Infrastructure Advisory

CTC Knight Frank CLYDE&CO CRISIL An S&P Global Company

Client – World Bank and PPP Node

Implementing Agency - Temeke Municipal Council

Project - PPP pre-feasibility study for 8 municipal Projects in Dar-es-Salaam

Deliverable - Sterio Market Final Pre-feasibility Report

October 2018

Abbreviations

Abbreviation	Full-form
AfDB	African Development Bank
BOQ	Bill of quantities
BRELA	Business Registration and Licensing Agency
CA	Contracting authority
CAPEX	Capital expenditure
CBD	Central business district
CCTV	Closed-circuit television
CRB	Contractors Registration Board
DBMO	Design, build, maintain and operate
DBFOMT	Design, build, finance, operate, maintain and transfer
DPR	Detailed project report
DSCR	Debt service coverage ratio
EOI	Expression of interest
EIRR	Economic internal rate of return
ELR	Employment and labor relations
EPC	Engineering, procurement and construction
EMA	Environmental management act
ENPV	Economic net present value
ERB	Engineers Registration Board
ESIA	Environmental and social impact assessment
ESMP	Environmental and social management plan
ESMS	Environmental and social management system
FRF	Fire and rescue force
GHG	Greenhouse gases
GoT	Government of Tanzania
ICMS	International construction market survey
IFC	International Finance Corporation
IRR	Internal rate of return
KPI	Key performance indicators
LCC	Lifecycle cost
LGA	Local government authorities
LGDA	Local government district authorities
LGFA	Local Government Finance Act
LTPP	Long-term perspective plan
MIC	Municipal Investment Corporation
NEMC	National Environment Management Council
NPV	Net present value

Abbreviation	Full-form
O&M	Operation and maintenance
OP	Operational policy
OPEX	Operational & maintenance cost
OSHA	Occupational Safety and Health Authority
PO-RALG	President's Office-Regional Administration and Local Government
PPP	Public-private partnership
ProjectCo	Project company
PS	Performance standards
PV	Present value
PST	Project screening tool
QCBS	Quality- and cost-based selection
RFQ	Request for qualification
RFP	Request for proposal
SCF	Standard conversion factor
SQ M	Square meter
TDFC	Tanganyika development finance company
TIN	Tax identification number
TMC	Temeke Municipal Council
TRA	Tanzania Revenue Authority
TZS	Tanzanian shillings
USD	US dollar
VAT	Value-added tax
VGF	Viability gap funding
WACC	Weighted average cost of capital
WB	World Bank

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1. Project summary

Introduction and objectives

The World Bank Tanzania has contracted a consortium to study the pre-feasibility of public-private partnerships (PPPs) for eight municipal Projects in the country. The consortium comprises the following international and local companies: (1) CRISIL (India), which leads the consortium; (2) Clyde and Co (Tanzania), which is providing legal support; (3) Crown Tech (Tanzania), which is providing costing and engineering input; and (4) Knight Frank (Tanzania), which is providing demand and market inputs. The study commenced in December 2017 and was completed in October 2018.

The subject of this study is redevelopment of Sterio Market, which is under the Temeke Municipal Council (TMC), one of the eight Projects the World Bank mandated the consortium to study. This Project aims to build a state-of-the-art three-storey market, which can accommodate 2,215 traders, thereby reducing congestion in and around the current market area. It will provide better facilities to traders and customers. The objective of the study is to assess the Project's strategic, technical, economic, financial, commercial, legal, regulatory and institutional feasibility under the PPP model.

Strategic case

The main stakeholders of the redevelopment project are TMC (as the envisaged contracting authority); the PPP node (quality assurance of the process and content), the World Bank (financing future steps in the transaction process), traders (as off-takers and users), the ProjectCo or special purpose vehicle (SPV), i.e. a private party/ developer/ concessionaire, and customers (as users of the new market).

The project is strategically important and embedded in national and sectoral development plans. Both traders and customers can expect to benefit. The upgraded facilities in the market will address the current unhygienic and congested structures. TMC owns the land and a copy of title has been submitted to the Consultant.

The main risks of the project are: 1) traders' refusal to temporarily relocate; 2) traders' refusal to relocate to higher floors; and 3) insufficient expertise to deliver the project on time and in accordance with agreed set of specifications as mentioned in the contract. We have formulated a comprehensive set of mitigation measures to help the local government authority (LGA) effectively manage these risks.

Economic case

We have analyzed the project's main cost and value drivers and identified a comprehensive set of critical success factors. Moreover, we have worked out various technical options and propose a three-floor market. The economic appraisal builds on quantitative as well as qualitative indicators, taking into account economic benefits such as improvement in the health of traders and customers, increase in income of traders owing to improved infrastructure, reduction in congestion on roads, sustainability and generation of additional employment. With an economic internal rate of return (EIRR) of 15.2%, we can conclude that the Project is economically viable.

Commercial case

Given the need to tie together in one contract both construction and operation and considering the LGA's limited financing ability, we recommend a design-build-finance-operate-maintain-transfer (DBFOMT) model. It optimizes ProjectCo's incentives structure and minimizes life-cycle costs of construction and operation. Tanzanian law does not separate ownership of the land from its immoveable assets. Moveable assets can be owned by ProjectCo, though.

Project risks have been analyzed in detail and assigned to either LGA or ProjectCo or shared. In addition, we present a set of comprehensive mitigation measures prior and during commercial operations. As payment mechanism, we recommend ProjectCo collecting the fees from the users as it will act as an incentive to maximize revenue collection. In this way, it will be an end-user-pays PPP model. We recommend a 15-year concession period in keeping with local laws and regulations.

Financial case

Our financial analysis is based on a rigorous market demand study and a willingness to pay survey. These exercises provide us with a high level of certainty on both the project's future demand and the traders' fee we propose. Both variables are key drivers in the project's financial analysis. With a project IRR of 19% and an equity IRR of 20%, we can conclude that the project is financially viable and has a high probability of attracting market interest at the pre-feasibility stage.

A value-for-money (VfM) analysis unequivocally confirms the financial advantage of the proposed DBFOMT model vis-a-vis a traditional public procurement. In other words, it is about USD 6.1 million cheaper for the Government of Tanzania (GoT) to pursue the proposed PPP model rather than following the public procurement route. We calculate this VfM costs advantage by comparing the present value of life cycle costs and revenues of both procurement options over the 15-year contract period.

Management case

The LGA has limited institutional capacity and understanding of the intricacies of a PPP model, not only in the bidding phase but even in the Project's operational phase. In order to address these deficiencies, we have enlisted various recommendations in Section 7.1.

We have also carried out a comprehensive legal due diligence and reviewed pertinent laws and regulations. We do not see any legal impediment for carrying the Project as a PPP. We also suggest solutions to work around various legal non-material issues.

From a social and environmental perspective, we do not discern any obstacles. However, we propose a comprehensive set of mitigation measures both during and after the construction. The social due diligence undertaken by World Bank independently recommends some steps to be taken to mitigate the minor social economic impacts The Project has been categorised B as per International Finance Corporation's (IFC) guidelines and requires full environmental and social impact assessment (ESIA). Along with the LGA, we have prepared a temporary relocation strategy for traders keeping in mind the social impact of this move.

Project screening tool

Sterio market scores 3.5 out of a maximum possible score of 5.0 on six parameters in the Project screening tool. The municipal market has a strong case for its strategic suitability and preliminary feasibility as there is a high demand from traders, which will lead to high occupancy of stalls within the market. The market facility will have multiple revenue sources such as daily fees from traders, washroom fees, parking fees, advertising fee, etc., which will make the Project viable as user charges are adequate to cover capex and opex. However, the Project involves temporary relocation for close to 1,200 traders for a period of three years, and faces slightly higher risk in terms of Project execution and implementation, thereby resulting in low PPP suitability. The institutional capability is also limited as TMC is yet to execute a PPP Project. (For further details, please refer to Section 19.)

Conclusions and next steps

The rigorous, comprehensive and multi-disciplinary analysis confirms the proposed PPP is strategically, economically, commercially, financially and managerially viable. It conforms to all local rules and regulations, and in particular the law governing PPPs. A Project implementation plan has been prepared detailing the steps to be taken next, such as obtaining land title deeds and preparing support infrastructure. We propose a two-phased procurement strategy -prequalification of bidders and bidding. We also propose various options for the

financial bidding variables. We estimate a total period of 15 months for procurement, including contracting the transaction advisor up to executing the PPP agreement. In summation, a total of 2,200 traders will benefit who would be catering to over 30,000 customers daily, considering each trader caters to 10-15 customers daily.

2. Background and objectives

This chapter contains the background of the assignment and the objective of the project and this study. It also briefly explains the project timelines and provides the details of the consortium.

2.1 Introduction

Leveraging the PPP model

In the last five years, Tanzania's annual GDP growth rate averaged 7%, compared with 4.4% for Sub-Saharan Africa, making it one of the 20 fastest growing economies in the world. However, the ageing economy remains heavily dependent on agriculture, which accounts for over a quarter of the GDP and employs about 65% of the work force. There is an urgent need to shift towards industrial and manufacturing growth, along with the tertiary sector, to support economic progress and poverty alleviation programs. Leveraging the PPP model will help the country transition from low to middle income with a focus on six priority areas, including infrastructure improvement.

Assignment description

Municipalities in Tanzania plan to implement a number of PPP projects, especially ones that do not require any public funding but only land contributions and have potential to become new source of revenue for them. As the central government funding turns intermittent and decreases, municipalities are seeking new mechanisms to meet public service expectations. Municipal projects under PPP are often challenging due to their limited size and the associated transaction costs of project preparation.

In order to advise the municipalities in Tanzania on how to reduce the cost of these projects, and achieve economies of scale, the World Bank had appointed an international consortium led by India's CRISIL Infrastructure Advisory and comprising domestic firms, namely Crown Tech Consult, Clyde & Co Tanzania, and Knight Frank Tanzania. The mandate was to study the pre-feasibility of PPP projects in building municipal infrastructure. These projects were initially identified by the LGA of Dar es Salaam. Based on the recommendations of the consortium, eight potential PPP projects were identified by the WB for this assignment. Redeveloping the Sterio Market in Dar es Salaam is one of them.

2.2 Consortium partners

The consortium (the consultant) comprises a consortium of four international and local firms as presented below:

CRISIL Infrastructure Advisory (lead partner)

CRISIL is the lead contractor and is responsible for the deliverables, project management, financial analysis, infrastructure gap assessment, economic review, risk assessment and also conducting capacity-building workshops.

Crown Tech Consult

Crown Tech is responsible for site and infrastructure evaluation, assessment of resettlement needs and environmental impacts and preparation of the project conceptual design.

Clyde and Co

Clyde and Co does the legal due diligence and reviews national and municipal laws, Acts and guidelines of Tanzania relevant to identified projects, title deeds, ownership, use and user rights, and other relevant legal aspects.

Knight Frank

The firm is responsible for the market and demand studies. It has studied the lease rentals, demand-supply gap, occupancy rates, and conducted the willingness-to-pay survey.

2.3 Objectives

Project objective

The objective of the project is to create an organized market with designated space for each trader. It will help reduce congestion in the area and provide better facilities such as public toilets, parking spaces, etc. for traders and customers. The proposed redevelopment would cater to the needs of the traders as well as the consumers. Apart from dedicated space on each of the three floors, traders selling similar goods will be segregated on each floor. The building will have lifts and pulleys to carry goods to higher floors, car parking space for consumers, cargo parking facility for trucks to unload their goods, proper access pathways and also basic amenities such as toilets (separate ones for workers and consumers), drinking water, electricity and ceiling fans.

Study objective

The study aims at preparing a report on the technical, financial, strategic, commercial and economic pre-feasibility of the project under the PPP model. The study also covers the management aspects such as legal, regulatory, social and environmental issues. Each of the above has been detailed in separate chapters.

2.4 Study execution

The study commenced on November 17, 2017 and was completed in October 2018. The first level assessment report was submitted after conducting stakeholder discussions to better understand the Project. Also, the draft pre-feasibility report was submitted and presented to the World Bank, PPP node and Temeke Municipal Council during the fourth mission in June 2018. Verbal and written comments from World Bank, PPP node and LGAs have been incorporated in the respective sections of the final pre-feasibility report.

The study includes four main deliverables:

Table 2.1: Main deliverables and the progress

Deliverables	Progress	Actual / proposed submission
Inception report	100%	December 21, 2017
First level assessment report	100%	February 16, 2018
Draft pre-feasibility report	100%	June 4, 2018
Final pre-feasibility report (Report on hand)	100%	October 25, 2018

Source: Consultant

2.5 Report layout

The report layout sets out the nine sections as mentioned under:

Section1	•Project summary, which includes Project background, strategic case, economic case, financial case, commercial case, management case, and subsequent steps for the municipal council
Section 2	•Project background, progress of the assignment till date and layout of pre-feasibility report
Section 3	•Strategic case outlining the Project's objectives, main stakeholders along with their roles and responsibilities, sector-level and Project overview, existing arrangements, and main benefits and risks.
Section 4	•Economic case delineating critical success factors, alternative technical options, economic appraisal along with sensitivity analysis, and impact and benefit accrued to the economy
Section 5	•Commercial case outlining proposed PPP Project structure, roles of the municipal council and ProjectCo, risk allocation matrix, output specifications, payment mechanisms, term of PPP contract, and accountancy treatment
Section 6	•Financial case evaluating cost structure, revenue configuration, overall viability of the Project along with scenario, sensitivity and VfM analysis as well as maket demand and willingness to pay responses
Section 7	•Management case dealing with institutional review, regulations, legal due diligence, and environmental and social aspects
Section 8	•Project procurement strategy and plan, preliminary Project schedule, milestones and Project implementation plan
Section 9	•Annexure related to bill of quantities, willingness to pay, market demand study, legal due diligence, social and environmental aspects, revenue collection, city infrastructure and municipal finance assessment, institutional review responses, and conceptual drawings

3. Strategic case

This chapter explains the need for the redevelopment of the Sterio market. It details the project's rationale/ objective and its economic benefits. It will also cover the roles and responsibilities of the various stakeholders of the project and the existing arrangement between these stakeholders. It seeks to explain in detail how the redeveloped Sterio Market can cater to their needs while taking into account the current market conditions and major risks involved in the project.

