information and forewarned of any event or any other matter affecting the Project and Project Facilities to enable them to control/minimize any adverse consequences by such event or matter;

- Registers to be maintained to record grievances or appreciations of members of public in relation to the operation and maintenance of Project and Project Facilities.
 - All materials used in the maintenance, repair and replacement of any of the Project and Project Facilities shall meet the Design Requirements /standards and approved by Authority.
 - The personnel assigned by the Private Party/Concessionaire have the requisite qualifications and experience and are given the training necessary to enable the Private Party/Concessionaire meet the O&M Requirements.
4. O&M Manual and O&M Plans: Prior to making application for the Completion certificate for the Project the Private Party/Concessionaire shall finalize in consultation with the LGA/ LGA's Engineer:
- The O&M Manual
 - The O&M Plan for the first year of operations (to be prepared and submitted each year of the Project period)
- i. The O&M Manual prepared by the Private Party/Concessionaire shall set out the operations and maintenance standards and details of the operations and maintenance activities to be undertaken during the Project Period; so that the Project and Project Facilities shall at all times conform to the Requirements prescribed in this schedule.

The Manual shall include without limitation the following aspects:

- Organization structure with responsibilities of key personnel;
 - Project facility Management Plan;
 - Safety Management Program including the Emergency Response Protocol;
 - Inspection Procedures;
 - Maintenance Intervention Levels;
 - Asset Management Project Deliverables and Tolerance Criteria;
 - Environment Management Plan;
 - Maintenance Programme;
 - Management information system;
 - Report Formats
- ii. The O&M Manual shall have two sections viz. a) Operations and b) Maintenance.
- a. Operations:
- It shall prescribe procedures and systems for activities including but not be limited to the following for the regular and emergency operations of the Project and Project Facilities thereon.
- Maintenance facility to attend to Bus breakdowns.
 - Functioning of the all buildings, service apartments, Electronic & IT systems for all and other facilities
 - Functioning of Administrative, Security system, Parking, Water supply, sanitation, sewerage and waste disposal and all other Project facilities
 - Functioning of Electrical, HVAC and lift Work, Building Management System (BMS) etc., as applicable
- b. Maintenance:

- This section shall include the activities described here-in-under amongst other activities required for the regular and preventive maintenance of the equipment during the operations period, so that the Project and Project Facilities is maintained in a manner that at all times it complies with the specifications and standards prescribed in the Concession Agreement with sound, durable and functional condition.
- The Private Party/Concessionaire shall maintain the Project and Project Facilities in usable condition throughout the Project Period or any extension thereof in terms of the PPP Agreement through regular maintenance and preventive maintenance of the various items and elements of the Project and Project Facilities.

iii. Routine Maintenance

In order to ensure smooth functioning during normal operating conditions for all [24]² hours of a day, routine maintenance of the Project and Project Facilities shall include but not be limited to:

- Prompt repairs of building parts, leakages or damages to any part in the buildings and other Project facilities.
- Prompt repairs of concrete joints, road side drains, lane/road marking, signage, patching, raised beams, barricades, railing, drain cleaning, etc.
- Replacement of equipment/consumables and repairs to equipment and other civil works which are part of the Project and Project Facilities.
- Maintenance of the roads and cross drainages within the Site in accordance with Good Industry Practice;
- Keeping the Site/Project Facilities in a clean, tidy and orderly condition free of litter and debris and taking all practical measures to prevent damage to the Project Facilities or any other property on or near the Site;
- Taking all reasonable measures for the safety of all the workmen, material, supplies and equipment brought to the Site. Explosives/ flammables, if any, shall be stored, transported and disposed of by the Private Party/Concessionaire in accordance with Applicable Laws/Applicable Permits.
- For routine maintenance works of the buildings and other Project facilities, the Private Party/Concessionaire shall generally follow the operational and performance criteria specified in the respective Tanzania Standard Codes, Specifications and standards. Where such criteria are not specified in the Tanzania Codes, Specifications and standards, the Private Party/Concessionaire, for the purpose of routine maintenance shall set forth such criteria as to conform to good international standards and Good Industry Practice for sound maintenance practices in consultation with the LGA/ LGA's Engineer.
- Replacement of lighting equipment/consumables, bulb/tube lights, fans, light fitting, poles, wires, cables or any equipment etc. and other electrical works which are part of the Project;
- Repair / replacement of all electrical and electronic equipment or any other equipment and other works which are part of the Project;
- Repair / replacement of all computer , hardware, networking , consumables or any other equipment / works which are part of the Project;
- Repair/replacement of fixture and fastening, polishing of Interior and Furniture Works which are part of Project;

- Maintenance, repairs and replacement of equipment, pavements, culverts, structures and other works which are part of the Project;

iv. Periodic Maintenance

The Private Party/Concessionaire shall carry out periodic maintenance of the Project facilities. The Private Party/Concessionaire shall generally follow the operational and performance criteria specified in the respective Tanzania Standard Codes, Specifications and standards/ guidelines. Where such criteria are not specified in the Tanzania Codes, Specifications and standards/ guidelines, the Private Party/Concessionaire, for the purpose of periodic maintenance shall set forth such criteria as to conform to good international standards and Good Industry Practice. The periodic maintenance of the Project and Project Facilities shall include but not be limited to:

- All Project buildings
- Road markings, carriageway and lanes
- Culverts and drains
- Landscaping
- Electrical equipment and lighting
- Computer hardware, software & networking
- Electrical & electronics equipment

- 4 Inspections & Frequency: The Private Party/Concessionaire shall plan and carry out the inspection programme (visual inspection, close inspection, thorough inspection, etc.) for the Project and Project Facilities for its smooth operations. The type of inspection and related frequency of various items of Project and Project Facilities shall be prepared in consultation with the LGA/ LGA's Engineer and shall be adhered to.
- 5 Reporting Requirements: The format of reports and recording requirements would be finalized in consultation with the LGA/ LGA's Engineer. The periodicity of inspections for maintenance activities by the Private Party/Concessionaire shall be set out in the O&M Manual and regular reports on the same shall be, sent to the LGA/ LGA's Engineer. Where required, the Private Party/Concessionaire shall carry out any maintenance, repair or rehabilitation works found necessary as a result of such inspections. During the Project Period, the Private Party/Concessionaire shall provide to the Authority a Monthly report (Monthly O&M Report) which shall contain the following minimum information:
- Inspections undertaken by the Private Party/Concessionaire during last three months and action taken/ proposed thereafter;
 - Details of all reports submitted to the LGA/ LGA's Engineer during the monthly O&M inspection compliance report
 - Maintenance activities undertaken during the month ended,
 - Details of any Emergency and action taken
- 6 Inventory: The Private Party/Concessionaire shall maintain an inventory of all items comprised in the Project and Project Facilities in a format to be developed in consultation with the LGA or LGA's Engineer. Throughout the Concession Period the Private Party/Concessionaire shall keep the Inventory updated to take account of works carried out on and other changes made to the Project and Project Facilities.

5.3.4.2 Indicative O&M SLAs

5.3.4.2.1 Project Standards for Operations

Table 12: Project Standards for Operations

Component	Performance Indicator	Response time
Bay availability	[90%] of the bus bays to be operational at all times; across the two shifts	Temporary resolution within [2] hours Permanent resolution within [one] week
Layover/waiting time - Buses	Peak hour - not to exceed [30] min Non peak – not to exceed [1] hour	Response within [5] minutes over the permissible limits
Parking Area	[90%] of the vehicle parking bays to be available at all times; across the two shifts	Temporary resolution within [2] hours Permanent resolution within [one] week
Maximum queue at the collection window	Not more than [3] buses	Immediate
Public Information system	Operational at all-time clearly specifying the bus schedule, bay details, fare.	Immediate
Enquiry Counter	Operational at all time	Response within [30] minutes
Passenger shed/waiting area	Operational 24 hours a day, throughout the year in the bus terminal	Resolution within [15] minutes
Security	The facility security staff for the open area shall be on duty 24x7 throughout the year The facility security staff for the terminal shall be on duty for 16 hours over two shifts throughout the year	Immediate
Closed circuit system	Operational 24x7 throughout the year	Response within [15] minutes over the permissible limits
Toilets	Operational 24 hours a day, throughout the year in the bus terminal	

5.3.4.2.2 Routine Maintenance

5.3.4.2.3 Maintenance of Terminal & other buildings

The terminal building, offices, cabins and other buildings require routine and periodic maintenance. Timely intervention is to be done to main the structural adequacy and the aesthetics of the structural elements.

Table 13: Maintenance Standards for terminal and other buildings

Item	Service Quality Criteria	Time allowed for repairs or Tolerance permitted
Building Exterior and Interior	There should be no cracks, paint wearing, scaling of plaster, deflection of any structural elements like walls, roofs, columns etc. Maximum tolerance of 5% per 1000 m ² area	Timely intervention within two days of detection of any defects and permanent restoration within fifteen days to maintain structural adequacy and facade beauty.
Housekeeping	There should be no accumulation of dust on the floors, furniture, racks, cupboards, etc. of the offices, and other rooms	The floors in all the offices, cabins shall be cleaned/wiped daily. Furniture, doors and windows, racks, cupboards shall be dusted daily.

Item	Service Quality Criteria	Time allowed for repairs or Tolerance permitted
Electricity gadgets like bulbs/lamp shades/wiring, etc.	Operational at all times	Temporary measures within eight hours, permanent restoration within seven days, depending on nature and intensity of work required
Utilities like water supply/tap/tap connections/ pipe/tanks & overflow/ glasses/ window panes/all other building furniture	Operational at all times	Timely intervention with Temporary measures within eight hours, permanent restoration within seven days, depending on nature and intensity of work required
Ventilation	The natural ventilation and air circulation shall not be blocked. The artificial ventilation installations like exhausts, fans, blowers shall function properly.	The ventilators, sky-lites, exhausts, fans, blowers, etc. shall be cleaned after every two days. Any damage shall be repaired and rectified within seven days.
Power Supply, Electrical Installations, Electrical Equipments	Power supply shall be for 24 hours. Standby power arrangements by use of Diesel Generator sets. The electrical systems and arrangements shall be maintained as per the instructions of the installation, operation and maintenance manual of the particular system. Routine maintenance for earthing systems and meters indicating overloading of electrical installations No loose, open, un-insulated wiring in these areas. Switch Boards, Electric meters are enclosed in boxes and access to authorized persons only.	Timely intervention with Temporary measures within six hours, permanent restoration within seven days, depending on nature and intensity of work required. Standby power supply by generator sets shall be ready to be operated and should be available 24 hours
Bus Terminal Lighting	Operational at all times	Temporary measures within eight hours and permanent restoration within seven days of detection.
Water Supply, Plumbing Installations	Water Supply shall be for 24 hours. The water shall be disinfected by usage of approved chemicals and should be as per approved and relevant guidelines and standards. The water conveyance network, plumbing appurtenances, pumps and related components shall be checked periodically. If any leakage, corrosion, damages etc. is found, it should be replaced. Hydraulic test shall be carried out to detect any leakage in the pipes prior to regular functioning of pipes. All the pipes and fittings shall be painted with anti-corrosive paint to avoid corrosion in future. All the pipes shall be repainted every 3 years.	Timely intervention with Temporary measures within eight hours, permanent restoration within seven days, depending on nature and intensity of work required.
Internal	All internal drainage pipes and fittings shall be of cast iron and shall comply with	Any blockage, silting in these installations shall be rectified within two days of detection. Any damage

Item	Service Quality Criteria	Time allowed for repairs or Tolerance permitted
Drainage	standard specifications. All the pipes and joints shall be checked periodically to detect any leakage and if found, the same shall be repaired as per the approved and relevant guidelines & standards. All the pipes shall be repainted every 3 years.	to sewer system shall be rectified within seven days of detection.
External Drainage	All the pipes shall be of salt glazed stoneware and laid in slopes as specified and shall comply with standard specifications. All the manhole frames and covers shall be of cast iron of required size and shall comply with standard specifications. Periodical checks shall be carried out for any overflow, breakage or cracking of pipes, blockage, etc. through inspection chamber.	
Sanitary Installations	All the sanitary vessels shall be of approved make and shall comply with standard specifications. Sanitary vessels are of different materials like GI, copper, stainless steel, etc. All the vessels shall be checked periodically and if found any disturbance like leakage, operational defect it shall be repaired as per the relevant guidelines and standards..	
Communication System (Telecommunication and Networking Systems)	Operational at all times	Temporary measures within two days and permanent restoration within seven days of detection.
Fire Fighting Equipment	Operational at all times	Any damage to fire fighting equipment installed in the project area shall be rectified within 2 days of detection. Fire extinguishers shall be replaced before the end of its expiry date. The water tank meant for fire fighting purpose shall remain full with water to its capacity at all the times
Water Tank	Functional and clean at all times	Water tank shall be cleaned and disinfected every two months (by usage of approved chemicals) to ensure that no inorganic sedimentation takes place.
Rain Water Harvesting System	Operational and clean at all times during the rainy season Clean during the other seasons of the year	Temporary measures within two days, and permanent restoration within seven days of detection
Solid Waste Management System	Operational at all times	Temporary measures within two days, and permanent restoration within seven days of detection

5.3.4.2.4 Maintenance of Bus bays/ stand, parking area, internal pavement/ roads & circulation area

The maintenance of the bus bays/ stands, parking area, internal pavement/ roads and circulation area shall include the planned on-going works and activities required to ensure safety, repair, small defects and to maintain the facilities in the required condition. It also includes carrying out of unscheduled maintenance works occasioned by irregular events such as accidents, natural failures, abnormal weather and the like.

The activities of management and maintenance of internal pavement/ roads and circulation area shall be carried out by the Concessionaire such that the vehicles are able to circulate at a certain level of comfort and safety to achieve the required service time at the bays.

Item	Service Quality Criteria	Time allowed for repairs or Tolerance permitted
Potholes	Maximum five numbers in the bus bays/ stand area, parking area, internal pavement/ roads and circulation area.	Potholes must be repaired within seven days after their detection.
Patching	Patches (i) shall be square or rectangular, (ii) shall be level with surrounding pavement, (iii) shall be made using materials with specifications same as those used for the surrounding pavement, and (iv) shall not have cracks wider than three (3) mm.	Non-complying patches must be repaired within seven days after their detection.
Cracking in pavement	There shall not be cracks more than 3 mm wide. Maximum allowable cracking shall be 5.0% in the bus circulation area	Cracks more than 3 mm wide must be sealed within seven days after their detection.
Rutting	Rutting shall not be more than 20 mm. Measured on a 2m straight edge. Maximum allowable rutting shall be 1.0% in the bus circulation area.	Rutting above threshold value must be eliminated within fifteen days.
Cleanliness of the pavement surface, road surface	The area must always be clean and free of soil, debris, trash, spill off Oil/Lubricants, dead animals and other objects etc. There should not be any standing water on the pavement.	The area must be cleaned daily. Dirt, debris and obstacles must be removed: Within four hour if they pose a danger to traffic safety Within eight hours if they do not pose any danger to traffic safety.
Pavement Surface Drainage	No water logging or standing water	Temporary restoration within one day and permanent restoration within seven days.
Traffic Signs, Road/Pavement Markings	These shall be legible, clean and visible at all times.	Any damages/wearing shall be repaired and rectified within three days. The damaged and missing signs shall be replaced within fifteen days.

Item	Service Quality Criteria	Time allowed for repairs or Tolerance permitted
Storm Water Drainage System	There should be no silting and blockage in drains. The drains shall be free of any obstacles, solid waste. The drainage appurtenances shall be without any cracks. There shall be no leakages from the pipes. Thorough inspection shall be done before and during the monsoon season.	<p>Obstructions must be cleared within two days after detection.</p> <p>Damages must be repaired within seven days after detection by reconstructing to the adequate shape and size.</p> <p>De-silting operations should be done once in a month with minor repairs if needed.</p> <p>During Monsoon, any blocked vent ways shall be cleaned as soon as possible</p>
Damage/ Breach to the Compound Wall	No Damage / Breach allowed	Any damage / breach to the boundary wall of the bus terminal shall be rectified within three days after their detection.
Vehicle Stoppers	Without any damage	Any damage to the stoppers shall be rectified within two days

6 Financial Case

This chapter discusses the financial viability of undertaking the Uyole area (Mbeya City) bus terminal project.

6.1 Financial Analysis of Suggested Procurement Modality

The aim of the financial assessment is to do an initial assessment of the viability of developing the project, provide inputs for funding and affordability analysis. The financial analysis draws upon the project configuration presented in the Technical Assessment and Project Configuration and Concept Note.

The approach behind the development of a financial model to assess the viability consists of the following elements:

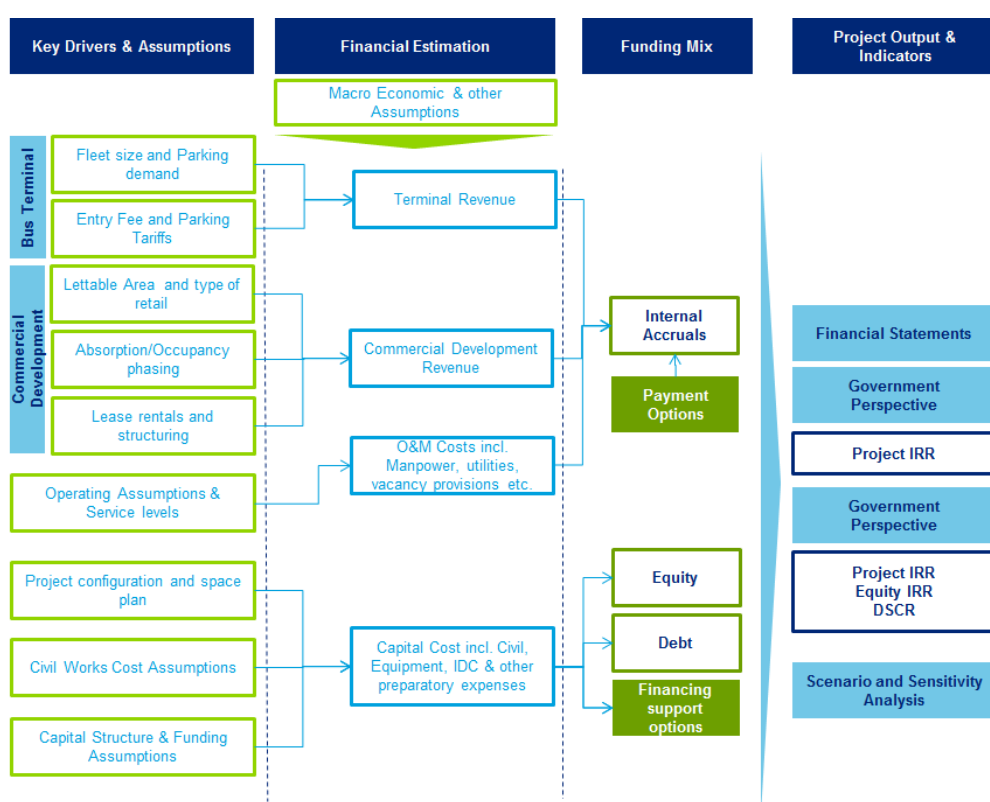


Figure 7 Financial Analysis Methodology

For the purpose of financial viability analysis, financial estimates have been based on applicable benchmarks drawn from similar projects undertaken previously and prevailing market dynamics. For instance, the capital structuring for the project has been based on benchmarks observed across infrastructure projects of similar scale and modality as well as market feedback. Similarly, revenue assumptions have been incorporated in analysis based on evaluation of market demand, observed market dynamics with respect to existing frameworks, competing developments, etc. The assumptions related to financing costs have been also drawn from the study of prevailing financial arrangements, accounting principles for similar infrastructure projects undertaken in the country. The key considerations include:

- Components forming part of assumptions related to costs are development assumptions of commercial and administration components, capital expenditure assumptions, operating costs assumptions, financing costs assumptions and construction timeline assumptions.
- The capital costs have been met through equity financing in addition to debt borrowings.

- As per the information provided by the respective LGA, the land is owned by them and accordingly, land acquisition cost has not been considered for financial viability assessment.
- Applicable corporate and withholding tax on interest payments in Tanzania have been considered.
- Further, site clearance, resettlement and rehabilitation costs have not been considered for the purpose of the Pre-Feasibility study. These cost may be estimated at the detailed feasibility stage.
- To estimate the approximate revenues accruing to the project, the assumptions related to absorption phasing, construction timeline and other assumptions relating to the estimation of revenues such as leasing rates, leasing/rent revision rates and time duration, have been undertaken.
- Other macroeconomic assumptions related to inflation etc. also have been taken as per reasonable estimates from benchmark values.

The project's capital expenditure, operational expenditure, and the debt repayment form the total outflows of the project. The indicators used to assess private sector interest include estimation of Net Present Value (NPV) of the project and Internal Rate of Return (IRR). While a positive NPV shows that the project is viable, the IRR calculation helps in assessing if the returns are adequately above the hurdle rate prevailing in the region.

The sub-sections below discuss the above considerations and present the key assumptions for the financial viability assessment of the project. Key assumptions considered for financial assessment for the proposed project are based on market studies, interactions with financial institutions, and industry benchmarks.

6.1.1 Key Assumptions for financial viability assessment

6.1.1.1 Project duration (Concession Period/Lease period – as applicable)

The project duration for financial assessment has to be assessed keeping in perspective the number of parameters including (i) Life of underlying asset; (ii) Applicable regulation (if any); and (iii) Demand saturation and/or capacity constraint.

In the case of PPP projects, Regulation 76(2) of the PPP Regulations 2015 provides that 'small-scale' PPP projects (total project value less than USD 70 million) may have a duration up to 15 years (upper limit). Given the regulatory constraint, a base case of 15 year concession period has been considered for evaluation.

6.1.1.2 Project Description – Development Assumptions

The commercial development on this site is expected to comprise an integrated development featuring terminal for inter-city, inter-district, and commuter buses; private car parking bays; terminal building including administration offices and passenger lounge; commercial building including restaurants; warehouse; bus repair facility; and toilets.

These assumptions are based on the demand potential and preferences stated by the sample resident population of Mbeya. The market analysis findings have been utilized to arrive at the mix and the quantum of spaces between terminal as well as commercial area. The marked absence of such nature of developments in the stated locality, coupled with the good captive existing demand, lend the site good potential for development.

Considering the trend for retail spaces in existing as well as other bus terminals, the focus is on retail space catering to passenger convenience such as small standalone format retail shops or frames and other passenger amenities.

Table 14: Project Site Development Assumptions

Sl.	Parameter	Value
1.	Plot size ¹⁷	23,206 m ²
2.	Inter-city bus bays	24 No.
3.	Inter-district bus bays	11 No.
4.	Commuter bus bays	17 No.
5.	Private cars parking bays	22 No.
6.	Main Passenger Block	945 m ²
7.	Passenger Amenities	1,680 m ²
8.	Warehouse	840 m ²
9.	Bus service	840 m ²
10.	Total built-up area	5,145 m ²
11.	Total floor area	5,145 m ²
12.	Plot coverage	22 %
13.	Plot ratio	0.22

It may be highlighted here that the area breakups assumed in the table above represent a preliminary understanding of the most suitable combination of bus bays, bus service area, warehouse, retail, and other spaces, considering the market feedback and the market analysis. This area allocation across components may vary depending upon the actual product mix conceptualized by the developer undertaking the construction of the bus terminal. Accordingly, for the purpose of Pre-Feasibility report, the entire rentable area has been considered at par.

6.1.1.3 Project Construction Costs

Project construction costs for the project have been estimated using the following approach:

- Based on the development plan, undertake a detailed listing of product mix with expected expansion requirement
- Derive base cost assumptions based on Quantity Surveyor's estimate and estimate the base capital cost.
- Decide on the capital phasing of the construction works
- Estimate the financing norms based on the industry benchmark and practices
- Estimate the total project cost taking into account the base civil cost, capital phasing, escalation and financing cost

6.1.1.3.1 Cost Assumptions

The cost assumptions have been considered based on the guidance provided by Architects and Quantity Surveyors Registration Board for the organized bus terminal developments of similar nature. The base costs have been duly adjusted for variation for the respective city. For the purpose of the cost estimation, following base rates and cost assumptions have been considered:

¹⁷ Note: There is a discrepancy in the plot size – as per the project's Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.

Table 15: Cost Assumptions

Cost	Details
Base construction cost (TZS/m ²)	As per estimate of Quantity Surveyor
Furniture, Fixtures and Equipment	As per estimate of Quantity Surveyor
External works	As per estimate of Quantity Surveyor

6.1.1.3.2 Base Civil Cost

The base capital cost include the civil construction cost of various project facilities as well as well as other costs such as ancillary facilities and cost of external works. The major civil costs associated with project are tabulated below:

Table 16: Base Civil Cost

S. No.	Project Component	Civil Cost (mn TZS)
A	Civil Construction Cost	
1.	Building	4,095
B	Other Cost	
1.	Furniture, Fixtures and Equipment	285
2.	External works	434
C	Total Civil Cost	4,814

6.1.1.3.3 Construction Phasing

The construction period for the project is assumed to be 24 months. The construction phasing of the project components is tabulated below:

Table 17: Construction/Capital Phasing Timeline for Proposed Development on Project Site

Construction Phasing	Without Delay (%)	FY Months
FY 2020	65%	12
FY 2021	35%	12
Total	100%	

6.1.1.3.4 Financing Assumption**a. Capital Structure**

In case of PPP procurement, the capex financing requirement has been considered to be met by equity financing in addition to debt borrowings. In case of PPP procurement, 70:30 Debt to Equity ratio has been considered based on the prevalent market practices.

The capital structure for the project PPP procurement options is tabulated below:

Table 18: Capital Structure

Particulars	%
Equity	30%

Debt	70%
------	-----

b. Interest Rates

As per our discussions with key lenders, lending rate of 16% has been considered.

c. Target Equity return – Hurdle rate

It may be noted that the private sector values its own risks and has its own expectations for return. In a competitive bidding, private sector would factor its expectations (high or low w.r.t. to government benchmark) and the same would be reflected in the financial bids. As per interactions with different stakeholders, it is observed that a return on equity of at least ~20% is preferred in the Tanzanian market.

In a PPP model, the test of how private sector shall handle a particular risk is the cost that it would assign for managing it. Experience suggests that private sector puts a high premium on risk in areas where it has little or no information or control to make a considered assessment of future possibilities.

Further a detailed computation of the target equity return, including assumptions related to risk free rate, asset beta and market risk premium etc., was also undertaken. This analysis has been presented in the annexure of this report.

d. Corporate and withholding taxes

For PPP procurement, the corporate tax rates applicable in Tanzania have been considered as per rate below:

Table 19: Corporate Tax Rates

Tax	Rate
Base tax rate	30%
Alternate Minimum Tax	0.3% of the turnover

6.1.1.3.5 Other Costs

- **Professional Fee**

Professional fee shall cover the costs for engagement of consultants for activities such as preparation of detailed engineering design plans and technical specifications, preparation of related documents and assistance in conducting bidding and construction management and supervision. These costs are paid upfront and are taken as 12.50% of base capital cost.

- **General Costs**

The General costs have been considered as 0.50% of the base capital cost. These costs will be required during construction period and the associated costs are equally distributed over the construction period.

- **Contingencies**

Contingency costs are considered to reflect any possible increase in estimated construction costs due to changes in quantities or implementation procedures or any increases in the estimated base costs for increase in unit price of the project components beyond the estimation prices for the planning year. Based on the project risks and uncertainties, the cost of contingencies is taken as 10.0% of the base capital cost of the project.

- **Value added Tax (VAT)**

Value added tax (VAT) on the construction has been considered as 18% as per the applicable tax laws.

Table 20: Total Capital Cost

S. No.	Project Component	Capital Cost (mn TZS)
A	Civil Construction Cost	
1.	Building	4,095
B	Other Cost	
1.	Furniture, Fixtures and Equipment	285
2.	External works	434
C	Base Capital Cost	4,814
D	Other Development Costs	
1.	General Costs	24
2.	Contingencies	484
3.	Professional Fee	665
E	Total Capital Cost	5,987

6.1.1.3.6 Total Project Cost

Based on the assumptions mentioned above, the escalated total project cost, including both pro-poor and other retail components, is tabulated below:

Table 21: Total Project Cost

S. No.	Project Component	Capital Cost (mn TZS)
A	Civil Construction Cost	
2.	Building	4,278
B	Other Cost	
3.	Furniture, Fixtures and Equipment	298
4.	External works	453
C	Base Capital Cost	5,030
D	Other Development Costs	
4.	General Costs	25
5.	Contingencies	505
6.	Professional Fee	695
7.	Interest During Construction	612
8.	VAT	1,126
E	Total Project Cost	7,993

6.1.1.4 Terminal Facility Revenue Assumption

6.1.1.4.1 Base Entry Fee

As per the prevalent business model in Mbeya and other similar bus terminals, the vehicles using the terminal facility are levied entry fee. The assumptions for terminal entry fee have been considered as below.

Table 22: Terminal Revenue Assumptions

Vehicle Category	Current Daily Entry Fee	Escalation
Mini-bus	2,000	Escalation of 25% every three years
Bus	4,000	
Daladalas	1,000	
Private cars/Taxi	1,000	

However, it is pertinent to note that the Mbeya City has an existing bus terminal at Sisimba ward and a Daladala terminal at the Nane Nane, which are expected to continue as the primary facility. The Uyole bus terminal is expected to serve as an alternate facility to the existing bus terminal for the inter-district/regional buses and Nane Nane terminal for daladalas.

Further, based on the discussions with the LGA officials, it is understood that the a vehicle pay a consolidated entry fee for using services of any of the terminal i.e. in case a daladala has paid the entry fee at the central bus terminal, it is exempted to pay the same at the Nane Nane terminal and vice versa.

Accordingly, it has been assumed that the only certain percentage of the demand from daladalas will be revenue generating for the Uyole bus terminal. The overall assumptions for revenue generation potential as a proportion of overall demand have been considered as below. It may be important to note that the revenue generation percentage is contingent on the traffic regulations which may be enforced by the LGA. It is to be noted that route configuration may require approvals from SUMATRA. This is not part of the decision-making authority of the LGA. Further, the traffic profile shall be contingent on LGA regulations and their enforcement. The private sector will have limited control over these factors.

Table 23: Revenue generation percentage

Vehicle Category	Percentage of the demand			
	2020-2025	2025-30	2030-40	2040-50
Inter-city bus bays	100%	100%	100%	100%
Inter-district bus bays	100%	100%	100%	100%
Daladalas ¹⁸	33%	33%	33%	33%

6.1.1.5 Commercial Development Revenue Assumptions

6.1.1.5.1 Lease Revenue

Base lease charges

The price realization for a commercial development is dependent on aspects such as the type of development, the prevailing market rates, the location of the development, pricing levels in competing

¹⁸ Note: The assumption for revenue generation has been considered on a standalone basis. If the Sisimba Bus Terminal is taken up as a PPP project, this assumption shall be revised to incorporate its impact.

developments, market potential, etc. The rentals achieved are therefore a reflection of the market based realization for space within the proposed development.

As evident from the market analysis, the leasing rates/rentals are observed to vary significantly depending upon the perception of developer, tenant category, the floor location, preference for revenue sharing, timing of transaction, etc., with higher rentals being allocated to prime space. For the site, the prevailing market rates as identified in the market assessment have been assumed as the rates for leasing. These rates are assumed to account for floors-wise variation.

In case of Mbeya Uyole Bus Terminal project, rentals assumed for the proposed developments in the Bus Terminal have been assumed marginally lower than area benchmark keeping in view that the facility is expected to serve as an alternate facility to existing bus terminals and there may be limited demand from terminal neighbourhood catchment.

In addition to the base lease charge, service charge have also been considered on account of common area maintenance charges and recovery of operational and maintenance expenses..

Table 24: Leasing Revenue Assumptions for Proposed Development on Project Site

Source	Base Rental per month per m ² (in TZS) – For 2020
Bus Services and Warehouse	13,000
Commercial Area	8,000
Service Charge	3,353

Lease duration and charge revision

It has also been assumed that the rent would be escalated after every lease period at the rate of 25%. The lease period considered is three years in alignment with the market practice.

6.1.1.5.2 Additional revenue streams

In the case of this project, the following additional revenue streams have been considered.

Table 25: Additional revenue streams

Revenue Stream	Unit	Rental/Fee
Washroom Fees	TZS per visit	300
Parking Revenue	TZS per visit	1,000
Advertisement Fees	TZS/sqm/month	20,000

6.1.1.5.3 Absorption Phasing for the Project Site

The primary revenue sources are user charges paid by bus operators and lease revenue of shops. The revenues for different years would depend on the traffic generated and number of shops allotted, respectively. For this purpose, an Absorption phasing schedule has been considered and occupancy of shops for different years has been estimated.

The proposed development would be serving Uyole and nearby wards in Mbeya city and location of the development being key from a commercial operations perspective, a total time frame of three years has been assumed for absorption/booking of space within the proposed bus terminal development.

Considering the dedicated ridership and demand from ticketing office, it is expected that a large part of the lettable space may be taken up within the first year of operations. Also, the stakeholder interactions and trends prevalent in Tanzania suggest a strong preference for retail spaces to be placed on the ground over other floors. The assumption made would be applicable for Mbeya Uyole Bus Terminal as well, and thus marginally slow absorption levels have been assumed for retail spaces on higher floors.