3.1 Project objectives

The primary objective of the project is to provide a state-of-the-art market with designated space for each trader and better facilities such as common toilets, parking spaces, etc. for both traders and customers. This would be achieved by redeveloping the existing Sterio market, by constructing a three-floor building along with parking space and support utilities such as storage space for traders, common toilets, electric substation, drainage network, solid waste collection huts, etc. Additionally, facilities such as Wi-Fi, CCTV camera, 24*7 security, lighting, firefighting facilities and washing and cleaning, would also be made available.

- *Trading space for traders* - The plan is to develop a modern market with a proper structure and designated space allotted to all traders/vendors. The proposed three floors in the market building (including the ground floor) will accommodate the traders, which are currently operating in and around the Sterio Market. A total of around 2,215 traders have been envisaged to be accommodated in the proposed building.
- *Parking space* – Some portion of the land area will be used to develop internal roads and parking slots for market users and delivery trucks. This area will be used for dual purposes: for delivery trucks to off-load goods in the night and early morning, and as a car park and for internal movement of vehicles and customers during the market hours.
- *Utilities/ support infrastructure* - Remaining portion of the land will be used for developing required utilities/support infrastructure such as storage space for traders, common toilets, electric substation, drainage network, solid waste collection unit, etc. Facilities such as Wi-Fi, CCTV camera, 24*7 security, lighting, firefighting facilities and washing and cleaning are also planned.

3.2 Stakeholders

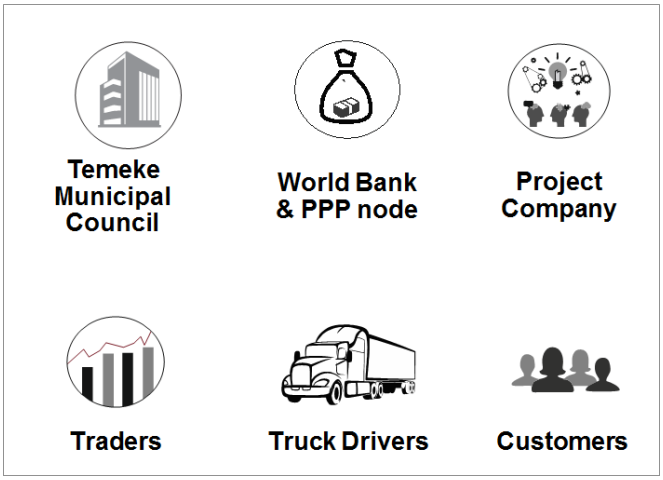
This section outlines the roles and responsibilities of key stakeholders of the project:

Temeke Municipal Council

The council would be the main implementing agency as the market is situated in Temeke ward. It will be responsible for monitoring the construction and implementation of the project.

PPP Node

PPP Node, established under the President's Office-Regional Administration and Local Government (PO-RALG), would assess and approve the project submitted by the municipal council.



World Bank

The World Bank is collaborating with the PPP Node to study the pre-feasibility of PPP Projects identified by the LGA of Dar es Salaam. It funds the selection of consultants to undertake the study and also selection of a transaction advisor for conducting detailed feasibility studies and for selection of ProjectCo.

Traders

Traders play a critical role in the project as they need to be temporarily relocated to the other nearby place during the construction period. They should be provided a written assurance that they would be allocated spaces in the redeveloped market. Further, they should be given access to basic services such as water, toilets, electricity and storage facility at the area where they are relocated to. Also this area should not be far away from the present location. This is important as otherwise chances are they may lose out on their customers.

ProjectCo

ProjectCo is the project company (or the special purpose company), i.e. a private party/ developer/ concessionaire, who is responsible for the design, construction, financing, operating and maintaining the project.

Customers

Customers are major stakeholders in the project too. The traders' willingness to relocate will highly depend on the customers' willingness to come to the location where they are temporarily relocated to. Also in the redeveloped market, customers will be able to avail adequate services such as proper access to each shop, toilet and parking facilities. The customers would benefit through an improved buying experience as traders dealing in similar goods would be segregated on each of the three floors. Thus, customers will not have to search for their shops. Also, the improved market structure would be rainwater free and without decay odors.

Truck drivers

Truck drivers play an important role in the functioning of the market as they transport goods in and out of the market. For smooth operation of these trucks, a good road access to the market is necessary. The truck drivers would benefit as they would be provided a dedicated space for loading and unloading of goods near the market. Currently, the truck drivers have to unload the goods on the roads nearby, resulting in traffic congestion. Sometimes unloading is done in a hurry, resulting wastage of fruits, such as banana, watermelon and cassava, and vegetables that get spoiled.

3.3 Strategic and sector review

This section provides a brief overview of the municipal markets and their end-users, the overall context of municipal markets in the TMC and the project's strategic alignment with municipal and national development plans.

Municipal markets overview

In cities, municipal markets emerge at select locations, which are of strategic importance and have good connectivity. Good connectivity results in more buyers and sellers. The buyers are assured that in the municipal market they will get the required products at a reasonable price and the sellers are confident that they would

be able to sell their produce by the end of the day, which help them lower the loss of perishable food items. Many of the traders cater to mainly wholesale consumers in the market whereas a few of them cater to retail consumers as well.

Markets in Temeke

The Temeke district has more than 25 markets in total. However, the district collects revenue from only 20 markets that are in full operation. The Sterio market, the largest in the district, is one among them. Tandika, Madenge, Keke and Magurune are situated near the Sterio market. These markets are retail markets selling perishable and non-perishable commodities.

The Sterio market is one of the busiest markets in Dar es Salaam and is dominated by wholesale traders and retailers of both perishable (fruits, vegetables, etc.) and non- perishable commodities (grains, spices, etc.). They operate in both small shops and in an ad hoc temporary pavement "outlets". Apart from this, the market also houses chicken suppliers, butcher shops, food vendors and shops/ kiosks selling kitchen utensils and second-hand clothes. In addition, the market is located near the Temeke Referral Hospital. There are several banks in its vicinity too. It has high traffic density due to its prime location.

Strategic alignment to national goals

The proposed project to redevelop the Sterio market is strategically relevant and is aligned with the government's goals. Moreover, it is consistent with the national development plans such as the Five Years Development Plan 2016/17 - 2020/21, Long-term Perspective Plan (LTPP) 2011/12–2025/26 and Development Vision 2025. The project emphasizes on improvement in healthcare, job creation, poverty eradication and sustainability. It is expected to create more employment opportunities to city residents and contribute towards improving their livelihood.

3.4 Business need

This section highlights the need for a state of the art municipal market at Temeke as mentioned below:

1. Unorganized and old market place

The current market structure is old and dilapidated. It is made of thin metal sheets supported by metal poles. Numerous stalls are located cheek by jowl in a haphazard manner. It also has a few unorganized butcher shops, which results in additional solid waste creation. Some of the sheds appear to be leaking too, resulting in accumulation of rain water inside the market premises during the rainy season.

2. Highly congested area

About 1,029 traders operate from within the designated space in the market and there are others who do business on the streets around the market, causing traffic congestion. Within the designated market space, the existing stalls/tables are chock-a-block making accessibility between stalls/tables difficult. The streets surrounding the market have also been partially occupied by the traders, making them poorly accessible for vehicles.

3. Poor drainage infrastructure and roads

The market has an old and poor drainage system, with many of the storm-water drains silted or blocked. Some of the roads within the market have been maintained properly but there are others in poor condition.

4. Lack of storage facilities

Although the market houses a large number of wholesale traders of perishable goods, there are no godowns/warehouses for bulk storage there. Lack of proper storage facilities within the market causes inconvenience to these traders and also affects their business prospects as perishable food items get wasted at the end of the day, resulting in food waste.

The following images captured during the site visit highlight various aspects of the existing state of the market:

		
Trading sheds in the market	Fruits and vegetables stalls	Separate sheds for chicken and meat
		
Goods brought to the market in trucks/lorries	Containers of goods brought to the market – lack of proper storage	Open drainage within the market

Source: Consultant

Thus, there is indeed a strong business need and need for better hygiene conditions in addition to improved traffic circulation. The current poor condition of the Project facility has been included above highlighting the inadequacy of the current situation and the numerous problems faced by the beneficiaries. This underpins the need for redeveloping Temeke Sterio Market from an environmental, operational and buyers perspective.

3.5 Existing arrangements

This section outlines the existing legal arrangements of the project.

Land owned by TMC

The Sterio Market area is owned by TMC (government notice No. 13 of 2000) but it does not have the title deed. However, due to increased trespassing and land disputes in areas with no titles, all the LGAs are now required to survey and obtain certificates of title for all the land they own. Accordingly, the TMC is in the process

of obtaining a title and have requested the Commissioner of Lands at the Ministry of Land to process one. Also, in accordance with PPP Policy 2009 and PPP Act 2010, the TMC may sell or lease any land or premises it owns to a ProjectCo in order to undertake a PPP project during the concession period, i.e. 15 years. There is no minimum required lease value; this should be assessed in detail in the feasibility stage. On expiry of the concession period, the TMC will resume operation and management of Sterio Market.

Project is eligible for PPP based on cost

The redevelopment project falls under the trade and marketing category (Section 4(4) of the PPP Act 2010) and thus qualifies to be developed under a PPP arrangement. Further, the maximum limit for PPP projects to be carried out by an LGA is USD 70 million (Regulation 76(2) (a) of the PPP Regulations 2015). The project's capex is USD 6.6 million and thus conforms to this rule too.

TMC has right to collect user fees

The TMC may charge rent, fees or tariffs to businesses or persons occupying or using the facilities in the Sterio Market according to the by-laws (Section 61(b) of the Local Government Finance Act). Under the PPP agreement, the TMC can grant to the ProjectCo the right to collect user fees from the tenants (traders/merchants) occupying the building. The PPP agreement will stipulate to whom these revenues accrue, i.e. whether to the ProjectCo or to the LGA. Or else, it will devise a sharing mechanism. Applicable taxes chargeable to the users will be paid to the Tanzania Revenue Authority (TRA).

3.6 Project overview

This section provides an overview of the project's location with respect to major landmarks and assesses the connectivity of the project site with major roads in the city. It also assesses the current status of the project land in terms of ownership and availability of the title deed.

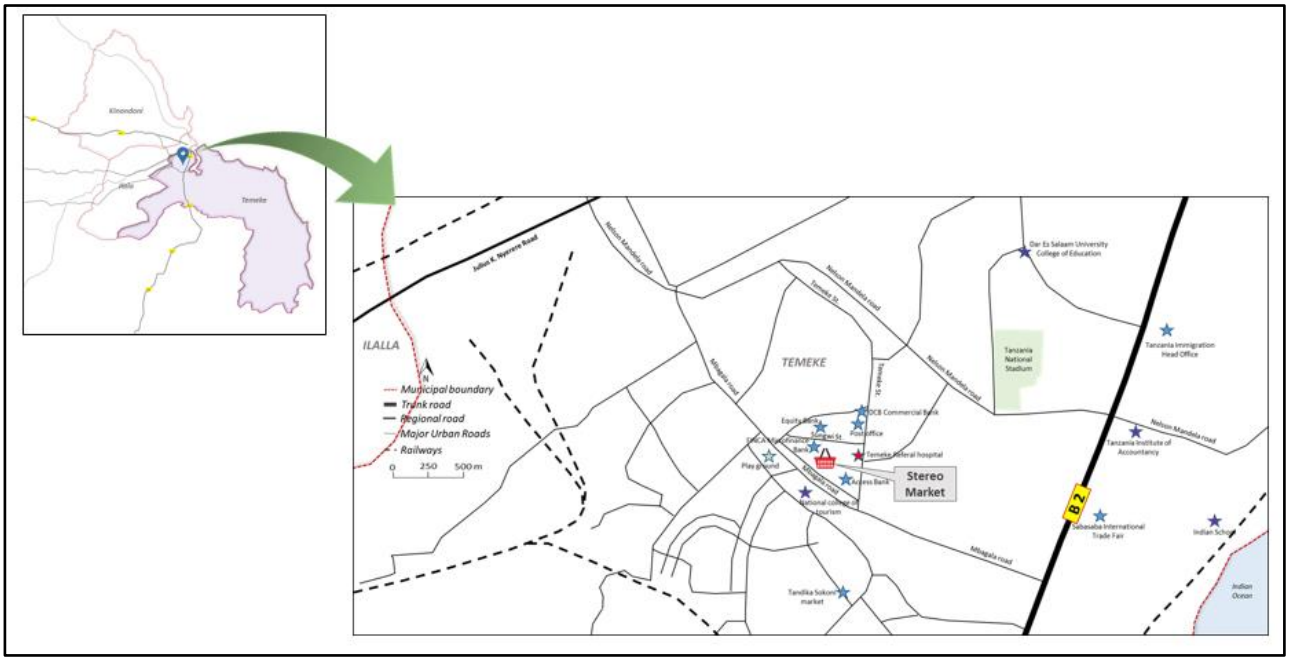
Location

The project is located in the Temeke ward in the TMC, about 16 kilometers south of Ubungo Terminal and nearly 5 kilometers southeast of Julius Nyerere International Airport. The nearest bus stop is Sudani Bus Stop, situated 200 meters south along the Mbagala Road. The area surrounding the market is a prime area and, hence, very busy. It houses the Temeke Referral Hospital as well as offices of CRDB Bank, DCB Bank, National Microfinance Bank, Bank of Africa, and Access Bank, along with large complexes.