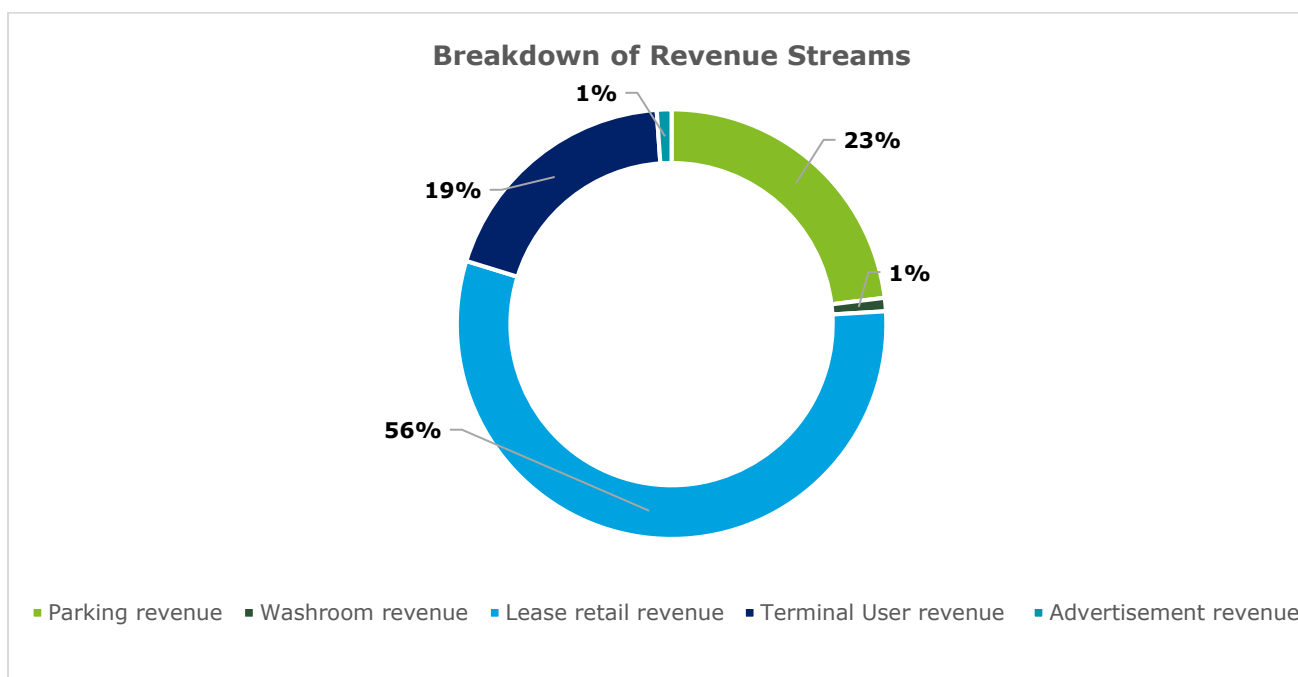
The absorption schedule assumed for the off-take of spaces has been provided in the table below:

Table 26: Absorption Phasing Assumptions for Proposed Development on Project Site

	2022 (Year 1 of Ps)	2023 (Year 2 of Ops)	2024 (Year 3 of Ops)	2025 (Year 3 of Ops)	2026 (Year 3 of Ops)	2027 (Year 3 of Ops)	2028 (Year 3 of Ops)	2029 (Year 3 of Ops and onwards)
Market Area	30%	60%	90%	100%	100%	100%	100%	100%
Parking	30%	40%	50%	60%	70%	80%	90%	90%

It may be noteworthy that the assumptions considered are based on the relative market appetite assessed for the commercial spaces and the expected pace of development of the site. The absorption levels may vary depending upon other factors.

The following exhibit provides a breakup of the various revenue sources for the project.



6.1.1.6 Operating Cost Assumptions

The key operational costs comprise of staff for the management and facility operation, utilities based on the consumption, Maintenance of the infrastructure, local government taxes and levies such as property tax and rent, other costs such as insurance and vacancy provision.

Operating costs assumptions as shown below have been taken as per prevalent industry norms and typical market practices relevant to similar projects.

6.1.1.6.1 Staff salaries and wages

Table 27: Staff Salaries and Wages

Staff salaries and wages	Number	Monthly Salary (Base 2020)	
Terminal Manager	1	500,000	1 FTE per terminal

Other support management/supervisor	2	450,000	2 FTE per terminal
Admin support staff	2	400,000	1 FTE for every 30 bus bays
Parking Assistant/attendant	6	200,000	1 FTE for every 20 bus bays per shift; Two shifts
Security Guard	9	250,000	3 FTE for the terminal; Three shifts
Security Incharge	1	350,000	1 FTE per terminal
Cleaning and Sweeping	4	200,000	1 FTE for every 5,000 m ² cleaning area
Casual workers	1	200,000	1 FTE per terminal

6.1.1.6.2 Utilities

Table 28: Electricity and Water consumption

Type	Daily Consumption	Tariff (Base year 2020)
Electricity consumption		
Building load	46	Per unit charge: TZS 349.5/unit Monthly service charge: TZS 6086
High mast	7	
Water consumption		
Total consumption	41 KL	TZS 1077.14 /KL

6.1.1.6.3 Other costs

Table 29: Operating Cost Assumptions for Proposed Development on Project Site

Sl.	Component	Estimate	Basis
1.	Repair and Maintenance	0.75%	% of escalated civil cost
2.	Insurance	0.15%	% of written down value of assets
3.	Property taxes	0.20%	% of the property value (project cost)
4.	Annual Government Land Rent	5,000	Yearly rent as per title deed

It may be noted that the part of the operating cost is recovered through the service charges levied for the commercial development.

6.1.1.7 General Assumption

6.1.1.7.1 Inflation assumption

As per Bank of Tanzania, the inflation rate as of 2017 was around 5.4%. Medium term target of 5% has been considered as per IMF forecast.

6.1.1.7.2 Depreciation Assumptions

Depreciation rates have been used as per the applicable tax laws and are mentioned below.

Sl. No.	Asset Class	Rate	Method
1.	Building, structures or any other asset class	5.0%	SLM
2.	Buildings, structures, dams, reservoirs – agriculture sector	20.0%	SLM
3.	Furniture, Fixture and Equipment	12.5%	WDV
4.	Intangible Assets	Over useful life	SLM

6.1.2 Key Indicators of Financial Analysis

This section analyses the viability of the project, drawing together inputs from earlier sections and sub-sections on projected demand as well as construction costs, operation and maintenance expenses, and estimated revenues.

The key financial indicators of the Project are presented below.

Table 30: Key Financial Project Indicators

Particulars	Build, Operate and Transfer (BOT) – User Pays	Build, Operate and Transfer (BOT) – User Pays
	Concession Period of 15 Years	With Viability Gap Funding Concession Period of 15 Years
Project IRR	10.98 %	18.61%
Equity IRR	5.9%	20.0% (Target Equity IRR)
Affordability/ Net financial implication for the Government	Unviable unless a Grant/Viability Gap funding is provided	Capital Grant of 42.25% of total project cost at an NPV of TZS 2861 mn required

6.1.3 Scenario/Sensitivity Analysis

6.1.3.1 Project Scenarios

The different scenarios have been provided in the table below.

Table 31: Impact due to scenarios

Scenario option		IRR
A	Base Case - BOT 15 year concession period development option	<ul style="list-style-type: none"> Project IRR of 10.98%; Equity IRR of 5.9%; and Grant / Viability Gap Funding Required in order to achieve financial feasibility
B	Base Case – With Viability Gap Funding; BOT 15 year concession period development option	<ul style="list-style-type: none"> Project IRR of 18.61%; Target Equity IRR of 20.0%; and Capital Grant of 42.25% of total project cost at an NPV of TZS 2861 mn required
C	Base Case - Increase of Bus Entry Fee to TZS 5,000 – BOT 15 year concession period development option	<ul style="list-style-type: none"> Project IRR of 11.37%; Equity IRR of 6.7%; and Grant / Viability Gap Funding Required in order to achieve financial feasibility

The above scenario analysis shows that the project requires support (grant/viability gap funding) in order to achieve financial feasibility. The last scenario analyses the impact of increase in Bus entry fee and it is evident that its impact is marginal. The increase in entry fee that would be required to achieve financial feasibility yields unrealistic results/ unrealistic fees being charged.

6.1.3.2 Sensitivity Analysis

The objective of the sensitivity analysis exercise is to examine the effect of the main levers on the project's financial viability.

For the purpose of the present Pre-Feasibility study, the impact of changes in equity IRR of the project were examined with change in variation in lease revenues.

Commonly, as part of sensitivity analysis, the sensitivity of the project indicators is tested on key variables such as demand, financial terms, capital investments and operation and maintenance costs. For the purpose of the present Pre-Feasibility study, the impact of changes in projections, and thereby the impact on the Project Indicators, were examined for the following variables:

- (i) Capital cost;
- (ii) O&M costs; and
- (iii) Terminal and Commercial Rental

The impact of different sensitivity factors from the levels considered in the financial analyses above was analyzed for impact on Project Financial Indicators

Impact due to sensitivity factors

The results of the sensitivity analyses are presented below.

Table 32: Impact due to sensitivity factors

Sensitivity		Base Case value	Sensitivity Value	Project IRR
A	Capital Cost	Base Case	Base Case	10.98%
			10% Higher	9.95%
			10% Lower	12.18%
B	Operation & Maintenance Cost	Base Case	Base Case	10.98%
			10% Higher	10.77%
			10% Lower	11.19%
C	Terminal and Commercial Rental	Base Case	Base Case	10.98%
			10% Higher	11.77%
			10% Lower	10.17%

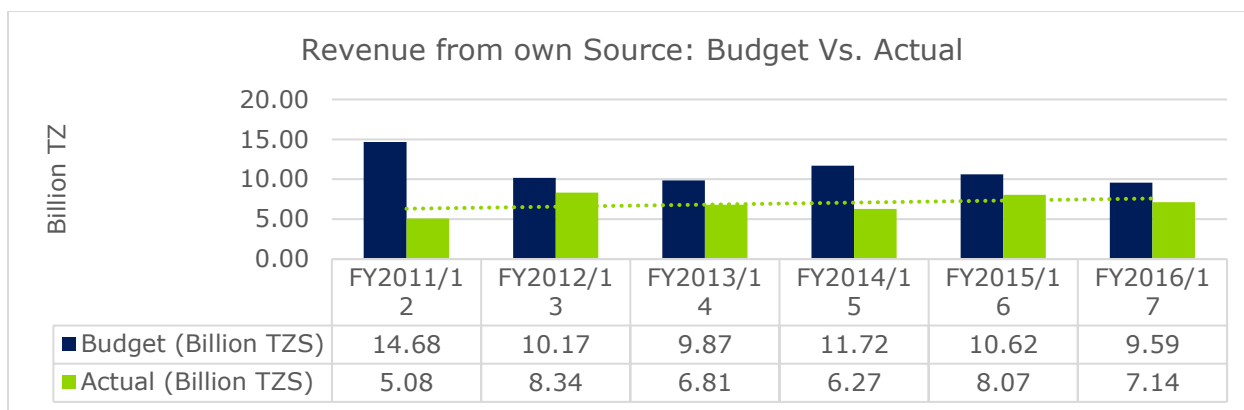
The above sensitivity analysis shows that project's return is sensitive to capital cost substantially. Therefore the viability of the Project would depend significantly on the timely construction to minimize cost overruns as well effectiveness of leasing to minimize the leakages. These will be the key determinants of value for money as well.

6.2 Affordability Analysis of the Project from LGA's viewpoint

This section explores the ability of the LGA to support the project through its current budget allocations and revenue sources.

Financial Performance

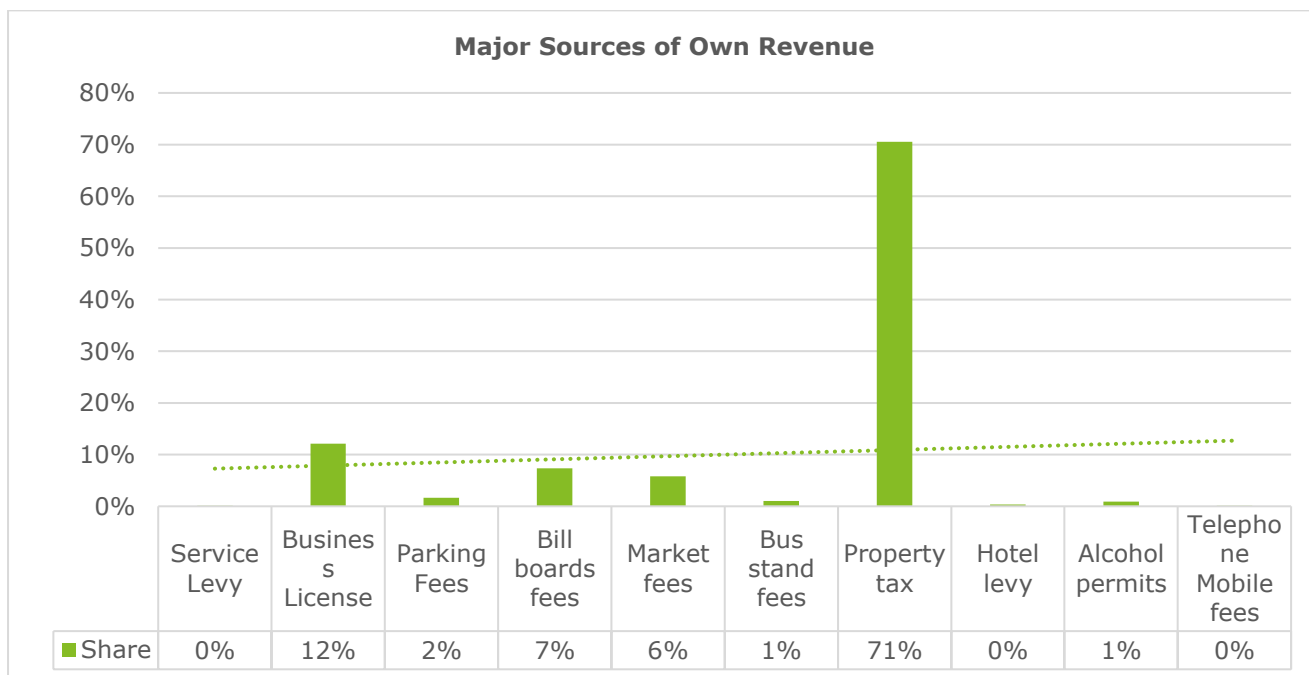
MCC's dependency on central government and development partners (85%) is very high. At the moment revenue from own sources (15%) is not adequate to finance its annual budget. MCC's annual revenue from own sources in the last 6 years have grown by 41% from TZS 5.08 billion in FY2011/12 to TZS 7.14 billion in FY2016/17 with an average annual growth of 11%.



Except for FY2014/15, MCC have been receiving unqualified audit report from CAG (2012/13 - unqualified; 2013/14 -unqualified; 2014/15 - Qualified; 2015/16 – Unqualified).

MCC does not have a clearly articulated revenue collection & resource mobilization strategy. Sustainability plan is also not in place.

MCC in FY 2016/17 had a revenue budget of TZS 65.63 billion of which TZS 9.59 billion (15% of the total budget) is from own source. Actual collection for FY2016/17 is TZS 58.95 billion (90% of the target) of which TZS 7.14 billion (74% of own source target) is from own sources. Service levy accounted 21% of revenue from own sources in FY2016/17. MCC has a database of all possible areas for own revenue collection as indicated below:



Collection of property tax and signboard fees was recently centralized and is now been collected by Tanzania Revenue Authority (TRA). It is not clear yet on a percentage share of the collections supposed to be remitted back to MCC.

Table 33: Council's 2016-17 Budget

Category	Personnel Emolument (PE)	Other Charges (OC)	Development	Total

Source	Basket Grant	Block Grant	Own Source	Foreign	Local	Own Source	
MBEYA CC	40,164,468,000	3,569,147,000	6,407,978,000	6,407,978,000	1,437,465,000	5,813,111,000	63,800,147,000

Summary

The above analysis shows that the LGA is more dependent on external sources of revenue than its own. Accordingly, the capacity of the LGA to provide grant/Viability Gap Funding without external support is limited.

6.3 Value for Money (VfM) analysis

In order to assess which mode of procurement will provide maximum value for money for the government, Value for Money (VfM) analysis has been undertaken. The Value for money (VfM) assessment for a project is undertaken to assess whether a PPP mode of procurement offers more value for money in comparison with the traditional (public) procurement model. This can be achieved using quantitative analysis, qualitative analysis or both.

6.3.1 Quantitative VfM

With an objective of assessing which mode of procurement will provide maximum value for money for the government, a VfM assessment helps in addressing whether PPP Procurement option offer higher value for money as compared to traditional procurement option.

To undertake a value for money analysis, the total costs and risks borne by the government under two modes of procurement namely; public procurement/traditional government procurement and PPP procurement is compared to find the difference, which quantifies the value for money for the government under the preferred mode of procurement.

The costs and risks borne by the government under traditional procurement are estimated by developing a public sector comparator (PSC). In case of a PPP procurement, the same are estimated as the NPV of total amount invested by the public sector, in the form of upfront VGF and/or annual payments made by the Contracting Authority over the entire concession period plus the portion of retained risk by the public sector.

6.3.1.1 Estimation of Public Sector Comparator (PSC)

The PSC estimates the hypothetical rather than actual risk-adjusted cost if a project were to be financed, owned and implemented by the Government. PSC estimates full life-cycle risk adjusted cost to the Government in order to achieve stated service delivery parameters of the project. Following are four important aspects of PSC:

- Base PSC Costs** – Base PSC costs include all direct and indirect cost for the entire project. It includes capital costs (design and constructions activities) as well as operational and maintenance costs. Any revenue from the project needs to be deducted from Base PSC Costs. It does not include any valuation of risks.
- Competitive Neutrality** – In order to eliminate the additional benefits enjoyed by a publicly procured project as compared with PPP procurement, the value of such benefits are added to arrive at the full cost to Government to ensure fair comparison. Competitive Neutrality removes the net competitive advantages that accrue to a Government entity by virtue of its public sector ownership.
- Retained Risk** – An important aspect of PSC is the proposed risk allocation and its valuation. Retained risks are those risks that the Government proposes to bear itself. Value of risks retained by the Government is added to the cost of the project.

4. **Transferable Risk¹⁹** – These risks are likely to be transferred to private bidders. The value of this risk in a PSC measures the cost the government is expected to pay for that risk over the term of the project.



Figure: Public Sector Comparator

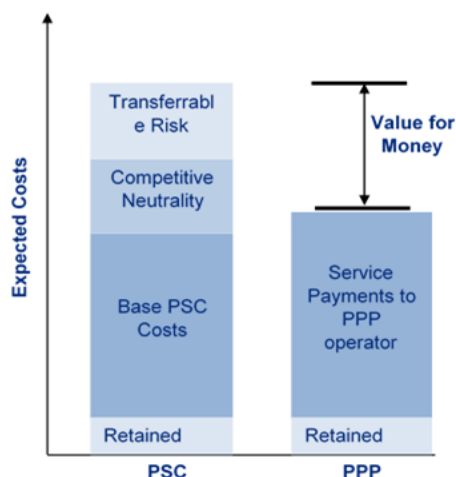
Once the PSC costs are ascertained, Value for Money (VfM) framework is used to evaluate public mode of project delivery against PPP modes.

6.3.1.2 Value for Money assessment

VfM is defined as the difference in the whole life cycle costs (in terms of cost, price, quality, quantity, appropriate risk transfer or a combination thereof) between a publicly and a privately procured project. VfM compares different modes of project delivery under common parameters in order to identify the appropriate and economical option. As presented in the adjacent figure, a VfM framework is used to compare PSC costs with PPP bid cost in order to get the best value for money for the project. VfM is defined as the difference in costs of these options.

In assessing and delivering VfM, it is also important to note that VfM is a relative concept which requires comparison of the potential or actual outcomes of alternative procurement options.

It may be pertinent to note that the VfM analysis is a data contingent exercise. It must thus be recognized that carrying out a VfM analysis in any given context is not easy as reliable VfM results are dependent on availability and reliability of data on possible performance by private sector, past track records of delays & cost escalations, identification & measurement of efficiencies etc. It may be noted that considering the limited availability of sufficient historical data to conduct the PSC and VfM analysis, the analysis presented herein draws heavily on based on the experience from other sectors and published report.



Performance of public development contract

As is evident from the multiple reports published by various authorities on performance of capital projects and performance of LGAs in Tanzania, the private sector, prima facie, is better equipped to manage risks associated with delivery and operations of the capital project. LGAs face issues on two fronts:

- i. **Risks during development period**– Report by the PPRA, Tanzania, highlights this issue in their report of procurement audits in seventy-six procuring authorities for FY 2013-14. It states "*The audits revealed significant performance gaps on contracts management which had serious negative consequences in the delivery of services, goods and infrastructure facilities including; delivery delays, cost overrun, poor quality of services, goods and works, and loss of public funds*".

Further, a study on Cost and Time Overrun of Road Construction Projects in Tanzania Road projects²⁰ indicates that the total cost and time overrun rates were an average of 44% and 26%

¹⁹ The government may choose to contract out certain aspects of a project such as O&M to a private party in traditional / public procurement. The value of such transferred risk would be equal to the price the private party would request for accepting that risk. However, for the project, no such transferable risks have been considered in the traditional procurement and thus transferable risks have not been considered in estimation of PSC

²⁰ Effect of Inadequate Design on Cost and Time Overrun of Road Construction Projects in Tanzania, Eradius E. Rwakarehe and David A. Mfinanga, 2013

respectively. Further, the cost escalation due to time delay is ~7% and remaining 37% cost overrun can be attributed to design & other factors. The observations are consistent with the PPRA reports.

Accordingly, Cost overrun of 35%, time delay of six month resulting in cost escalation of 7% has been considered for public funded contracts.

- ii. **Risk during Operations** – Operations are affected by inefficiencies in managing the contracts, especially in collection of revenues. For example, out of the total expected revenue to be collected and remitted to the councils by contracted collectors, only 67% was remitted to the audited councils²¹. Accordingly, a revenue collection loss of 35% has been considered for public funded method.

6.3.1.3 VfM Output Analysis

Based on the assumptions and the methodology suggested above, VfM analysis has been carried out for the shortlisted of procurement options and the results are as below:

Table 34. VFM Analysis Outputs

Value for Money Framework	PSC
Base PSC costs (A)	4,835.2
Capital expenditure	7,651.30
Operational cost	1,327.73
Interest	3,837.80
Government Support Savings	-
Revenue	7,982
Competitive Neutrality (B)	639
On account of Tax incidence	639
Retained Risk (C)	6,118
Increase in Capex due to delay in construction (C1)	427
Loss in Operational revenue due to delay in construction (C2)	143
Construction cost overrun (C3)	2,678
Loss in Operational revenue due to leakages (C4)	2,351
Increased Expenses due to delay in construction (C5)	517.94
Value for Money (A+B+C)	10,314

As can be seen from the table, the PPP mode is most preferred from the VfM viewpoint and is the most affordable option from the Government perspective.

6.3.2 Qualitative VfM Analysis

While quantitative VfM has its merits, its applicability in context of emerging economies is limited. The quantitative assessment is based on multiple assumptions that may alter as the project progresses and also, is contingent on the availability and quality of data related to performance of public procurement.

²¹ Source: Report of procurement audits in seventy six procuring authorities, Public procurement regulatory authority (PPRA) Tanzania, for FY 2013/14

In the absence of reliable and representative sample data, the quantitative assessment may not be preferred.

In Tanzania context, value for money procurement audit has been undertaken by the Public Procurement Regulatory Authority for capital project in the following reports:

- Report of Procurement Audits in Seventy Six Procuring Entities, 2014
- Value for Money Audits of 137 Construction Contracts, 2012

While these reports highlight and substantiate the occurrence of cost and time overruns, they do not dwell on the consequent impact of such delays and overruns. Thus, for the purpose of this assessment, qualitative VfM assessment has been preferred.

The qualitative assessment of the VfM analysis takes into consideration the aspects of the project that are relevant and may not necessarily be quantifiable. Qualitative VfM²² assesses the project from three viewpoints:

- (i) **Viability:** Can the desired outcomes of the PPP project be translated outputs that can be defined contractually?
- (ii) **Desirability:** Can the PPP project provide better risk management and produce incentives to develop innovative approaches to output delivery?
- (iii) **Achievability:** Is PPP procurement achievable, given attractiveness of the project and availability of LGA resources?

Following is an assessment of expected benefits of the project and how they test against each of the above evaluation criteria.

Table 35: Qualitative Assessment of VfM

Evaluation criteria	Value for Money <i>Is a PPP model preferable to traditional procurement in the case of this project?</i>
<p>Viability</p> <p><i>Can the desired outcomes of the PPP project be translated outputs that can be defined contractually?</i></p>	<ul style="list-style-type: none"> • Possibility of objective drafting/framing of contract: In the case of this project, the requirements in the contract can be identified, quantified/qualified and specified in contractual terms. <p>The scope of the assignment is largely designing and construction of a bus terminal, which may be coupled with operations and maintenance, depending on the mode of project implementation. Each of these dimensions can be further sub-divided into clearly definable and measurable contractual items²³ and defined in ways that will make them (1) easy to monitor; (2) negate/mitigate risks; and (3) require low level of contract variation in later years of the contract.</p> <p>The amount of 'non-contractual' items and risks are expected to be few and mostly related to unprecedented natural disasters and political turmoil.</p> <ul style="list-style-type: none"> • Possibility of development of a long-term contract for the project: The project comprises a mix of assets and services that are vital and shall be required by the public over the long run. Hence the project can be considered for a long-term contract. This becomes important in the case of PPPs because, conditional on the type of model

²² Methodology adapted from 'Value for Money Assessment Guidance' issued by HM Treasury, UK

²³ The effectiveness of the contract shall depend extensively on the deftness of its drafting. It is suggested that multiple international examples should be explored and best practices should be derived from them that may be used to mitigate risks in the contract.

Evaluation criteria	Value for Money <i>Is a PPP model preferable to traditional procurement in the case of this project?</i>
	<p>being used, cost recovery and subsequent profitability of the project require a long-term duration.</p> <p>Further, regulation 76(2) of the PPP Regulations 2015 provides that even for 'small-scale' PPP projects (total project value less than USD 70 million) may have a duration of 15 years (upper limit).</p> <p>Given the long duration of the contract, the probable pitfalls of a long-term contract shall need to be ascertained, costed and mitigated at the contractual stage of the project itself. Pitfalls may include unforeseen natural calamities/political unrest, time and cost overruns, need for contract variations, termination, etc.</p>
<p>Desirability</p> <p><i>Can the PPP project provide better risk management and produce incentives to develop innovative approaches to output delivery?</i></p>	<ul style="list-style-type: none"> <p>Ability of private sector to price and manage pertinent risks: The concerned private sector player is expected to have past experience of similar past projects and thus be well-equipped to estimate, price and manage the risks of the project. Further, the contract for this project can be developed in such a way so as to incentivize effective risk management.</p> <p>However, in the case of Bus Terminals, the private sector may not be incentivized to absorb the demand and/or revenue risk if the traffic level is uncertain or assessed as low at the project preparation stage. In this case, this risk shall need to be controlled by the LGA.</p> <p>As discussed in the earlier section, the demand and/or revenue risk is contingent on the traffic flows and route configuration within the city. For instance, the routes are governed and approved by SUMATRA. The demand is also contingent on the traffic regulations and enforcement thereof. These functions are within the domain of the public agency and the private sector has limited or no influence on these aspects. Thus, the private sector may not be in best position to manage the demand risk.</p> <p>Scope for innovation in construction and/or service delivery: This project shall comprise a bus terminal and ancillary retail facilities. For the bus terminal, the project shall require its operator to respond to variations in peak and non-peak hours, along with seasonal/festive/holiday variations in traffic. For the ancillary retail facilities, the project shall require its operator to respond to changing/evolving demand trends, product developments and customer preferences. Given this, an experienced private party may be better equipped to deliver and manage the project, as such services may not be part of the LGA's core skill-set/services.</p> <p>Maintenance of operational flexibility during contract term at acceptable cost: Given that the project concerns a bus terminal shall provide critical public transport service, the operations and maintenance of the facility become important. Operational management of a bus terminal shall require certain flexibilities such as increasing the operating staff's strength during peak hours and/or days. As discussed above, the private sector is expected to be more skilled at managing and pricing such flexibilities as compared to LGAs.</p>

Evaluation criteria	Value for Money <i>Is a PPP model preferable to traditional procurement in the case of this project?</i>
	<p>Flexibilities can be worked into the contract in the case of the bus terminal; subject to cost, frequency and necessity of such occurrences.</p> <ul style="list-style-type: none"> • Other desirable benefits - development of skill-set of the procuring Authority/LGA: the LGA is expected to develop/enhance its skill-set as a result of managing and monitoring the PPP contract and due to the constant interactions with the private entity, LGA counterparts and other stakeholders.
<p>Achievability</p> <p><i>Is PPP procurement achievable, given attractiveness of the project and availability of LGA resources?</i></p>	<p>As observed above, the LGAs face issues with time and cost overruns while managing infrastructure projects and would benefit from leveraging the expertise of the private sector. These issues, coupled with the above viability analysis, makes a case for undertaking procurement of private entities to develop and manage the project.</p> <ul style="list-style-type: none"> • Attractiveness of the project: The above financial analysis showcases that the market demand for the project is relatively low to medium level, and the project appears to be financially viable only if a capital grant is allocated. Accordingly, the project may or may not be attractive to the private sector. • Ability of the LGA to procure private parties and managing PPP contracts: While the LGA may not best equipped to handle complex PPP projects as of now, there are multiple capacity building initiatives that are being undertaken to enhance this capability. This can be further supported by structuring this PPP project well and preparing a sound and well-rounded Concession Agreement.

6.4 Conclusion

In view of the above, it is recommended that under the existent regulatory restrictions²⁴, PPP mode may be preferred for the Project. Based on the financial assessment, the financial result is as below:

Table 36: Suggested Procurement Option

Particulars	Build, Operate and Transfer (BOT) – User Pays <i>Concession Period of 15 Years</i>	Build, Operate and Transfer (BOT) – User Pays <i>With Viability Gap Funding Concession Period of 15 Years</i>
Project IRR	10.98 %	18.61%
Equity IRR	5.9%	20.0% (Target Equity IRR)
Affordability/ Net financial implication for the Government	Unviable unless a Grant/Viability Gap funding is provided	Capital Grant of 42.25% of total project cost at an NPV of TZS 2861 mn required

As it is observed from the above financial results, the project is unviable unless support in the form of Grant / Viability Gap Funding is provided.

²⁴ Regulation 76(2) of the PPP Regulations 2015 provides that for 'small-scale' PPP projects (total project value less than USD 70 million) may have a duration upto 15 years (upper limit)

7 Management Case

This chapter covers a review of the applicable laws and policies in Tanzania related to PPP and development of bus terminals. It also includes the institutions in place for PPP and Urban Planning which shall govern the development of the bus terminal. Further, it also assesses the impact of such regulations on the project.

7.1 Mbeya City Institutional Framework

As part of the Pre-Feasibility study, an institutional review of the MCC with a particular focus on benchmarking its institutional maturity level to manage the proposed PPP projects was conducted. Further a detailed assessment of the LGA's finances, including identifying key source of its revenues, leakages (if any) and potential sources of enhancing the revenues etc., was also undertaken. This analysis has been presented in this report.

The institutional assessment was carried out using participatory processes that allowed positive engagement with Council members. A collaborative and results-driven approach was used to generate consensus on the maturity level. More specifically, focused group discussions and one-on-one interviews using capacity and maturity assessment framework and tools to drive and measure organizational performance and capacity improvements were facilitated. MCC was assessed in six domains along the PPP project lifecycle as indicated below:

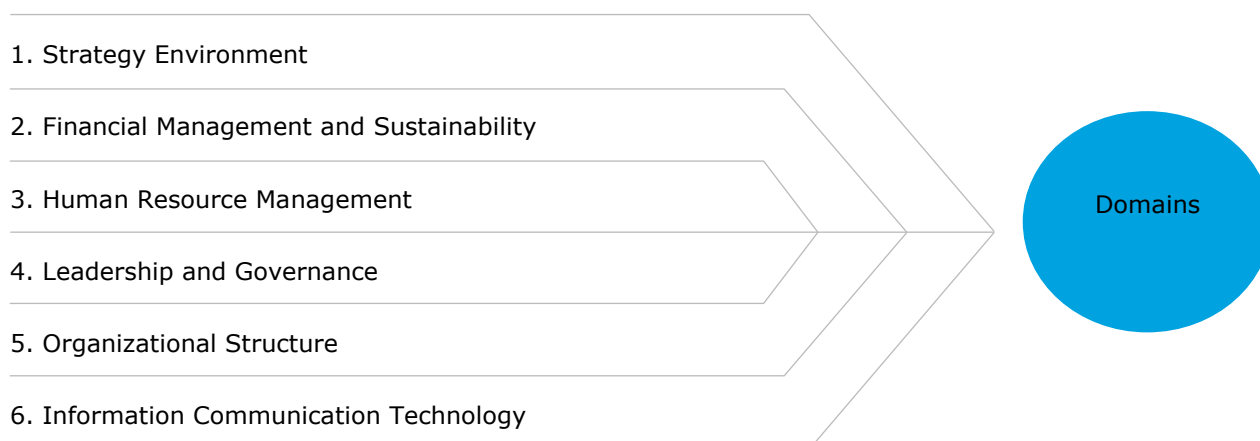


Figure 8 Domains for Maturity Assessment

The findings of the assessment were that, MCC is currently at developing level with an average score of 4.6 points out of 12 points. The highest score is on Organizational Structure (8 points) and the lowest score is on Financial Management and Sustainability (3 points), and Information Communication Technology (3 points). The low score in Financial Management and Sustainability is attributed to lack of revenue collection and resource mobilization strategy as well as high dependence on central government funding. This aspect has a direct bearing on the ability of the MCC to fund the project and affordability of the project in case any viability support mechanism are identified as part of the PPP structure. Other domains also have a strong impact on PPP initiatives within the council. In the next one year, MCC desires to have an overall score of 8.0

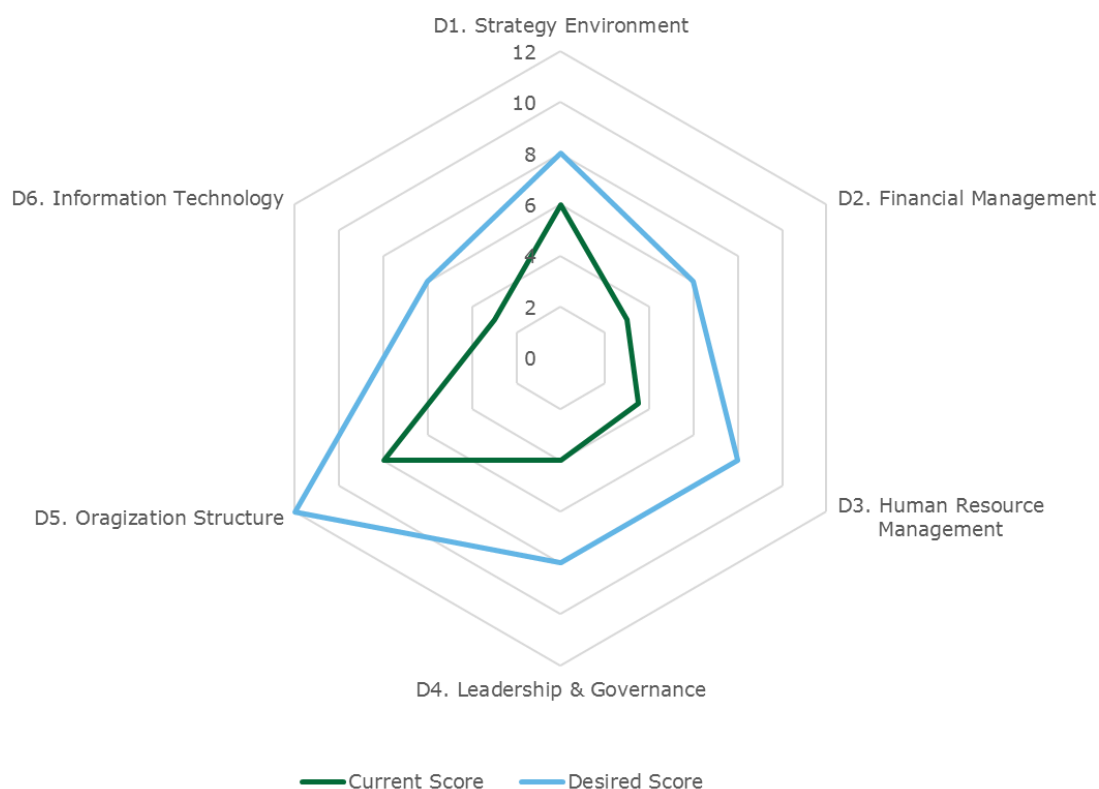


Figure 9 Radar Chart showing score obtained by MCC on Maturity Assessment

7.2 Overview of Applicable Legal Laws and Regulations

7.2.1 Public Private Partnership

As per Tanzania PPP Policy 2009, Public Private Partnerships are viable means to address constraints of financing, management, and maintenance of public goods and services. They enable the government to fulfil its responsibilities in efficient delivery of socio-economic goods and services by ensuring efficiency, effectiveness, accountability, quality and outreach of services.

Public Private Partnership Act No. 18 of 2010 was brought into force in 2010 as the main governing act regarding PPPs in mainland Tanzania.

7.2.1.1 Qualifications for considering the Project under review as PPP

Section 11(1) of the Public Private Partnership Act, 2010 provides an opportunity for the Contracting Authorities (LGAs inclusive) to enter into contracts with private parties in the provision of services which were primarily in their portfolio of services. The provision provides that a contracting authority may enter into an agreement with a private party for the performance of one or more of the functions of that contracting authority. This means the project under study is eligible for PPP provided it meets the other requirements.

As per the legal review, there is a constitutional and statutory basis for LGAs to participate and manage the project under review. This is reinforced by the project value threshold set under the laws (i.e. USD 70 million). The LGAs have the power to engage in the projects subject to compliance with the law, particularly the PPP Act and its regulations. The projects beyond the threshold set by the law are handled by other contracting authorities as defined under section 3 of the PPP Act.

The project falls into sectors or areas that qualify for PPP, subject to meeting other requirements and criteria set out in various laws and regulations. In terms of method of procurement, the project shall be subjected to an open and competitive bid.

7.2.1.2 Implementation of Project

In the implementation of the PPP project, the parties shall comply with the laws related to construction, licensing and other legal requirements. The implementation of the project shall also need to comply with laws that regulate the establishment and operation of the project, and incidental regulatory matters. These laws might change with time; private parties shall keep themselves updated of the changes.

7.2.1.3 Establishments related to PPP

The PPP Centre

- Provides PPP technical assistance to the Government.
- Develops operating guidelines for contracting authorities.
- Assesses proposed PPP projects and forwards those projects it deems appropriate to the Ministry responsible for Finance.
- Submits PPP projects to the PPP Technical Committee once approved by the Ministry responsible for Finance.

It shall be noted that, as per the procurement guidelines under the PPP Regulations, in the PPP project under review, the Centre shall have the statutory mandate to ensure that the LGA procures the required services for the implementation of the project in a fair, transparent, competitive and cost effective manner.

The Facilitation Fund

The PPP Amendment Act (2014) - 10c, establishes a facilitation fund, to be known as the PPP Facilitation Fund. Upon approval by the PPP Technical Committee, the Facilitation Fund shall be used to:

- a. Finance feasibility studies and other project preparation costs as may be required by a contracting authority; and
- b. Provide resources to assist projects with limited financial viability and high economic benefit.

The PPP Technical Committee

- Considers and approves PPP proposals made to it by the PPP Centre.
- Submits approved PPP proposals to the National Investment Steering Committee for scrutiny.
- Approves allocation of funds from the Public Private Partnership Facilitation Fund.
- Assigns to contracting authorities terms and conditions for utilization of the Facilitation Fund.

The PPP Technical Committee will be made up of a series of public officials including the permanent secretaries of the ministries of finance and land, the Deputy Attorney General and the Commissioner General of the Tanzania Revenue Authority among other members. The PPP Technical Committee will also include two persons from the private sector. These persons will be selected by the Minister for Investment upon the recommendation of the Tanzania Private Sector Foundation.

The figure below depicts the key supervisory and executive institutions relevant to the project.

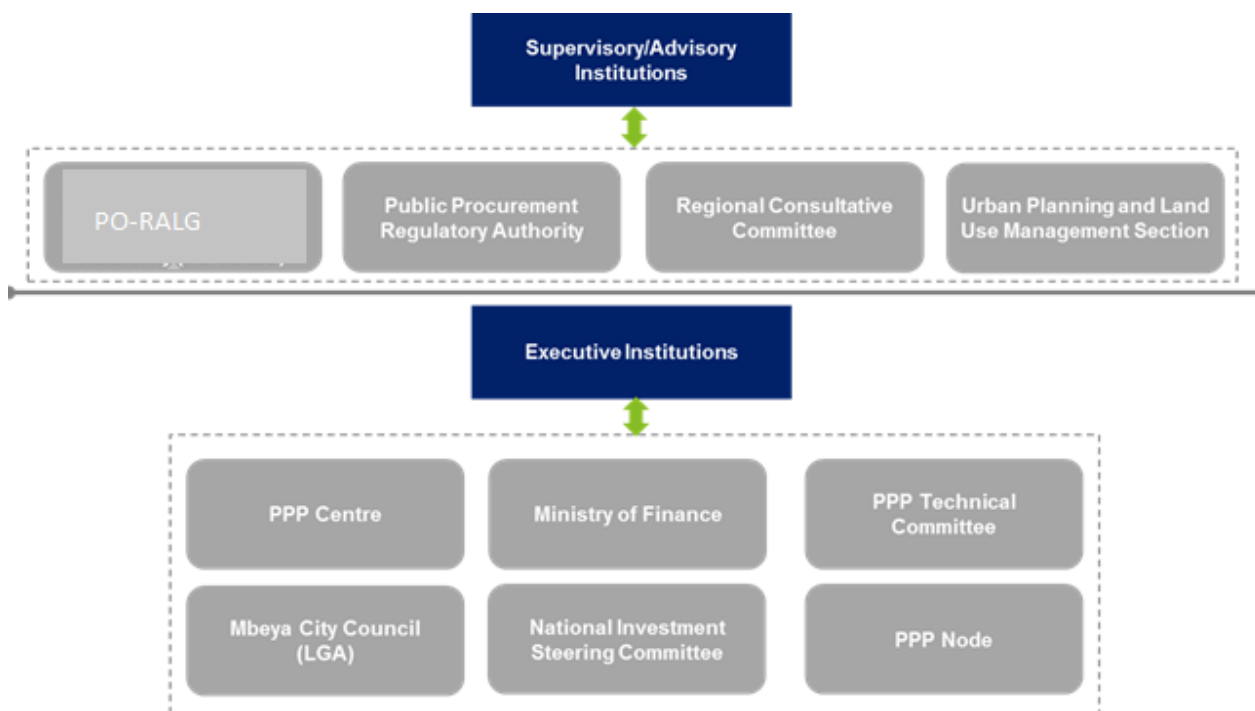


Figure 10 Key Supervisory and Executive Institutions for the Project

7.2.1.4 Land Acquisition and Compensation

PPP Act anticipated situations where a PPP project may entail acquisition of land from their true owners for purposes of investment or development. In this regard, section 13 of the Act provides: “Where the project requires acquisition of land for its implementation, the acquisition shall be carried on in accordance with the Land Act, Village Land Act, the Land User Planning Act, Land Acquisition Act and any other relevant laws”.

The land acquisition must be in the interest of the public. Acquisition of land may be by agreement between the parties. If this is not preferred or adopted, the following procedure may be followed:

- Issuance of notice of acquisition of the respective land
- Valuation of the land and developments in the land to be acquired
- Consultation with the land owner
- Payment of fair and prompt compensation
- Disputes as to compensation to be resolved by parties concerned within six weeks. If the dispute is not so resolved, either party is at liberty to send the dispute to court for determination
- If dissatisfied, parties can appeal the decision of the Court.
- Payment as per the court order discharges the Minister of all obligations in this regard

In assessing compensation for land acquired in the manner provided for in the Land Act and Land Acquisition Act, the concept of opportunity shall be based on the following:

- market value of the real property;
- disturbance allowance;
- transport allowance;
- loss of profits or accommodation;
- cost of acquiring or getting the subject land;
- any other cost loss or capital expenditure incurred to the development of the subject land; and
- interest at market rate will be charged.

7.2.1.5 Resettlement

The law in Tanzania is explicit about compensation but it is silent on relocation and/or resettlement. So, there is no express legal duty on the part of the government to resettle the occupants of the areas affected by the project. However, the government has discretion to opt for a relocation or resettlement in cases of land acquisition, and has done that in some projects in the past.

In terms of process, the resettlement involves identifying affected persons and their properties, identifying the alternative location, consulting the affected persons and their leaders on the projects and options available to them, conducting valuation of their properties, consulting and sharing of the valuation findings, effecting compensation, resettling the affected persons and demolishing the affected structures.

7.2.1.6 Environmental impact considerations

Section 11(4) of the Public Private Partnership Act, 2010 relates to undertaking of the feasibility study for PPP projects. It provides that where the PPP project requires Environmental Impact Assessment (EIA) under part VI of the Environmental Management Act, 2004, EIA certificate must be procured before undertaking the project. Section 12 (3) of the same Act provides that the PPP agreement shall contain a condition that shall ensure that an EIA certificate has been issued in respect of the project. Further, regulation 12(1) (n) of the Public Private Partnership Regulations, 2015 provides that the feasibility study shall contain a description of environmental and social impact assessment.

National Environment Management Council (NEMC) is empowered by law to conduct EIA and provide certificate in that regard. Section 81 of the Environmental Management Act, 2004 also requires an EIA to be conducted in respect of "any activity out of character with its surrounding or any structure of a scale not in keeping with its surrounding", and an activity entailing major change in land use. Under the EIA and Audit Regulations, 2005, a project which is deemed to have a probable negative environmental impact is also amenable to EIA. In this regard, it shall be crucial to review the drawings for the project with a view to determine if the same may render the project qualify for EIA.

Under section 29 (3) of the Urban Planning Act, 2007, the LGA may require an EIA in the event it determines that the project may have a negative effect on the environment.

It is a requirement of the law to conduct an Environmental Impact Assessment of all PPP projects before construction or financing.

Bus terminals must be subjected to a mandatory EIA as stipulated in part A of the schedule to the Environmental Impact Assessment and Audit Regulations, 2005, GN 349. Section 81(2) of the Environmental Management Act, 2004 provides that EIA shall be done prior to the commencement or financing of a project or undertaking.

7.2.2 Urban Planning and Development

As per a Notice issued by the President of the United Republic of Tanzania in December 2010, the President's Office-Regional Administration and Local Government Authority (PO-RALG) has reviewed its organization structure and functions in order to strengthen the quality of internal operations. As a result of this, PO-RALG has been divided into eight divisions, six units and five affiliate institutions.

Out of these, the **Infrastructure Development Unit** shall facilitate infrastructure development and maintenance in LGAs. This unit shall facilitate LGAs to prepare and implement action plans on transport infrastructure development.

The project to develop a bus terminal in Mbeya city falls under the purview of the **Infrastructure Development Unit**.

Regulation 126 of the Local Government (Urban Authorities) (Development Control) Regulations, 2008 requires every intending builder to submit a building plan with its details clearly drawn. The plan has to show the position, form and dimension of the foundations, wall, floor, roofs, chimney and the several parts of the building. It is this plan which shall determine the type of facility that is being proposed for development.

Section 62(1) of the Local Government (Urban Authorities) Act imposes specific **duties on LGAs** for the provision and management of **Public Bus Stand** and **Public Parking**. LGAs have also been given powers to charge fees for various services or facilities offered by the authority and make by laws for the same. Further, Section 6 mentions that all money received in the form of fees paid in respect of rent of shop, butcheries, market stalls, user charges, service charges and entertainment taxes form a part of the sources of revenue of the LGA. For this purpose, the LGA is also empowered to make by-laws imposing such charges on inhabitants. In addition to this, certain provisions of the Local Government (Finances) Act, 1982 also impose charges such as fines, taxes etc.

There is a requirement to comply with the provisions of the Urban Planning and Space Standards Regulations, 2011 which specify the space and planning standard size for parking lots.

7.3 Project Specific Legal Review

7.3.1 Legal Suitability of Project Site

7.3.1.1 Ownership of Plot

As per the legal review, the project is proposed to be developed over an area²⁵ of 16,500 m² of land.

The plot marked for the project is a part of the Uyole Primary School. The school is owned by the Mbeya City Council. The LGA does not have a direct ownership of the land. Both the School and the LGA do not have title deed over the area. The LGA has expressed that the school has surplus land available, and that the school as well as the surrounding community has been engaged in a conversation to process the change of use and title deed in a period of four months. However, this negotiation process has been unsuccessful and the project has been terminated.

7.3.1.2 State of Project Site

The site is currently part of the Uyole Primary School and is not used as a terminal. The site is at a distance of two kilometers from the existing Uyole bus terminal.

7.3.1.3 Land Usage

The site is currently occupied by a primary school. There were efforts by the LGA to gain access to the site either for either co-location or relocation of the school, however the school authorities and the community are opposed to the proposal. Construction of a bus terminal poses not only security related risks for the people and children of the school but also considerable resistance from the community. The land use proposed for the site i.e. bus terminal is not consistent with the current land usage and the LGA has withdrawn the project from list of projects under this assignment/study.

7.3.1.4 Third Party Interests

As per the legal review, the school, which currently occupies the project site, might need to be compensated with alternative land or in some other form. The Headmistress of the school was non-committal on this issue. The LGA is supportive of the change of land use given there is due stakeholder consultation and engagement.

A consultative and consensual approach shall be adopted in order to avoid hindrances (such as lack of project ownership and protests), and enable a smooth transition and adoption of the new bus terminal.

7.3.1.5 Regulations related to Bus Terminals

Regarding Bus Terminals, there is a requirement to comply with the provisions of the Urban Planning and Space Standards Regulations, 2011 which specify the space and planning standard size for parking lots.

Bus terminal projects must be subjected to a mandatory EIA as stipulated in part A of the schedule to the Environmental Impact Assessment and Audit Regulations, 2005, GN 349. Section 81(2) of the Environmental

²⁵ Note: There is a discrepancy in the plot size – as per the project's Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.

Management Act, 2004 provides that EIA shall be done prior to the commencement or financing of a project or undertaking.

7.3.1.6 Development Permissions

Building Permits for Construction of the Facility

The Local Government (Urban Authorities) (Development Control) Regulations, 2008 empowers the LGAs to issue building permits where any construction is to be undertaken in their area of jurisdiction. Regulation 2 defines the term “building” to mean “any structure of whatsoever material constructed and includes billboards and telecommunication towers”. This means therefore that all the intended PPP projects for bus terminals need to be constructed only after obtaining the requisite permit as provided under Regulation 104 of the Local Government (Urban Authorities) (Development Control) Regulations, 2008. The LGA will see whether the specific drawings and other documents submitted during application for permits comply with the requirements and standards of the particular PPP intended project.

Construction/development must follow all set up procedures—get the relevant drawings approved by LGA, Occupational Safety and Health Authority (OSHA), and Fire and Rescue Department; obtain building permits/planning consent from the LGA; and permits from specialized sector offices, if that is required. OSHA registration and NEMC approvals are also required.

7.3.1.7 Labour Laws

Regarding Immigration laws, the private partner has to comply with rules for obtaining work permits, resident permits, and transfer of knowledge/ succession by locals.

7.3.1.8 Rents and Rates

The LGA is empowered under regulation 9 of the GN 376 of 2011 (MCC Bylaws on Levies Chargeable in Car Terminals) to impose charges and levies on the use of the bus terminal. The rates are also provided in the schedule to the bylaw as shown below.

Sl.	Type of Vehicle	Rates (TZS per day)
1.	Passenger Buses with less than 20 passengers	500
2.	Passenger Buses with less than 40 passengers	800
3.	Passenger Buses with more than 40 passengers	1,000
4.	Lorry of under 10 tons	700
5.	Lorry of over 10 tons	1,000
6.	Vehicle of less than 3 tons	500
7.	Noncommercial Private cars	200
8.	Motorbikes	200
9.	Bajaji	300

According to regulation of GN No 374 of 2011 (MCC bylaws on Property Tax), every owner or occupier of building within the MCC has to pay property tax as per the rates stated in the schedule to the GN. For unsurveyed areas (high density) the rate is TZS 60,000 for commercial and 80,000 for industries. For Low density areas, the rates are 40,000 and 100,000 respectively. The latter rate (TZS 100000) also applies for plots situated in the City Centre. For plots which have been valued, the rates are 0.15% of the total value of the plot earmarked for commercial or industrial use. However, the above bylaw has been rendered ineffective by the passage of the Finance Act, 2017 which has authorized the Tanzania Revenue Authority to collect property taxes.

Based on the provisions of section 6 and 13 of the Local Government (Finances) Act, 1982, the LGAs have made by-laws which impose fees for parking in their area of jurisdiction.

7.3.1.9 Resettlement

The law in Tanzania is explicit about compensation but it is silent on relocation and/or resettlement. So, there is no express legal duty on the part of the government to resettle the occupants of the areas affected by the project. However, the government has discretion to opt for a relocation or resettlement in cases of land acquisition, and has done that in some projects in the past.

In terms of process, the resettlement would involve identifying affected persons and their properties, identifying the alternative location, consulting the affected persons and their leaders on the projects and options available to them, conducting valuation of their properties, consulting and sharing of the valuation findings, effecting compensation, resettling the affected persons and demolishing the affected structures.

7.3.1.10 Competition

The private party has to respect the law regarding competition. In particular he must refrain from making or concluding anti-competitive agreements, abusing dominant position, misuse of market power, and avoid unconscionable conduct. According to section 8(I) of the Fair Competition Act, 2003 "A person shall not make or give effect to an agreement if the object, effect or likely effect of the agreement is to appreciably prevent, restrict or distort competition."

Section 9(I) of the Act further provides that "A person shall not make or give effect to an agreement if the object, effect or likely effect of the agreement is: (a) price fixing between competitors; (b) a collective boycott by competitors; or (c) collusive bidding or tendering."

Additionally, section 10(1) of the Act is also relevant when it provides: "A person with a dominant position in a market shall not use his position of dominance if the object, effect or likely effect of the conduct is to appreciably prevent, restrict or distort competition".

On the available materials, the project under review does not violate competition law. Once the project is fully set out and terms of engagement known, then the project needs to be assessed particularly to see if the same complies with Competition law.

Given the legal and institutional framework in Tanzania and Mbeya, the pre-feasibility study now studies the project in terms of location, site and demand in the subsequent sections.

8 Conclusion and Way forward

8.1 Conclusion

8.1.1 Technical Assessment and Project Configuration

The study shows that the facility to be developed at Mbeya City is technically feasible as it has positive market demand (assessed quantitatively and via interactions during site visits) and in terms of project configuration (conversant with the Master Plan of Mbeya City).

8.1.1.1 Market Demand

After considering the residential, commercial, and retail infrastructure in proximity to the site for the proposed Bus Terminal, the demand for bays is as below:

Year	Inter-city bus bays	Inter-district bus bays	Daladalas
2020	5	5	1
2030	7	6	5
2040	12	12	14
2045	19	19	20

8.1.1.2 Project Configuration

Location of the project is in Uyole Ward on the outskirts of Mbeya City. The available plot covers an area²⁶ of about 23,206 m². It is part of the built up area of the City, which is accessed by roads in all directions. It is surrounded by commercial, institutional and residential areas of Mbeya city; hence it is commercially active.

Upon assessing the need and market potential of this project, the study proposes that the facility focus on catering to inter-city buses, inter-district buses, and daladalas; and include warehouse and other commercial facilities including restaurants, shops and private vehicle parking areas. The facility maybe designed as a two floor building, accommodating the following:

- Bus service area (includes parking space for buses and daladalas)
- Warehouse
- Bus office
- Ticket office
- Parking spaces for private vehicles such as cars
- Public spaces for toilets and bathrooms

It is proposed that Mbeya City and Tanzania specific design considerations and specifications be used to develop this bus terminal.

²⁶ Note: There is a discrepancy in the plot size – as per the project’s Concept Note it is 16,500 m² whereas as per our interactions with the LGA and the satellite coordinates shared by LGA, the plot size is approx. 23,206 m². This does not include the area housed by the primary school structure. The same has been considered for the purpose of this project.

8.1.1.3 Site Assessment

Site assessment has revealed that presently the site comprises of an undeveloped green field on the western side of TANZAM highway and borders a Primary School on the northern side.

8.1.1.4 Environmental and Social Impact Assessment

The preliminary environmental and social impact assessment shows that the project may have local/regional social and environmental impacts, most of them are expected to be short to medium-term impacts. The level of these impacts may vary across different stages of the project—before, during and after construction

From an environmental perspective, few important impacts may include the following: alteration of scenery view; increased dust and air pollution; increased noise; increased waste generation during construction, traffic congestion, and overwhelmed administrative authority. Other impacts include debris deposition in storm water drains and associated floods; contamination of surface and ground water and adverse effects from operation of asphalt plant and camps operation.

From a social perspective, the project is expected to lead to job creation and increased income of the local community as local community members might be employed to work on different tasks in the project. Other impacts may include improved local community living standards; improved accessibility, and increased property and land values.

There may be some adverse social repercussions as well. For example, the project may lead to conflicts with the affected persons including the school bordering the site.

The study shows that it is possible to mitigate most negative impacts associated with the project's implementation so as to maximize positive impact that the project is expected to have. It is also recommended that once decisions over the project's viability have been made and the project design is finalized by the PPP operator/developer/Concessionaire, a detailed Environmental and Social Impact Assessment should be conducted as required by Environmental Management Act (EMA), 2004 (Act No. 20 of 2004) (Made Under Sections 82(i) and 230(2)(h)) and the Environmental Impact Assessment and Audit Regulations (EIAAR), 2005.

8.1.2 Financial and Economic Assessment Results

The results of financial and economic assessment have been presented in the table below.

Table 37: Project Viability Indicators

Particulars	Build, Operate and Transfer (BOT) – User Pays	Build, Operate and Transfer (BOT) – User Pays
	Concession Period of 15 Years	With Viability Gap Funding Concession Period of 15 Years
Project IRR	10.98 %	18.61%
Equity IRR	5.9%	20.0% (Target Equity IRR)
Affordability/ Net financial implication for the Government	Unviable unless a Grant/Viability Gap funding is provided	Capital Grant of 42.25% of total project cost at an NPV of TZS 2861 mn required

Table 38: Economic IRR and Benefit – Cost Ratio

Estimated Economic IRR	Benefit-Cost Ratio
24.5%	3.0

Based on the tabulated results, following conclusions and takeaways can be considered for project viability, scoping and structuring:

- **Project Financial viability:** It can be seen from the key project indicators, the base case is financially unviable unless support in the form of grant/viability gap funding is provided.

It may be noted that Pre-Feasibility study is contingent on product mix and demand assumptions considered by the Consultant. The private sector may have an independent view of the viability of the project and it may yield a viable scenario as part of the market testing process.

- **Project Economic viability:** It can also be observed that the project demonstrates economic benefits and the economic IRR is higher than the threshold of 12%, generally considered for similar projects.

8.1.3 Legal, Institutional and regulatory assessment

Legal and Regulatory Assessment

As per the legal review, the plot allocated for Uyole bus terminal is part of a school owned by the LGA. It shall be necessary to change the use and divestment of the plot from the school.

There were efforts by the LGA to gain access to the site either for either co-location or relocation of the school, however the school authorities and the community are opposed to the proposal. Construction of a bus terminal poses not only security related risks for the people and children of the school but also considerable resistance from the community. The land use proposed for the site i.e. bus terminal is not consistent with the current land usage and the LGA has withdrawn the project from list of projects under this assignment/study.

Institutional Assessment

The institutional assessment revealed that Mbeya City Council is currently at 'developing' level (with an average score of 4.6 points out of 12 points as per our analysis). The Council is performing best on the 'Organizational Structure' front and is lowest on the 'Financial Management and Sustainability' and 'Information Communication Technology' front. The low score in Financial Management and Sustainability is attributed to lack of revenue collection and resource mobilization strategy as well as high dependence on central government funding. All these domains have a huge impact on PPP initiatives within the Council.

The results of the analysis of the LGA's finances shows that the Council is more dependent on external budgetary/financial support than its own sources of revenue.

8.1.4 Conclusion

Based on the issues with the site, namely the inability to relocate the school and community resistance and financial viability of the project which requires viability gap funding the LGA has decide not to proceed with this project.

9 Annexure A: Willingness to Pay

This sub section presents the findings from surveys conducted by the market assessment team for data gathering with regard to the 'development of bus terminal' project in Mbeya City. The survey involved many stakeholders being interviewed on a comprehensive set of questions covering aspects such as willingness to pay, rates/rents and preferences.

9.1 Perspective of Terminal Administrator

As a part of the survey, the market assessment team interacted with the Terminal Administrator - Mr. Adolf Mlay. He provided with information pertaining to the various routes, stops for buses, operational aspects of the existing terminals etc. Below are the details of his interview with the team.

Table 39: Responses from Terminal Administrator

Stakeholder - Terminal Administrator				
1. What is the usual entry fee at a bus terminal for the following categories: (a) Daladala (b) Minibus (c) Intercity buses (d) Taxis (e) Private vehicles	Type of Vehicle	Amount/day	Fee	Time spent
	Daladala	100	500	5-10 min
	Minibus	80	1500	10-30 min
	Inter-city bus	25	3000	1-2 hrs
	Taxis	20	500	4-5 hrs
2. How many buses visit the Bus terminal in a day? Please give a split of the above mentioned categories.	Private vehicles	100	1000	5 mins
	3. What is the average time spent by the above categories at the bus terminal?			
4. Is there any cap on time spent at the terminal for the above mentioned categories?	There is no cap			
5. What are the Origin and Destination pairs of the intercity and local buses including daladala, Minibuses?	Origin	Inter-city	Inner-city	
	Mbeya Bus terminal	Arusha	Mbalizi	
		Dar	Mwanjelwa	
		Morogoro	Uyole	
		Iringa		
		Chunya		
Tunduma				
6. What the major intermediate stages for intercity buses via Sisimba bus terminal?	Nane Nane bus stand, Uyole, Mbalizi, Simiki			
7. What is the average occupancy of the intercity buses which operate via Sisimba bus terminal?	40-50 passengers (about 70-80%)			
8. What is the average occupancy of the local bus categories such as Daladala, Minibuses which operate via Sisimba, Nane-Nane bus terminals?	15 passengers (about 75%)			

Stakeholder - Terminal Administrator		
9.	How many personnel are required for operation of Admin facility at Sisimba bus terminal?	About 4
10	Is the facility operated on a shift basis?	No
11	What are the working hours for the Bus terminal?	From 5 am to 7 pm; officials are around. Past 7 pm there is no oversight
12	How many working days in a year?	365
13	Is a concessional fare applicable for some intercity/ local buses? Eg. Daladalas which pay entry fee at Nane-Nane Bus Terminal need not pay fees at Sisimba Bus Terminal.	Fees are paid only once a day for access to all bus stands within the council jurisdiction
14	Are there any peak seasons where more Bus services are run? If yes, 1. What is the average variation in total buses per day? 2. How many peak season days in a year?	June, July, December and January are peak months. There is usually 10 extra buses in operation

9.2 Perspective of Bus Operators

The interviews with bus operators provided with critical insights about the rates charged and customer pattern and willingness to pay. The interviews also covered a number of intracity small bus operators/daladala operators, Minibus operators and taxi owners. Out of the operators interviewed, the responses to our detailed questionnaire from a few have been presented below.

Table 40: Responses from Intercity Bus Operator

Stakeholder - Bus Operators - Intercity		
1.	What are the intercity Origin and Destination points for buses which ply via Sisimba Bus Terminal?	Tunduma to Mbeya
2.	What is the entry fee charged at Sisimba Bus Terminal?	Tshs 1500
3.	What is the average fee escalation observed at the Sisimba Bus Terminal?	Not Known
4.	What is the average time an intercity bus waits at the terminal?	2 hours
5.	What are the major Bus stops/pickup/drop points in the vicinity of Sisimba ward?	Mbalizi
6.	What are the peak demand seasons?	June, July, December and January
7.	How many more buses are run per day during these seasons?	Same number of buses, some may make two trips instead of the regular one
8.	What is the average occupancy of the buses during peak and non-peak times of the day?	Average occupancy is 30 passengers (100%). They usually leave the stand with about 20 passengers, and pick the remainder along the way
9.	What are the major intercity routes in Tanzania around Mbeya city which currently do not include Sisimba Bus Terminal in their routes?	None
10	How many passengers alight from the bus at Sisimba Bus Terminal every time a bus stops?	20

Table 41: Responses from Bus Operators – Daladala/Minibuses/Taxi

Stakeholder - Bus Operators – Daladala/Minibuses/Taxis		
1.	What are the Origin and Destination points from Sisimba ward within Mbeya city? (including all the stops)	Central terminal to Mbalizi, Mwanjelwa, Uyole
2.	What is the entry fee charged at Sisimba Bus Terminal for (a) Daladala: 500 (b) Minibus: 1500 (c) Taxi: 500 Private vehicles: 1000	
3.	What is the average fee escalation observed at the Sisimba Bus Terminal?	Not known
4.	What is the average wait time at the terminal for the above mentioned categories?	Daladala: 10-15 minutes Minibus: 1-2 hours Taxi: 6 hours Private vehicles: 5 minutes

9.3 Perspective of Retailers

Given that the redevelopment of the bus terminal will have development of commercial area for retailers, the survey included interviews from existing retailers in the area in order to establish preferences and spending patterns of the travellers availing the facility.

Table 42: Responses from Existing Retailers

Stakeholder – Existing Retailers		
1.	Team to profile the above facilities in terms of following: <ul style="list-style-type: none"> Condition of the shops (New/ Renovated/ Old/ /Dilapidated): Old: The shops are old and disorganized Type and number of shops <ul style="list-style-type: none"> Retail(Small retail/ Medium Retail/ Super markets/Corporate offices/ Restaurant): 7 retail shops Ticketing: 12 Restaurant & Eateries: 3 Parking (number of bays and average time spent): 8 for intercity buses, 8 for taxis, 6 daladalas Others Which shop has the maximum footfall % Occupancy as on date : Not disclosed 	
2.	Please document the Name of the shop, type of shop, shop size (Sq m)	Mbeya electronics, phone accessories retailer, 24 sqm
3.	Area of the shop	Bus stand
4.	Footfalls (Number of visitors/day)	40 customers
5.	Daily sale (TSH/day)	Not willing to share
6.	Do you follow a lease model or outright ownership model?	Lease
7.	For lease model: <ul style="list-style-type: none"> In case of lease, what are the lease / rental charges paid and lease period presently?: Monthly lease What is the escalation period for lease charges?: Not disclosed 	

	<ul style="list-style-type: none"> Is there any requirement for a security deposit? If yes, how much?: No security deposit 	
8.	In case of ownership model, <ul style="list-style-type: none"> Market price paid Year of purchase 	N/A
9.	What are the common area maintenance charges levied by LGA?	Trash collection
10	Are these charges included in lease?	No
11	What is the frequency of escalation for these charges?	No comment

9.4 Perspective of Travelers

The new proposed bus terminal is meant for ease of travel of the population that shall avail this facility. Accordingly, many travellers/customers were interviewed to understand the travel behaviour along with their willingness to pay for better facilities.

Table 43: Responses from Travelers

Stakeholder – Travelers		
1.	Please document the demographics data: <ul style="list-style-type: none"> Name: Mr. Mushi Age: Around 60 yrs old Occupation: Shop owner Indicative monthly income of the household: Not disclosed Gender: male Area of stay: New forest 	
2.	Purpose of visit (Inter city/Intra city/Other _to be specified)	Inter city travel
3.	What are the key issues /challenges faced at the existing bus terminal	<ul style="list-style-type: none"> Lack of Public amenities: Waiting areas, public washrooms, Ticketing related aspects: Unauthorized ticket sellers (wapiga debe); ticketing booths are not organized Lack of parking for private cars, and disorganized parking for buses Entrance and exit flow of vehicles Storage facilities
4.	If (re)developed, which of the following services may be provided at the Bus Terminal	<ul style="list-style-type: none"> Public amenities Storage & Locker room Waiting rooms Restaurants Small Shops hotels

10 Annexure B: Market Demand Assessment

10.1 Overview of area surrounding the project site

This section provides an outline of the major trip generating and attracting areas for the public transport in the City as well as that for the existing bus terminal (project site). The project site is surrounded by some of the focal institutional, residential and commercial areas of Mbeya City. It is also served by an established network of road routes, bus terminals and bus stops. The following map shows the key intra-city routes along with the bus stops and other modes of public transport such as railways and airport.

Table 44: Distances between project site and other transport facilities

Name of transportation facility	Driving Distance between named facility and project site
Uyole daladala stand	~1 Km
Nane-Nane bus terminal	~6.8 Km
Mbeya Main bus station	~ 14.8 Km
Meta Bus Station	~ 15.5 Km
Mfiati bus Stop	~ 12.0 Km
Mwanjelwa Bus Stop	~ 11.5 Km
Kabwe Bus Stop	~ 10.9 Km
Soweto Bus Stop	~ 10.2 Km
Iwambi Bus Stop	~ 21.4 Km
Mwisho wa Waya Bus Stop	~ 20.5 Km
Mbeya Airport	~ 11.5 Km



Figure 11 Public transit network related infrastructure surrounding the project site

Development of Uyole Bus Terminal in Mbeya City (Uyole Ward)

Name of transportation facility	Driving Distance between named facility and project site
Mbeya Railway Station	~ 17.8 Km

The main trip generating areas include (i) residential areas and (ii) institutional areas—offices and other institutions. The trip attracting areas include (i) commercial areas and markets, (ii) hotels and lodges, and (iii) institutional areas.