Connectivity

The market is easily accessible with good road connectivity. It borders the Kabunga and Kasana streets to the northwest and southeast, respectively. The area is accessible via the Nelson Mandela Road that links with the Kilwa Road at the Uhasibu Road junction. Both are dual-carriage tarmacked roads. The ward is also accessible via the Mbagala Road, which also connects to the Kilwa Road at Kwa Azizi Ali. There are several bus stops along the two roads enabling access to the area. The map below shows the market location and access roads:

Figure 3.1: Location map of the Sterio Market



Source: Consultant

Land title deed

The market is spread over 6,840 sq m and is owned by TMC. The municipal council has the title deed for the designated land and a copy of the same has been submitted to the consultant for verification.

Land for temporary relocation

The traders will have to be temporarily relocated during the construction phase. The municipal council has identified an open space at Mwembe Yanga in Temeke district to temporarily relocate the traders.

3.7 Main benefits

This section highlights the project's main benefits to traders and consumers.

Improved livelihood for traders

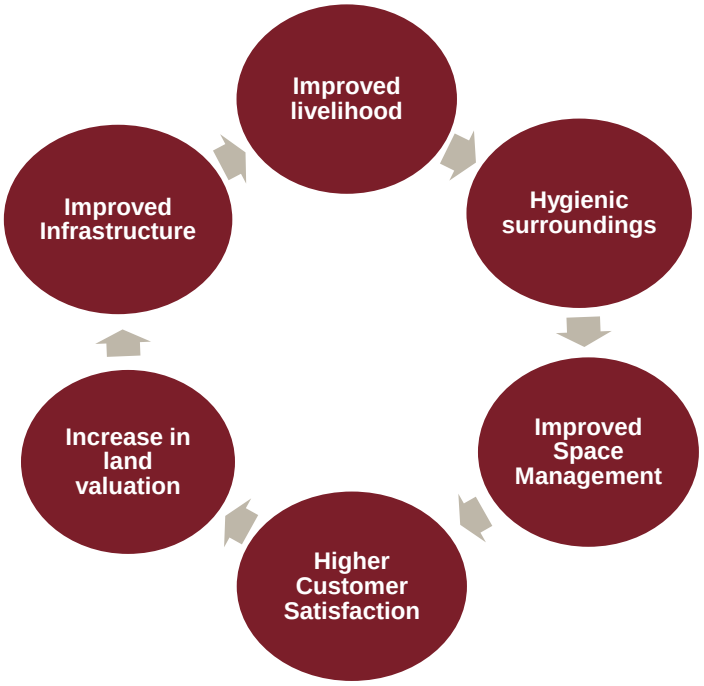
Redeveloping this market will improve the livelihood of around 2,215 traders including 1,200 traders who are currently operating in and around the Temeke market. This also includes the additional traders who will be allotted trading spaces in the market (resulting in their self-employment) owing to the increased space available because of the proposed multi-floor structure.

Improved hygiene conditions and reduced health problems

Currently, market has poor drainage system with many drains silted or blocked leading to water overflow. The water, mixed with other waste, results in poor hygiene in the area. As discussed earlier, many traders are operating outside the market and these unsanitary conditions are detrimental to their and consumers' health. The modern market will be organized and have a drainage system that will boost hygiene in the area. This will be beneficial to not only the traders but even the customers. It will reduce ill-health and in turn cut the healthcare expenditures of traders, customers and nearby communities.

Improved space management

Currently, the market is highly congested and chaotic. This makes accessing certain sections of the market difficult, affecting the livelihoods of the traders operating in these sections. The traders/hawkers that are operating on the ground around the Sterio Market will be shifted to the redeveloped building. This will ensure that these traders/ hawkers get proper operating space within the market, as opposed to the current situation. All traders operating just outside the facility or on its perimeter will be accommodated in the Project facility and none of traders will be left out.



Enhanced shopping experience for customers

The Temeke area is dominated by low - and middle income group people who prefer to shop in markets such as the Sterio Market rather than malls and shopping centers. Redeveloping this market will improve the shopping experience of a large portion of the population in this area.

Improved supporting infrastructure and amenities

Currently, there is no storage space in the market which is causing inconvenience to the traders and also affecting their business prospects. The new proposed market will have dedicated storage spaces for the traders. It will also have other amenities such as toilets and drinking water facility for the traders and the customers.

Increase in land valuation of nearby areas

Redevelopment of the market will give an impetus to the real-estate sector in the surrounding area. The increase in the area's land value will directly benefit the local community.

3.8 Main risks

This section highlights the main risks attached to the project.

Refusal of traders to relocate

This is a brownfield project, which is currently occupied by close to 1,200 traders. It is required that all traders are temporarily relocated and resettled at the proposed location at Everet sub ward in the Temeke ward. The sample group of traders consulted during the willingness-to-pay survey agreed to relocate. Our findings are also confirmed by the municipal council as they also had field consultations pointing that a vast majority of them are willing to relocate. However, we are apprehensive that this could change in reality, delaying the Project's implementation.

Unwillingness to occupy space on higher floors

Currently, Sterio Market operates only on the ground floor. The proposed redevelopment envisages three floors for traders (including the ground floor). Even though the proposed Project has provision of lifts for traders to carry their goods to higher floors, it remains to be seen whether they will be willing to move to higher floors. This could result in traders jostling to occupy space on the ground floor, which will result in congestion, as is the case currently. This aspect was discussed with LGA officials, and they do not consider it as a major risk, and have exuded confidence that they will be able to convince traders to move to higher floors by segregating traders selling similar type of goods on each floor. This will reduce the undue advantage of operating on lower floors, and will lead to fair competition among traders.

Lack of expertise of ProjectCo

ProjectCo should have significant experience as a PPP operator in municipal markets. Also, the ProjectCo should preferably be a combination of local and regional companies with sufficient experience in executing DBFOMT Projects under PPP. However, there are no companies in Tanzania with this requirement.

Steps for mitigation of potential risks

Detailed stakeholder consultations need to be undertaken and group leaders of the trader unions need to be taken into confidence as they will play an important role in convincing traders to temporarily relocate. The proposed temporary site is close to the existing site and temporary structures along with water, electricity and toilets as well as other amenities will be provided. Also, the fee increment is marginal and amounts to 30-50% increase over current fees, owing to improved facilities provided at the redeveloped market, such as larger stall size with access space, toilets, electricity, water, security, storage facility, etc.

4. Economic case

The main objective of the chapter is to demonstrate that redeveloping the Sterio Market results in significant economic benefits to the wider economy. It identifies the critical success factors for the PPP. It identifies and appraises a wide range of realistic and achievable targets and recommend the preferred option.

The redevelopment project will result in increased employment opportunities and savings by way of reduced healthcare spending. A distributional impact analysis sets out how the stakeholders are expected to benefit. A sensitivity analysis, meanwhile, reveals how the economic IRR (EIRR) is impacted by different variables. The chapter finally presents the economic case for the redevelopment of the Temeke Sterio market.

4.1 Critical success factors

This section presents the critical success factors driving the successful redevelopment of the Sterio Market.

Financial closure

One of the key success factors of a PPP project is obtaining financial closure on time. In many cases, it can be seen that the government signs the contract and often the selected bidder takes significant time to arrange the financing. In the meantime, the government waits and often without any remedies or penalty clauses in the contract. This can be avoided by requesting the selected bidder to submit an irrevocable and first-demand guarantee, linked to the financial closure deadline agreed to. In the Sterio Market Project, financial closure should ideally be achieved in about 12 months. If after 12 months, financing agreements have not been signed, the government can exercise the guarantee.

PPP agreement

Generally, as part of the procurement process, and after selecting the preferred bidder, the draft PPP agreement is finalised in a round of final negotiations. However, to ensure timely completion of the negotiation process, it is proposed that the draft PPP agreement be shared with the shortlisted bidders. Feedback and comments will then be incorporated into the contract's final version and this is then the reference for bidders' proposals. Final contract negotiations with the preferred bidder would, therefore, take limited time.

User charges

Rendering the project financially viable, a marginal increase in the trader fees as outlined in Section 6.4 is necessary. This was discussed with TMC. We believe the increase is reasonable. It has been agreed to by TMC as the redeveloped market will provide more space to the traders and will provide independent trading stalls to each of them. Currently, they do not enjoy these facilities. The municipal council will make relevant changes in the municipal by-laws to reflect the revised fees.

Willingness of traders to pay increased charges

The consultant and the TMC undertook a willingness-to-pay survey and held extensive consultations with traders on the increase in user charges. The outcome points to the majority of traders willing to pay higher fees (1.5 to 2 times of the current fees) if they are provided adequate space and proper facilities as outlined in the Section 10. Additionally, the TMC would conduct an awareness campaign among the traders about the proposed benefits of the project before increasing the user fee.

Contract management skills

Both before and after commercial operations start, the LGA should have enough skills to manage the contract. These include capacity to manage the project, design and run the awareness campaigns, manage contractual risks and project financing. The institutional assessment review highlights the gaps in these skill sets among the officials of the LGA. It is recommended that all the concerned officials should attend adequate training that covers all the above mentioned aspects. In addition, we recommend bringing in a resident international PPP contract management consultant to support the LGA in these functions.

4.2 Technical options

This section explores the rationality of the various technical options for redeveloping the market:

Option 1- Do nothing

This option maintains the current status quo, which would result in further degradation of the area in the years to come. With the unhygienic surroundings and the rainwater seeping through the sheds, there is a high chance of infection and water borne diseases. Based on this, we discard this option.

Option 2- Build the market at another location

In order to build a new market elsewhere, the LGA will need to find the required land. Even if it is done, convincing the traders to leave the current market location is likely to be challenging. Therefore, we discard this option.

Option 3- New market with only ground floor

To implement this option, the existing market has to be demolished and a new building, with only the ground floor, has to be constructed. However, given the lack of space and the huge number of traders currently operating in the market, constructing only the ground floor would not suffice at all. Therefore, this option is discarded.

Option 4- New market with three floors (proposed by consultant)

This option entails demolishing the existing market and building a new market building of three floors (including the ground floor), with on-ground facilities for services and offloading. The number of floors has been arrived by categorizing the traders as large ones, who require 10 sq m of space, medium ones who require 6 sq m of space and small ones, who require 3 sq m. The traders, selling similar type of goods, would be lumped together on each floor.

As many as 440 large traders would occupy 4,400 sq m of the proposed built-up area, 890 medium size stalls would occupy 5,340 sq m of the built-up area and 885 small traders would occupy 2,656 sq m of space. Option 4 is the most viable and recommended one, as there is no underground parking and no commercial development envisaged and the traders would have sufficient space to function.

Table 4.1: Summary of technical options and recommendations

S.N.	Technical option	Recommendation
1	Do nothing	Discarded
2	Build a market somewhere else	Discarded
3	New market with only ground floor	Discarded
4	New market with three floors	Accepted

Source: Consultant

We conclude that the recommended technical option of a market with three floors is our working assumption. The financial and economic analyses below seek to estimate the likely cost of and revenue from this option.

4.3 Economic appraisal

This section assesses the economic impact of the Project and the benefits accruing, in terms of increased income of traders in the market owing to improved infrastructure, savings on account of reduced healthcare spending of traders and consumers, reduction in wastage of food, and other environmental benefits.

Financial and economic analysis have similar features - both estimate the net benefit of an investment based on the difference between the 'with project' and 'without project' situations. The basic difference is that the financial analysis compares revenue and cost of only the project. In economic analysis, we take a wider perspective and look at the project's contribution to the economy in general, taking into account its positive and negative externalities.

Assumptions and methodology

The economic analysis looks at both quantifiable and non-quantifiable factors such as incremental income, taxes paid, savings in healthcare expenditure, job creation and reduced traffic congestion. We have quantified the economic benefits to the greatest degree possible. When this is not possible, we have presented a qualitative description of its economic benefit. The various assumptions and considerations in arriving at the economic benefit for this Project are:

- *Period of analysis* - The economic appraisal of the Sterio Market has been undertaken for 30 years since the life of the asset and, in turn, its effect on the economy will exceed the contract duration of 15 years.
- *Economic prices* - In the financial analysis, we use the market prices reflecting the financial costs to a project. In the economic analysis, we convert these financial prices (both revenue and cost) into economic prices using a standard conversion factor (SCF). An SCF of 0.9 has been assumed to eliminate the effect of market price distortions, especially taxes and subsidies.
- *Discount rate* - A discount factor of 12% has been assumed to calculate the economic NPV of the project and this is in keeping with other infrastructure appraisal benchmarks used by the World Bank and other multilaterals.