In addition to buses, Mbeya City is also served by the TAZARA Railway ‘express’ line once a week, connecting Mbeya to Dar es Salaam and Zambia region and a ‘regular’ line connecting the same destinations daily. Further, Mbeya also has a dry port focusing on Malawi and Zambia bound traffic. This dry port is serviced by the MCC Limited (MCCCL) rail line. Mbeya connects to the rest of Tanzania by air through Songwe Airport which is one of four major airports available in Tanzania.

10.1.1 Institutional Area

The surrounding office spaces mainly include standalone businesses and financial institutions, including NMB Bank Uyole branch and an automotive dealer of Toyota vehicles.

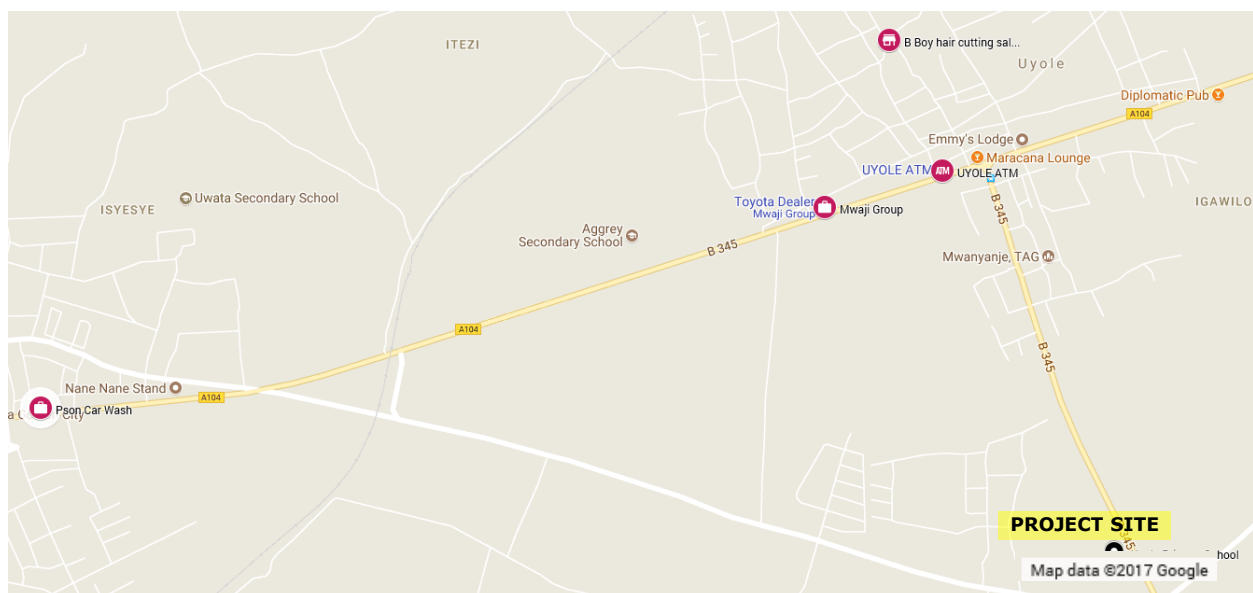


Figure 12 Institutional Infrastructure near the project site in Mbeya City

10.1.2 Residential Area

Mbeya City Council is divided into 36 wards. Out of these, Uyole ward (in which the project site is located) is surrounded by five wards. The proposed bus terminal shall cater to the following wards based on their proximity to the project site:

Name of transportation facility	Population (from 2012 Census)
Uyole	11,543
Nsalaga	18,993
Itezi	18,445
Iduda	4,157
Iganjo	8,697

Development of Uyole Bus Terminal in Mbeya City (Uyole Ward)

As per interactions with the LGA, these wards correspond closely to residential areas. The above mentioned wards correspond to about 16% population of the Mbeya region and comprise mainly middle level income population



Figure 13 Residential areas surrounding the project site

10.1.3 Commercial Infrastructure

The project site is surrounded by multiple markets/ commercial infrastructure. Following is an overview:

Sl.	Market	Aerial distance relative to Project Site
10.	Makondeko Market	~1.7 km
11.	Uyole Njiapanda Market	~1.9 km
12.	America St. Market	~3.2 km
13.	Pm Family Min Market	~3.6 km
14.	Sido Market	~11.1 km
15.	Kabwe Shopping Center	~11.2 km
16.	Mwanjelwa Market	~11.5 km
17.	Ndiyo Supermarket	~12.7 km
18.	Ndiyo Mini Market	~12.8 km
19.	Uzunguni Market	~14 km

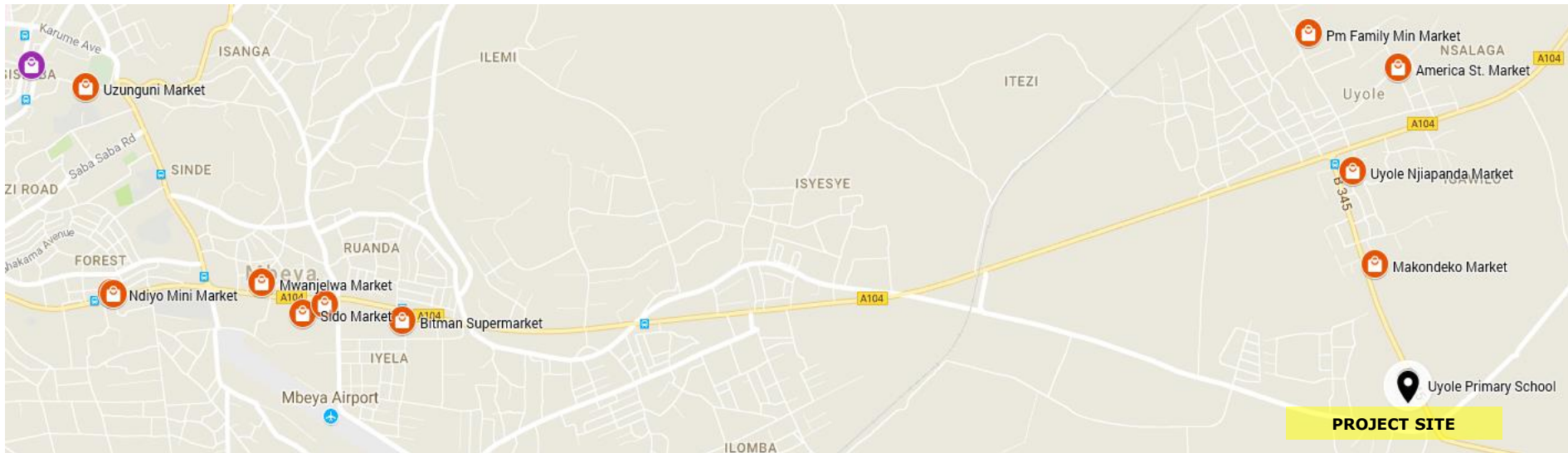


Figure 14 Markets/commercial infrastructure surrounding the project site in Mbeya City

The closest market to the project site is the Makondeko market. The Uyole Njiapanda market comprises numerous stalls and shops offering food commodities and second-hand goods. It is one of the busiest markets in the region. Pm Family Min market is a grocery store within a four km radius of the project site.

10.2 Demand potential of bus terminals

The objective of demand assessment is twofold: (i) to assess the number of vehicles that may access the facility and bays required at the bus terminal to cater to current and future traffic; and (ii) to assess the potential of retail and other services at the bus terminal. Such an assessment shall provide inputs that may be used to determine the configuration of the bus terminal.

10.2.1 Approach for demand assessment of bus terminals

A demand for bus terminal and the facilities required is contingent on traffic profile and preference for mode of public transport, the transportation network, extent of inter-city and intra-city travel, corresponding trip characteristics, operational parameters, and competition from other modes of public transportation. It is also dependent on socio-economic indicators and preferences of the region.

Following section summarizes the relevant approaches and discusses their relevance in context of demand assessment of the subject bus terminal.

10.2.1.1 Trip Generation Model

Trip Generation Model is used to determine future traffic projections that can then be used to assess capacity of terminals. This model forecasts number of trips generated in and attracted to the area being studied, subject to household and socio-economic attributes.

This method requires data such as household trip information, commercial establishment trip information, speeds, etc. Once such data is collected, an 'Origin-Destination' matrix is generated which allocates the number of trips between each trip-generating zone against each trip-attracting zone in the given area.

This approach is relevant for inter-city demand assessment - though is not always feasible. This is because of unavailability of granular data at the City level and uncertainties regarding accuracy and exhaustiveness of available data sets.

10.2.1.2 Travel Demand Elasticity Model

As per the Travel Demand Elasticity model, the future demand is contingent on certain socio-economic indicators such as population, income, domestic production etc. The demand elasticity model considers that the growth of travel demand, *ceteris paribus*, is correlated to one or more of such indicators and the demand elasticity with respect to the indicator(s) is transferrable across time and region. A set of such significant indicators are selected by regressing them with the vehicle numbers for a given set of years. The elasticity value of the most significant indicator, in this case population, can be used to forecast the future year vehicle numbers.

10.2.1.3 Approach considered for demand assessment of the bus terminal

A Tanzania level transport sector review was undertaken by the African Development Bank Group in 2013. This review classifies vehicles in numerous categories, including 'Heavy Passenger' and 'Light Passenger' vehicles, and provides historic data for each category. These categories include:

- Heavy Passenger Vehicles: (i) Buses and (ii) Mini-buses
- Light Passenger Vehicles: (i) Daladalas and (ii) Cars

Information for these categories is further supplemented by historic data collected from other Government agencies such as the Tanzania Revenue Authority (TRA).

Further, the World Bank serves as a reliable source of data for important socio-economic indicators of Tanzania, including Gross Domestic Product (GDP) per Capita, Population, Inflation, etc. Thus, given the availability of reliable data and keeping in view the constraints with Trip Generation Model, Travel Demand Elasticity has been used for demand assessment of this project. This has been supplemented with current traffic profile and primary interactions to assess the future demand.

The overall approach for demand potential assessment is presented in the figure below:

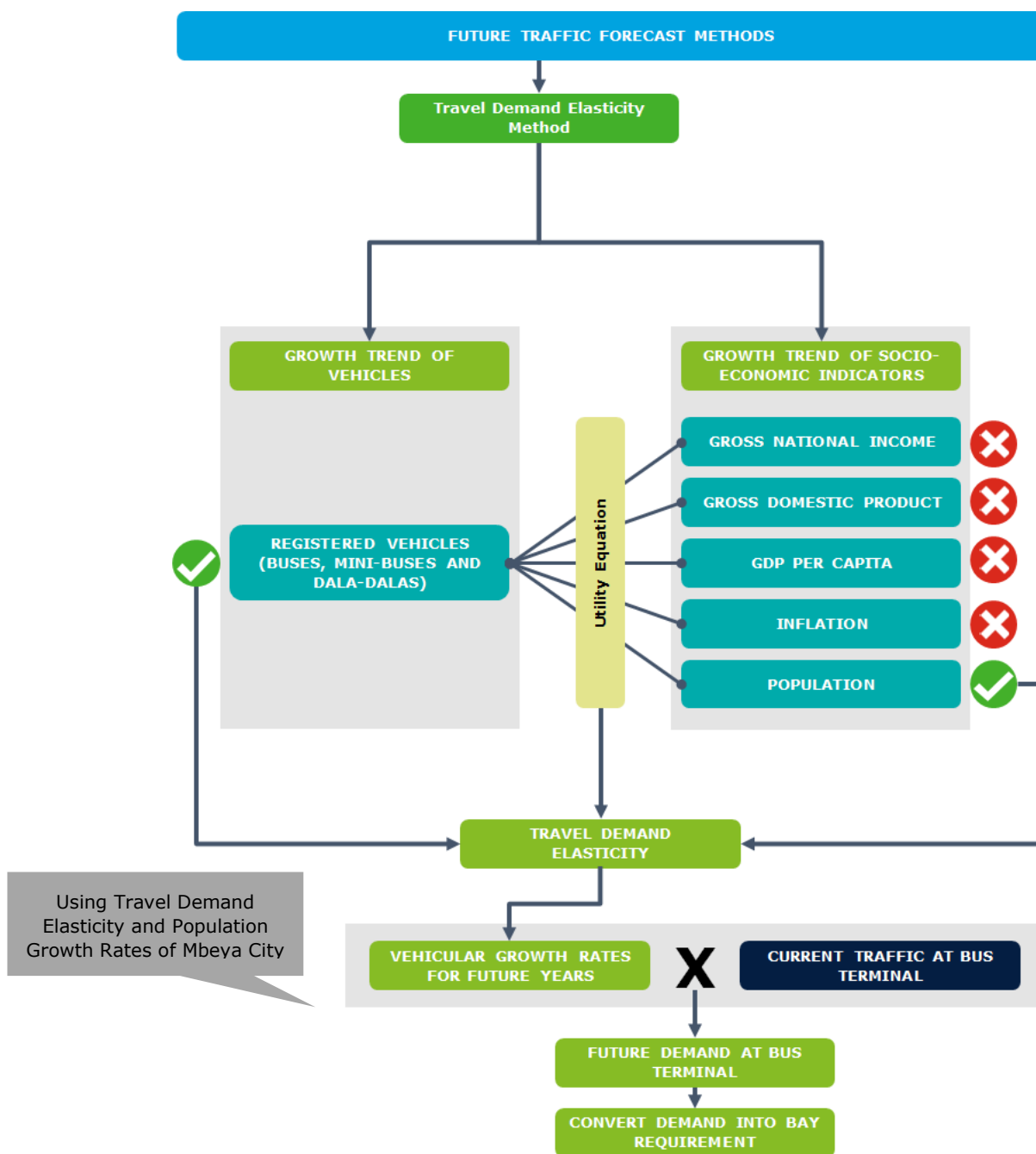


Figure 15 Demand estimation methodology

10.2.2 Estimation of demand potential of Bus Terminals using Travel Demand Elasticities

In order to project the future growth trend of vehicles, it is important to shortlist the right mix of socio-economic growth indicators.

In this case, the socio-economic indicators considered for the Trend Based Regression analysis include GDP, GDP per Capita, Inflation and Population of Tanzania (country level data).

In order to ascertain the relationship between heavy/light passenger vehicles and socio-economic growth indicators, the log-log regression model has been used. This model assesses the travel demand elasticity of heavy/light passenger vehicles with respect to the indicators.

$$\ln Y = \ln \alpha + \beta_1 \ln X_1 \quad (---\text{Utility Equation})$$

In the above equation:

\ln – Natural Logarithm

Y – is the dependent variable—Heavy Passenger Vehicles or Light Passenger Vehicles (*available historic data at country level*)

α – is the intercept term

X_1 – is the Independent Variable – Population (data at country level)

β_1 – is the slope coefficient of Population, *measuring the elasticity of heavy/light vehicles with respect to Population*

This analysis estimates the travel demand elasticity of heavy passenger vehicles to population as 3.43 and for light passenger vehicles as 4.88. These values suggest that if population increases by 1%, on average, Heavy Passenger Vehicles will increase by 3.43% and Light Passenger Vehicles increase by 4.88%. Thus, Heavy/Light Passenger Vehicles are very responsive to changes in population.

Using these travel demand elasticity values and plugging in values for Mbeya City's future projected population, returns growth rates of vehicles for those years respectively. Demand elasticities have been considered as transferrable to all the years of analysis assuming that there shall not be sudden shifts or changes in the socio-economic indicators of Tanzania; thus keeping the responsiveness of vehicle growth to these indicators approximately the same.

Mbeya City's population grew at 3.79% as of 2012²⁷. It has also been observed that population of Mbeya City has reduced from a CAGR of 4.07% between 1988 and 2002 to a CAGR of 3.79% in the last census undertaken in 2012, and is further expected to soften.

Table 45: Mbeya City population and its growth rate

Years → Parameters ↓	1988	2002	2012
Population	1,51,881	2,65,586	3,85,279
Growth Rate (CAGR)	--	4.07%	3.79%
Source: National Bureau of Statistics, Tanzania			

To capture this trend for future projections, the growth rate for Mbeya City's population has been reduced intermittently between the time period 2017 to 2045.

Based on the above, the estimated growth rates for the proposed bus terminal have been estimated. It has been assumed that for the period 2017-2020, the short term growth rates will be based on the recent traffic trends in the region. Since, the vehicles expected to use the proposed bus terminal currently originate or are destined to the main bus terminal, the traffic data of the existing Main Bus Terminal in Mbeya City can be considered as representative growth rate for demand estimation for the Uyole bus terminal. The historic growth rates based on last three year traffic of Inter-City Buses/Coaches and Coasters/Mini-buses at the existing bus terminal in Sisimba Ward is 19% (between 2014-15 and 2016-17) and for daladalas is 21%²⁸.

In the medium and long term, it has been considered that the demand growth rates will converge to those calculated through demand elasticities.

²⁷ Source: Calculated based on 2012 Population and Housing Census, National Bureau of Statistics, Ministry of Finance, Published in March 2013 and Tanzania Census 2002, Analytical Report, Volume X, National Bureau of Statistics, Ministry of Planning, Economy and Empowerment, Published in August 2006

²⁸ Source: Mbeya City Council

Table 46: Estimated future growth rates of vehicles for Mbeya City

Years	Heavy Passenger Vehicles (Buses/Mini-buses)	Light Passenger Vehicles (Daladalas/Cars/Taxis)	Remarks
2017-20	19%	21%	Short term growth rate in alignment with the existing trend; gradually reducing to growth rates based on demand elasticities by 2020
2030	11.15%	15.86%	Based on the demand elasticities
2040	9.43%	13.42%	
2045	9.26%	13.18%	

The above rates have been applied to the 2016-17 traffic data of the existing bus terminal to arrive at future traffic projections for the project in Mbeya City.

Table 47: Projected number of daily vehicles for the bus terminal

Years	Buses	Mini-buses	Daladalas	Cars
2020 (E)	20	35	22	35
2030 (E)	57	100	94	158
2040 (E)	139	244	330	556
2045 (E)	216	381	612	1032

These values have then been used to calculate the bay requirements for the bus terminal.

10.2.3 Capacity estimation – calculation of bay requirements at bus terminal

Based on the future traffic estimates for the bus terminal, the requirement of bays for buses, mini-buses, daladalas, and cars have been calculated as follows.

10.2.3.1 Bays for buses

Based on the discussions with the users and bus operators during the site visit, following travel characteristics were observed:

- The travel time of most inter-city buses is in excess of 6 to 8 hours, allowing them one trip per day.
- Peak period for departure from Mbeya is up to 4 hours during the morning period and the arrivals are spaced out through the day, depending on the travel time.
- Buses depart from the terminal in the first half of the next day after spending the night at the terminal or a nearby parking lot.
- At Mbeya, at present, the dwell time for buses is up to 2 hours. It may be worth noting that this may be attributed to relatively lower inter-city bus traffic as compared to other bus terminals in operation in Moshi and Mwanza having dwell times as low as 30 to 60 minutes.

Based on the above, it is observed that since it takes more time for boarding as compared to de-boarding, the morning peak hour is the deciding factor for number of bays required for the terminal. The number of bays required to facilitate boarding in the morning peak hour becomes the required bus bays for that terminal. The bay utilization is calculated by dividing the number of hours of departure by the expected dwell time of each bus. The number of required bays for buses is then obtained by dividing the projected bus traffic for a particular year by the bay utilization value.

Further, it is expected that over the years certain parameters such as dwell time and hours of operations will improve as the level of operational efficiency increases. Better infrastructure, upgradation of services, and trained staff will lead to better management of the terminal.

Accordingly, the consolidated assumption values of all the parameters have been presented in the table below:

Table 48: Assumption values for buses and resultant number of bays

	2020	2030	2040	2045
Hours of operation (hrs)	14			
Daily Frequency <i>Based on interactions with the users and operators, the number of trips per bus per day is taken as one</i>	One			
Dwell Time (hrs) <i>It has been considered that the dwell time for buses at the terminal will improve to 30 min from the existing 2 hrs over the forecast years.</i>	1 (60 min)	0.75 (45 min)	0.5 (30 min)	0.5 (30 min)
Peak period (hrs) <i>Peak period implies the hours of departure of the buses during the morning</i>	4	6	6	6
Bay Utilization <i>The number of times a bay can accommodate a bus within the hours of operation in a working day</i>	4	8	12	12
Result: Number of Bays <i>Calculated by dividing the projected bus traffic by the Bay Utilization value</i>	5	7	12	19

10.2.3.2 Bays for mini-buses

Based on the discussions with the users and stakeholders during the site visit, following travel characteristics were observed for mini-buses:

- Mini-buses generally provide intra-city and/or short range inter-city services (inter-district) with average journey time between 2 to 4 hours.
- These vehicles provide multiple services in a day
- The average dwell time for mini-buses ranges between 15 to 60 minutes depending on type of service and route.

The number of bays required at a terminal is a function of cycle time (journey time of one trip), dwell time (halt time at the terminal between two trips) and peak hour utilization. The total bays required can be estimated by formula: $((Dwell\ Time * Peak\ hour\ utilization) * Projected\ Daily\ Traffic)$. With better infrastructure, faster turnaround of buses, and higher passenger numbers, the dwell time of mini-buses peak hour utilization will also improve. The consolidated assumption values of all the parameters have been presented in the table below:

Table 49: Assumption values for mini-buses and resultant number of bays

	2020	2030	2040	2045
Hours of operation	14			
Peak hour utilization²⁹ % <i>daily vehicles</i> <i>expected during peak</i> <i>hours</i>	20%	10%	10%	10%
Dwell Time (hrs)³⁰ <i>Time between two trips</i>	0.75 (45 min)	0.67 (40 min)	0.5 (30 min)	0.5 (30 min)
Result: Number of Bays	5	6	12	19

10.2.3.3 Daladalas

Based on the discussions with the users and stakeholders during the site visit, following travel characteristics were observed for daladalas:

- Daladalas generally provide intra-city services with average journey time between 2 to 4 hours

The average dwell time for daladala ranges up to 15 minutes. As earlier noted, the traffic profile and the number of bays of at Uyole bus terminal is contingent on Nane-Nane terminal as well as proposed re-development of main bus terminal. At present the daladalas primarily use the main bus terminal and Nane-Nane terminal as the terminating hubs. Also, as proposed concept of the main bus terminal, due to capacity constraint and with an aim of decongesting the City Center, the focus shall be on encouraging decentralization of routes. The daladalas will be encouraged to use the existing Nane-Nane facility as the hub.

Given the above, it is expected that daladalas will continue to use the Uyole bus terminal as a transit stop and shall require only passenger drop-off and pickup area. However, a conservative assumption of 25% of the estimated traffic has been considered to be requiring designated daladala bays.

The number of bays required at a terminal is a function of projected vehicle fleet size which will use the facility as originating or termination, cycle time (journey time of one trip) and dwell time (halt time at the terminal between two trips). The total bays required will be given by this formula: $((Dwell\ Time * Peak\ hour\ utilization) * Projected\ Traffic)$. With better infrastructure, faster turnaround of buses, and higher passenger numbers, the dwell time of daladalas will also improve.

The consolidated assumption values of all the parameters have been presented in the table below:

Table 50: Assumption values for daladalas and resultant number of bays

	2020	2030	2040	2045
Hours of operation	14			
Peak hour utilization³¹ % <i>daily vehicles</i> <i>expected during peak</i> <i>hours</i>	20%	10%	10%	10%
Dwell Time (hrs) <i>Time between two trips</i>	0.125 (7.5 min)	0.100 (6 min)	0.083 (5 min)	0.067 (4 min)
Result: Number of Bays	1	5	14	20

²⁹ Peak hour utilization for urban cities is generally between 10-20%. The policies by the municipal council/ regulator may dictate the peak hour utilization.

³⁰ For capacity estimation, all mini-buses have been considered as inter-district vehicles.

³¹ Peak hour utilization for urban cities is generally between 10-20%. The policies by the municipal council/ regulator may dictate the peak hour utilization.

10.2.3.4 Parking for cars

Based on the discussions with the users and stakeholders during the site visit, following travel characteristics were observed:

- Privately owned cars drop-off or pick-up passengers and so they typically have a dwell time of 15 to 30 minutes.
- 15-20% of the total car arrivals in a day happen during the peak hour.

Assuming an average dwell time of 15-20 minutes, one parking slot can serve 3-4 cars in an hour. Hence the total slots required during the peak hour defines the total parking demand of the terminal. With faster turnaround of buses, mini-buses and daladalas, the average dwell time for cars will decrease over time. The consolidated assumption values of all the parameters have been presented in the table below:

Table 51: Assumption values for cars and resultant number of parking bays

	2020	2030	2040	2045
Hours of operation	14			
Peak Hour Share (%)	20%			
Dwell Time	0.250	0.200	0.167	0.167
Result: Number of Parking Bays	2	6	18	34

10.3 Demand potential of retail at bus terminals

The objective of the demand assessment for retail space at the bus terminal is to arrive at the potential built up area that can be developed as retail. This demand shall be derived as follows: (i) by determining the potential demand for retail by the travelers; and (ii) by determining the potential demand for retail by the households in the immediate catchment area.

The demand for retail stores at bus terminals is largely governed by type of travelers (long/short distance), number of neighboring households, consumption spend, and propensity to spend.

This approach for demand potential of retail space at the bus terminal involves analysis of spend and household expenditure pattern of the target population. The key household spend items are assessed and segregated into consumption and other spend. The consumption spend may include key drivers of demand of retail spaces such as food and grocery, apparel, footwear, consumer durables, telecom equipment and other electronic appliances etc. This approach is extremely useful in quantifying the demand potential for retail spaces. The key limitation of this approach is that it is dependent on availability of reliable data on household budget and consumer spend.

10.3.1 Approach considered for demand assessment of the Project

In the context of Tanzania, a Household Budget survey³² was undertaken in 2010/11 and the results were published in 2012. The survey provides itemized household spend on food and non-food sub-categories for the urban areas including the study cities of Mbeya, Moshi, Arusha, and Mwanza. In addition, the World Bank's 'Global Consumption Database' also provides per capita consumption data for Tanzania.

The 2002 Tanzania Population and Housing Census has been used as a base for the sampling of the 2011/12 Household Budget Survey (HBS). The survey used a stratified multi-stage sample design. At the first stage, the primary sampling units selected are Enumeration Areas (EA). These are small operational areas defined on maps as per the 2002 census. The following table summarizes the information pertaining to the coverage of households by region for the 2002 Tanzania Census.

³² Source: Household Budget Survey Main Report, 2011/12, National Bureau of Statistics, Ministry of Finance (July 2014)

Table 52: Households '02 TZ Census Frame by Region, Rural and Urban Strata and Mainland

Region	Rural Stratum	Urban Stratum	Total
Arusha	142	120	133
Kilimanjaro (includes Moshi)	139	104	129
Mbeya	186	113	163
Mwanza	142	111	130

The first level of stratification corresponds to geographic domains defined for the survey, which are Dar es Salaam, Other urban, and Rural areas. The HBS report mentions that it was ensured that the sample was geographically representative by taking a proportional allocation in each region, district, and ward for urban as well as rural parts of the area. The units for analysis for the 2011/12 HBS were the individual households and the people in these households. The 2012 HBS proposed surveying 3,120 households each in Dar es Salaam and Other Urban Areas and 4,160 households in Rural Areas.

Further, in case of the study cities, it has been observed that the organized retail is in nascent stage of development and there is a strong reliance on free standing retail shops as well as informal markets for convenience needs. Also, based on our primary interactions, it was observed that the preferences stated by the users were heavily influenced by the existing retail setup and that preference of organized retail may be considered as a latent need.

Given the availability of reliable data on consumption spend, the Consumption Spend Assessment approach has been preferred over the others for demand assessment of retail at the bus terminal.

The overall approach for demand potential assessment is presented in the figure below:

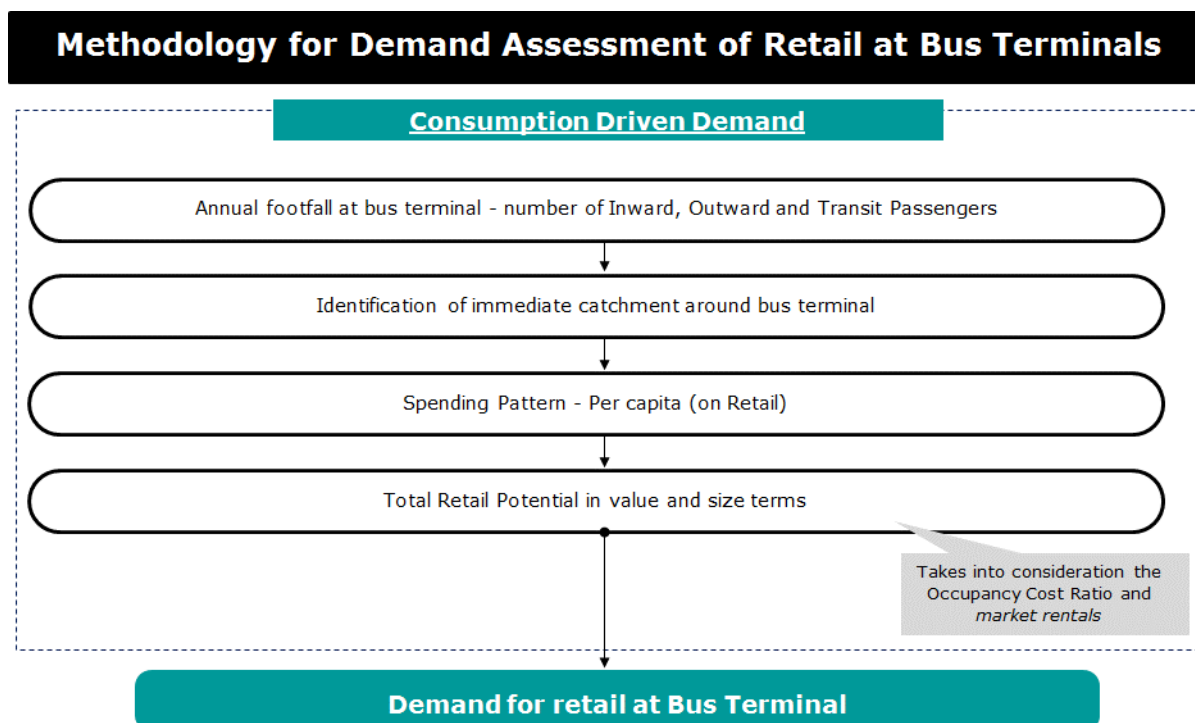


Figure 16 Methodology for Demand Assessment of Retail at Bus Terminals

10.3.2 Assessment of demand for retail at bus terminal

Demand for retail by travelers is directly related to the number of travelers accessing the bus terminal and their propensity to spend.

10.3.2.1 Assessment of footfall at terminal and target catchment

Using the projected number of vehicles, their capacity, and their frequency of accessing the bus terminal each day, the number of travelers per day have been estimated.

Travelers have been classified into three types: (i) Outward Passengers: long distance/inter-city travelers departing the bus terminal; (ii) Inward Passengers: long distance/inter-city travelers arriving at the bus terminal; and (iii) Transit Passengers: short distance/intra-city travelers. Outward and Inward Passengers use buses/mini-buses for their travel, whereas Transit Passengers use daladalas.

Following table summarizes the average capacity of vehicles in the context of Mbeya:

Type of Vehicle that shall access the Bus Terminal	Bus	Mini-Bus	Daladala	Car
Average capacity of vehicles in terms of number of passengers	60	30	12	3

Following are the estimated number of passengers accessing the proposed bus terminal per day in the year 2020 (future perspective has been considered because it is assumed that it will take 2-3 years for the bus terminal to be expanded and become operational).

Type of Passengers	Outward Passengers	Inward Passengers	Transit Passengers
Average number of passengers per day	1,880	1,880	1,948

Since vehicles commonly do not operate at full capacity, it is assumed that buses and mini-buses/daladalas operate at 80% and 90% of their respective capacities.

In addition, one driver per car has been added to arrive at the terminal and accounted for in the estimation of per day footfall.

Given the above, the total footfall at the bus terminal has been calculated:

Total footfall per day at the proposed bus terminal	
Total footfall at the proposed bus terminal over a year (365 days)	2,084,147 persons

Of this footfall, not everyone will engage in retail spend. Hence, it is assumed that about 50% of the total footfall will shop at bus terminal or use other related facilities.

Aside from travelers, the proposed retail set-up is also expected to cater to some of the households surrounding the terminal. For the purpose of demand assessment, it is considered that 5% of the population of Uyole Ward is the target catchment and the demand will be primarily driven by population segments with medium and low purchasing power.

10.3.2.2 Propensity to spend

As per the World Bank Global Consumption Database, the Per Capita Retail Consumption Spend per month by various income categories (lowest, lower, middle, and higher) adjusted for escalation and increased propensity to spend is presented below:

	Lowest	Low	Middle	High
Per capita consumption spend (2020 E)	TZS 69,217	TZS 1,68,698	TZS 3,19,277	TZS 13,13,126

In the context of Tanzania, the 2012 Tanzania Mainland Basic Demographic and Socio-Economic Profile provides an analysis of demographic profile of the country as well as key indicators of economic profile such as economic activity, housing condition, household assets and amenities etc. It is pertinent to note that there is no segregation based on the household income or purchasing power.

With this background, we have considered population segregation of the urban population based on daily spend from the World Bank Consumption database³³. As per the database, spend based population segregation is as below:

	Lowest	Low	Middle	High
Spend per day	below \$2.97 per capita a day	between \$2.97 and \$8.44 per capita a day	between \$8.44 and \$23.03 per capita a day	above \$23.03 per capita a day
Percent of urban population	84.85%	14.16%	0.97%	0.03%

Using the data for Lowest, Low and Middle categories, the Per Capita spend on retail (per day) has been estimated at TZS 2,856.

Based on the interactions with users of the main bus terminal, it has been considered that the average spend of a traveler is ~TZS 1,100 and that one in two travelers are willing to spend at the terminal facility.

10.3.2.3 Estimation of retail demand potential

The aggregate consumption spend of the target persons translates into retail sale potential.

Further, empirical studies suggest that there is a strong relationship between retail sales and rent for retail spaces. Such a relationship is depicted by 'Occupancy Cost ratio'³⁴.