Economic indicators

The economic appraisal considers qualitative and quantitative aspects. The qualitative aspects cover the factors which cannot be quantified such as reduction in wastage of food owing to bulk storage facility, reduced traffic congestion, improved security of petty traders who are currently operating on the road side, dust emission (air pollution) during the construction period, noise pollution during market hours, etc.

The quantitative analysis consider benefits (surpluses) accrued to the three major stakeholders of the Project:

a) *Producer surplus*: Producer surplus covers net benefits to retail traders from the Project. It will include overall increase in income of retail traders owing to improved infrastructure of the market. The overall savings in healthcare expenses of these traders due to hygienic facilities such as clean toilets and proper solid waste management at the market is an additional economic benefit. The producer surplus will be calculated in real terms and excludes inflation. It also considers any loss of livelihood of producers in the other markets owing to development of this market.
b) *Consumer surplus*: Consumer surplus covers net benefits accruing to end-consumers of the municipal market. The major economic benefit to consumers is savings in healthcare expense through consumption of safe food products. The modern market will provide hygienic and good quality goods such as vegetables, fruits and other food items for consumption, reducing overall healthcare expenses of the household.
c) *Developer surplus*: The developer of the municipal market facility will get benefits in terms of profits generated from the project. The profits accrued will then be converted from nominal value to real value to assess the economic benefits to the developer.

To calculate the economic benefits, we have used the following indicators:

Table 4.2: Economic indicators

S.N.	Component	Indicator	Quantified?
1	**Incremental income of the traders**	Net incremental surplus 'with Project' scenario and reduce it by 50% to account for loss of livelihood of traders elsewhere	Yes
2	**Savings in healthcare expenses of traders**	Number of small, medium and large traders operating from the facility multiplied by a proportion of per-capita spending on hygiene-related diseases	Yes
3	**Savings in healthcare expenses of consumers**	Number of people consuming products from the market multiplied by a proportion of per-capita spending on food-related illnesses	Yes
4	**Profit after tax (PAT)**	Profit after tax from the Project is brought down to real terms by dividing it with inflation rate	Yes

Source: Consultant

Metrics

To arrive at the economic cost, capex and relocation cost of traders of Sterio Market were adopted from the financial analysis and multiplied with the SCF. Here, capex excludes VAT, as VAT is considered a form of transfer payment.

In producer surplus, the current cost and revenue of the traders operating in the market has been considered for the duration of 30 years in the 'without Project' situation. The proposed revenue after redeveloping of the market has been considered in the 'with Project' scenario. The difference between the two scenarios results in incremental surplus for traders owing to improved infrastructure. The savings in healthcare expenditure for the traders has been calculated by multiplying the number of traders with average per capita healthcare expenditure on illnesses.

In consumer surplus, the savings in healthcare expenditure for consumers has been calculated by multiplying the number of consumers of vegetables and fruits from the market with average per capita healthcare expenditure on illnesses.

In developer surplus, the overall profits generated from the project are taken into account. The profits accrued are then converted from their nominal value to real value, resulting in economic benefits to the developer.

The net economic benefits generated by the project have been calculated by considering capex and relocation cost incurred during first two years of construction, and then adding the producer surplus, consumer surplus and developer surplus incurred over the 30-year period.

Based on these assumptions, the project's economic IRR for 30 years is 15.2%. The economic NPV is USD 2.4 million. This implies the project will be viable from a socio-economic viewpoint, underpinning the robust economic metrics. Moreover, efficiency benefits will be accrued to traders with the removal of middle men who charge traders for services.

Sensitivity analysis

We consider the following scenarios: 1) Project's capex (including relocation cost) increases or decreases 20%; and 2) project's PAT increases or decreases 20%. Even in these adverse circumstances, the EIRR is high.

Table 4.3: Sensitivity analysis

	EIRR (%)
Base case	15.2%
Scenario 1	
With-Project capital cost higher by 20%	13.7%
With-Project capital cost lower by 20%	17.1%
Scenario 2	
With-Project PAT lower by 20%	13.7%
With-Project PAT higher by 20%	16.5%

Source: Consultant

4.4 Distributional impact

This section assesses the distribution of economic benefits across the stakeholders and concludes that they are better off with the implementation of the Project. The distributional impact has major implications. The benefits of the Project need to be redistributed ensuring that all stakeholders are made better off.

Table 4.4: Distributional Impact on various stakeholders

Beneficiary	Distributional Impact	Impact
Temeke Municipal Council	It will be able to fulfill its social responsibility without any significant capex. The Project gives TMC an opportunity to leverage on the private sector efficiencies in redeveloping the Sterio market and still remain the owner of the asset.	High
Traders	Big benefits as they will get a dedicated space to sell their goods. Also, their sales would increase manifold on account of hygienic marketplace wherein the customers would flock to meet their household grocery needs.	High
Customers	Their overall buying experience would be better with traders selling similar goods segregated on the same floor, the market becoming clean and hygienic, devoid of rain water accumulation. Public washrooms would also be there for their needs.	High
Truck Drivers	They would be able to unload their goods at dedicated space and thereby reduce the traffic congestion on roads. Further, the goods would be unloaded in a composed manner, which would lessen the chances of fruits and vegetables getting spoiled.	High
ProjectCo	ProjectCo can expect optimum returns for the investment made in the redevelopment. Based on the commercial freedom provided, it can charge reasonable fees for cargo truck entry and car parking. Rest of the fees would be as per the municipal by-laws.	Medium

Source: Consultant

5. Commercial case

This chapter demonstrates the recommended option results in a well-structured and viable PPP transaction. It provides an overview of the project's structuring aspects, outlines the proposed PPP model, the contractual agreements and the roles and responsibilities of the municipal council and ProjectCo.

The risk allocation matrix presents the risks each party faces in each of the project phases: designing, building, financing, operating, maintaining and transferring. The output specification provides an insight into the area statement and the overall proposed market design related to technical components.

We have also provided a brief description of the proposed payment mechanism. The proposed term of the PPP, the procurement methodology and the accountancy treatment of the proposed PPP model have also been detailed.

5.1 Project structure

This section provides an overview of the structure of the project in terms of the roles and responsibilities allocated to the LGA and ProjectCo.

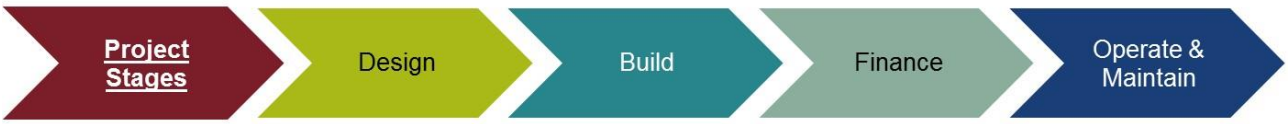
Project structuring overview

Structuring is a critical component of a PPP project in which we allocate responsibilities and rights, and distribute risks to each party involved in the contract. The aim is to arrive at a structure that will make the project technically feasible, economically and commercially viable, fiscally responsible, and also provide value for money (VfM) to the LGA. A typical PPP project structure involves contractual arrangements between a number of parties including the government, project sponsor, project operator, financiers, suppliers, contractors, engineers and end users.

Information from the feasibility study and economic pre-feasibility analysis is a key input to the PPP structuring. For example, while structuring, information such as the key technical risks and estimates for demand and users' willingness to pay for the services has to be taken into account. The PPP structure then helps in analyzing the commercial viability, affordability and VfM, which could iteratively result in changes to the proposed risk allocation. In short, project structuring is a crucial component in the overall process of preparing a PPP project.

Different stages of project implementation

In PPP structuring, we discern the following building blocks which have to be allocated to any of the parties and responsibilities defined. This analysis then determines the PPP model proposed.



- *Design* - The task in this stage is to prepare the conceptual design and the layout plans of the project facility as proposed in the development mix and components in the proposed project configuration. The proposed design should be approved by the relevant municipal council. The design should take care of the regulations and municipal by-laws applicable to the proposed project facility. Designing the project

would also need to consider the environmental and safety regulations in addition to identifying the scope of services, design characteristics and specifications for all project components and performance and quality requirements. These aspects would form the conceptual and detailed design and finally the bill of quantities (BOQ).

- *Build* - The task in this stage is to build the project facility as per the approved conceptual and detailed designs. The ProjectCo should adhere to the timelines and costs proposed. The special purpose company is expected to contract an EPC (engineering, procurement and construction) contractor who could also be a shareholder in the special purpose company.
- *Finance* - The task is to provide finance for the construction of the project facility. It follows a typical project finance structure. Typical project finance or financial gearing is 30% equity and 70% debt arranged from commercial banks or multilateral financing institutions. In the case of the Sterio Market project, finance could be challenging, as the immoveable assets will remain in the ownership of the LGA and cannot be used as a lending security. This is a constraint and is further discussed in the legal section.
- *Operation and maintenance (O&M)* - Post the construction, it has to be decided which party takes up the responsibility of operating and maintaining the assets. The ProjectCo will then sub-contract this to an O&M contractor which could be a shareholder in the SPV.

5.2 Proposed PPP model

This section explores the different options to implement the PPP project and also delves into aspects which we believe are crucial to the successful implementation of the project.

LGA's constraints

As mentioned above, we see various constraints in executing the proposed project under the public procurement model. The finances of TMC are already stretched (for further details refer to Section 16) and it does not have sufficient resources to fund the project on its own (capex is over TZS 15 billion or USD 6.6 million). Further, there is a clear need to combine construction and operation phases to minimize the lifecycle cost (LCC). The party responsible for the construction should preferably also operate avoiding contractual hand-overs and disconnects.

LCC is the total cost of ownership. Hence, a design should be selected that ensures the lowest overall cost of ownership taking into account the required quality and function. An LCC analysis should be done in the early phase of the design process when the design can still be refined to reduce cost. In addition, the municipal council has limited experience and skills to manage this type of Projects within the stipulated time and budget. The rationale for the PPP model is driven by the private sector's resources and to leverage its expertise. It also allows the LGA to provide basic infrastructure services in the backdrop of constrained financial budgets. Additional benefits of a PPP are:

- *Sufficient experience in arranging finances* – ProjectCo is expected to have past experience in implementing similar kind of projects and would have sufficient experience in arranging finances from different sources based on its technical and financial credentials.
- *Utilize modern technologies* – Having past experience in this field, ProjectCo can leverage its expertise and modern construction technologies to develop the market and can include features that the public sector might not have envisaged.
- *Minimize the LCC* – ProjectCo can not only integrate the development of these components but also innovate and cross-subsidize the development of some components with others and thus minimize the total LCC of all the assets combined.
- *Leverage past experience* – ProjectCo will leverage its past experience in EPC management and bring in efficiency in operation and maintenance techniques, which will in turn maximize profits.

- *Incentivized to maximize collected revenues* – The ProjectCo is incentivized to maximize the collection of fees. By assuming responsibility of construction as well as operation and maintenance of the facility, it is provided with the commercial freedom to exploit the market facility in the best way possible.

Recommended DBFOMT model

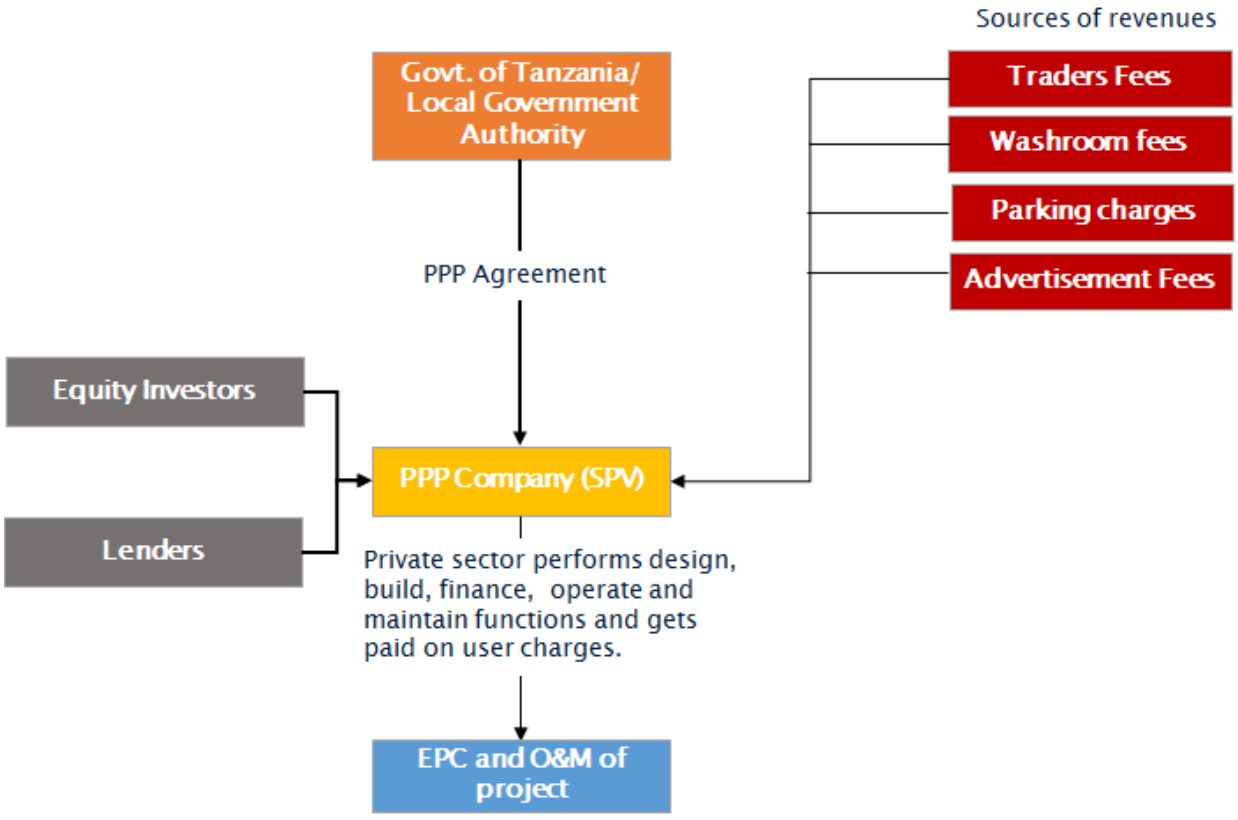
Based on the above constraints, we recommend a DBFOMT model. In this model, ProjectCo is responsible for designing, building, financing, operating and maintaining the project facility and finally transferring it at the end of the concession period. The government will only be responsible for providing the land parcel in addition to the necessary approvals, such as environmental permits and regulating tariff charges as per the municipal by-laws where deemed necessary.