Studies also suggest variation in the Occupancy Cost w.r.t. nature of business, type of market, nature of tenants, target population etc.

The Occupancy Cost Ratio generally ranges from 1% to 15%. Based on our discussion with retailers, it was observed that in the context of Mbeya, considering the nature of business at the bus terminal is primarily food oriented and passenger services, a lower Occupancy Cost Ratio of ~2% has been considered for demand potential estimate.

For estimating the retail demand potential, the other key estimate required is the indicative market rentals. The rentals also vary with respect to the location, neighborhood, retail saturation as well as type of retail concept.

Based on our discussion with retailers and dalalis, the monthly rentals vary from 12,000 TZS per m² to 30,000 TZS per m² for established markets.

Considering that the retail set-up shall be a secondary function of the bus terminal and the nature of development is that of "frames" or stripped down space, monthly rental of 10,000 TZS per m² has been considered for demand estimation.

10.3.2.4 Demand potential for retail

Based on the assumptions outlined in the earlier sections, the demand potential of retail has been estimated as below.

The first step is estimating the Gross Sales, using the formula for Occupancy Cost Ratio:

$$\text{Occupancy Cost Ratio} = \text{Gross Occupancy Cost} \div \text{Gross Sales}$$

³³ Source: World Bank Global Consumption Database – Tanzania, Accessed in October 2017

³⁴ Occupancy cost ratio is the ratio of gross occupancy cost for a retail center to gross sales.

In the above equation:

Occupancy Cost Ratio: is assumed as 2%

Gross Occupancy Cost: is represented by the monthly rent per m². This has been assumed at TZS 10,000 per m² per month

Gross Sales: are calculated using the above equation—by dividing Gross Occupancy Cost by Occupancy Cost Ratio. Using the above values, Gross Sales have been estimated at TZS 500,000 per m² per month.

The next step is estimating the revenue per month by multiplying the station footfall per month, along with estimated number of people from target catchment, with the monthly per capita spend. Given the assumption mentioned in the previous sections, the revenue per month is TZS 97,605,032.

The last step is estimating the gross lettable area—the demand for retail area at the bus terminal—by dividing revenue per month by the Gross Sales figure:

$$\text{Demand for retail in the form of gross lettable area in m}^2 = \frac{\text{Revenue in TZS per month}}{\text{Gross Sales in TZS per m}^2 \text{ per month}}$$

Thus, there is a demand of ~195 m² of gross lettable area for retail area as part of the project concept. This demand is for retail consumption i.e. shops, stalls, frames, restaurants, etc. and excludes circulation, recreational as well as administrative areas.

10.3.3 Inference for the project conceptual configuration

Based on the above market demand assessment, feedback from the interactions with the stakeholder and competition assessment, there is a strong preference for modernized transport facilities. Accordingly, the product may comprise the following:

- **Bays for different types of vehicles**

This shall be the main component of the bus terminal. Bays shall be provided for buses and mini-buses and daladalas and temporary parking spots shall be provided for cars/taxis.

Along with the bays, there shall also be space for circulation of vehicles and for streamlined entry and exit from the terminal. The demand for bays is as below:

Year	Inter-city bus bays	Inter-district bus bays	Daladalas
2020	5	5	1
2030	7	6	5
2040	12	12	14
2045	19	19	20

It may be noted that given an intent to de-congest the City Center, space constraint of the site and the fact that a daladala terminal has been developed at the Nane-Nane terminal, specific bays have not been provided for daladalas. It has been assumed that most of the daladalas will not have a lay-over at the terminal and shall pick up the passengers from designated lane.

- **Retail area**

It has been substantiated by the primary as well as secondary research that retail stores/shops/stalls/frames shall be developed at the proposed bus terminal. Going along with stakeholder expectations, the space shall be exclusively dedicated to retail set-ups.

Based on the demand estimation, it can be seen that the demand for retail area is not very significant. It may be noted from the technical configuration suggest development of retail area in excess of the demand. The sizing of the retail area will be a finalized as part of the Pre-Feasibility study, taking into account the cost of development and revenue potential.

- **Area for ticketing, administration and other amenities**

The primary interactions reveal that there is need for improved ticket counters, better passenger waiting areas as well as increased vigilance at the terminal. Thus, these facilities shall be specially demarked at the terminal.

11 Annexure C: Site suitability analysis

The suitability analysis of the site with consideration of the above-mentioned six criteria is done in the following table.

Table 53: Site Suitability Analysis



Sl. No.	Criteria	Rating	Criteria for Rating	Remarks
1. Legal Suitability				
1.a	Title and ownership	Medium	Clear ownership and possession of Title Deed = High	Plot is owned by the LGA, although the required title deed is yet to be acquired.
			Clear ownership and no possession of Title Deed = Medium	
			No ownership and no possession of Title Deed = Low	
1.b	Legal claims	Low	No legal claims = High	As per the legal review, the school, which currently occupies the project site, might need to be compensated with alternative land or in some other form. The Headmistress of the school was non-committal on this issue. The LGA is supportive of the change of use given there is due stakeholder consultation and engagement.
			Potential legal claims = Medium	
			Existing legal claims = Low	
Overall rating		Low		
2. Planning Considerations				
2.a	Existing Zoning	Low	Zoned for intended use = High	The surrounding area has a mix of agriculture, various business activities, a school, and residences. Existing zoning is not well defined which should be done by the LGA.
			Zoned for non-residential use = Medium	
			Zoned agricultural/residential = Low	
2.b	Adjacent Land Use	Low	Adjacent uses office/mixed use = High	The area is surrounded by agricultural fields and residences
			Adjacent uses non-residential = Medium	
			Adjacent uses residential/agricultural = Low	
2.c	Consistency with Comprehensive Plan	Medium	Specific use consistent with master plan = High	The project is outside the Mbeya Central Area Redevelopment Plan. The LGA can
			General use consistent with master plan = Medium	
			Use not consistent with master plan = Low	

Sl. No.	Criteria	Rating	Criteria for Rating	Remarks
				change land use of the area to suit the project.
	Overall rating	Low		
3. Site Characteristics				
3.a	Topography	High	Relatively flat site < 5% = High Moderate slope constraints 5%-15% = Medium Significant slope constraints > 15% = Low	The site has relatively flat.
3.b	Drainage	High	Single drainage shed = High Several drainage sheds = Medium Numerous drainage sheds = Low	The site has single drainage shed.
3.c	Soils/ Substructure	High	Minimum grading/excavation problems anticipated = High Moderate grading/excavation problems anticipated = Medium Significant grading/excavation problems anticipated = Low	Minimum grading or excavation are expected.
3.d	Vegetation	Medium	Significant native vegetation for landscape buffer/character = Low Moderate native vegetation for landscape buffer/character = Medium No native vegetation for landscape buffer/character = High	The site has moderate natural vegetation cover.
3.e	Structures	High	No existing on-site structures = High Existing structures of marginal value/concern = Medium Existing structures of significant value/concern = Low	There are existing structures of significant concern.
	Overall rating	High		
4. Site Accessibility				
4.a	Existing Road	Low	Two or more existing roads available to access major regional /trunk road in close proximity = High Two or more existing roads available to access/egress site = Medium One existing road available to access/egress site = Low	The site is on the side of the main highway.
4.b	Site Access	Low	No encumbrances to two points of access/egress = High Limited encumbrances to two points of access/egress = Medium Both access/egress points significantly encumbered = Low	The station can be accessed by one side only.
4.c	Proposed/Existing Roads	Low	Multiple Master-Planned or existing roads adjacent to development area and regional /trunk road in close proximity = High Two Master-Planned roads or existing roads adjacent to Development Area = Medium	The site is on the side of the main highway.

Sl. No.	Criteria	Rating	Criteria for Rating	Remarks
			One Master-Planned road or existing road adjacent to Development Area = Low	
4.d	Mass Transit	Medium	Rail and Bus Available = High Bus Available = Medium No Mass Transit Available = Low	Buses travel through the area.
4.e	Flight Path	High	No flight Path nearby = High Flight Path Near Site but High Altitude = Medium Flight Path Nearby and Low Altitude = Low	There is no flight path near the Bus Terminal.
	Overall rating	Low		
5. Access to Utilities				
5.a	Power	Medium	Available capacity on-site or in immediate proximity = High	Necessary utility services including power, water, sewerage, and telecommunications are in general vicinity of the site.
5.b	Water Supply		Available in general vicinity = Medium	
5.c	Sanitary Sewer		Capacity not available in general vicinity = Low	
5.d	Communications			
	Overall rating	Medium		
6. Access to Supporting Infrastructure and Facilities				
6.a	Health	Medium	Available capacity on-site or in immediate proximity = High	Social and business infrastructure are in the vicinity.
6.b	Education		Available in general vicinity = Medium	
6.c	Banks		Capacity not available in general vicinity = Low	
6.d	Others			
	Overall rating	Medium		
7. Environmental Considerations				
7.a	Wetlands	High	Minimum wetlands constraints (- < 1 acre of care area) = High Moderate wetlands constraints (-1-10 acres of care area) = Medium Significant wetlands constraints (- > 10 acres of care area) = Low	The site has no wetland constraints.
7.b	Flood Plain	High	No Floodplain = High Floodplain but no impact on development area = Medium Floodplain within development area = Low	There is no flood plain near the site.
	Overall rating	Medium		

12 Annexure D: Conceptual Designs

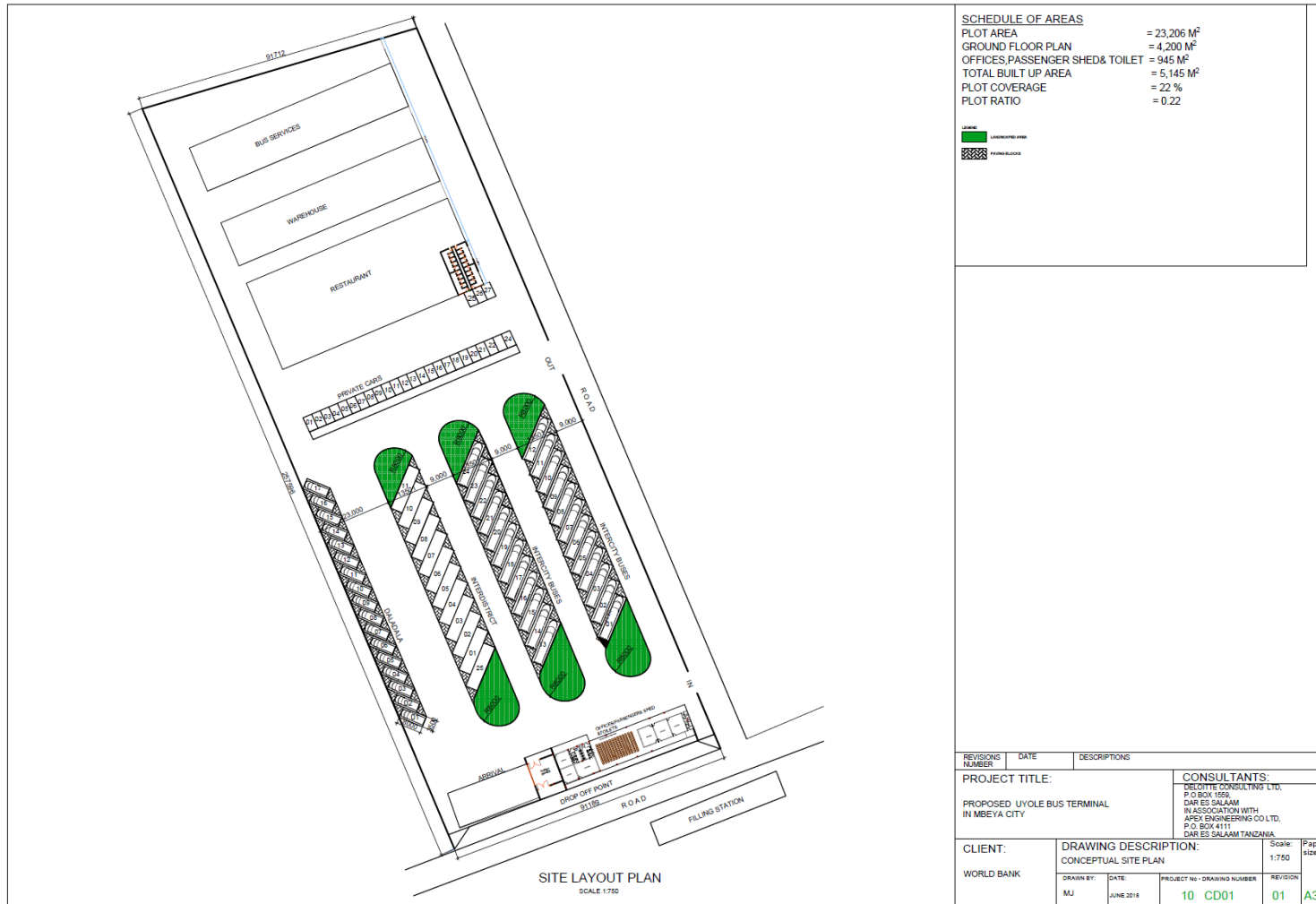


Figure 17 Site Plan of Proposed Uyole Bus Terminal in Mbeya City

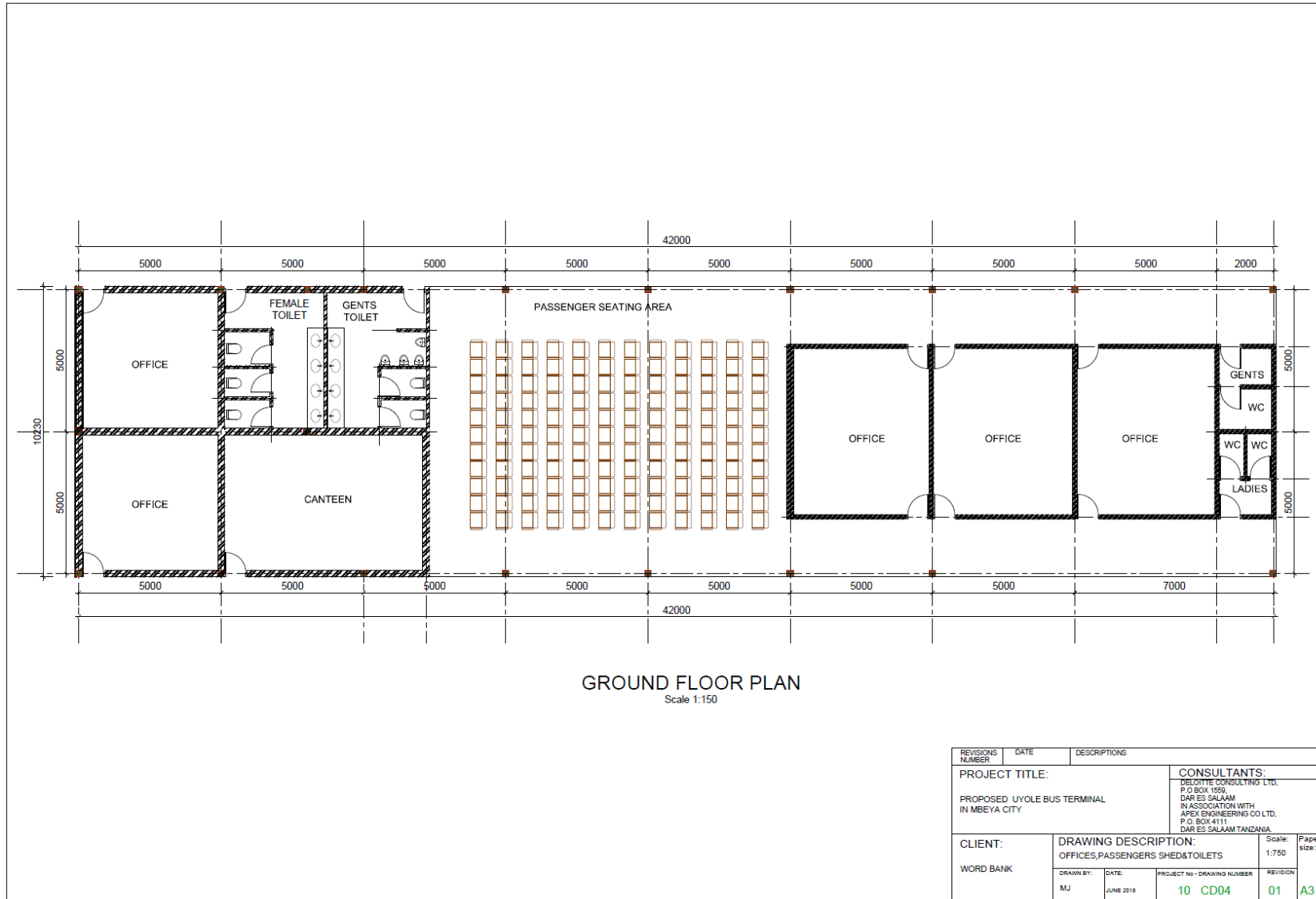


Figure 18 Ground Plan of Proposed Uyole Bus Terminal

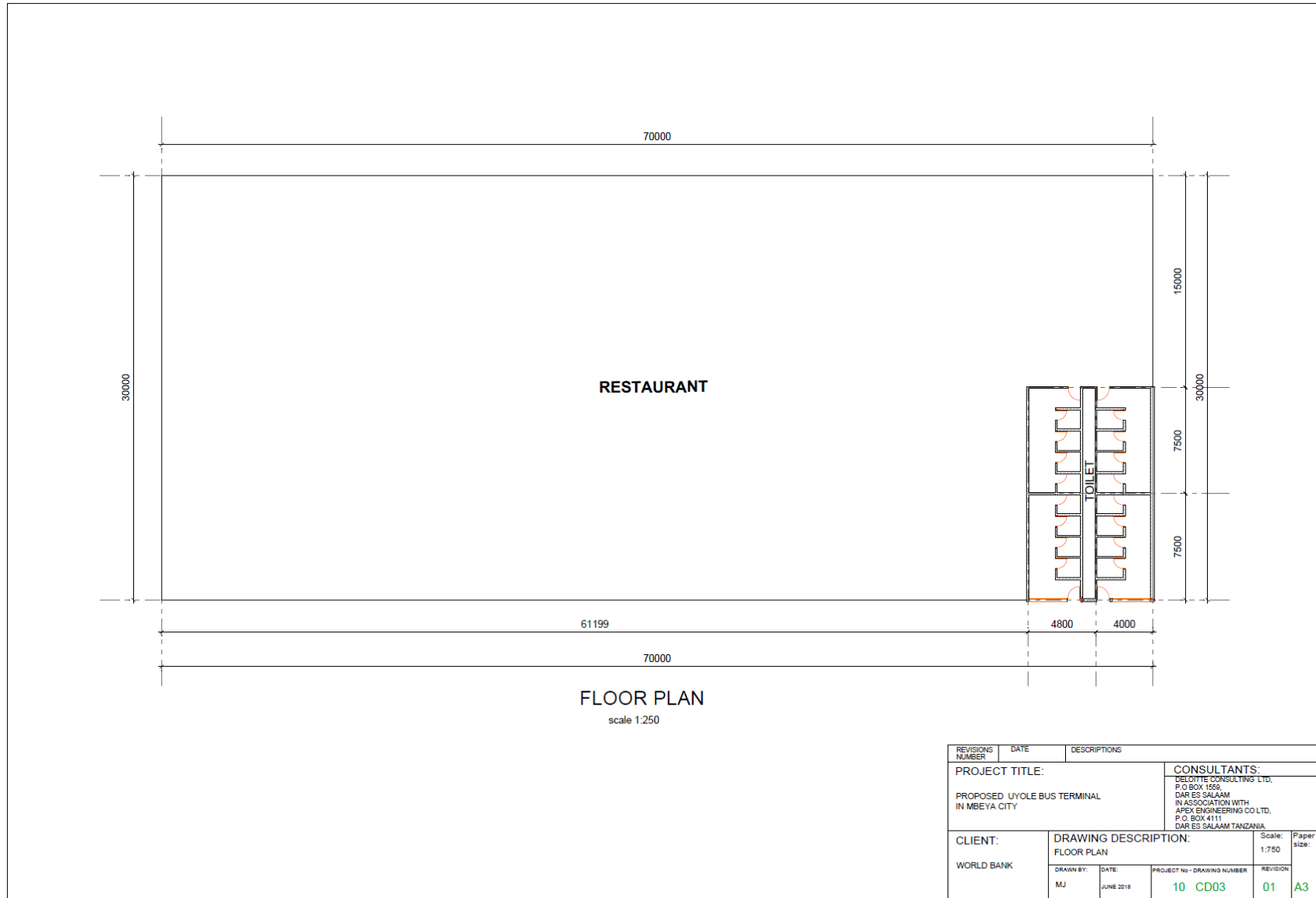


Figure 19 Restaurant Plan of Proposed Uyole Bus Terminal in Mbeya City

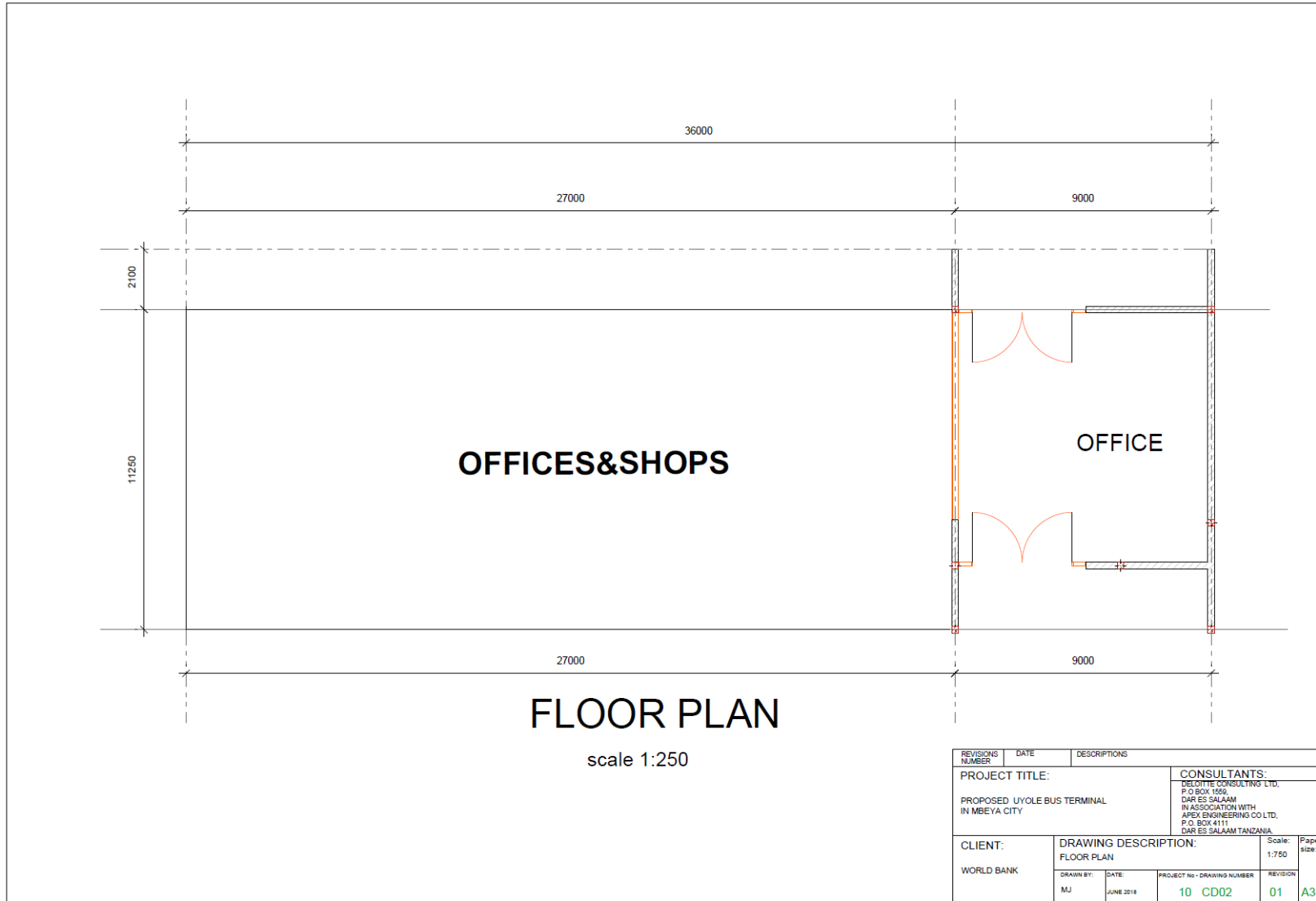


Figure 20 Office & Shops Plan of Proposed Uyole Bus Terminal in Mbeya City

13 Annexure E: Methodology for assessing basic construction costs

13.1 CAPEX Cost Methodology

The methodology used to obtain the cost is comparison of construction cost of completed project of similar nature and magnitude in the recent past five years.

The rates have however been adjusted for price fluctuation of materials and labour and different government policies and regulations.

A small adjustment of around 5% was used to upscale the cost for upcountry project though not in all elements of the works.

In conversion of currencies, we have adopted 1 USD equals to TZS 2,235.00 and 1 Euro Equals to TZS 2,787.80.

The estimates do not include cost escalation (both pre and post contract), site acquisition and associated legal fees, building permit fees, finance charges, import duties above preferential 5% of Tanzania Investment Center and disbursement cost for consultants

13.2 Base Data

The base of our data is projects executed to completion in the last past five years of similar nature. Also some rates were related to rates found from the Architects and Quantity Surveyors Registration Board, (AQRB) and data from cost indices of the National Construction Council of Tanzania (NCC).

13.3 Benchmarking Data

As said above, a small percentage (5%) was used to adjust upcountry projects in the upward side although not all elements of the works were up scaled.

13.4 Assumptions/Basis

It is assumed that the projects have slightly similar terrain and therefore excavations are not much different from one site to another. It also assumed that all project are for average consumers not for the high-end users.

Further, it is assumed that the cost of the projects do not include the following i) Cost escalation (both pre and post-contract), ii) Site acquisition costs and associated legal fees, iii) Building Permit fees, iv) Finance charges, v) Import Duties above preferential 5% TIC rate and vi) Disbursement cost for consultants.

13.5 Unit Rates

The unit rates used are inclusive of materials cost, labour cost, plant, equipment and small tools cost, profit and overheads and all incidentals for each particular element of works.

13.6 Allowances

a) **Contingency:** Contingencies have been considered as 10% of Civil works cost.

- b) **Professional fees** we allowed 12.5% of Civil works cost. It includes fees for Architect, Quantity Surveyor and Engineers.

14 Annexure F: Capital Asset Pricing Model (CAPM)

14.1 Estimation of Cost of Equity

CAPM is a theoretical model used for estimating the cost of equity. The model has been debated widely for its applicability to emerging markets and many experts have cautioned against the use of CAPM in such markets. As requested by World Bank, it has been used for broadly estimating the Cost of Equity. It may be noted, as directed by World Bank, various assumptions and proxies have been taken for estimation of expected return owing to limited data available in Tanzania context.

The CAPM approach is defined by

$$Re = Rf + \beta \text{ (Market Risk premium)}$$

Where

Re = Expected return on Equity

Rf = Risk free rate

β = Asset Beta

14.2 Assumptions

14.2.1 Risk Free Rate

The project life can be considered as either the concession period (15 Years) or the economic life of the asset. For the purpose of this analysis, keeping in view the lending term, 10-15 year rates have been considered.

The central government has been borrowing from the market through issue of treasury bonds. The recent 10 and 15 Treasury bond issued was issued at a coupon rate ranging from ~11.44-13.50%. Further, based on our discussions with the key development and commercial banks, the LGA may also raise debt at commercial terms with interest rates ranging from 14-16%.

Accordingly, T bond of comparable maturity may be considered as the Risk free rate. Following may be considered

Maturity	Average Yield (2018)
10 years	11.44%
15 Years	13.50%

Source: Bank of Tanzania, United Republic of Tanzania

While we expect the rates to range between the two yield rates mentioned, we have taken 15 year yield rate as the risk free rate for the purpose of this discussion.

14.2.2 Beta (β)

Estimation of Beta requires availability of historical return data of the asset or industry. In case of Tanzania, where such data is not available, suitable proxy may be assumed. The results may vary significantly depending on the proxy assumed. We have considered Beta for retail (grocery and food) industry segment as the proxy for this project. For the purpose of discussion, we have considered two cases; namely

- i. Unlevered beta for Global market; and
- ii. Unlevered beta for Emerging markets.

These betas may further be levered for being considered for the project.

Proxy basis*	$\beta_L = \beta_U * (1 + (1-T)D/E)$			
Global – Real Estate (General/Diversified)	1.09	75%	1.04	70%
Global – Retail (General)	1.18	45%	1.31	70%
Emerging Markets – Real Estate (General/Diversified)	1.18	63%	1.19	70%
Emerging Markets – Retail (General)	1.36	42%	1.55	70%

14.2.3 Market Risk Premium

Market risk premium is generally estimated on the basis of historical returns with respect to the risk free rate. However, due to limited quality data available for the Dar es Salaam Stock Exchange, a suitable estimate such as premium on the basis of Country ratings may be taken. We have assumed Market risk premium of 7.50%³⁵.

14.3 Conclusion

Basis the above assumption, following expected returns can be estimated in various cases

Proxy basis*	$R_e = R_f + \beta$ (Market Risk premium)	
	For corresponding Industry Average Debt ratio	For Project Debt ratio of 70%
Global – Real Estate (General/Diversified)	19.63%	19.25%
Global – Retail (General)	20.27%	21.24%
Emerging Markets – Real Estate (General/Diversified)	20.32%	20.40%
Emerging Markets – Retail (General)	21.68%	23.03%

It can be seen that minimum return expected is 19.25%. In the case of emerging markets, the expected return estimated is in the range of 20-23%. Thus, the cost of equity of 20% may be considered prudent.

It may be noted that the private sector values its own risks and has its own expectations for return. In a competitive bidding, private sector would factor its expectations (high or low w.r.t. government benchmark) and the same would be reflected in the financial bids. Thus, World Bank may consider ~20% as the benchmark for purpose of comparison of the PPP options.

³⁵ Source: Levered and Unlevered Betas by Industry, Aswath Damodaran, January 2018

15 Annexure G: Preliminary Social and Environmental Impact Assessment

15.1 Introduction

This chapter presents preliminary findings of an Environmental Impact Review (EIR) and Social impact Review (SIR) conducted for the project. EIR includes potentially identified environmental issues and risks and proposed environmental risk mitigation and management. In addition to this, it includes framework for an environmental impact assessment, environmental risk management, and all other relevant aspects needed for the project to be undertaken by the LGAs for compliance with IFC Performance Standards and the equator principals.

Further, the chapter documents a preliminary social impact review that includes key social risks and their mitigation and management. It should be noted that this report neither constitutes an exhaustive Environmental Impact and Social Impact Assessment as required under the Environmental Management Act (EMA), 2004 (Act No. 20 of 2004) (Made Under Sections 82(i) and 230(2)(h)) nor The Environmental Impact Assessment and Audit Regulations (EIAAR), 2005.

The preliminary environmental and social impact assessment conducted in the project sites was meant to ascertain data and information that would form the basis for informing assessment of the project's viability.

15.2 Methodology

This study used a participatory and consultative process with key stakeholders during data and information collection and site visits. The latter was meant to establish site-specific social and environmental traits that, together with other technical parameters (e.g., Financial viability; Legal, Regulatory and Institutional frameworks, and Conceptual project designs), would inform decisions on the projects' viability.

In order to identify impacts and assess their significance, the following criteria (URT, 2009) were considered:

The scales of negative and positive impacts that are likely to occur were determined using an extent of low, medium, and high. Details of the scale are presented below.

Scale for assessment of negative and positive impacts			
Scoring Parameters	(a) L+ = Low positive	(b) M+ = Medium/moderate positive	(c) H+ = High positive
	(d) L- = Low negative	(e) M- = Medium/moderate negative	(f) H- = High negative and
	(g) O = No apparent impact.		

15.3 Preliminary Environmental and Social impacts for the proposed project

The project involves development of the bus terminal in Uyole ward in Mbeya to accommodate facilities such as parking bays for buses, mini-buses and daladalas, shops, restaurants, along with other related facilities.

Presently, Uyole and nearby Nsalaga, Itezi, Iduda, Igawilo and Iganjo wards lack a bus terminal to accommodate parking and moving spaces for vehicles (such as buses, mini buses, and daladalas). Therefore, the project is expected to provide standardised space for passenger transport. The project shall also promote community engagement and civic pride, as it shall attract people of varied age groups. This shall make the City more vibrant. The project is in line with the National Development Plans; such as Sustainable Development Plan 2016-2020 and Tanzania Development Vision 2025 that place emphasis on poverty reduction and sustainability since the project is expected to create more employment opportunities for City residents and others outside the City and shall help in the improvement of these people's livelihood. The LGA through rents and other charges shall have access to revenue that shall enable in the improvement of other socio-economic services, hence helping in reducing poverty.

15.3.1 Environmental Impacts

The proposed project shall have multiple impacts of varying spatial and temporal significance as highlighted in the table below.

#	Environmental Impact	Rating criteria					Significance Rating criteria				
		Geographical coverage	Time span	Possibility for impact reversal	Cumulative effects	Residual impact	Mobilization phase	Construction phase	Immobilization phase	Operation and maintenance	
1.	Change of scenery view	Local	Short	Yes	Yes		L-	M-	M-	M+	
2.	Increased dust and air pollution	Local	Short	Yes	Yes		L-	H-	M-	L-	
3.	Increased noise	Local	Short	Yes	Yes		L-	M-	M-	L-	
4.	Pollution of water sources	Local	Short	Yes	Yes	Yes	L-	M-	O	O	
5.	Increased waste generation during construction	Local	Short	Yes	Yes	Yes	M-	H-	M-	L-	
6.	Traffic congestion	Local/Regional	Short	Yes	Yes		L-	H-	L-	O	
7.	Damage to existing structures and public services	Local	Short	Yes	No		O	M-	O	O	
8.	Slow recovery of areas impacted by construction	Local/Regional	Mid	Yes	Yes		O	O	M-	L-	
9.	Overwhelmed administrative authority	Local	Mid	Yes	Yes		L-	M-	L-	M-	
10.	Risk to workers and their safety	Local/Regional	Short	Yes	Yes		L-	H-	L-	O	
11.	Debris deposition in storm water drains and associated floods	Local	Short	Yes	Yes		O	O	O	H-	

#	Environmental Impact	Rating criteria					Significance Rating criteria			
		Geographical coverage	Time span	Possibility for impact reversal	Cumulative effects	Residual impact	Mobilization phase	Construction phase	Immobilization phase	Operation and maintenance
12.	Increased runoff and soil erosion	Local	Short	Yes	Yes		L-	M-	L-	M-
13.	Contamination of surface and ground water	Local	Mid	Yes	Yes		L-	M-	L-	M-
14.	Impact from camps/asphalt plant operation	Local	Short	Yes	Yes		L-	H-	O	L-

B: L+ = Low positive, M+ = Medium/moderate positive, H+ = High positive, L- = Low negative, M- = Medium/moderate negative, H- = High negative and O = No apparent impact

15.3.2 Social Impacts

The proposed project shall have multiple impacts of varying significance as highlighted in the table below.