We also see the need to tie together in one contract both construction and operation, as well as the LGA's limited financing ability. The recommended model also optimizes ProjectCo's incentives structure as it minimizes the LCC of construction and operation. The transfer of assets will only be partial as the land and structure remains with the LGA as the Tanzanian law does not separate ownership of the land from its immoveable assets. Moveable assets can be owned by the ProjectCo, though.

5.3 Roles and responsibilities of proposed PPP model

This section outlines the proposed PPP model as well as the allocation of roles and responsibilities of the municipal council and ProjectCo. Additionally, it covers key procurement components such as bidding variables and concession period.

Figure 5.1: Proposed PPP model



Source: Consultant

The proposed PPP model will have TMC as the concession's grantor, which will enter into an agreement with ProjectCo, i.e. SPV, to undertake the project during the concession period of 15 years. ProjectCo will be

responsible for financing the project, and bringing together equity investors as well as lenders (commercial banks or domestic financial institutions). It will provide expertise to successfully construct and operate similar Projects, and generate revenue via fees collected from traders, washroom fees, parking charges and advertisement fees.

Responsibilities of TMC

- *Obtaining approvals* - The municipal council will take the project through the PPP process, in line with provisions of the PPP Act 2010, and obtain approvals necessary for entering into the PPP agreement with ProjectCo.
- *Leasing of project site to ProjectCo, but ownership remains with municipal council* - The project site will be leased to ProjectCo by the TMC during the concession period. ProjectCo will hand over the project along with the assets to the municipal council at the end of the concession period without encumbrances. The operation and maintenance of the structure will be transferred, but not its ownership, as the municipality owns the land and its structures. For further details refer to Section 7.2. Private sector would be handed over the commercial user rights.
- *LGA to operate the market after the concession period* - At the end of the concession period, TMC will directly operate the municipal market - as per Tanzanian laws, the maximum length of the concession period is limited to 15 years, and additional five years is only provided in case of an extended construction period owing to government delays.
- *Provision of supporting infrastructure by the LGA* - The municipal council will also provide for improvement of support infrastructure, such as widening the access roads leading up to the market, as post the development of the modern market, an increase in customers and cargo is anticipated. Further, the council will also be required to provide proper storm water drainage connectivity and regularly flush the drains nearby to the market.
- *LGA to facilitate all environmental approvals* - The municipal council will also be responsible for facilitating the environmental approvals, going ahead on the project. There are a range of approvals such as construction permit, operations permit, utilities permit, etc. that need to be obtained from municipal council or other authorities (as required) with well-defined timelines. However, the ProjectCo is responsible for driving the task of getting approvals.
- *LGA to provide for temporary relocation* - The council will also be responsible for temporary relocation of ~1,200 petty traders currently operating in Sterio Market.
- *Accommodate both authorized as well as unauthorized traders* - The LGA will accommodate authorized as well as unauthorized traders in the market building, and will proactively restrict traders operating on adjacent streets as well as curtail daladala operators from stopping indiscriminately along nearby roads, aimed at avoiding user charges. If the LGA fails to undertake these measures, the ProjectCo stands to lose a portion of the potential revenue.
- *Option of follow-on PPP after completion of the PPP and handover to the government* - This is a potential option that can be explored by the LGA as the private sector is more efficient in managing the operations of infrastructure facilities by leveraging on past experience.

ProjectCo responsibilities

- *Obligations of ProjectCo* - ProjectCo will be responsible for designing, constructing, procuring, financing, and operating and maintaining the project for the designated concession period.
- *Incorporation of the SPV* - ProjectCo will be contractually obligated to incorporate and register the SPV as per rules and regulations of Tanzania, for the performance of the PPP agreement.

- *Commercial operation of the market* - ProjectCo will be given the right to develop, build, finance, operate and maintain the project during the concession period. During this period, it will have the right to commercially exploit the municipal market, i.e. the economic use of the municipal market and collection of revenue.
- *Overall management of market* - ProjectCo will be responsible for the performance of the municipal market (proper space allocation for traders, clean and hygienic toilets and washrooms, and clean parking areas for customers and cargo trucks) and for the discharge of all obligations to the municipal council throughout the concession period.
- *Sub-contracting to other firms* - ProjectCo will be given the right to subcontract certain aspects of the operations to reputable parties.

Concession period

- *Contents of PPP agreement* - The PPP agreement will be entered into between TMC and ProjectCo for the performance of the rights and obligations of both parties, as detailed in the agreement.
- *Concession period* - The concession to develop, build, finance, operate, maintain and transfer the project will be given to ProjectCo for 15 years, which would include the construction period of two years.
- *Commercial freedom given to LGA, subject to certain conditions* - The PPP agreement will specify commercial freedom with respect of development undertaken, and would give the ProjectCo the right to fix the charges, subject to a cap decided by the LGA.
- *Setting up an escrow account* - A special account, specifically for this purpose would be set up wherein all the revenues collected by the ProjectCo would be deposited on a daily basis and these would be ring fenced avoiding uncontrolled diversion of funds.
- *Provisions in PPP agreement* - The PPP agreement should also contain provisions for conducting regular audits and impose penalties on the ProjectCo in case of overcharging.

Table 5.1: Summary of responsibilities of ProjectCo and municipal council

Stages in PPP contract	ProjectCo	Municipality
Design	√	-
Construction	√	-
Finance	√	-
Operate	√	-
Maintain	√	-
Transfer	√	-

Source: Consultant

5.4 Risk allocation

In this section, we identify risks and allocate these to the contractual party that is best able to manage those risks.

Introduction

Project risk management is an iterative process conducted throughout the project's lifecycle, and involves systematically considering possible outcomes before they happen and defining procedures to accept, avoid or minimize the effect of the risk on the project. The first necessary step is identification and allocation of risk. Given that PPP projects involve complex project financial and contractual structures, risk identification and allocation of risk to the appropriate contractual party is essential for successful implementation.

The essential principle driving risk allocation is that management of risk should be allocated to the party best able to handle it.

Methodology of risk assessment

The risk assessment has been carried out through the following steps:

- *Identify key risks of the project and consequence of the risks* - Risks to the project's success are generally low to moderate and are considered manageable. The risks of greatest concern relate to the ability to complete construction as per schedule, that user charges will be paid without exception, and that ProjectCo can secure affordable finance in time.
- *Allocate the risks to the appropriate contractual party* - The risk allocation matrix outlines allocation of risk to the party that is best-suited to handle and mitigate the risk. Risk allocation involves analysis of the identified risk and determining whether the risk may be transferred to ProjectCo or retained by the LGA. On the basis of the risk analysis, the important risk categories relevant to the project have been allocated to the contractual party best able to bear the risk, or alternatively to reduce the likelihood of the risk occurring and / or minimize the consequences of the risk.

Table 5.2: Risk allocation matrix

Risk	Description of risk	Risk assumed by
Site and approvals	Securing project approvals on a timely basis or site conditions do not allow for excavations and new construction	LGA
Construction	Events during construction prevent the completion of market facility	ProjectCo
Revenue	Not generating enough revenue due to leakage in revenue collection	ProjectCo
Performance	A sub-contractor engaged by the ProjectCo fails or delivers substandard work or maintenance costs are higher than expected because of poor design, materials or installation.	ProjectCo
Financial	Ability to secure financing for the project	ProjectCo
Political	Changes in laws or regulations reduces the ProjectCo revenue/ increase costs, or new policies reduce the importance attached to the development of municipal market and government support	LGA
Force majeure	Performance targets are not met or project is terminated due to force majeure event	ProjectCo and LGA
Default	There can be default from either sides - government event of default and ProjectCo event of default.	ProjectCo and LGA

Source: Consultant

5.5 Risk mitigation

Risk mitigation involves developing strategies and options on how to mitigate risks.

Table 5.3: Risk mitigation matrix

Risk	Mitigation measures	Likelihood
Site and approvals	LGA should carry out geo-technical surveys to assess any issues prior to selection of ProjectCo. LGA should proactively assist the necessary agencies and get their approvals on various aspects, such as land excavation, and project design.	Medium
Construction	ProjectCo can sign fixed price construction contracts with subcontractors and also maintain contingency provisions.	Medium
Revenue	ProjectCo should ensure optimal usage of best of commercial facilities as higher usage will result in higher revenue.	High
Performance	ProjectCo should ensure providing the services as per the service specifications in the contract.	Medium
Financial	ProjectCo should assess the current market situation at which loans are being provided for commercial projects. It should also endeavor arranging finances from multiple sources such as commercial banks, domestic financial institutions, multi-lateral agencies.	Low
Political	LGA should get appropriate legal advisors to validate implications of the change in regulations on the project and should compensate ProjectCo for changes in the laws. The LGA should assess the impact of changing the public policies and assess the loss that would be borne by the ProjectCo.	Low
Force majeure	Obtain adequate insurance policies.	Low
Default	Both ProjectCo and LGA have to manage the project with an eye to avoiding events of defaults, triggering penalties and/or termination.	Low

Source: Consultant

5.6 Input and output specifications

This section presents an illustrative set of input and output specifications that the ProjectCo will be expected to fulfill under the PPP agreement. These specifications have been formulated in four parts to provide a clear understanding of the expectations from the ProjectCo.

- *Overall scope of the Project facility* - Temeke Sterio Market, spread over 6,840 sq m, will be redeveloped to cater to ~2,200 traders. It will be a modern market with a proper structure and designated spaces allotted to all traders/vendors. The proposed three floors in the market building (including the ground floor) will accommodate traders currently operating in and around the market. On average, over 30,000 customers are expected visit the market daily. Parking will be allocated for 46 cars and 50 trucks.
- *Detailed output specification of the Project facility* - The section covers the main output specification of the Project, which defines how the objectives will be attained. It covers physical outputs such as building, parking, toilets, etc. as well as services such as healthcare, security, hygiene, etc. which will ensure smooth operations of the modern facility.

Table 5.4: Output specifications of the Project

Facility	Output specifications
Toilets	• Toilet facility to be provided for traders and customers • Separate toilets for male and female traders and customers • Provision for toilets in each floor of the market building • Toilet should have 24*7 water supply • Toilets should be clean, hygienic and well maintained • Toilets should have provisions for differently-abled traders and customers • Standards for sanitary fittings should be complied as per Tanzanian standards
Showers	• Shower facility to be provided for traders/ porters • Separate shower facility for male and female traders • Showers should have 24*7 water supply • Showers should be clean, hygienic and well maintained
Water supply	• Potable drinking water to be provided to traders and customers as per per-capita norms • 24x7 water to be supplied to traders for washing and cleaning fruits and vegetables • 24x7 water to be supplied for cleaning of floors and other usage • Water storage facilities for emergency purposes such as water shortage, fire accidents • Water supply guidelines needs to be complied as per Tanzanian standards
Parking area	• Provision for adequate space to meet parking requirement of customers and traders • Provision for adequate space to meet parking requirement of cargo trucks • Adequate internal movement space to be provided for entry and exit of cars and trucks • Sufficient and paved road at entry and exit points to avoid congestion • Smooth movement of vehicles to reduce waiting time.
Electricity	• Provision for 24*7 electricity supply, including back-up for load shedding • Adequate number of ceiling fans, lights and charging points for traders
Security	• Provision of security cabin to avoid unauthorized operations outside the market building • Adequate security staff to be provided to handle safety and security operations
Drainage	• Adequate drainage to be developed around the site • Drainage line needs to be connected with central drainage of the city • Drainage guidelines needs to be complied as per Tanzanian standards
Sewerage	• Provision of underground septic tank for collection of sewerage • Periodic sludging of septic tank through de-sludging trucks

Facility	Output specifications
	• Sewerage guidelines needs to be complied as per Tanzanian standards
Solid waste management	• Solid waste collection units will be placed strategically on each corner of the floor • Collection of solid waste to be carried out on a regular basis during the day • Spoilt food and vegetables to be collected from each trader • Discarded food or thrown away in the internal circulation pathways to be collected • Solid waste to be segregated into recyclable and non-recyclable waste • Garbage collection trucks to transport the solid waste to the landfill site • Solid waste management guidelines should be complied as per Tanzanians standards
Hardscape and landscaping	• Outdoor areas of the market to be smoothly hardscaped to facilitate easy movement • Paving's surface quality to ensure durability as well as resistance against wear
Maintenance and repair	• Floors, gates, fences and stalls should be kept in good state of repair. • Proper maintenance of refrigeration facilities to ensure product preservation • Other minor repair works need to be carried out
Hygienic practices	• Provision of daily cleaning, dusting and mopping of common areas, stalls and equipment • For disinfection of knives for meat, temperature of water to be maintained at 82 degree • Periodic removal of cobwebs, repair and cleaning of roof and wall finishes • Monitoring the water quality by examining harmful metals & microbiological contents • Pest control measures to be taken both outside and inside the market • Regular cleaning of toilets and usage of naphthalene balls to prevent entry of pests
Safety health and environment	• Provision of adequate fire extinguishers and above ground fire hydrants in the market • Smoke detection and alarm systems to be installed in the market building • Health of workers/ traders needs to be checked on routine basis • Management to comply with legislation relating to public health and safety • Installation of green building technologies (solar panels) to reduce carbon footprint • Provision of techniques for waste water-recycling and rain water harvesting • Adherence to environmental and social performance standards as per IFC

Source: Consultant

- *Minimum design specifications* – These are minimum specifications that need to be adhered to in order to provide adequate facilities for different stakeholders of the Project:

Table 5.5: Minimum design specifications of the Project

Facilities	Design specifications
Stalls	• Stall sizes will be of two different types as per Project requirement • Minimum built-up area of small stalls - 3 sq m, medium - 6 sq m and large stalls - 10 sq m • Minimum access space of 20% of built-up area to be considered for each stall • Sufficient space for movement around the market and easy access to each stall
Car and cargo parking	• Minimum equivalent car space (ECS) for cars -25 sq m • Minimum ECS for trucks - 50 sq m
Toilets and showers	• Minimum area for each urinal - 2 sq m • Minimum area for each water closet - 4 sq m • Minimum area for each shower room -10 sq m

Source: Consultant

- *Detailed input specifications* - The plot area of 6,840 sq m shall be developed as:

  a) 65% (4,446 sq m) of the land shall be earmarked for constructing a new market building that will accommodate small, medium and large stalls for traders along with toilets across all the three floors. The admin block and electrical room will be accommodated on the ground floor of the market building.

  b) 17% (1,150 sq m) of the land will be reserved for parking;

  c) 15% (1,002 sq m) would be allocated for internal movement;

  d) ~1% is allocated for solid waste collection unit spread over an area of 60 sq m; and

  e) ~3% (182 sq m) shall be set aside for other necessary utilities.

  The total development of 6,840 sq m will include a built up area of 15,728 sq m that would. The available area would be fully occupied by the three floor market building along parking, internal movement, garbage collection hut and other necessary utilities.

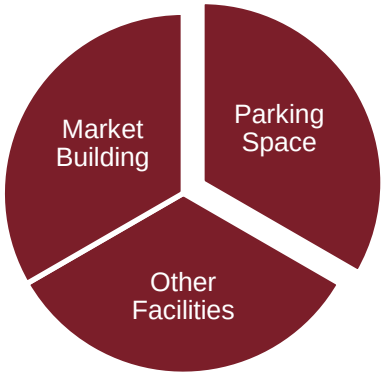
Table 5.6: Technical components and area statement

Development mix	% Land area	Plot coverage (sq m)	Total built-up area (sq m)
Market main building	**65%**	**4,446**	**13,338**
Large stalls	21%	1,467	4,400
Medium stalls	26%	1,780	5,340
Small stalls	13%	885	2,656
Toilet blocks	2%	218	653
Administration block	2.7%	253	253
Electrical room	0.3%	37	37
Ancillary facilities	**35%**	**2,394**	**2,394**

Development mix	% Land area	Plot coverage (sq m)	Total built-up area (sq m)
Parking facilities	17.3%	1,150	1,150
Internal movement	15.5%	1,002	1,002
Solid waste collection unit	0.7%	61	61
Other facilities/ utilities	2.5%	182	182
Total area	**100%**	**6,840**	**15,732**

Source: Consultant

- *Market building* - It is planned as a three-floor building with a total built up area of 13,338 sq m. The ground floor of the building will have an electrical room, bulk storage area, toilets, and stalls of traders selling perishable goods. It aims at avoiding any damage to these goods while transporting to higher floors. The first floor of the building will have an administration office, two bulk storage areas, public toilets, stalls for non-perishable goods, and petty traders. The second floor of the building will also have two bulk storage areas, public toilets and stalls for non-perishable goods along such as electrical goods, clothes, etc. All the floors will have a good mix of small, medium and large stalls. Also, the design of the floors will be similar; it is proposed to have homogeneous sections on each of the floors, with stalls/kiosks selling similar merchandize located adjacent to each other on the same floor. This will ensure that the locational disadvantage of one stall vis-à-vis another is minimized. Based on observations during the site visit, it is proposed to have stalls / kiosks of three sizes to meet the need of the existing traders – as per the design specifications mentioned above.



  - *Stalls*- It is assumed that 440 shops will require 10 sq m area each, almost 890 stalls of 6 sq m each, whereas the remaining 885 stalls can be small trading stalls of 3 sq m each. The larger stalls will be earmarked for big traders, who extensively trade across various commodities in fruits and vegetables, whereas the smaller stalls will be reserved for small traders who deal in a single type of fruit or vegetable. The access area is included in super built-up area of 3 sq m, wherein we have assumed that 80% will be carpet area (2.4 sq m) and 20% will be access area (0.6 sq m) out of total area of 3 sq m for small traders. Similar access space will be provided for medium and large stalls. The redeveloped market will accommodate ~2,215 traders.
  - *Toilet blocks and showering facilities* - It is planned to have toilet cum showering facilities on three floors of the market building. We have assumed a 12 hour operational period over which over 2,200 traders will be operational and each trader caters to minimum 20-30 customers. We have considered 6 peak hours (morning 8 am to 11 pm and afternoon 5 pm to 8 pm) and 6 non-peak hours (11 pm to 5 pm). While we have conservatively assumed that each trader will go toilet couple of times, in reality, it might be higher (thrice or four times). While each trader will have 20-30 customers each day, we have conservatively assumed less than 10% of customers will use the toilets. However in reality, it might be higher (15%-20%). In the overall toilet configuration, we have considered both urinals and commodes so that both male travelers and female travelers can use the toilets. Average time for using urinal has been considered as 3 minutes and the average time for using the commodes has been considered as 6 minutes. Based on an indicative total daily usage of ~6,200 times by traders, customers, porters and administration staff and considering each toilet fixture would require 6 sq m space (as per minimum design specifications), the total area requirement of toilet fixtures shall be 112 sq m (including urinals and commodes). In addition, the porters who help the traders in transporting the goods from trucks to their respective spaces in the market, will also be availing the shower facility.

A very conservative estimate of only around 177 porters (10% of total number of traders) have been considered, whereas the number could be far higher close to 20% -30%. Considering area required for shower room as per the minimum design specifications, the total area requirement of shower rooms shall be ~27 sq m.

Thus, the total area required for toilets and showers shall be ~139 sq m. However, a higher space of 653 sq m has been assumed in the Project configuration in case the usage of toilets exceed the base assumptions considered.

- *Administration block* - It is planned to have an administration block on the first floor, measuring 253 sq m, which will be equipped with seating for 20-25 people. A space will be allocated for the market manager deputed by the TMC and other staff appointed by the ProjectCo to collect daily user charges from small and big traders, washroom and shower users, and for car parking and cargo entry. Telephone, office furniture, computers, photocopiers, printers and office stationery will be provided.
- *Bulk storage* - Bulk storage facilities will be provided to traders to store daily unsold goods. There will be one bulk storage each on the ground and first floors, and two bulk storages on the second floor. The area of the bulk storage will be ~15 m x 9 m each. The rationale of keeping two bulks storages on the second floor is that most large traders will be operating on this floor, and given the high volume of goods they deal with, it might not possible for them to sell all the goods and supplies brought in a single day.
- *Electrical room* - It is planned to have a small electrical room on the ground floor, measuring 36 sq m, which will have the electric substation, powering the lights, fans and water supply system across the three floors of the market during operational hours. The market is proposed to be operational from 8 am to 8 pm. To facilitate the movement of goods to higher floors, the Project includes two service lifts within the main building.
- *Stairs and ramps* - Apart from the service lifts to carry goods, all the floors will have access through staircases and ramps for the public and traders. The ramps will help senior citizens/ handicapped person to access the higher floors of the market.

- *Parking facilities and internal movement* - There will be a need for internal access roads and parking slots for market users and delivery trucks. It is planned to have a parking facility for cars and cargo trucks adjacent to the market building. 15% (2,152 sq m) of the land area will be earmarked for parking. The parking facility will serve a dual purpose: early morning, cargo delivery trucks will use it for loading/off-loading purposes, whereas during market hours, it can be used for parking cars and internal movement of vehicles and customers. Forty-six cars can be accommodated in the proposed parking space. It is important that the market should have a traffic control plan to ensure public safety and optimal use of pavement and parking areas.

Compliance with Tanzania laws and regulations

ProjectCo will have a general obligation to ensure that all works comply with relevant Tanzanian legislation, and standards and good industry practice in Tanzania. Installation plans will need to be approved before works commence and construction standards will need to be met prior to the handover of the assets.

Conceptual designs and layout plans

The conceptual designs and layout plans of the Project have been provided in Section 19. These designs provide a base level understanding of the physical specifications of the market facility and its various components.

As per the conceptual designs/schematics, the ground floor plan will have dedicated stalls and shops for traders selling perishable goods, a bulk storage area, an electrical room and a parking area for cars and cargo trucks outside the building. The first floor will have a dedicated space for the administration office, two bulk

storage areas, and stalls for of non-perishable goods. Similarly, the second floor will have two bulk storage areas, stalls for non-perishable goods such as tailoring mart, electrical goods and other goods. There will also be public toilets and access to ramps, stairs and service lifts on each floor.

These designs and layouts are indicative and subject to change during the transaction advisory stage.

5.7 Recommended payment mechanism

We can discern two payment mechanisms as explained below:

1. *LGA collects fees and pays ProjectCo:* In this case, the LGA collects the fees from traders, washrooms and shower users, as well as car and truck owners. Fees collected are then transferred to ProjectCo, as per the contract. Another option could be to contractually agree on a level of payment (similar to providing availability payments). However, the municipal council is not incentivized to maximize collecting these fees and enforce each trader, washroom or shower user, car and cargo trucks to pay the requisite fees. Further, this option might also be vulnerable to political pressure groups and lobbying aimed at fees exemptions. These would result in revenue leakage and might trigger contractual penalties.
2. *ProjectCo collects fees:* In this case, ProjectCo collects the fees from all user groups as to maximize the collection of revenue as it is its only source of income.

The current revenue collection efficiency of the LGA is low, resulting in loss of revenue generated (for details refer to Section 14), which will not be the case if ProjectCo collect the fees. We recommend that ProjectCo collects the fees from traders, washroom and shower users, cars and trucks carrying cargo as it is incentivized to maximize its collection.

5.8 PPP contract term

Ideally, the concession period should match the economic life of the underlying asset, or as a minimum cover of the asset's depreciation period. However, the length of the concession period as per Tanzanian law is only 15 years. A shorter period may result in the ProjectCo not able to recoup the investments. We recommend extending the concession period to e.g. 25 years, as this enhances financial pre-feasibility. Hence, while 15 years is the legally maximum allowed term, an overarching recommendation is that extending this could be considered by the Government of Tanzania.

5.9 Accountancy treatment

This section elaborates the accountancy treatment of the proposed PPP project, in terms of ownership and transfer of assets.

Financial Reporting and Accounting for PPP projects

Currently, there is no specific accounting guidance under the Tanzanian accounting standards for PPP arrangements. Generally, infrastructure companies could account for the infrastructure as a part of their fixed assets at the construction cost and do not recognise any revenue during the construction period. Revenue is normally recognised for the amount recoverable from the public sector and/or the amount recovered from the customers for use of the infrastructure only after the construction is complete.

The International Accounting Standard Board (IASB) has issued an interpretation related to accounting treatment of Service Concession Arrangements under its IFRIC 12, such as the Design-Build-Finance-Operate-Maintain models being proposed for the Project. It can be effectively interpreted that even though the infrastructure assets are not recognised as the property, plant or equipment (PPE) of the operator, it can account for them in its books. Similarly, it can recognize the revenues as measured in accordance with IAS 11

(for construction or upgrade services) and/or IAS 18 (for operation services, where the operator operates and maintains the infrastructure).

Financial reporting by the public sector of risks and liabilities in PPP transactions is not mandatory in Tanzania. Globally best practices require governments to reflect most PPP assets and associated liabilities on the government's balance sheet. If they are not accounted for, then they are listed in the Notes to Account.

Depreciation

Accordingly, the following provisions related to depreciation could apply.