#	Social Impact	Rating criteria					Significance Rating criteria			
		Geographical coverage	Time span	Possibility for impact reversal	Cumulative effects	Residual impact	Mobilization phase	Construction phase	Immobilization phase	Operation and maintenance
1.	Jobs creation and increased income/City revenue	Local/Regional	Short	Yes	Yes		L+	H+	M+	H+
2.	Conflict with Resource Owners and Affected Persons		Long	Yes	Yes		O	O	O	H+
3.	Improved local community living standards		Long	Yes	Yes		O	O	O	H+
4.	Improved accessibility		Long	Yes	Yes		O	O	O	H+
5.	Decongestion of traffic		Long	Yes	Yes		O	O	O	H+
6.	Improved storm water collection system		Long	Yes	Yes		O	O	O	H+

#	Social Impact	Rating criteria					Significance Rating criteria			
		Geographical coverage	Time span	Possibility for impact reversal	Cumulative effects	Residual impact	Mobilization phase	Construction phase	Immobilization phase	Operation and maintenance
7.	Reduction of dust dispersion		Long	Yes	Yes		O	O	O	H+
8.	Increased property and land values		Long	Yes	Yes		O	O	O	H+
9.	Child labour		Short	Yes	Yes		L-	L-	L-	L-
10.	Diseases spread		Mid	Yes	Yes		L-	L-	L-	L-

B: L+ = Low positive, M+ = Medium/moderate positive, H+ = High positive, L- = Low negative, M- = Medium/moderate negative, H- = High negative and O = No apparent impact

15.3.3 Mitigation of Environmental and Social Impacts associated with proposed project

This section provides summative mitigation measures to aforementioned impacts of the proposed project in Mbeya City. The mitigation measures reflect upon significance of the impacts.

15.3.3.1 Site Selection for development phase

Disruption of Economic and Social Activities and Services

On-going activities in the area to be redeveloped in the City shall be disrupted as the bus terminal area is in proximity to various institutional and residential areas. The disruption may render some community members to lose their livelihood options. To mitigate this impact, the LGA should consider the following:

- Relocate on site residents and existing users of facilities to areas that shall ensure continuity of their current livelihood activities. Both parties involved should consensually agree upon the relocation process and compensation packages.
- The LGA should invest in creating awareness for the community on the impact of the project to be implemented within the core area of the project.
- On behalf of the local communities, including local leadership (Ward/sub-ward chairpersons/executive officers or/and councillors, representatives of the small-scale businesses) in project decision-making processes committee. This shall ensure representation during decision making regarding the impact on affected stakeholders.

15.3.3.2 Design, construction and Operation Phases

1. Conflicts with Affected Persons

The project may result in conflicts with the stakeholders of Uyole Primary School, which currently occupy the site. While it may or may not be possible to accommodate them in the project, the LGA should consultatively develop an implementation scheme for the project.

2. Conflicts with Land Owners and Resource Users

To mitigate this impact, the LGA may

- Develop a compensation scheme
- Obtain construction materials from authorized sources
- Re-use soils excavated as sub-base material

3. Health issues from waste and pollution

The LGA in collaboration with responsible institutions e.g. NEMC, Health Departments should consider the following:

- All activities and materials used during construction and after construction shall comply with health standards.
- Emissions from machinery during construction and vehicles during operation of the facilities shall be of acceptable levels.
- Hazardous waste and non-hazardous waste shall be handled as required.
- Biodegradables should be collected and disposed on time to minimize foul odour from decomposing waste.
- The LGA and the Contractor shall ensure that existing laws and regulation regarding child labour are adhered to.
- The LGA (through its relevant departments) and the Contractor shall put up signs to educate workers about diseases such as HIV/AIDS and how they spread.

4. Storm water runoff

All storm water should be channelled through existing systems such that no flooding of existing settlement areas or creation of ponds and standing water shall happen that may turn into mosquito or any other waterborne vectors breeding sites.

5. Noise from increased vehicles at facilities

- LGAs in collaboration with responsible agencies should institute restrictions through formulating by-laws on honking and idling vehicles.
- Tanzania Bureau of Standards, in collaboration with the police traffic department, should check emission levels from vehicles in use to allow vehicles that pass the test to use the facilities. Vehicles that fail the test should not be allowed to use the facilities.
- Install sound absorbers with the facilities to control noise dissipating to neighbouring communities.

6. Other impacts and mitigation measures

Impact	Mitigation measure	Responsible agency
Increased dust and air pollution	The construction site shall be watered to minimize dust.	Contractor, NEMC, and Mbeya City Council
Increased noise	Controlled use of construction machinery or minimized use of machinery during night hours or prime time hours when residents are at rest.	Contractor, NEMC, and Mbeya City Council
Pollution of water sources	Avoid spillage of any polluting material.	Contractor, NEMC, and Mbeya City Council
Increased waste generation during construction	Removal of disposable waste on time.	Contractor, NEMC, and Mbeya City Council
Traffic congestion	Traffic police/contractor to regulate traffic.	Contractor and Mbeya City Council
Damage to existing structures and public services	All necessary care shall be taken to avoid damage to existing structure and services.	Contractor and Mbeya City Council
Overwhelmed administrative authority	Plan and execute plans to minimize detrimental effects.	Contractor and Mbeya City Council
Risk to workers and their safety	Abide by all construction laws and regulations regarding safety at work.	Contractor, Mbeya City Council, and relevant agencies
Debris deposition in storm water drains and associated floods	All necessary precautions shall be taken to avoid debris deposition to existing storm water drains.	Contractor, NEMC, Mbeya City Council, and relevant agencies
Increased runoff and soil erosion	Ensure thorough compaction.	Contractor, Mbeya City Council, and relevant agencies
Contamination of surface and ground water	Avoid spillage of any contaminants.	Contractor, NEMC, Mbeya City Council, and relevant agencies

Impact	Mitigation measure	Responsible agency
Impact from camps/asphalt plant operation	Abide by operational procedures.	Contractor, NEMC, Mbeya City Council, and relevant agencies

15.4 Summary and Conclusion

This study has provided a preliminary assessment of environmental and social issues associated with the project’s implementation in Mbeya City.

From an environmental perspective, it can be observed that these impacts include

- alteration of scenery view,
- increased dust and air pollution,
- increased noise,
- pollution of water resources,
- increased waste generation during construction,
- traffic congestion, and
- overwhelmed administrative authority.

Other environmental impacts include

- risk to workers and their safety,
- debris deposition in storm water drains and associated floods,
- increased runoff and soil erosion on construction site,
- contamination of surface and ground water from operating machinery leakages, and
- impact from camps/asphalt plant operation.

Geographically all environmental impacts identified are local except risk to workers and their safety which might have regional impact. Also, impacts such as overwhelmed administrative authority and contamination of surface and ground water are mid-term impacts, the remaining identified impacts are short-lived.

Impacts that are negative, of low-to-high and low-to-moderate significance are

- increased dust and air pollution,
- increased waste generation,
- increased traffic congestion,
- damage to existing structures,
- overwhelmed administrative authority,
- risk to workers and their safety,
- debris deposition in storm water drains and associated floods,
- contamination of surface and ground water, and
- resulting impact from operation of asphalt plant and camps operation.

From social impact assessment perspective, the project shall lead to job creation and increased income of the local community as local community members might be employed to work on different tasks in the project. Other impacts may include

- improved local community living standards,
- improved accessibility, and
- increased property and land values.

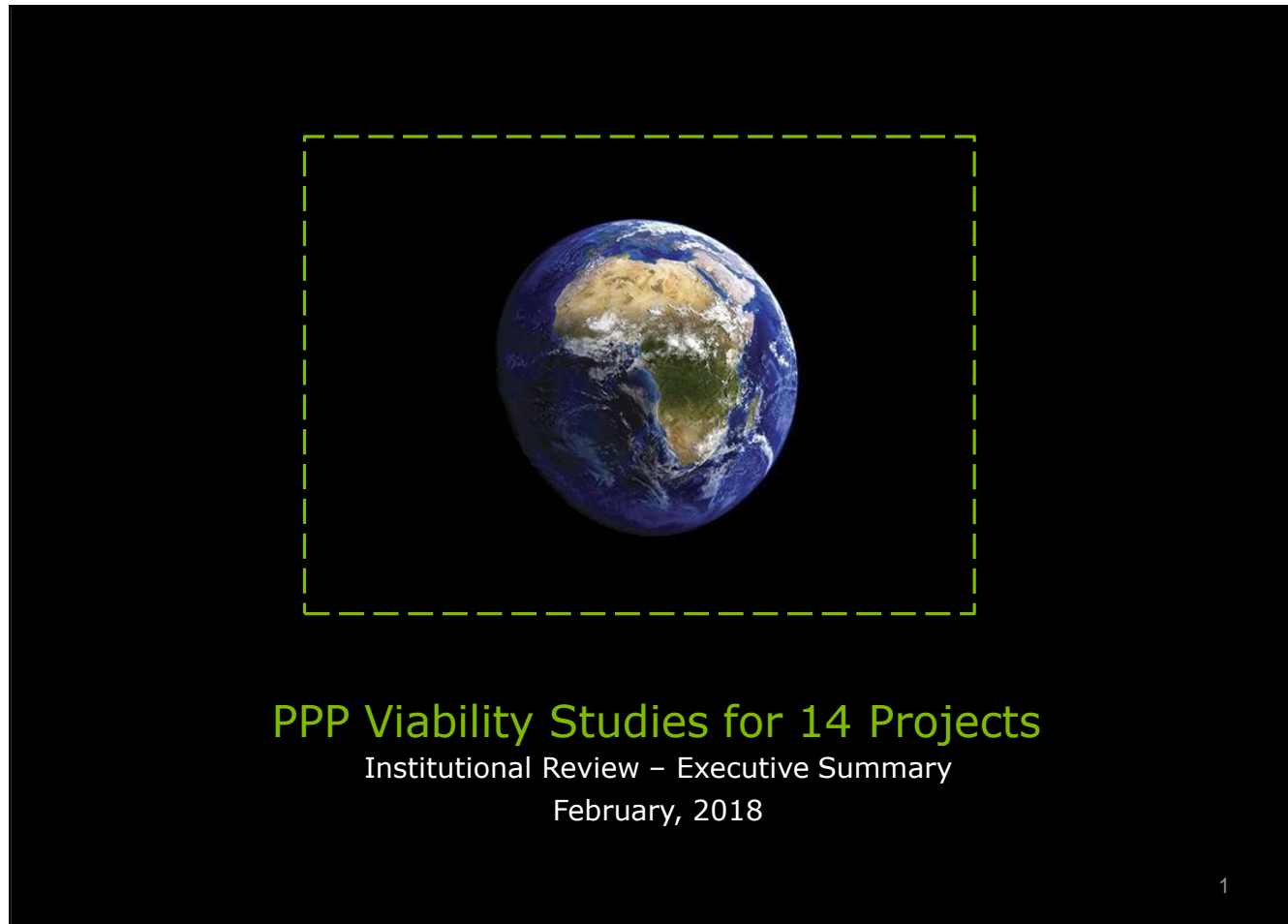
These are positive short-to-long term impacts that have high significance.

However, the project may also lead to conflicts with the affected persons including traders relocated from the site. This is critical and needs to be mitigated. Further, the mitigation plan also needs to address safeguards and mitigation measures to address prevalent social issues including child labour, HIV/AIDS etc.

The findings show that most negative impacts associated with the project’s implementation could be mitigated to maximize positive impact that the project is expected to have. It is also recommended that

once decisions over the project's viability have been made and the project design is finalized by the PPP operator/developer, a detailed Environmental and Social Impact Assessment should be conducted as required by the law.

16 Annexure H: Institutional Assessment Report (Presentation)



Local Government Authorities in Tanzania have plans to implement a number of PPP projects as a strategy for revenue generation

Deloitte has been contracted by the World Bank Group to undertake viability studies for fourteen projects in four regions of Tanzania

Current Situation

- Central government funding for Local Government Authorities (LGAs) is unreliable and decreasing, municipalities are seeking new mechanisms to generate revenue through PPP projects in order to meet public service expectations
- However, LGAs currently have limited manpower, funding and technical capabilities to independently plan, design and implement a PPP, particularly due to the associated transaction costs and technical complexity of PPP projects
- Deloitte has been contracted to undertake studies that will consider 14 PPP projects in light of the economic, legal, financial, market, socio/environmental, affordability and value for money factors. Deloitte is also responsible for building the capacity of PO-RALG and the LGA Investment Committees so they fully understand the appraisal of PPP projects

Scope of Work

Viability Studies

1. Economic and Infrastructure Assessment
2. Financial assessment and fundraising strategies
3. Legal and Regulatory Review
4. Demand Study
5. Project Configuration
6. Site and Infrastructure Evaluation
7. Project Description
8. Financial modelling and viability assessment
9. Project implementation plan and viability study report

Capacity Building

1. Institutional Review
2. Working Groups
3. Validation Workshops
4. Brainstorming
5. Technical Training

2

The institutional review is the first step in the capacity building process to help LGAs understand their current PPP capabilities

The Deloitte methodology develops capacity that directly translates in performance improvements and the achievement of sustainable results

Approach	Methodology
<ul style="list-style-type: none"> • The assessment was conducted using a participatory process that promoted engagement and ownership with LGA members. A highly collaborative and results-driven approach was used to generate consensus on the maturity levels • The scope of the institutional review assessment included: <ul style="list-style-type: none"> • PO-RALG PPP Node • LGA Investment Committees – Arusha, Moshi, Mbeya, Mwanza • Focus group discussions and one-on-one interviews using PPP capacity assessment framework and tools to measure organizational performance and capacity improvements • A tailored performance improvement plan has been developed for each LGA Investment Committee and the PPP Node based on the outcomes of the assessments with a focus on addressing identified gaps • Findings from the institutional review and the performance improvement plan have been shared with each of the key stakeholders 	<ul style="list-style-type: none"> • The Maturity Model Benchmarking Tool (MMBT) was used to measure institutional capacity against four stages of maturity and assigned a score to quantify the current state • The spectrum of maturity levels (based on the responses to specific indicators) both informs and inspires institutions to work towards leading benchmarks <ul style="list-style-type: none"> • Basic (1 – 3) – Minimal capacity • Developed (4 – 6) – Capacity is evident • Advanced (7 – 9) – Adequate capacity • Leading (10 – 12) – Good capacity • The capacity building domains (and indicators) have been tailored specifically to determine the ability of a stakeholder to manage a PPP project through implementation and operation: <ol style="list-style-type: none"> 1. Project Inception 2. Feasibility 3. Procurement 4. Development 5. Delivery 6. Exit • A performance improvement plan is developed to identify and tailor interventions that emphasize a shift in capacity to the desired state

3

The choice of areas for institutional review was informed by best practices and our experience in working with LGAs in Tanzania

The institutional review focused on six organizational capacity domains aimed at establishing management capacity of the Contracting Authorities in PPP

Domain	Areas tested in relation to PPP initiatives within Contracting Authorities (CAs)
1 Strategy Environment	<ul style="list-style-type: none"> Alignment of PPP agenda to broader organizational strategy Presence of strategic guidance on PPP within the Contracting Authorities (CAs) Presence of strategies for PPP stakeholders engagement and management Alignment of strategic investment decisions with organizational strategic direction
2 Financial Management and Sustainability	<ul style="list-style-type: none"> Establish the track record of the CAs in general financial management Presence of resource mobilization strategies for financing PPP prefeasibility studies Presence of comprehensive organizational wide risk management frameworks in PPP management The capacity of CAs in procurement and contract management
3 Human Resource Management	<ul style="list-style-type: none"> Establish whether the CAs has the required skills and experience to manage PPP projects Presence of organizational learning systems for transferring and sharing PPP skills and knowledge across the CAs Clarity of roles and responsibilities of personnel in PPP management Establish the value of previous PPP capacity building interventions and trainings
4 Leadership and Governance	<ul style="list-style-type: none"> Level of participation of Council Management Team (CMT) in PPP investment decisions Level of buy-in and sense of ownership of PPP projects by the Council Management Team (CMT) Level of participation of Full Council (Councilors) in PPP investment decisions and their level of PPP knowledge
5 Information, Communication and Technology	<ul style="list-style-type: none"> Presence of communication strategy for communicating CAs' investment information Availability of platforms for promotion of CAs investment opportunities and PPP initiatives Whether CAs are going digital in PPP information sharing and marketing Functionality of CAs' websites as a platform for information sharing
6 Organizational Structure	<ul style="list-style-type: none"> Functionality of the PPP Nodes and Investment Committees Presence of PPP guidelines to PPP Nodes and Investment Committees Clarity of roles and responsibilities of the PPP Node and Investment Committee The interactions between the PPP Node / Investment Committee with other stakeholders within CAs such as PMUs

4

The role of the government and capacity needs evolve along the PPP transaction lifecycle from inception to closeout

The PPP capacity domains defined include Strategy, Leadership & Governance, HR, Organizational Structure, ICT and Financial Management

Project Inception	Project Feasibility	Procurement	Development	Delivery	Exit
<i>Policy and Strategy</i>	<i>Viability Study</i>	<i>Contracting</i>	<i>Engineering</i>	<i>Project Management</i>	<i>Define & Blueprint</i>
Role of government is to establish and ensure the implementation of legal, regulatory, institutional, policy and strategy frameworks for PPP	Role of government is to secure the best value for money through quantitative & qualitative analysis, beginning with identification and selection	Role of government is to manage the procurement and structure the deal so that it is bankable, while achieving optimal risk allocation	Role of government is to provide oversight and compliance monitoring of the construction ensuring it meets the identified performance standards	Role of government is to provide oversight and compliance monitoring of the service / asset operations. Other activities may include dispute resolution & negotiations	Role of government is to implement the project and identify options for either service / asset takeover or consider a new procurement





Relevant Capacity Domains

<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Strategy Environment ➤ Leadership and Governance 	<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Strategy Environment 	<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Financial Management ➤ Information Technology 	<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Leadership and Governance ➤ Financial Management 	<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Organizational Structure ➤ Leadership and Governance 	<ul style="list-style-type: none"> ➤ Human Resource Management ➤ Financial Management and Sustainability
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5

The four common capacity gaps revealed are structural in nature and if not addressed, will expose the LGAs to significant risk

Capacity gaps observed at the institutional level relate to Skills, Governance, Strategy, Financial Management, Risk Management and Funding

Challenge	Implications
 Limited PPP skills and experience	In spite of formal PPP training received from the World Bank, there are a significant number of Investment Committee members who have not received this training due to staff movements. The training that was received has also not been cascaded to other key stakeholders within the LGA nor has it translated into operational changes within the institutions.
 Limited functionality of the Investment Committees & PPP Nodes	The LGA Investment Committee members are not fully dedicated to the PPP unit and have other primary full-time responsibilities. There is no specific budget allocated to these committees for execution of their responsibilities and in some instances, members of the committee were given letters of appointments but no job descriptions to guide their PPP roles. There is an overreliance of funding from the central government and development partners for all four LGAs and the PPP Node. As a result, LGAs do not have enough funds to bear the transaction costs associated with the end-to-end PPP lifecycles for projects.
 Limited strategies for PPP engagements	Although the LGAs assessed in this study have Mid-Term Expenditure Framework (MTEF) plans and are involved during the budget preparation process and strategy discussions, these strategies make no reference to PPPs and do not include specific PPP initiatives. The 14 PPP projects within these LGAs are not reflected in the current strategic plans.
 Non-compliance in procurement, contract management and Risk Management	The Auditor General report noted non-compliance to Public Procurement Act highlighting violations in procurement procedures such as, performance bonds/securities not submitted from successful tenders, inadequate documentation of contracts, records of contract implementation not properly managed, inconsistencies in the evaluation process, and notable deficiencies in the preparation and implementation of the procurement plan. This has negative implications in the ability of LGAs to manage the procurement process for these upcoming PPP projects. The LGAs do not have frameworks to guide them when identifying, monitoring and managing risks associated with PPP projects. Risks associated with PPPs in all of the 14 proposed projects have not been identified and the mitigating controls have not been developed.

Limited PPP skills and experience is associated to constraints in awareness, resources, systems & policies.

The root cause of limited PPP skills and experience includes:

- According to PPP Act (2014) and its regulations (2015) LGAs have been allowed to engage in small scale PPPs. However, PPP is still a new concept to majority of LGAs in Tanzania. There have been limited PPP awareness raising campaigns at the LGA level. PO-RALG PPP Node is mandated to run PPP awareness raising campaigns but this have not been sufficiently done due to the Node being under resourced.
- During the assessment, LGAs staff did not demonstrate clear understanding of PPP development life cycle (project inception, feasibility study, procurement, and contract management).
- Limited hands-on training: Members of the investment committee and PPP nodes who received PPP training did not get a platform for practical implementation and hence limited practical experience in PPP projects. No mentorship and coaching was provided after the 6 module training from the World Bank.
- Limited financial resources allocated for capability development and absence of pipeline of PPP projects have hindered the LGAs' desire for developing PPP professionals.
- Despite the fact that LGAs annual training plans are not adhered due to various reasons including the resource constraints, these plans do not include PPP skills development.
- LGAs has limited mandate to mobilize and retain experienced PPP professionals. It was reported that human resource placements are done by the Central Government.
- Lack of institutionalized learning systems and policies to enforce sharing of skills and knowledge from staff attending trainings and capacity building interventions for organizational wide learning.

Recommendations

1. PO-RALG PPP Node should participate in hands-on-PPP development trajectories together with LGAs investment committees.
2. PO-RALG PPP Node should engage aggressively in networking with the private sector to gain trust and understanding of key drivers that drives the private sector investments.
3. PO-RALG PPP Node should organize PPP innovation boot camps to stimulate innovations in PPP projects.
4. PO-RALG PPP Node should put in place PPP project appraisal unit with relevant staff (with adequate appraisal skills).
5. LGAs should enhance their capability in PPP life cycle management through creating and participating in learning opportunities.
6. LGAs should organize and deliver PPP trainings to new members of the LGAs, investment committees, and Councilors.
7. LGAs should develop an organizational learning system within the council to enhance their learning agility and ensure knowledge transfer and sharing among staff.
8. Members of investment committee be seconded to places where there are PPP projects being implemented.

Limited functionality of the Investment Committees and PPP Nodes is a result of structural challenges, limited resources, and unclear roles & responsibilities

The root cause of limited functionality of the Investment Committees includes:

- The investment committee and PPP Nodes do not feature in LGAs structure. The mandate for changing the structure is vested with the Central Government. The investment committee is mainly made of head of departments (CMT members) appointed by the CA. However, these members have other primary fulltime responsibilities in their departments and units hence limited devotions to execution of PPP roles and responsibilities.
- The investment committee operates without a clear workplan. No resources allocated to the investment committee hence no motivation for developing the workplan and execution of its responsibilities. The investment committees do not feature in LGAs' annual approved plans.
- There is limited clarity on which department should initiate PPP projects. At the moment the Economic Planning Statistics and Monitoring departments are playing the coordination role with some overlaps with the investment committees.
- There is limited clarity on which body will handle the PPP procurement process. The PPP Act indicates that the CA can appoint a team to handle the process, at the same time PMU claims to have mandate to oversee the procurement process and contract management. The PPP Regulations (2015) indicates the involvement of Tender Board in procurement process, however it is not clear whether these are the same as the existing Tender boards.
- The investment committee meets on ad-hoc basis with no clear guidelines on the frequency of meetings. These committees operates without investment by-laws, guidelines, defined roles and responsibilities, and job descriptions. According to PPP regulations (2015), PPP Node has the mandate to prepare the small scale PPP guidelines for LGAs. However, these guidelines have not been prepared yet.

Recommendations

1. LGAs should make follow-up of small scale PPP guidelines from PO-RALG PPP Node
2. LGAs should develop investment by-laws to guide the investment committees in identification of potential opportunities for a PPP
3. LGAs should allocate a budget for the investment committees and PPP Nodes to enable them to function smoothly
4. LGAs should formalize the investment committees by ensuring that these committees are reflected in the existing council structures
5. The investment committees should develop their workplans and ensure compliance in implementation
6. LGAs should develop Job Descriptions for each member of the investment committee
7. PO-RALG PPP Node should develop a clear reporting structure
8. Appoint full time PPP investment managers

Absence of organizational strategies in resource mobilization, investments, stakeholders engagement & management hinders strategic PPP engagements.

The root cause of limited strategies for PPP engagements includes:

- The assessed LGAs do not have clear investment strategy and articulated strategies for PPP investments. Frequent change of government priorities have demotivated LGAs in developing long term strategies. The use of Medium Term Expenditure Framework (MTEF) have created less focus in developing long term organizational strategy. However, proposed PPP projects are not reflected in some MTEFs.
- Limited strategies for engaging and managing PPP stakeholders due to limited knowledge and experience in development of stakeholders engagement and management strategy. LGAs can hardly demonstrate their strategized agenda in negotiations for PPP engagements.
- LGAs do not have clear communication strategy for communicating investment information. As indicated in PPP Regulations (2015), websites are key platform for communicating, marketing and promotion of CA's investment opportunities and PPP initiatives. However, despite the fact that each LGA has a website, some have not been updated regularly and have not highlighted investment opportunities within the CAs. While there is a move to go digital in all communication, still LGAs have not invested enough in ICT equipment.
- LGAs does not have clear resource mobilization strategies for mobilization of resource for financing project development (pre-feasibility and feasibility studies). None of the assessed LGAs have accessed funds from the PPP Facilitation Fund at PPP Centre for project and capacity development as outlined in Part V of the PPP regulations (2015).
- There is no clear evidence that investment decisions are backed up with clear data. A consolidated database of all key organizational information in LGAs is not in place. Data is scattered in different departments, units and external institutions and can hardly be gathered within short period of time.

Recommendations

1. LGAs should be trained and coached on strategy development
2. LGAs should develop strategic plans and investment strategies to guide them with PPP engagements
3. LGAs should develop resource mobilization and revenue collection strategies to increase the resource base from own sources
4. LGAs should develop stakeholders engagement and communication strategies
5. LGAs should come up with a process for determining the projects which will be delivered on budget or via a PPP. The best practice suggest that these projects be reflected in strategic plans as well as in MTEF
6. PO-RALG needs to develop a strategic plan that includes key statements of identity (vision and mission) to position itself well in its environment.

Non-compliances in procurement and contract management is associated to irregularities and deficiencies in procurement procedures, contract management, and risk management.

The root cause for Non-compliance in procurement, contract and risk management includes:

- The review of CAG reports noted violation of procurement procedures outlined in Public Procurement Act of which the same practice can be taken to PPP procurements. These irregularities varies from one LGA to another including but not limited to, incomplete tender and bid evaluations, not reporting procurements to the tender board, lack of criteria for qualifying tenders, and lack of competitive procurement, no technical specialist in PMUs as required by Public procurement Act, notable deficiencies in the preparation and implementation of the procurement plan, and not submitting annual procurement plans to PPRA.
- The review of CAG reports also noted irregularities in contract management which can also affect contract management under PPP. These irregularities includes but not limited to, records of contract implementation are not properly kept in a particular file, contract register not updated, implementing projects without signed agreements, inadequate documentation of contract, entering contracts without performance bonds, incomplete records in procurement files.
- Investment committee, PMUs, Tender Boards, and user departments lack knowledge of Public Procurement Act, PPP Act and its Regulations.
- The review noted absence of comprehensive organizational wide risk management frameworks in PPP management due to limited investment in risk management. According to PPP Regulations (2015), CA should identify financial, technical, and operational risks between partners. However, the current practice did not demonstrate pro-activeness in identification and management of potential risks associated with PPP engagements. In some LGAs, Risk Registers and Risk Champions are not in place.

Recommendations

1. LGAs should strengthen their tender boards and procurement management units by creating platform for periodic learning on procurement practices outlined in Public Procurement Act and guidelines.
2. LGAs procurement management units and tender boards should be oriented on PPP procurement requirements and procedures as outlined in PPP Act (2014) and its regulations (2015) for them also to understand the relationship between legislation procurement and PPP Act.
3. LGAs should develop procurement procedures checklist to assist them in ensuring that no procurement process is skipped.
4. LGAs should develop criteria for qualifying tenders
5. LGAs should ensure that PMUs includes technical specialist to comply with PPA.
6. LGAs should develop realistic annual procurement plans based on the available resources.
7. LGAs must ensure competitive procurement requirements are adhered all the time in order to avoid any disputes from bidders.

10

Each institution benchmarked their current state of maturity against a standardized set of indicators and best practices

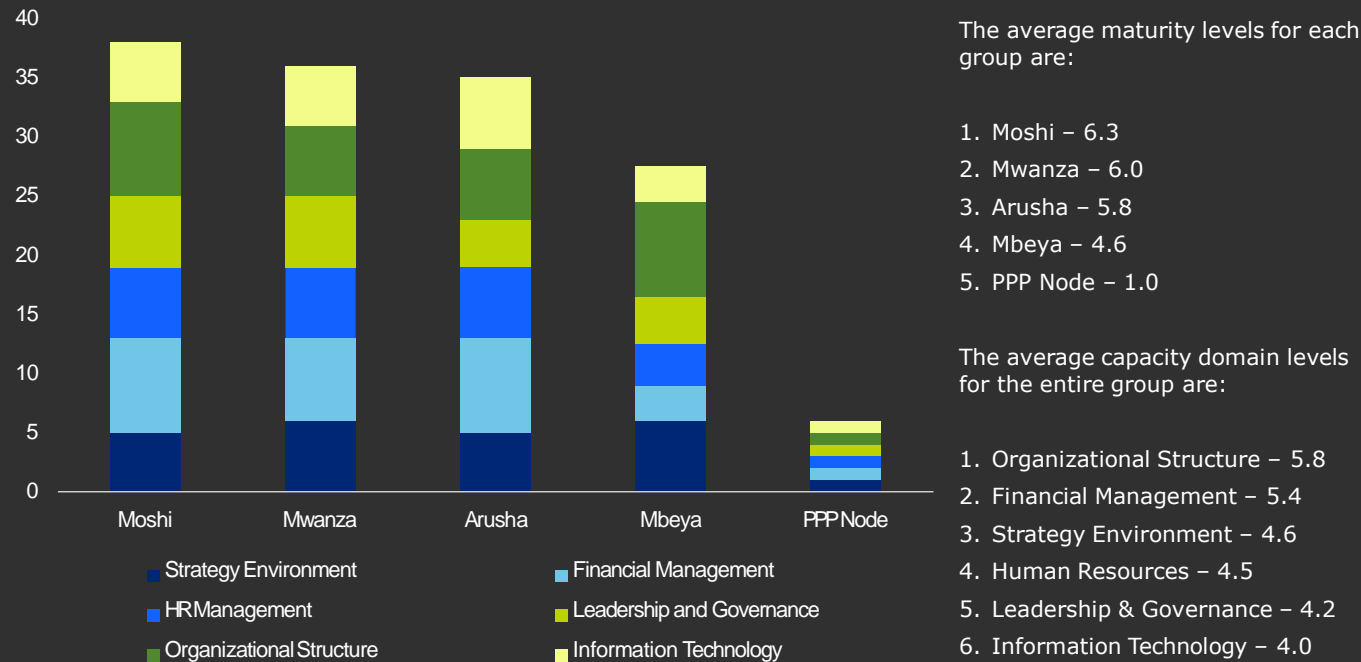
Deloitte's Maturity Model Benchmarking Tool (MMBT) is an instrument that allows institutions to map their current and desired state of performance