- *Annual deprecation of immovable assets* - The standard depreciation rate of 5% as given in the Finance Act has been assumed for the market building and other civil works and a straight line method has been used for depreciation of this class of assets. It should be noted here that though the physical ownership of the asset remains with the TMC, the operation and management of the assets and economic activities is transferred to ProjectCo for the duration of the concession period and, hence, depreciation cost is allowed to be considered in ProjectCo's financial statements.
- *Annual deprecation of movable assets* - For plant, machinery and electrical works, a depreciation rate of 12.5% has been taken, and a diminishing value balance method has been used for this class of assets, as given in the Finance Act. Additionally, there is a provision for accelerated depreciation for plant and machinery and 50% initial allowance (first year allowance), as allowed under the Act, which has been considered.

6. Financial case

The main objective of a financial appraisal is to ascertain the project's financial pre-feasibility. The financial analysis determines financial metrics such as the project IRR and equity IRR and debt-service coverage ratio (DSCR). This chapter details the assumptions used to arrive at costs, revenues and other financial modelling assumptions related to opex, occupancy rates, project financing, depreciation and taxation. This chapter also analyzes the project's VfM, both qualitative and quantitative.

6.1 Willingness to pay

This section provides insights into traders' willingness to pay higher charges when the new market becomes operational.

The assessment involved the market manager and ~150 traders. The market has ~1,200 traders, with 1,029 traders having contracts with the municipal council. The assessment found that majority of the traders were willing to pay the higher proposed fee (in form of daily fee, monthly fee, truck entry fee, etc.) if provided with proper facilities that include security, cleanliness, ventilation (ceiling fans), hygiene facilities (toilets), parking facilities, water and electricity.

Currently, the daily fees charged for large shops (9.0-14.5 sq m) and small stalls (1-5 sq m) are TZS 500 and TZS 300, respectively. The monthly fee charged varies from TZS 30,000 to TZS 50,000 for large shops and TZS 5,000 to TZS 15,000 for small stalls/tables. Also, there are charges such as truck entry fee, toilet fee, parking charges, etc. Further details are included in Section 10.

6.2 Assumptions and methodology of financial analysis

This section provides an overview of the financial assumptions for the market. Key financial assumptions include depreciation rate, corporation tax rate, cost of capital and the inflation rate.

Depreciation

The standard depreciation rate of 5% as given in the Finance Act of Tanzania has been assumed for the market building and other civil works, and straight line method (SLM) has been used for depreciation of this class of assets. For plant, machinery and electrical works, a depreciation rate of 12.5% has been taken and a written down value (WDV) method has been used for this class of assets, as per the Finance Act.

Additionally, there is a provision for accelerated depreciation for plant and machinery and 50% initial allowance (first year allowance), as allowed under the Act, has been considered. It should be noted that though the physical ownership of the asset remains with the TMC, the operation and management of the assets and economic activities will be transferred to ProjectCo for the duration of the concession period. Hence, depreciation cost is allowed to be included in ProjectCo's financial statements.

Corporate income tax

Current corporation income tax rate in Tanzania is 30%, and the same has been assumed in our financial model. Moreover, there is no limit on the carry-forward period for tax losses in Tanzania, and the same has been used to set off losses in the initial operating years.

Carry forward of losses

In Tanzania, there is no limit on the carry forward period of tax losses. This has been considered in the financial

model. However, as per the latest Finance Act, an alternative minimum tax of 0.3% is imposed on the turnover of the third year of an entity with tax losses for three consecutive years.

Cost of capital

For interest rate on long-term loans, based on market assessment, the bank lending rate in Tanzania is 14% p.a.-16% p.a. Hence, for the purpose of this financial model, an interest rate of 16% p.a. (inclusive of the processing charges) has been assumed as standard interest rate on long-term loans. Moreover, the standard cost of equity is usually 19-21%, which has been assumed at 20% for calculation of cost of capital. Considering debt-to-equity ratio of 70:30, the post-tax weighted average cost of capital (WACC) is 13.8%.

$$\text{WACC (post-tax)} = g \times Rd \times (1 - t) + Re\ (1 - g)$$

Where g is gearing; Rd is the cost of debt; Re the post-tax cost of equity; and t is the corporation tax rate.

Tariff indexation and cost revision

Regarding tariff indexation, it was agreed by the TMC that the tariffs/fees can be increased every three years, and a rate of 25% was proposed and agreed. The assumed indexation has been considered only after detailed discussions with the investment team members across LGAs and they have given their consensus for the same. However, they also proposed that the indexation should be applied every three years, rather than annually as changing the bylaws annually is cumbersome and not practicable. For cost revision, an annual escalation of 6% (equivalent to the average inflation in Tanzania over the past five years) has been assumed. With respect to ProjectCo's perspective, it would have been reasonable to increase the user charges on-year, as user charges would then be linked to the country's inflation index. However, the LGAs opined that increasing user charges annually will not be amenable to a majority of the traders, instead suggesting that the increase should be done every three years. This will be beneficial to ProjectCo as the user charges would increase 25% vis-à-vis the compounded 6% increase on-year, which would translate into 19% increase only at the end of the third year. Hence, the cumulative impact over the project's period of 15 years would result in higher gains to ProjectCo in the case of the first option as compared with the second option.

Grace period and tenure

We have assumed that the construction of the market will take two years. A grace period for the loan repayment for this project has, therefore, been considered to be two years, and the repayment period has been considered to be eight years (making the total loan tenure of 10 years). It should be noted that the interest grace period is generally not available. Therefore, this was not considered in the financial model.

Table 6.1: Financial assumptions

Variable	Value
Depreciation rate (buildings and other civil works)	5% p.a.
Depreciation rate (plant and machinery)	12.5% p.a. 50% (first year allowance)
Corporation income tax	30%
Post-tax WACC (70% debt, 30% equity)	13.8%
Tariff indexation	25% (every three years)
Opex revision rate	6% p.a.
Principal grace period	2 years
Principal repayment period	8 years

Source: Consultant

6.3 Capital expenditure and O&M costs

This section provides an overview of capex and opex for the redevelopment of the market.

Indicative cost of land

It is proposed that the plot area of 6,840 sq m will be developed for construction of the municipal market. Based on discussions with municipal valuers, it was estimated that land prices in the area are between TZS 112,000-210,000 per sq m (or USD 49-91 per sq m). Hence, the total value of the land earmarked for development of the municipal market ranges between TZS 0.76-1.44 billion (USD 333,000-624,000).

Capex

Capex estimates for the proposed redeveloped Sterio Market are presented in the table below. We have assumed that the market building will have three floors (including ground floor), and all these floors will be used to accommodate the traders currently operating in and around the market.

Given that this market will also cater to wholesale customers apart from retail customers, a larger shop size of 10 sq m for large traders, stall size of 6 sqm for medium stalls and stall size of 3 sq m for small stalls has been considered. Given this development mix, a total of 2,215 traders will be accommodated in the market. It has been considered that all floors in the market building will be open-framed structures (similar to industrial construction) with wide open halls to accommodate traders; moveable kiosks will be built for large shops and we assume that there will not be any major civil work that will be required for interiors within the floors. Total capex of the market, as estimated by the consultant, is USD 6.6 million (inclusive of VAT), which can be split in two years in ratio of 30:70. The major cost contribution in the first year is land development and part construction, whereas in the second year, the major cost contribution will be civil cost, plant and machinery, and supporting infrastructure.

Table 6.2: Area statement and capex

Area statement	% of land	Land area (sq m)	Floors	Total built-up area (sq m)	Capex (USD)	% of total cost
Land development	Lump sum				10,706	0.2%
Civil cost						
Market building	65%	4,446	3	13,338	2,963,222	44.5%
Parking and internal movement	31%	2,152	1	2,152	243,761	3.7%
Other utility/support infrastructure	4%	242	1	242	745,348	11.2%
Plant and machinery	for estimates refer to Section 9				116,870	1.8%
Electrical works	for estimates refer to Section 9				484,882	7.3%
Common utilities	for estimates refer to Section 9				20,507	0.3%
E&S capacity building	@ 0.5% of capex				22,927	0.3%
Design/engineering studies	@ 12.5% of capex				573,162	8.6%
Contingency	@ 10% of capex				458,530	6.9%
VAT	@ 18% of capex				1,015,185	15.3%
Grand total					**6,655,099**	**100.0%**

Source: Consultant

In the cost estimates, the cost for civil works also factors in the construction of barriers on the boundary wall for reducing dust and air pollution during the construction phase, and lowering noise pollution during the operation phase.

Also, the cost for solid waste management includes not only the cost of waste collection trucks and construction of a 60 sq m solid waste collection hut, it covers cost for separate waste collection bins on each floor of the market as well. Lastly, the environmental and social awareness and capacity building cost of 0.5% of capex which includes cost related to Environmental & Social awareness training and other activities for the project.

Opex

Operation and maintenance of the market structure (as will be required and drafted in the PPP contract) is crucial to ensure optimal operating conditions to traders as well as customers. Total opex of the project comprises salary expense, utilities cost, solid waste management charges, electricity expense and other annual maintenance expenses. We assume 15 people will be employed in the market for administration works with a monthly salary of USD 200 each.

An additional 10 workers have been for cleaning and solid waste disposal. Also, considering the electricity charge of USD 0.11 per kilo-watt hour charged by TANESCO, the total electricity expense of the market in the first year of operation works out to ~USD 56,774. It has been assumed that 70% of this cost will be recovered from traders as is the current practice, and the remaining cost will be borne by ProjectCo for electricity consumption in the common area. Desludging cost has also been considered in the opex, the desludging for the Sterio Market will be done every two months.

In addition, a periodic repair and maintenance cost equal to 5% of the capex has been assumed at an interval of every five years. An annual cost escalation of 6% (equivalent to average inflation in Tanzania over the past five years) has been assumed for projection of these costs over the concession period.

Table 6.3: Opex of the market

Parameter	Calculation
Salary expense/ month	15 workers - USD 200 per month 10 workers - USD 100 per month
Utilities cost/ year	0.5% of capex p.a.
Annual maintenance cost	0.5% of capex p.a.
Electricity cost/ year	Usage of 516,125 kWh per year – USD 0.11 per kWh
De-sludging cost	USD 77/ trip every two months
Periodic repair and maintenance cost	5% of capex every five years

Source: Consultant

6.4 Revenue sources

This section presents the identified revenue sources for the Sterio market:

Fees from traders

Fees will be charged from traders, which include daily charges for use of space, i.e., shops/tables/stalls, as well as monthly rentals. Currently, some traders are paying daily as well as monthly rentals to the TMC, whereas others are only paying monthly rent.

Currently, daily fees collected from the large shops/kiosks is USD 0.4 (TZS 1,000) and that from small stalls is USD 0.2 (TZS 500), while the monthly fees collected from large shops/kiosks varies from USD 13 (TZS 30,000) to USD 21.8 (TZS 50,000), and that from small stalls is from USD 2.2 (TZS 5,000) to USD 4.4 (TZS 10,000).

Based on the willingness-to-pay assessment undertaken by the consultant, it was established that once the modern market with better facilities and improved hygiene is developed, the daily fees charged to large shops, medium stalls and small stalls can be increased to USD 1.1 (TZS 2,500), USD 0.7 (TZS 1,500) and USD 0.3 (TZS 750), respectively, while monthly fees can be set for large stalls is USD 28 (TZS 65,000), for medium stalls is USD 15 (TZS 35,000) and small stalls is USD 6.5 (TZS 15,000).

The increase in fees has been agreed to by TMC officials, and is justified considering the fact that currently, owing to lack of space, each trading table is small in size and is used by 2-4 traders, either together or in shifts; in the redeveloped market, dedicated space of 3 sq m, 6 sq m or 10 sq m (which is much larger than the currently available space) will be available for each trader, and they will have the entire day to trade. The occupancy of the stalls and shops have been considered 80% in the first year of operation and has been ramped up to 90% over the years.

Security and cleaning charges

Based on stakeholder consultations, traders are currently paying for security and cleanliness either daily or monthly to their respective groups/unions, depending of their agreed arrangement. This charge has been pegged at USD 0.1 (TZS 300) per day for small and medium traders and USD 0.3 (TZS 600) per day for large traders (combined for security and cleaning) given that the redeveloped market will provide enhanced level of security and cleanliness.

Parking charges

The parking fee, which is currently USD 0.4 (TZS 1,000) per day for customers, can be amended to per-hour basis, with the rate fixed at USD 0.2 (TZS 500) per hour to enable raising more revenue. This will match the prevailing rate charged by other public parking run by the National Parking System in Dar es Salaam. Moreover, as Sterio Market is located in a congested area with limited parking facility, we have assumed that the 46 car-parking slots will be 80% occupied in the first year of operation of the market. This has been ramped up to 90% over the next two years. Moreover, an average of 50 cargo trucks enter the market premises - a fee of USD 4.3 (TZS 10,000) per cargo truck per entry is proposed to be levied.

Washroom and shower fees

The washroom fee currently charged at various places in Dar es Salaam is ~USD 0.15 (TZS 300). The same has been maintained for the project. It has been assumed that each of the traders will use the washroom twice during the day. Also, on average, three customers per two traders will use the washroom in a day. Moreover, additional facility of shower rooms have been proposed at a charge of USD 0.2 (TZS 500) per entry.

Advertisement fees

Currently, the market is in dilapidated condition and there are no billboards or any other mode of advertisement. Hence, no revenue is generated in the form of advertisement fees. But the redeveloped market will have dedicated billboards of 12m*10m. As per the market assessment, a monthly rental of ~USD 2,174 (TZS 5 million) can be levied for the same. Four such billboards are proposed to be set up in the market premises, which can be used for commercial advertisements.