	BASIC	DEVELOPING	ADVANCED	LEADING								
STRATEGY ENVIRONMENT	<ul style="list-style-type: none"> Strategic plan is not properly documented and/or communicated/cascaded PPP agenda is not aligned with broader organizational strategic PPP projects are not reflected in existing MTFE Key stakeholders are not involved in PPP development 	<ul style="list-style-type: none"> Existence of strategy or plan with little or no highlight of PPP projects The strategic plan is communicated and implemented, however, there is less alignment of PPP strategies to Council's broader strategy MTFE is linked directly to Council's strategy but PPP projects are not clearly reflected in and there is little evidence of implementation Stakeholders are less involved in PPP development 	<ul style="list-style-type: none"> Existence of PPP guidelines and by-laws for guiding Council's PPP development Existence of and evidence of periodic strategy reviews with some evidence on the link between PPP agenda and broader organizational strategy Evidence of participatory approach to strategic planning and periodic review, with some involvement of stakeholders in PPP development Strategy cascading is done to the departmental level only 	<ul style="list-style-type: none"> Council's PPP agenda, PPP opportunities, and strategic investment decisions are highly aligned with Council's broader strategy and strategic direction Presence of strategic guidance on PPP within the contracting authority and evidence of regular strategy reviews High involvement of key stakeholders in planning, identification and implementation of PPP projects; articulation of stakeholders commitment in executing the strategy, including PPP projects Strategy cascading is done to all levels of the council 								
FINANCIAL MANAGEMENT AND SUSTAINABILITY	<ul style="list-style-type: none"> The Council has poor track record in financial management The Council has no clear resource mobilization strategies for financing PPP pre-feasibility studies The Council do not have risk management frameworks in PPP management Limited capacity in procurement and contract management Limited compliance with PPA, PPP Act and donors' procurement procedures No evidence of existence of a competent and active PMU None compliance with external reporting requirements No evidence of existence of tender board and tender advertisements 	<ul style="list-style-type: none"> The Council has reasonable track record in financial management The Council has limited resource mobilization strategies for financing PPP pre-feasibility studies The Council has some risk management controls in place but linked to PPP management Reasonable capacity in procurement and contract management PMU is actively involved in all procurements and conducts awareness sessions to staff on PPP/PPA/PPP Reasonable compliance with financial controls-Clean audit reports Reasonable compliance with external reporting requirements Procurement reports are discussed Evidence of advertising of tenders 	<ul style="list-style-type: none"> The Council has good track record in financial management The Council has reasonable resource mobilization strategies for financing PPP pre-feasibility studies The Council has risk management frameworks with little link to PPP management Strong capacity in procurement and contract management Strong internal controls with accountability & transparency Budgeting process incorporates staff and stakeholders priorities Full compliance with external reporting requirements Evidence of annual procurement plan and reports as evident in financial committee meeting Existence of Independent tender board 	<ul style="list-style-type: none"> The Council has excellent track record in financial management The Council has strong resource mobilization strategies for financing PPP pre-feasibility studies The Council has organizational-wide risk management frameworks in PPP management Excellent capacity in procurement and contract management Procurement tenders are published for openness Effectiveness of internal audit function and evidence of value for money (VFM) Existence of annual procurement plan Revenue collection strategy and strong alternative sources of revenue plans for sustainability 								
HUMAN RESOURCE MANAGEMENT	<ul style="list-style-type: none"> No skills and experience in managing PPP projects Lack of learning systems for transferring and sharing PPP skills and knowledge across the Council Absence of standard staff letters of employment with clearly defined JDs Development needs of staff are not known OPRAS not implemented or used just as a tool HR guidelines and manuals not provided to all employees/Head of Departments No evidence of budgets for training and employee capacity building 	<ul style="list-style-type: none"> Presence of human resources designated for PPP management, but has limited skills and experience in managing PPP projects Limited learning systems for transferring and sharing PPP skills and knowledge across the Council Standard terms and conditions of employment in place Staff career development plans are tracked on annual basis Participatory culture on talent management issues Awareness and implementation of OPRAS Personal development plans, annual appraisals are in place and reflected in staff OPRAS Existence of a Workers Council 	<ul style="list-style-type: none"> Presence of human resource pool with adequate skills and experience in managing PPP projects within the Council Presence of effective learning systems for transferring and sharing PPP skills and knowledge across the Council Completed skills assessment Understanding of key HR indicators (including turnover) Evidence of knowledge sharing and transfer among Council staff HR Benefits / non-monetary in place Development plan aligned with roles Effective implementation of development plans Effective and active Workers Council 	<ul style="list-style-type: none"> Presence of PPP professionals with extensive skills and experience in managing PPP projects within the Council Presence of highly effective learning systems for transferring and sharing PPP skills and knowledge across the Council Retention strategy in use e.g. strategies to retain good talent in PPP practice Evidence of effective feedback mechanism Non-monetary incentive and recognition scheme in place Employee evaluation and salaries tied to performance (Functional OPRAS) Evidence of functional Workers Council 								
LEADERSHIP AND GOVERNANCE	<ul style="list-style-type: none"> Limited participation of CMT in PPP investment decisions CMT does not have a sense of ownership of PPP projects Limited participation of Councilors in PPP investment decisions Councilors has limited PPP knowledge No evidence of CMT, standing committees, and full Council meeting minutes No clear decision-making process in place No evidence of formal or informal mentorship program Evidence of serious misunderstanding between the Councilors and CMT 	<ul style="list-style-type: none"> CMT is reasonably participating in PPP investment decisions CMT has reasonable sense of ownership of PPP projects Reasonable participation of Councilors in PPP investment decisions Councilors has reasonable level of PPP knowledge Effectiveness of full council in issues resolution Leadership commitment and accountability to follow up on the agreed action item and adherence to scheduled meetings Evidence of internal communication mechanism Documented CMT, standing committees, workers council and full council meeting minutes 	<ul style="list-style-type: none"> Adequate participation of CMT in PPP investment decisions CMT adequately engaged with sense of ownership of PPP projects Adequate participation of Councilors in PPP investment decisions Councilors has adequate level of PPP knowledge Public-interest decisions available Evidence of formal mentorship for all Council Leadership (DED, CMT decision making) 	<ul style="list-style-type: none"> Full participation of CMT in PPP investment decisions CMT highly engaged with great sense of ownership of PPP projects Full participation of Councilors in PPP investment decisions Councilors has high level of PPP knowledge Improved decision-making process, including input from key stakeholders Evidence of mentorship process and succession plan Evidence of participatory and transparent decision making process Evidence of no tolerance of unethical behavior 								
ORGANIZATIONAL STRUCTURE	<ul style="list-style-type: none"> Absence of PPP Nodes and Investment Committees Absence of PPP guidelines for PPP Nodes/Investment Committees No evidence of clear roles and responsibilities of PPP Nodes/Investment Committees No interactions between PPP Nodes/Investment Committees with other stakeholders within the Council Less than 60% of the required skill set position filled Evidence of organization chart 	<ul style="list-style-type: none"> Limited functionality of PPP Nodes and Investment Committees Limited PPP guidelines for PPP Nodes/Investment Committees Limited clarity of PPP Nodes/Investment Committees' roles and responsibilities Limited interactions between PPP Nodes/Investment Committees with other stakeholders within the Council 60% - 80% of the core positions filled Alignment of structure to strategy 	<ul style="list-style-type: none"> PPP Nodes and Investment Committees are functional Clear PPP guidelines for PPP Nodes/Investment Committees in place Adequate level of clarity of PPP Nodes/Investment Committees' roles and responsibilities Adequate level of interactions between PPP Nodes/Investment Committees with other stakeholders within the Council At least 80% of core positions are filled Adequacy of structure to fulfill organizational needs Alignment of structure to strategy with clear responsible people for each of the strategic action 	<ul style="list-style-type: none"> PPP Nodes and Investment Committees are highly effective PPP Nodes and Investment Committees effectively deploying PPP guidelines High level of clarity of PPP Nodes and Investment Committees' roles and responsibilities High level of interactions between PPP Nodes/Investment Committees with other stakeholders within the Council Evidence of the council suggesting organisation re-structuring based on change in local priorities All core position are filled 								
INFORMATION COMMUNICATION AND TECHNOLOGY	<ul style="list-style-type: none"> No evidence of communication strategy No evidence of digital platforms such as website for promotion of Council's investment opportunities and PPP initiatives The Council do not have a website Restricted to paper-based communication (internal and external) No ICT department Sub-optimal IT equipment 	<ul style="list-style-type: none"> Presence of communication initiatives on Council's investment information but, no clear documented communication strategy Limited functionality of digital platforms such as website for promotion of Council's investment opportunities and PPP initiatives The Council's website is up-to-date and highly functional Standard day-day IT/IS processes in place Dedicated ICT personnel Backup and Disaster Recovery plan in place Training plan for employees in place Existence of ICT strategy & IT policy 	<ul style="list-style-type: none"> Adequate execution of communication strategy on Council's investment information Presence of reasonable digital platforms such as website for promotion of Council's investment opportunities and PPP initiatives The Council's website is updated periodically ERICOR, HMS, HRIS, Plan Rep3 used for decision-making Reliable email communication ICT department in place At least 60% of all positions have access to ICT services. Evidence of National ICT policy cascaded to the council 	<ul style="list-style-type: none"> High level of execution of communication strategy on Council's investment information Highly effective digital platforms such as website for promotion of Council's investment opportunities and PPP initiatives The Council's website is up-to-date and highly functional Evidence of Innovation and incremental technological changes Adequate IT infrastructure in place, including off-site backup Evidence of implementation of ICT Policy Effective information desk that receives and disseminates information 								
RATING	Basic			Developing			Advanced			Leading		
	1	2	3	4	5	6	7	8	9	10	11	12

* Please note that the maturity model was not used fully for the PO-RALG PPP Node due to their extremely limited capacity

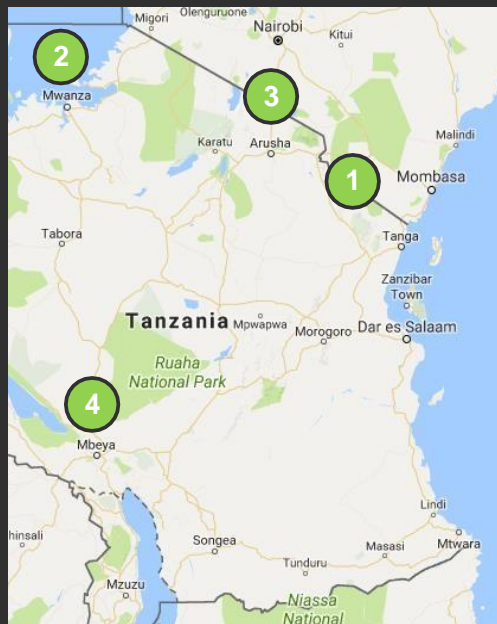
On average, the four LGAs are at the developing stage of institutional capacity while the PPP Node is at the basic stage

The maturity levels ranked from highest to lowest are Moshi, Mwanza, Arusha, Mbeya with the PPP Node being at the lowest level



These scores have specific implications on the success of each PPP project at varying points along the lifecycle in each LGA

The maturity levels ranked from highest to lowest are Moshi, Mwanza, Arusha and Mbeya with the PPP Node being in the last position



Sample PPP Projects	Maturity	Highlights
1 Moshi Slaughterhouse, Market Facilities, Bus Terminal	6.3	Strong automated financial process and generation of revenue but lack of PPP strategy
2 Mwanza Bus Terminal, Truck Terminal	6.0	Strong automated financial process and generation of revenue but limited investment in ICT for investment promotion
3 Arusha Market Facilities	5.8	Strong automated financial process and revenue generation but challenges with leadership and human resources
4 Mbeya Abattoir, City Park, Bus Terminal, Market Facility	4.6	Good organizational structure but high dependency on central government for funding
PPP Node N/A	1.0	Challenges with organizational structure, strategic planning, leadership and governance, human resources and financial management

Each LGA has a distinct roadmap to address the capacity gaps that will have an impact on each step in the PPP lifecycle

It is recommended to prioritize capacity gaps related to human resources, leadership, governance, strategy and engagement as a starting point

✓ = Impact on PPP Step

Performance Goals		Inception	Feasibility	Procurement	Development	Delivery	Exit
Human Resources	Develop human resource management strategy aimed at transferring and sharing PPP knowledge across the LGAs	✓	✓	✓	✓	✓	✓
Leadership & Governance	Develop leadership and governance strategies which will enable formalization of the PPP investment committees for the LGAs	✓			✓		
PPP Strategy	Develop strategic plans that articulate the strategic direction for PPPs in each district	✓	✓				
Stakeholder Engagement	Develop stakeholders engagement strategy to define, identify and broaden external relationships within the LGA	✓	✓				
Financial Management	Develop / update financial management strategy to address the mobilization of funds required for PPP projects			✓	✓		✓
ICT Strategy	Develop / update ICT strategy to enhance communication with its perspective partners for PPP projects			✓			
Procurement	Strengthen procurement and contract management practices for structuring a PPP project			✓			

Balancing high-impact quick wins with long-term interventions is critical for building a culture of continuous improvement

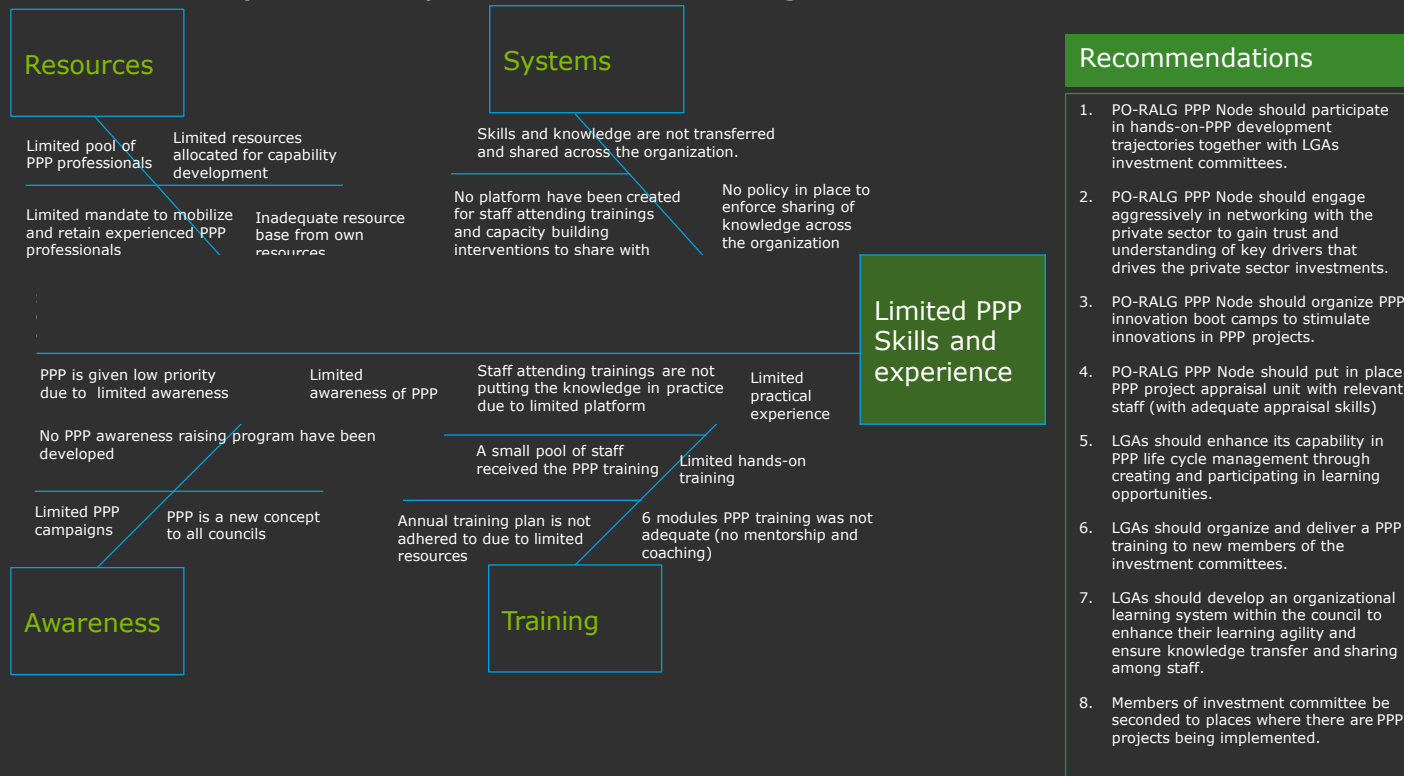
Although the implementation of interventions is out of scope for this engagement, it is recommended that technical assistance be provided at both the LGA Investment Committee and PO-RALG PPP node levels.

- Short Term (< 6 months): In order to quickly help the LGA Investment Committees increase their chances of success for the identified PPP projects, place greater emphasis on assisting **Moshi** and **Mwanza** with closing their performance gaps.
- Medium Term (6 months – 1 year): Leverage and scale the early successes with Moshi and Mwanza by providing assistance to **Arusha** and **Mbeya** (consider involving the Investment Committee from Moshi and Mwanza to support).
- Long Term (1 year – 2 years): Continue to improve the enabling environment by building the capabilities of the PPP node to provide the necessary oversight, regulatory frameworks and technical competencies to the LGA Investment Committees (maintain their active involvement and engagement during the technical assistance provided to the 4 LGAs).

Appendix

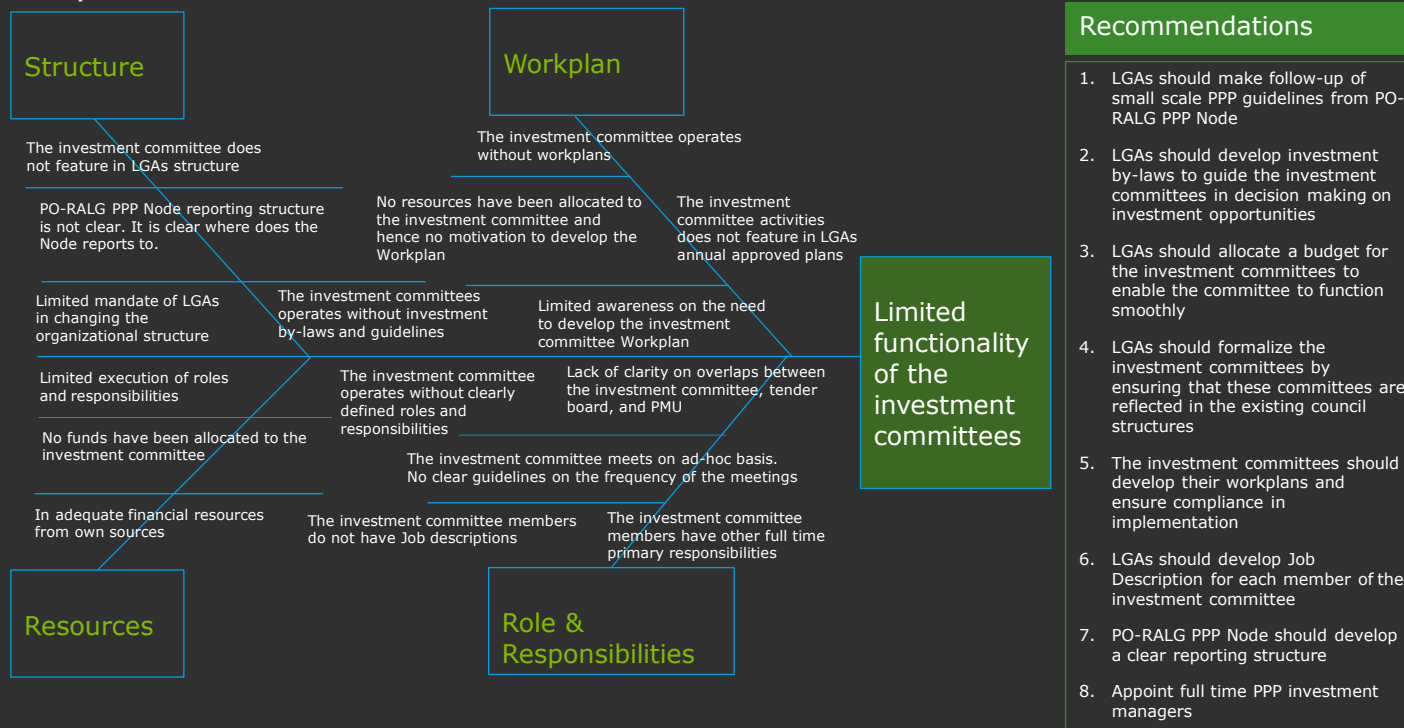
The four common capacity gaps revealed are structural in nature and if not addressed, will expose the LGAs to significant risk

Limited PPP skills and experience is associated to constraints in awareness, resources, systems & policies, and training



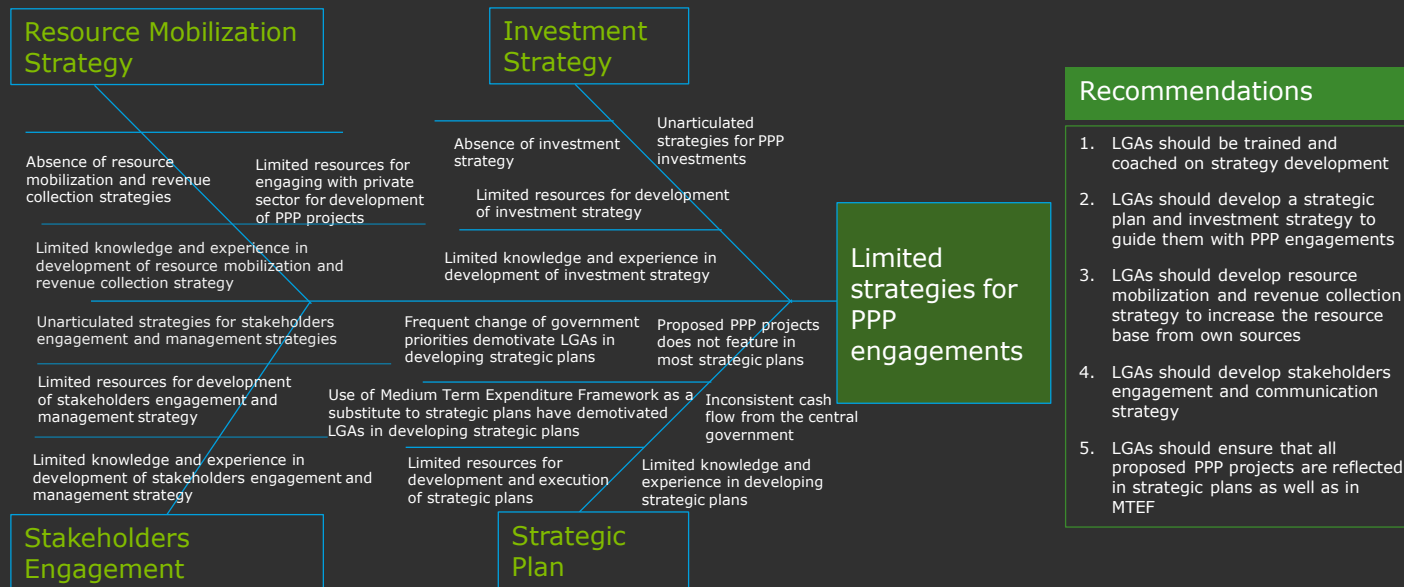
The four common capacity gaps revealed are structural in nature and if not addressed, will expose the LGAs to significant risk

Limited functionality of the investment committees is a result of structural challenges, lack of workplans, limited resources, and unclear roles and responsibilities of investment committees



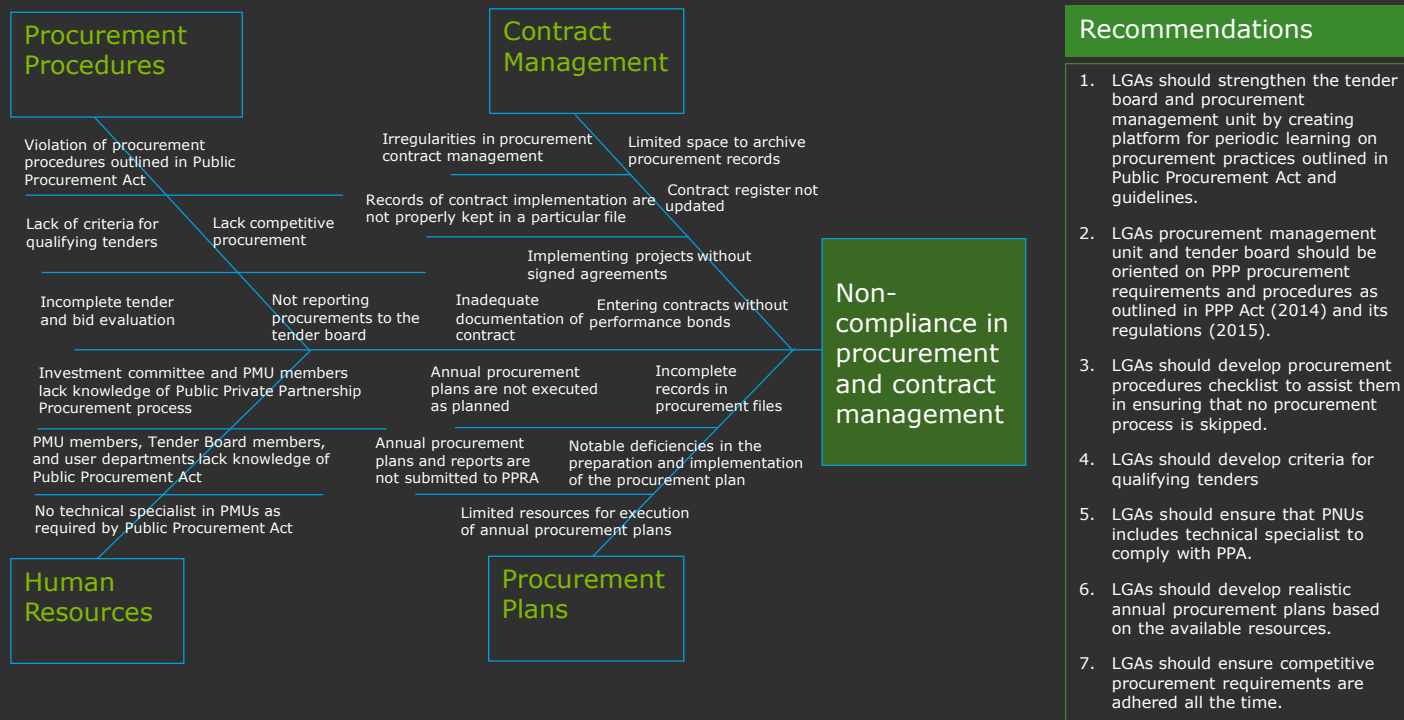
The four common capacity gaps revealed are structural in nature and if not addressed, will expose the LGAs to significant risk

Absence of strategic plans, resource mobilization strategies, investment strategies, and stakeholders engagement and management strategies hinders strategic PPP engagements.



The four common capacity gaps revealed are structural in nature and if not addressed, will expose the LGAs to significant risk

Non-compliances in procurement and contract management is associated to irregularities, deficiencies and violation in procurement procedures, contract management, procurement plans, and human resources.



Mbeya City Council (MCC) is currently at developing level with an average score of 4.6 out of 12 points.

Mbeya City Council Maturity											
CURRENT SCORE			VARIANCE			DESIRED SCORE					
4.6			3.4			8.0					
DOMAIN	CURRENT SCORE			DESIRED SCORE			PRIORITY				
Strategy Environment	6.0			8.0			High				
Financial Management And Sustainability	3.0			6.0			High				
Human Resource Management	3.5			8.0			Medium				
Leadership And Governance	4.0			8.0			Medium				
Organizational Structure	8.0			12.0			Low				
Information Communication Technology	3.0			6.0			Medium				
Basic			Developing			Advanced			Leading		
1	2	3	4	5	6	7	8	9	10	11	12
Minimal capacity			Capacity is evident			Adequate Capacity			Good capacity		

Mbeya City Council (MCC)'s key Strength, challenges and recommended actions

Key Strengths

- MCC uses MTEF as a planning tool
- Automated financial processes, clean audit report from CAG, and fair percentage in revenue collections
- All staff have generic job descriptions in accordance with national guidelines and also the Council ensures that OPRAS forms are completed and reviewed on annual basis
- MCC has a well defined decision making structure, the Full Council and the Council Management team meet on a regular basis as planned and the leadership is committed to implementing agreed action plans
- Presence of a well defined organization structure that is aligned with the Council's (expired) strategy in compliance with PO-RALG guidelines
- Presence of active and well staffed ICT unit. All core business units have been automated

Key Challenges

- Absence of key strategic documents: MCC's strategic plan expired since 2015 and the process for developing a new strategy has not started due to limited funding
- Absence of revenue collection and resource mobilization strategy, mobilization of PPP resources and budget allocated for PPP projects
- Absence of HR strategy that define succession plans, knowledge transfer, training plans, staff recognitions etc.
- Absence of formal leadership development program and formal mentorship and low priority to PPP initiatives
- Limited flexibility in making changes to the Council's organization structure since the mandate for making any changes remains with PO-RALG
- Absence of ICT strategy which defines training plan, communication strategy, disaster recovery plan and staff's limited access to computers

Recommendations

- MCC should develop and formally document a strategic plan that will guide it with PPP engagements as well as investment bi-laws to guide the Investment Committee in decision making on investment opportunities
- MCC should enhance its capabilities in PPP lifecycle management through creating and participating in PPP learning opportunities
- MCC should develop revenue collection and resource mobilization strategy and diversify its resource streams to reduce overdependence on central government and development partners
- MCC should strengthen its tender board and procurement management unit by creating platform for periodic learning on procurement practices outlined in the Public Procurement Act and guidelines while also orient itself in PPP procurement requirements and procedures
- MCC should develop a risk register specific for PPP projects and organize risk management training to departmental risk champions
- MCC should formalize the investment committee by ensuring that it's reflected in the existing council structures, its members' roles are clearly defined and also allocate budget for the investment committee to enable it function smoothly

Arusha City Council (ACC) is currently at developing level with an average score of 5.8 out of 12 points signifying that capacity is evident but lacking in critical areas.

Arusha City Council Maturity											
CURRENT SCORE			VARIANCE			DESIRED SCORE					
5.8			2.0			7.8					
DOMAIN			CURRENT SCORE			DESIRED SCORE			PRIORITY		
Strategy Environment			5.0			8.0			Medium		
Financial Management And Sustainability			8.0			10.0			High		
Human Resource Management			6.0			7.0			Low		
Leadership And Governance			4.0			6.0			High		
Organizational Structure			6.0			8.0			High		
Information Communication Technology			6.0			8.0			High		
Basic			Developing			Advanced			Leading		
1	2	3	4	5	6	7	8	9	10	11	12
Minimal capacity			Capacity is evident			Adequate Capacity			Good capacity		

Arusha City Council (ACC)'s key strengths, challenges and recommended actions

Key Strengths

- ACC has formal planning processes and tools (MTEF and PLAN-REP) and has built staff capacity to use these tools. The Council also has established and registered the Investment Company governed by city investment node with 6 board members to fast-track and manage ACC's investment projects
- Presence of efficient financial processes which are automated with EPICOR and LGRCIS systems
- Revenue growth: Revenue from own sources have grown by 131% over a period of six years
- All ACC staff have generic job descriptions in accordance with national guidelines and also the Council ensures that OPRAS forms are completed and reviewed on annual basis
- ACC has a well defined decision making structure, the Full Council and the Council Management team meet on a regular basis as planned and the leadership is committed to implementing agreed action plans
- Presence of active and well staffed ICT unit. All core business units have been automated

Key Challenges

- Absence of key strategic documents: ACC is currently operating without a strategic plan. The 5 year strategic plan expired since 2016
- Absence of revenue collection and resource mobilization strategy despite exceeding revenue targets from own sources. Public Expenditure Tracking System (PETS) is currently neither working nor enforced
- Absence of HR strategy that define succession plans, knowledge transfer, training plans, staff recognitions, career development etc.
- Limited use of data in decision-making process as the Council currently operates without a statistician and lack of formal leadership development plan
- Investment Node is not reflected in ACC's current organizational structure and its roles and responsibilities have not clearly defined nor formalized
- Absence of ICT strategy which defines training plan, communication strategy, disaster recovery plan and staff's limited access to computers

Recommendations

- ACC should develop a strategic plan to guide it with PPP engagements as well as investment bi-laws to guide the Investment Committee in decision making on investment opportunities
- ACC should develop revenue collection and resource mobilization strategy and diversify its resource streams to reduce overdependence on central government and development partners
- ACC should strengthen its tender board and procurement management unit by creating platform for periodic learning on procurement practices outlined in the Public Procurement Act and guidelines while also orient itself in PPP procurement requirements and procedures
- ACC should develop a comprehensive risk management framework including a risk register specific for PPP projects and organize risk management training to departmental risk champions
- ACC should enhance its capabilities in PPP lifecycle management through creating and participating in PPP learning opportunities including PPP training for new members, knowledge transfer and sharing among staff

Mwanza City Council (MCC) is currently at developing level with an average score of 6 out of 12 points indicating capacity is evident but lacking in critical areas.

Mwanza City Council Maturity											
CURRENT SCORE			VARIANCE			DESIRED SCORE					
6.0			2.7			8.7					
DOMAIN	CURRENT SCORE			DESIRED SCORE			PRIORITY				
Strategy Environment	6.0			9.0			High				
Financial Management And Sustainability	7.0			8.0			High				
Human Resource Management	6.0			9.0			High				
Leadership And Governance	6.0			9.0			High				
Organizational Structure	6.0			9.0			High				
Information Communication Technology	5.0			8.0			Medium				
Basic			Developing			Advanced			Leading		
1	2	3	4	5	6	7	8	9	10	11	12
Minimal capacity			Capacity is evident			Adequate Capacity			Good capacity		

Mwanza City Council (MCC)'s key strengths, challenges and recommended actions

Key Strengths

- MCC uses MTEF and PLAN-REP as planning tools and has built capacity to use these tools effectively and also plans to establish an investment company that will manage investment projects to avoid political interference in business development projects
- Presence of effective financial processes which are automated, clean audit report from CAG, and presence of both risk and fraud management frameworks
- All MCC's staff members have generic job descriptions in accordance with national guidelines and also the Council ensures that OPRAS forms are completed and reviewed on annual basis
- MCC has a well defined decision making structure, the Full Council and the Council Management team that meet on a regular basis as planned and the leadership is committed to implementing agreed action plans
- Presence of a well defined organization structure that is aligned with the Council's (expired) strategy in compliance with PO-RALG guidelines

Key Challenges

- Absence of key strategic documents: MCC's strategic plan expired since 2015 and the process for developing a new strategy has not started due to limited funding
- Absence of revenue collection and resource mobilization strategy, mobilization of PPP resources and budget allocated for PPP projects
- Absence of HR strategy that define succession plans, knowledge transfer, training plans, staff recognitions etc.
- Absence of formal leadership development program and formal mentorship and low priority to PPP initiatives
- Limited flexibility in making changes to the Council's organization structure since the mandate for making any changes remains with PO-RALG
- Absence of ICT strategy which defines training plan, communication strategy, disaster recovery plan and staff's limited access to computers

Recommendations

- MCC should develop and formally document a strategic plan that will guide it with PPP engagements as well as investment bi-laws to guide the Investment Committee in decision making on investment opportunities
- MCC should enhance its capabilities in PPP lifecycle management through creating and participating in PPP learning opportunities
- MCC should develop revenue collection and resource mobilization strategy and diversify its resource streams to reduce overdependence on central government and development partners
- MCC should strengthen the tender board and procurement management unit by creating platform for periodic learning on procurement practices outlined in the Public Procurement Act and guidelines while also orient itself in PPP procurement requirements and procedures
- MCC should develop a risk register specific for PPP projects and organize risk management training to departmental risk champions
- MCC should formalize the investment committee by ensuring that it's reflected in the existing council structures, its members' roles are clearly defined and also allocate budget for the investment committee to enable it function smoothly

Moshi Municipal Council (MMC) is currently at developing level with an average score of 6.3 points out of 12 points.

Moshi Municipal Council Maturity											
CURRENT SCORE			VARIANCE			DESIRED SCORE					
6.3			1.2			7.5					
DOMAIN			CURRENT SCORE			DESIRED SCORE			PRIORITY		
Strategy Environment			5.0			7.0			Medium		
Financial Management And Sustainability			8.0			9.0			High		
Human Resource Management			6.0			7.0			High		
Leadership And Governance			6.0			7.0			Medium		
Organizational Structure			8.0			9.0			Medium		
Information Communication Technology			5.0			6.0			High		
Basic			Developing			Advanced			Leading		
1	2	3	4	5	6	7	8	9	10	11	12
Minimal capacity			Capacity is evident			Adequate Capacity			Good capacity		

Moshi Municipal Council (MMC)'s key strengths, challenges and recommended actions

Key Strengths

- MMC has a current strategic plan in place (2016 – 2021), uses MTEF tool as a framework for executing the strategy and has a budget of 25 million TZS allocated for the investment committee
- All financial processes are automated, clean audit report from CAG, and also presence of a comprehensive risk management framework that includes a risk register
- All staff have generic job descriptions in accordance with national guidelines and also the Council ensures that OPRAS forms are completed and reviewed on annual basis
- MMC has a well defined decision making structure, the Full Council and the Council Management team meet on a regular basis as planned and there's also internal control policy in place
- Presence of a well defined organization structure that is aligned with the Council's (expired) strategy in compliance with PO-RALG guidelines
- Presence of active and well staffed ICT unit with its own local radio station. All core business units have been automated with EPICOR, LAWSON, LGRCIS and PSSN systems

Key Challenges

- Absence of a stand alone PPP strategy and a stakeholders engagement and hence vulnerable in engagements with private sector, also MMC doesn't have the mandate to negotiate PPP projects as the mandate is centralized with the PPP Node of PO-RALG
- Absence of clearly defined and well documented revenue collections and resource mobilization strategies
- PMU unit not strengthened to facilitate PPP procurements and yet the link between the Investment Committee and PMU unit isn't clearly defined
- Absence of HR strategy that define succession plans, knowledge transfer, training plans, staff recognitions, talent retention etc.
- Absence of formal leadership development program
- Investment Committee isn't reflected in the Council's current organizational structure and PPP decisions are largely centralized and made by PPP Node of PO-RALG
- Absence of ICT strategy which defines training plan, document management, communication strategy, disaster recovery plan and staff's limited access to computers

Recommendations

- MMC should develop a database of all key strategic information on potential business investment opportunities and bi-laws to guide the Investment Committee in decision making on investment opportunities
- MMC should formalize the investment committee by ensuring that it's reflected in the existing Council's structure
- MMC should develop revenue collection and resource mobilization strategy and diversify its resource streams to reduce overdependence on central government and development partners
- MMC should enhance its capabilities in PPP lifecycle management through creating and participating in learning opportunities
- MMC should also develop organizational learning system within the council to enhance its learning agility and ensure knowledge transfer and sharing among the staff
- MCC should develop a risk register specific for PPP projects

PO-RALG PPP Node is among the five key bodies currently involved in PPP development process in Tanzania

Tanzania PPP Framework



PO-RALG PPP Node’s key strengths, challenges and recommended actions

Key Strengths

- Highly motivated and committed members who took initiatives to formalize the Node and have remained very committed in delivering their roles and responsibilities though not clearly defined and under difficulty operating environment
- The Node members are aware of the shortcomings of the PPP node and seem eager to develop their capacity in the area.
- Members of the Node have received PPP training conducted by the World Bank and there are plans to bring the PPP experts to share their knowledge and experience with the Node
- Members of the Node are full time employees
- PO-RALG PPP Node has a team leader with experience in general procurements.
- Functions of PO-RALG PPP Node are outlined in the PPP Act (2014) and its regulations (2015)

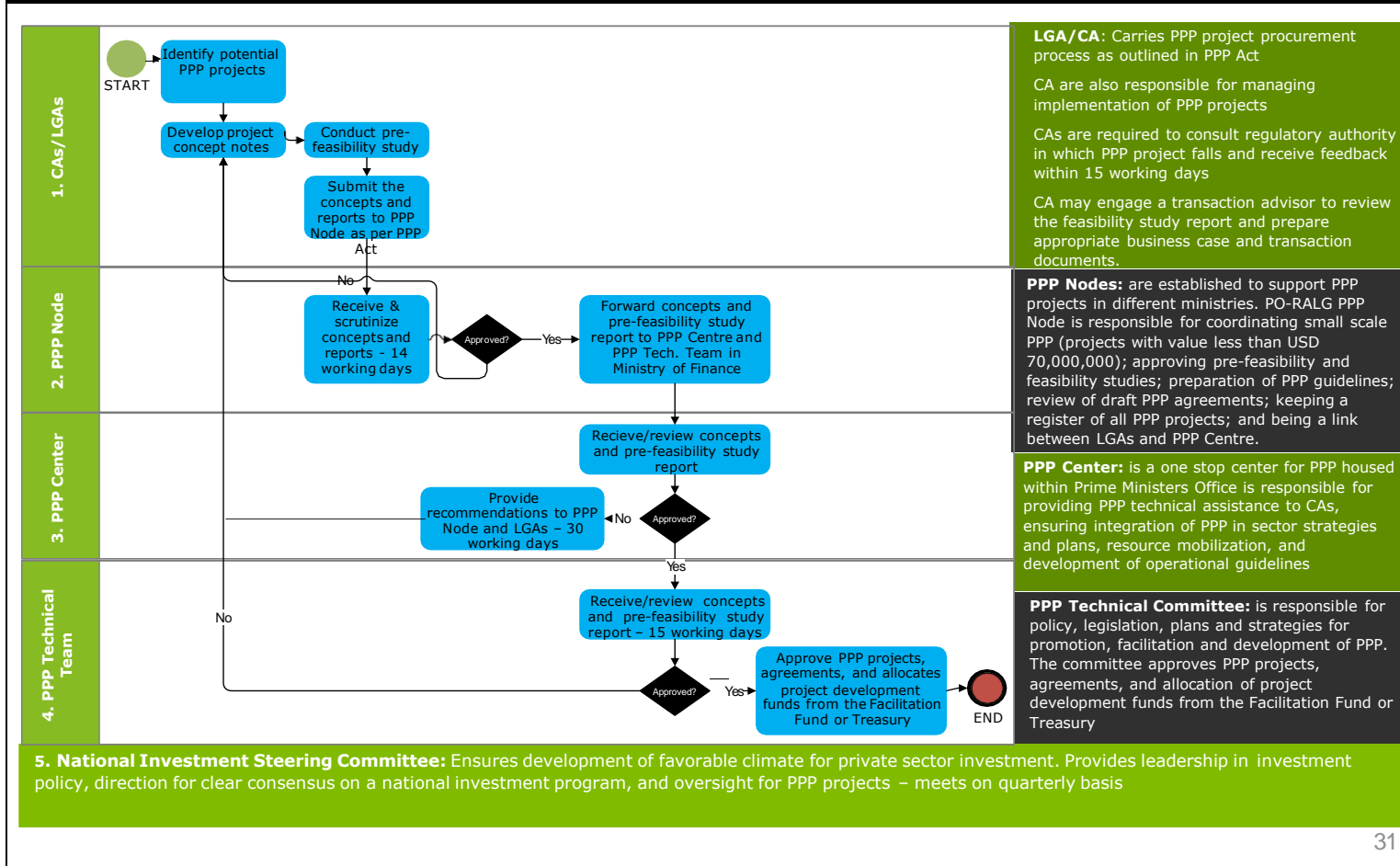
Key Challenges

- Absence of strategic plan to guide its operations including mission and vision, communication and PPP stakeholders engagement
- Limited resources and budgetary constraints
- Absence of guidelines for small scale PPP approvals
- Absence of HR plan/strategy, inadequate human resources, limited PPP skills and training
- Absence of governing body and undocumented roles and responsibilities
- Unclear reporting structure, limited application of PPP frameworks and absence of PPP appraisal unit

Recommendations

- PO-RALG needs to develop a strategic plan that includes key statements of identity (vision and mission) to position itself well in its environment. Develop PO-RALG PPP Node strategic plan
- The PPP Node should develop small scale PPP guidelines for LGAs investment committees
- Develop stakeholders engagement and communication strategy
- Develop monitoring and evaluation framework to guide follow-ups of PPP projects
- PO-RALG PPP Node needs adequate resources for it to increase effectiveness in execution of its mandate
- Develop a resource mobilization strategy in order to increase resources for delivery of its mandate
- Participate in hands-on-PPP development trajectories together with LGAs investment committees.
- Engage aggressively in networking with the private sector to gain trust and understanding of key drivers that drives the private sector investments.
- Ensure clarity of roles and responsibilities of each node members and the reporting structure within PO-RALG

The PPP development process involves five bodies, Contracting Authority / LGA, PO-RALG PPP Node, PPP Center located at Prime Minister’s Office, PPP Technical Team, and National Investment Steering Committee





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17 Annexure I: City Level Infrastructure Assessment

17.1 City Level Infrastructure Assessment

The Terms of Reference (ToR) have required an assessment of the existing infrastructure in the City which supports the proposed project. This assessment gives an insight into the economic status of the City's infrastructure which is related to the proposed project and also identifies the infrastructure gaps that exist which would help the local authorities to generate an infrastructure project pipeline that could be implemented in the near future.

The transport infrastructure has direct relationship with the proposed project. This includes the road network comprised of trunk and regional roads which link the City region to the outside of the region and the City's internal road network. The public transport terminals such as bus stations and parking facilities are also part of the transport infrastructure. Storm water drainage is most often part of the road system. The functioning of the storm water drainage system has direct effect on the functioning of road infrastructure also particularly during the rainy season.

The assessment has covered also the state of utility services in the City with regard to water supply, sewerage and solid waste disposal, power supply and telecommunications. These are considered as one of the important things for the functioning of the proposed facility.

The social infrastructure including education institutions, health facilities, hotels / lodging and other amenities are also related to the proposed project.

17.1.1 City profile

Mbeya city is the administrative, commercial and industrial centre of Mbeya region. It is the largest urban centre in the south western part of Tanzania comprised of Mbeya, Iringa, Njombe, Ruvuma, Songwe, Rukwa, and Katavi.

Mbeya city is situated at an elevated land along the slopes of the Mbeya Range at an altitude rising from 1600 to 2000 meters above the mean sea level. The area is nested along valleys surrounded by undulating hills and range of mountains. The central part of the City lies in the valley between two mountain ranges of Loleza and Uporoto. Some rivers and streams including Meta, Sisimba and Mbata which originate from the mountains in the northern part flow through the City.

The area receives an average annual rainfall of about 883 mm mostly in the rain season which lasts between September and April. The temperatures are moderate with an annual average of 17.6°C. The temperatures fall to 14.5°C during July and rises to about 21.1°C during November.

The City covers an area of about 214 km² (2,140,000 m²) out of which 150 km² (1,500,000 m²) forms the central area of the City and the remaining area contains the suburbs.

Mbeya has been growing steadily since its establishment in the 1930's. Several plans have been issued to control the growth of the town including the Mbeya Master Plan (1974); the Expansion of Township Boundaries (1978 – 1982); and the Mbeya Master Plan Review (1984).

It should be noted however that the town has been growing without adherence to the plans. As a result the majority of the City residents live in squatters.

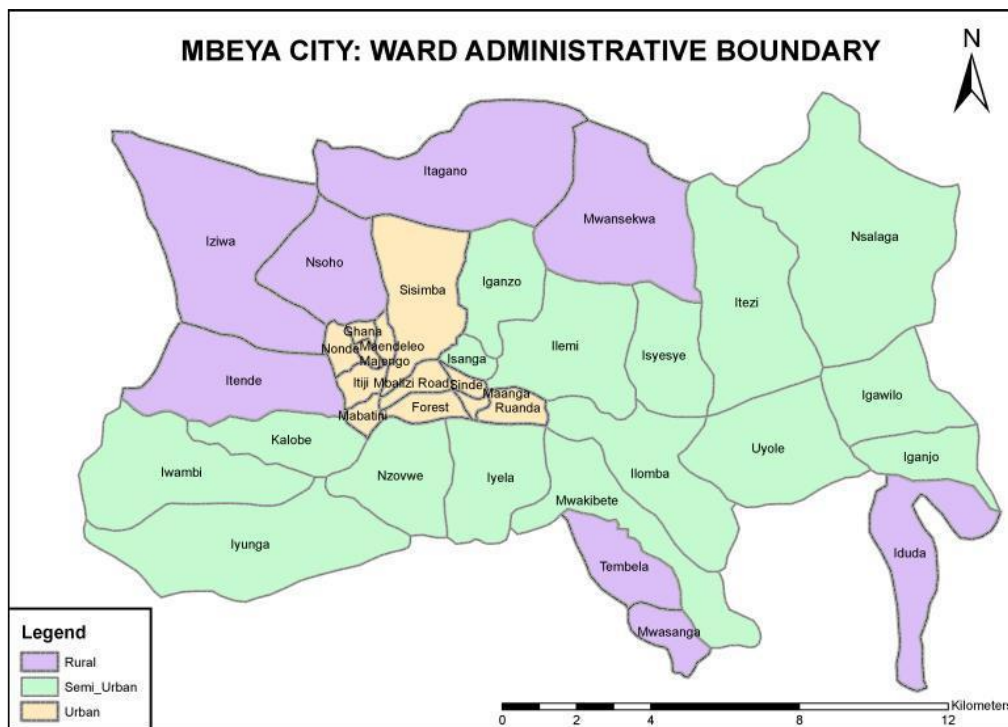


Figure 21 Mbeya City Wards

Uyole Ward in which the proposed bus terminal project site is located, is one of the 36 Wards which constitute the Mbeya City Council as shown in Figure 4. It is in the outskirts of the City about 10 km west from the City Center. The junction of the TANZAM highway and Mbeya (Uyole) – Malawi Border highway is located in Uyole ward as shown in Figure 5.

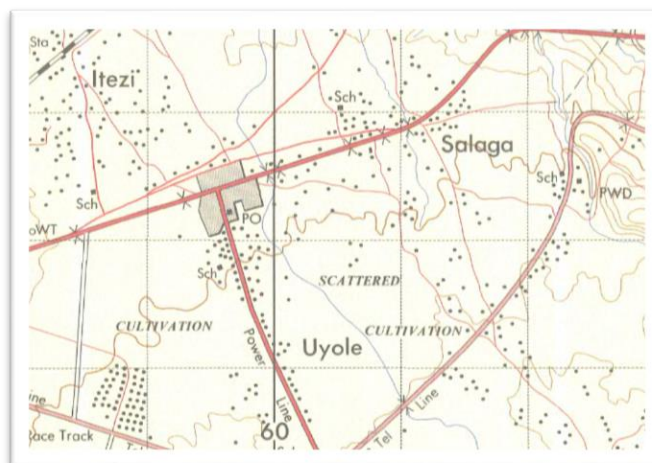


Figure 22 Uyole Ward at a Junction of two Highways

17.1.2 State of the City’s physical infrastructure

The physical infrastructure includes the following:

- Transport infrastructure
 - Roads linking the City to other regions and countries
 - City’s internal roads
 - Bus stations
 - Vehicle parking facilities
 - Storm water drainage
 - Other modes of transport

- Railways
- Airports
- Utility services infrastructure
 - Water supply system including sources, treatment, transmission, storage and distribution
 - Sanitation facilities for both fluid and solid waste
 - Power supply
 - Telecommunication system
- Social infrastructure and other amenities
 - Education institutions
 - Health institutions
 - Hotel accommodation / lodging

17.1.2.1 Road connectivity

The trunk roads link the City to outside the country and to the other regions within the country. The regional roads link the urban centres and district headquarters in the region. Trunk and regional roads network is under the jurisdiction of the Ministry of Works, Communication and Transport through the Tanzania National Roads Agency (TANROADS). The road network under this category include 812 km of trunk roads of which 517 km is paved and 296 km is unpaved. Regional roads network has a size of about 1444 km of which 38 km is paved and the rest is unpaved.

Mbeya is well served with road network from different parts of the country and is connected to the two main highways linking Malawi and Zambia as shown in Figure 3.1. It is the country’s main gateway to the Central and Southern Africa countries of Malawi, Zambia, Zimbabwe, Botswana, South Africa and Democratic Republic of Congo through Zambia. Mbeya city is about 850 km from Dar es Salaam, 100 km to the Zambian boarder at Tunduma and 170 km to the Malawi boarder. Mbeya is also connected by other trunk roads and regional roads to the neighbouring regions of Iringa, Njombe, Ruvuma, Singida, Tabora, Rukwa, and Songwe.

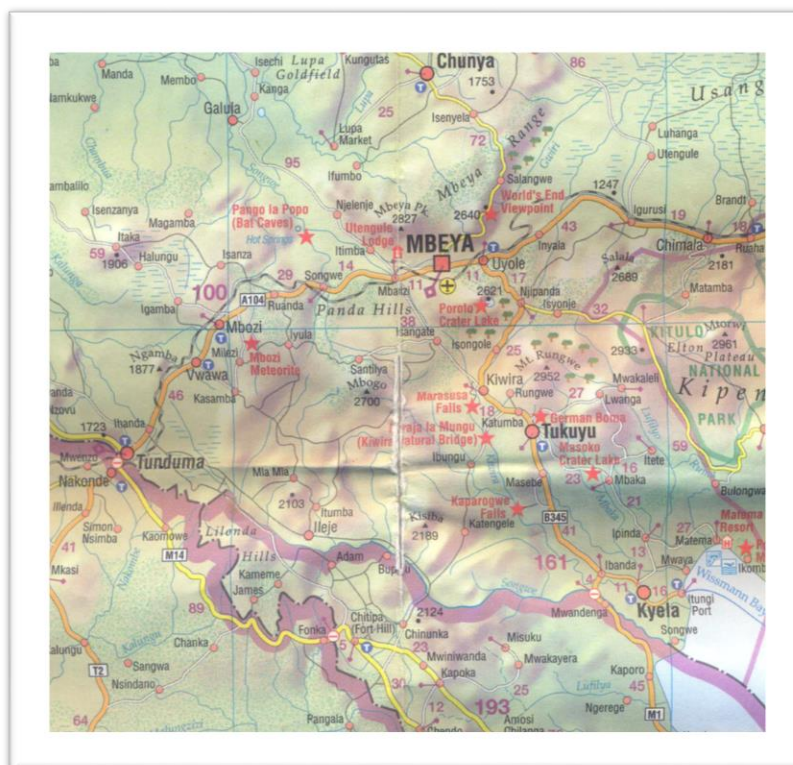


Figure 23 Mbeya City Road Connection

17.1.2.2 City's road network

The City's internal road network is under the jurisdiction of the LGA. Stretches of trunk and regional roads located within the City boundaries are under TANROADS. The City's roads are in form of arterial roads and streets. The City's road network is estimated to have total length of about 129 km of which 26 km is paved and 103 km is unpaved. The unpaved roads includes 59 km of gravel roads and 44 km of un-engineered earth roads.

The road network in the central area is both in grid and radial pattern. Most of the roads in the central business area are paved with functioning storm water drains. Some few arterial roads linking different parts of the City are paved but a large part of the City's road network remain unpaved which is a major challenge to the local authorities. There are some ongoing projects to improve the City's road network including the Tanzania Strategic Cities Project (TSCP) which is funded the World Bank through the LGA.

The roads in City are single carriageway and are narrow particularly in the City centre. Absence of parking facilities has resulted in street parking which creates obstacle to the traffic movement. This has forced the local authorities to adopt a one direction vehicular traffic on some roads in the City centre.

17.1.2.3 Bus stations

Sisimba Bus Station

The Sisimba bus station is located in the City Centre and functions as the main station for inter-city buses and buses travelling to different districts of the region. The town buses (daladalas) also pick and drop passengers at the station.

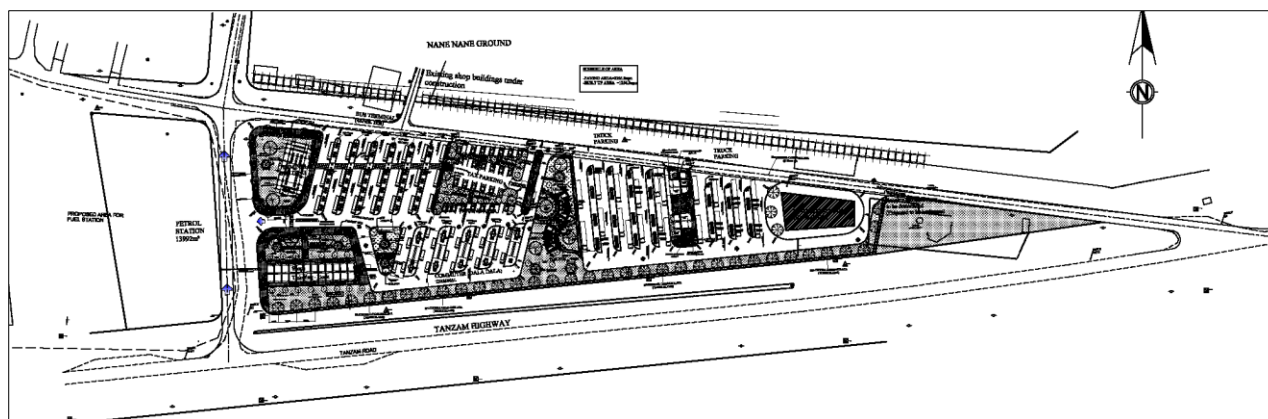
The bus station is old and has developed over time in an unplanned manner. The perimeter of the station is built up inadvertently accommodating shops, food vending, luggage storage facilities, and ticketing offices. The entire surface of the station is paved with concrete blocks but with a clear demarcation of different bays for different buses, taxis, and passenger vehicles. The bus station is congested and the existing facilities including the services that are being provided are generally not of the required minimum standards.



Figure 24 Existing Sisimba Bus Terminal

Nanenane Bus Station

Nanenane bus station is located about 10 km east of City Centre on the north side of the TANZAM highway near Uyole – Malawi Boarder highway junction. The bus station has been built recently by the LGA under the Tanzania Strategic Cities Project through World Bank financing. It is mainly used for dropping and picking passengers from inter-city buses, local buses travelling between Mbeya and other destinations in the region, and City buses (daladala).



The station has the following facilities:

- Bus terminal for inter-city and other large buses with capacity of about 40 buses
- Daladala terminal with capacity of about 30 mini buses
- Truck parking bays with capacity of about 20 trucks
- Administration building
- Shops and ticketing kiosks
- Information centre
- Toilets

17.1.2.4 Vehicle parking facilities

Parking facilities are not publicly provided in the City center whereby cars are parked on the street or on the pavement of buildings. Only a few premises in the City center have vehicle parking space.

Most of the public and private business premises do not have parking space other than on the edge of the road, which has forced the LGA to convert some roads to be one-way traffic.

The situation calls for any new development project in the City center to consider provision of adequate vehicle parking.

17.1.2.5 Storm water drainage

The drainage system in the City comprises mostly of open drains lined and unlined with outfalls to the nearby streams. The topography of the area is favourable for surface drainage in which some streams flowing through the City provide water shed for the surface runoff.

17.1.2.6 Other modes of transport

a) Railways

The Tanzania Zambia Railway (TAZARA) starts from Dar es Salaam and passes through Mbeya to Zambia. The main railway station is located at Iyunga in the southern outskirts of the City along the Mbeya – Tunduma highway.

The railway was constructed in early 1970's to serve the landlocked Zambia as an alternative way to South Africa. Most of the Zambian, Malawian and Democratic Republic of the Congo (DRC, former Zaire) imports and exports used to be transported through this line. The TAZARA Railway line has also made hard timber harvesting possible in the basins of tropical forests of Mlimba - Kilombero simultaneously boosting up economic and agricultural activities along the rail line. Commodities like timber, food, cash crops, and livestock are easily ferried from production areas to markets. Currently, TAZARA is facing high competition from road transport between Tunduma and Dar es Salaam.

b) Airports

The recently opened Songwe airport has a 3,000 m paved runway to accommodate large aircrafts. There are scheduled flights from Dar es Salaam and the air travel is has been increasing since the opening of the airport.

An old airport with a gravel runway is located at Mwanjelwa within the City, a short distance from the City Centre. This was being used by charter flights before the opening of the Songwe airport.

17.1.2.7 Utility services

a) Water supply

The water sector in the City is favourable given that most of the residents have easy access to water within their own streets. The proportion of the population living in the area with water network is 97%. Majority of them walk less than a kilometre to fetch water. About 81% of the households are connected to water services in their own compounds whereas the remaining 19% depend on communal water sources.

Mbeya Water Supply and Sanitation Authority (Mbeya-WSSA) is a fully autonomous public water and sanitation utility responsible for the overall operation and management of water supply and sanitation services in the City. It is classified as a Class A water utility and its area of operation has a total population of 402,768. The total length of the water supply network is 702.1 km, out of which water is drawn from surface (river - 31%) and groundwater sources (spring - 69%).

Uyole ward is also served with the City water supply system whereby almost 100% of the users are provided with water supply.

b) Sewerage system

The old Mbeya town sewerage network system was developed in 1989 to serve the Mbeya Referral Hospital with a sewer line of 150 mm diameter and a total length of 4.8 km from the hospital to Kalobe oxidation ponds.

The sewer has recently been expanded to 102 km through Mbeya Water Supply and Sanitation Project financed by some Development Partners. The works included laying of pipes and sewerage treatment facility that comprises seven wastewater stabilization ponds. Out of these ponds, two are anaerobic, four are maturation, and one is a facultative pond. The system has a volume of 129,233 m³ and the discharge capacity is 14,360 m³ per day.

The City Centre is connected to the sewerage system but the suburbs rely on individual septic tanks and soak pits.

Most of the households within the City still do not have adequate solid and liquid waste disposal. The solid and liquid wastes are disposed haphazardly, some people use it for manure on the backyard garden while others burn or bury the waste.

c) Solid waste disposal

Mbeya City Council is responsible for ensuring that solid waste generated in its jurisdiction is managed in an environmentally and economically sound manner that protects public health and safety. Solid waste management is strongly grounded in the need to safeguard the environment, conserve, and recover material and energy resources, and protect public health and safety. Thus, the LGA is accountable to the public it serves to successfully plan and implement the solid waste management plans.

The City's only dump site located at Nsalaga ward about 14 km from the City Centre has been improved recently by construction dump, all weather access road, and provision of a weigh bridge to control overloading in order to protect the access road.

The waste management system covers the City; however, most of the households do not have access to adequate solid waste disposal. The solid waste is disposed haphazardly, some people use it for manure on the backyard garden while others burn or bury the waste.

d) Power supply

Mbeya City including Uyole ward is connected to the national power grid resulting in reliable and adequate power supply for present needs despite of the erratic power cuts being a national problem.

Provision of standby power backup in the form of generators is necessary for the planned facility in order to ensure full time power supply.

e) Telecommunications

Mbeya City is well served with telecommunication services including fixed line telephones, mobile phone services, data and internet services, which are also important for functioning of the planned facility.

17.1.2.8 Social infrastructure and other amenities

The City's social infrastructure includes education, health, recreational, and other community facilities. Existing facilities belong to both public as well as private institutions.

a) Educational facilities

Almost every ward of the City has public and privately owned nursery, primary, and secondary schools. Mbeya University of Technology (MUST), Mzumbe University Mbeya Campus and Moravian Church Teofilo Kisanji University (TEKU) are certain institutions and universities providing higher education services in the City. The Uyole Agricultural Research Institute, primarily undertaking public agricultural research and development, is located in the Uyole ward.

b) Health facilities

There are five hospitals, seven health centers, and 34 dispensaries in Mbeya. Mbeya Referral Hospital is the largest government hospital present in the City.

c) Tourism facilities

Mbeya boasts of a significant number of hotels and lodges in and around the City offering all classes of services. The City hosts a significant number of transit passengers travelling between Dar es Salaam, Malawi, and Zambia who make a stop in the City for overnight lodging and food.

d) Community facilities

Community facilities in this context may include libraries, community centers (might be publicly funded or supported by private organizations), cinema theaters, museums and art centers, auditoriums and concert venues, religious centers, sports and recreation facilities, and community gardens and parks. Some of these facilities are available in the City although they are not evenly distributed particularly in the developing parts of the City.

17.1.3 Summary of assessment of City level infrastructure

Assessment of the City's infrastructure, which is connected (directly or indirectly) to the planned project, has been summarized in the table below. The summary presents status, adequacy, gaps, and recommendations for improvement of the infrastructure for effective functioning of the planned facility.

Sl.	Infrastructure	Status	Adequacy / gaps	Recommendations
1.	Road connection	The City and Uyole ward are well connected to the National/International road network. Development of these roads however is not under the jurisdiction of the LGA.	Connection of the City and Uyole ward to the outside areas is adequate.	None

Sl.	Infrastructure	Status	Adequacy / gaps	Recommendations
2.	Intra city roads	<p>The City center in which the bus station is located has a reasonably good road network, which is well maintained.</p> <p>Most of the road network in the outskirts of the City and suburbs is unpaved, un-engineered, and relatively poor.</p>	Road network outside the City center including Uyole ward is undeveloped and poor. Most of the suburbs including Uyole are developed on unplanned areas, which is also a reason for poor road network.	The planned bus terminal is located alongside the Mbeya – Malawi Border highway. It can be easily accessed through the main road.
3.	Bus stations	The City has two bus stations, the Sisimba central bus station in the City center, and Nanenane bus station which is close to Uyole.	<p>The central bus station has some buildings and is paved but its development has taken place over time in an unplanned manner.</p> <p>The Nanenane bus station is a new development built under the Tanzania Strategic Cities Project funded by the World Bank.</p>	More bus stations, including the proposed Uyole bus station, should be planned to match the growth of the City.
4.	Parking	Cars are parked on the street or on the pavement of buildings.	Parking is a serious challenge to the developing City.	<p>All developments in the City should consider provision of adequate parking.</p> <p>Parking should be a necessary component of the planned bus station.</p>
5.	Water supply	<p>Mbeya City including Uyole ward is well served with water supply network.</p> <p>The proposed bus station is near the main road served with water supply network.</p>	Water supply to the proposed bus terminal shall not be a problem.	Local sewage system should be considered for the facility.
6.	Sewerage system	Only the City center is served with the sewerage system leaving most parts of the City without this service.	There is sewerage system in Uyole ward, where the bus terminal is proposed.	Despite of the fact that the proposed project can be served with the existing sewerage system, more investment in expanding and

Sl.	Infrastructure	Status	Adequacy / gaps	Recommendations
				extending the sewerage system is needed.
7.	Solid waste management	Solid waste is collected by truck for delivery to the City’s dumpsite.	There are no solid waste collection sites or containers within the City.	Waste collection sites should be developed for the proposed facility and surrounding areas.
8.	Power supply	The City and the region are connected to the national grid.	Electric power supply of the City is adequate although power cuts and fluctuations are common.	Solar powered street lighting can be adopted in the facility. Generator for backup power supply is also necessary for operation of some parts of the facility.
9.	Telecommunications	Fixed line, mobile phone, and data services are available.	Available services considered to be adequate.	None
10.	Social infrastructure / amenities	Education, health, banking facilities, and other amenities are available in the City.	Sufficient for the City needs	Bank services and first aid medical facility can be provided inside or nearby the planned facility.

18 Annexure J: Environmental Impact Assessment Process

An EIA assessment process requires that the following process to be implemented:

Scoping: The purpose of scoping is to achieve the following: identify the main stakeholders that will be negatively or positively affected by the proposed project; identify stakeholders' main concerns regarding the proposed project; identify main project alternatives; identify likely impacts, data requirements, tool and techniques for impact identification, and prediction and evaluation. In addition, to identify project boundaries in terms of spatial, temporal and institutional aspects; ensuring adequate stakeholder participation in all stages of EIA; and preparation of scoping report and terms of reference for EIA.

Baseline study: The baseline study involves a detailed survey of the existing social, economic, physical, ecological, social-cultural and institutional environment within the project boundary and ensuring that adequate stakeholder participation is engaged.

Impact assessment: involves the following: impact identification, impact prediction and evaluation of impact significance following a variety of appropriate techniques and approaches; second, ensuring that concerns and views from stakeholders are fully taken into account during assessment of impacts; and third, assessing all possible alternatives and their impacts and recommending appropriate options.

Impact mitigation and enhancement measures: involves, first, preparing mitigation measures for all adverse significant impacts, through elimination, reduction or remedying them. Second, it involves preparing enhancement measures for all significant positive effects arising from the project to increase the project's contribution to social development and environmental conservation. Third, it involved preparing a mitigation and enhancement plan for all significant negative impacts and positive effects, with details about institutional responsibilities and costs where appropriate. Lastly, preparing a monitoring plan and environmental and social management plan with details about institutional responsibilities, monitoring framework, parameters, and indicators for monitoring and costs for monitoring where appropriate.

Preparation of an impact statement: Preparation of an environmental impact statement entails, first, preparing an environmental impact statement adhering to contents outlined in the Regulations. Second, it is preparation of a technical summary in both Kiswahili and English; and third, preparation of all technical details that is appended to the statement.

Review of the environmental impact statement: NEMC in association with the developer review the environmental impact statement with a view to ensuring its adherence to review criteria and any guidelines that may be issued under the Regulations. NEMC may call for a public hearing and public review of the environmental impact statement in accordance with the conditions and procedures stipulated under the Regulations. Having done that NEMC submits a review report to the Minister responsible for the environment with recommendations and all documents used in the review for approval.

Monitoring and Auditing: NEMC conducts environmental monitoring in order to evaluate the performance of the mitigation measures specified in the environmental and social management plan as well as monitoring plan. The monitoring process involves first, Verification of impacts, adherence to approved plans, environmental standards and

general compliance of the terms and conditions set out in the EIA certificate. Second, undertaking by the developer to monitor the implementation of the project to ensure

that mitigation measures are effective, and Collection of data that can be used in future projects and for environmental management. Third, NEMC and the project developer to carry out project environmental

audit; Putting in place mechanisms for stakeholder participation during monitoring and auditing process. Finally, it requires defining areas of focus in audit exercise that normally involves five items:

- (i) implementation/enforcement audit, which takes place when NEMC verifies if mitigation measures and pollution levels are within limits;
- (ii) performance/regulatory audit that entails identification of compliance to relevant legislation or safety standards;
- (iii) impact prediction audit (which checks the accuracy and efficacy of the impact prediction by comparing them with monitored impacts);
- (iv) collection and compilation by NEMC of information arising from auditing for future use; and
- (v) collection of data by the developer from auditing and compiling information for project management and for submission to NEMC.

Decommissioning: This is the final stage done at the end of the project life cycle. The decommissioning report is either prepared as part of the environmental statement or not part of the statement, it shows how impacts will be addressed, and costs of all mitigation measures. The report ensures that welfare of workers; resource users and their general livelihood are not adversely affected due to decommissioning. The project developer is required to implement decommissioning requirements indicated in the environmental impact statement. The National Environmental Management Council monitors implementation of decommissioning plan, including land and other resources rehabilitation to offset the adverse effects of the project.

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