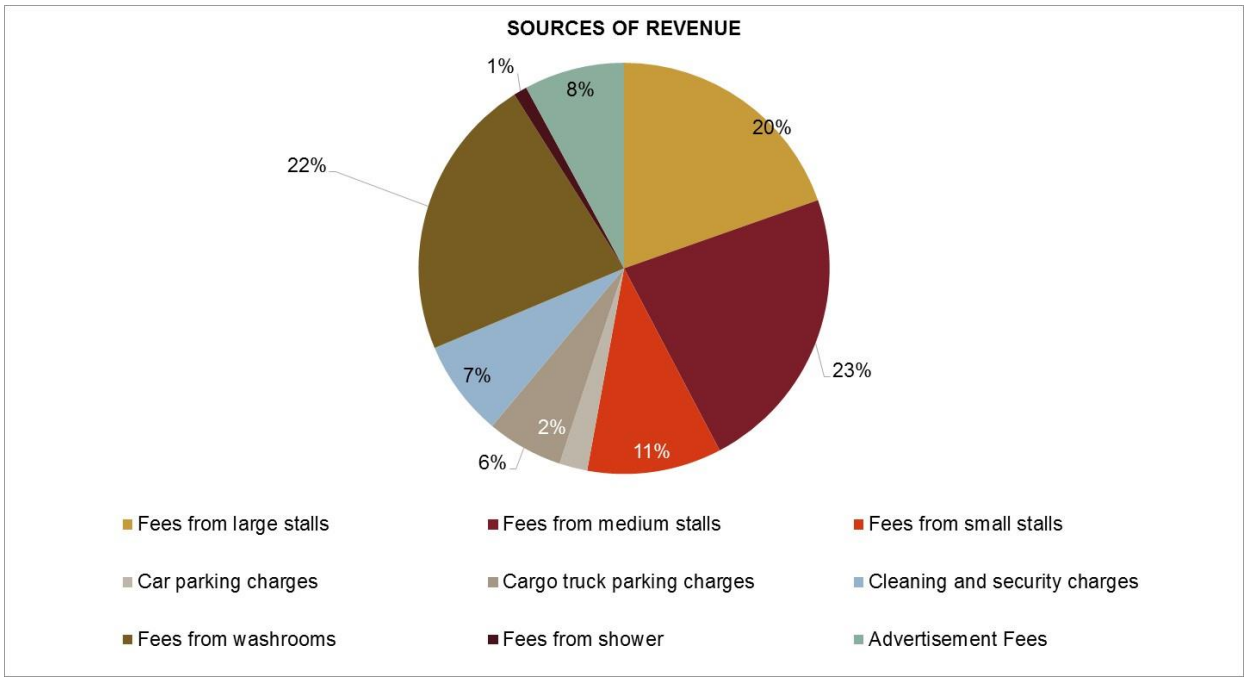
Table 6.4: Annual revenue statement

Annual revenue statement	Number	Daily fees (TZS)	Daily fees (USD)	Total first year revenue (USD)
Fees from business shops	440 traders	2,500	1.1	139,652
Fees from medium stalls	890 traders	1,500	0.7	169,487
Fees from small stalls	885 traders	750	0.3	84,267
Car parking charges	460 cars/ day	500	0.2	29,200
Cargo truck parking charges	50 trucks/ day	10,000	4.3	79,348
Cleaning and security charges- shops	440 traders	600	0.2	33,517
Cleaning and security charges- stalls	1,775 traders	300	0.1	67,604
Fees from washrooms	6,202 users/day	300	0.1	295,269
Fees from shower	177 users/ day	500	0.1	14,045
Annual revenue statement	Number	Fees / month (TZS)	Fees / month (USD)	Total revenue (USD)
Fees from business shops	440 traders	65,000	28	119,374
Fees from medium stalls	890 traders	35,000	15	130,017
Fees from small stalls	885 traders	15,000	7	55,409
Advertisement fees	480 sq m area	41,667/ sqm	18.1 / sqm	104,348
Total annual revenue				**1,321,537**

Source: Consultant

As shown in the above table, revenue from washroom fees and fees from medium stalls are major revenue contributors for the market. These comprise 22% and 23% of the total revenue generated from the market, respectively. Other major sources of revenue are fees for large (20%) and small (11%) stalls, advertisement fees (8%), cleaning and security fees of stalls (8%), and cargo parking (6%). The minor sources of revenue include car parking fees (2%) and shower fees (1%).

Figure 6.1: Contribution from various sources of revenue



Source: Consultant

6.5 Financial pre-feasibility

This section presents the base-case equity and project IRRs to assess the financial pre-feasibility of the project.

Our financial analysis shows that the project is financially viable and is expected to attract interest from private developers. The various financing assumptions considered in preparing the base case of this model include:

- *Interest rate on long-term loan of 16%,*
- *Principal repayment grace period of two years,*
- *Repayment period of eight years,*
- *An equity contribution of 30% of the Project cost,*
- *CIT of 30%,*
- *Large shop size of 10 sq m, medium stall size of 6 sq m and small stall size of 3 sq m,*
- *Daily fees from small stalls - TZS 750, medium stalls - TZS 1,500 and large stalls - TZS 2,500.*
- *Monthly fees from small stalls- TZS 15,000, medium stalls- TZS 35,000 and large stalls- TZS 65,000.*

Also, as per the PPP Act 2010, a concession period of a maximum of 15 years is allowed for municipal PPP projects, and the same has been considered for calculating the project's financial metrics. As the useful life of the civil structures will exceed 15 years, a residual value equivalent to the inflation-adjusted value of the asset at the end of the concession period has been calculated. We have assumed this as income accruing to ProjectCo.

Our calculations result in post-tax project IRR of 19%, post-tax equity IRR of 20% and average DSCR of 1.6. These returns are robust and should be acceptable to ProjectCo as well as financers. Also, the maximum DSCR stands at 3.0, while the minimum DSCR of the project is 0.8 during the initial years of operation, which

shows that ProjectCo will need to arrange for additional working capital during this period in order to meet its debt obligation.

Table 6.5: Financial pre-feasibility

Item	Metric outcome	Comparison with	Conclusion
Project IRR	19%	WACC of 13.8%	Project IRR higher than WACC suggests that project is financially viable.
Equity IRR	20%	Equity return of 20%	Equity IRR higher than equity rate of return suggests that project will be able to attract private players.
DSCR	1.6	DSCR of 1.25	DSCR is higher than the minimum DSCR required in infrastructure projects to secure bank finance. It shows that the project will be able to service its debt obligations in time.

Source: Consultant

6.6 Solar power assumptions

The rationale of including the solar panels on the rooftops is to save electricity expenses for the ProjectCo, thereby decreasing opex of ProjectCo.

As discussed earlier, of the total available 6,840 sq m land, the market building is to be built on 4,446 sq m area. Also, as per the current development mix, there is no development proposed on the roof-top, which means that majority (assumed to be 85%) of the roof-top area can be used for installation of solar panels.

Based on market assessment and secondary research, the capex of a roof-top solar panel in Tanzania is USD 1.1-1.25 per watt-peak (Wp); for the purpose of this model, this cost has been assumed to be USD 1.15 / Wp. Also, the space required to install 1 kilo-watt peak (kWp) capacity of solar power is 10 sq m on average. Using these assumptions, the capex for installing solar panels on 85% of roof-top area is ~USD 0.43 million.

Table 6.6: Capex calculation for roof-top solar

Parameter	Unit	Figure
Unit capex for solar panels	USD per Wp	1.15
Area required for solar panels	sq m per 1 kWp	10
Total area available on market rooftop	sq m available	3,779
Capacity installed	kWp	378
Total capex for rooftop solar	**USD**	**434,597**

Source: Consultant

Capex accounts for most of a solar project cost, with opex comprising a minimal share. For calculation purposes, annual opex is assumed to be 1.25% of capex. Moreover, it has been assumed that the capacity of the solar panels to generate electricity will degrade at the rate of 1% annually. Considering a load factor of the solar panels of 0.18, the total electricity that can be generated by the roof-top solar system will be 595,888 kWh per year in the first year of operation.

Solar power's viability can be assessed in terms of savings in electricity cost of the market for the ProjectCo and/or revenue generation by selling the remainder of electricity. As discussed earlier, as per the practice currently, it has been assumed that ~70% of the electricity expense of the market will be recoverable from the traders while the remaining will need to be borne by the ProjectCo for electricity usage in the open area. The

electricity tariff charged by TANESCO is TZS 263 (USD 0.11) per kWh. The total savings and/or revenue generation by the solar roof-top system, thus comes out to be USD 65,548 per year in the first year of operation.

Table 6.7: Savings in electricity expense and return generated due to roof-top solar

Parameter	Unit	Figure
Load factor for solar panels	Ratio	0.18
Total electricity that can be generated	kWh per year	595,888
Cost of electricity by TANESCO	USD per kWh	0.11
Total savings in electricity cost	USD	65,548
Equity IRR of project (with solar power)	%	17%
Equity IRR of project (without solar power)	%	20%

Source: Consultant

Based on the above assumptions and calculations, it is evident that if solar roof- top panels are used in the project, then the equity IRR of the project decreases by 3% compared to the base case scenario. It can also be observed that at the current tariff of USD 0.11 and for a concession period of 15 years, the savings in electricity expense and/or the revenue generation from sale of electricity is not enough to generate sufficient returns to make the installation of roof-top solar panel viable and is, therefore, not recommended and we can leave it to the ProjectCo's discretion to take this decision.

6.7 Sensitivity analysis

As discussed earlier in Section 6.4, in our estimates of the project's capex we have included a contingency of 10% as a buffer. However, in the case of an unforeseen event, if the capex and opex of the project increase beyond this buffer or if the revenue generated or tariff revision rate have been overly estimated or interest rate on debt has been considered too low, the equity IRR of the project could decrease.

We have undertaken a sensitivity analysis to test the resilience of equity IRR under adverse scenarios. Here, capex, opex and revenue have been assumed to increase or decrease by 20%, while interest rate on debt has been checked at 18% p.a. and 14% p.a. and tariff revision rate has been considered at 20% and 30% and the corresponding effects in the equity IRR (of the base case) are depicted in the table below:

Table 6.8: Sensitivity analysis

S. No.	Case	Equity IRR	Average DSCR
1	**Base case**	20%	1.6
2	**20% increase in capex**	14%	1.3
3	**20% decrease in capex**	28%	2.1
4	**20% increase in opex**	19%	1.6
5	**20% decrease in opex**	21%	1.7
6	**20% increase in revenue**	26%	2.0
7	**20% decrease in revenue**	14%	1.3
8	**Debt Interest rate @18% pa instead of 16% pa**	19%	1.6
9	**Debt Interest rate @14% pa instead of 16% pa**	21%	1.7
10	**Three-yearly tariff revision rate @30% instead of 25%**	21%	1.7
11	**Three-yearly tariff revision rate @20% instead of 25%**	18%	1.5

Source: Consultant

The above table shows that project's revenue and capex are the most sensitive factor. Under the unforeseen event, the project revenue may decrease by 20% or capex may increase by 20% as compared to the base case, then the equity IRR of the Project falls to 14% under each scenario. These rate of return might not be acceptable to the equity providers as it is lower than the objective return on equity of 20%.

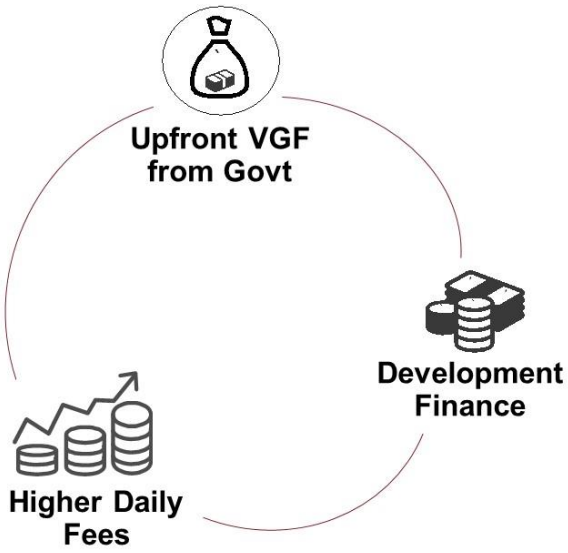
We infer that in the base case the project is viable, but in certain cases, our assumed circumstances may differ and various sweeteners or financial enhancers may be required to make project viable. These enhancers are further discussed in the section below.

6.8 Financial enhancers

Based on our analysis, we confirm the project's financial pre-feasibility. In particular, with an equity IRR of 20%, the Project is likely to have a market interest. However, as discussed above, if the project's estimates are revisited, the Project's financial pre-feasibility will decrease. In such case, various sweeteners or financial enhancers might be required to make the project viable. Various sweeteners are listed below:

Upfront viability gap funding (VGF) from the government

The government could consider financing support for this project in the form of an upfront VGF. It has been assumed that the government will invest a certain proportion of the total project cost spread over the two-year construction period. A case of 10% VGF has been considered by the consultant for pre-feasibility. The debt and equity contribution in each of the cases is assumed as a proportion of the amount remaining after the VGF funding.



Development finance from multilateral institutions

Considering the project's strong contribution to public good, we have considered the possibility of securing development finance for this Project to improve its viability. In case of development finance from multi-lateral institutions such as World Bank, African Development Bank, etc. the interest rate on the USD-denominated loan has been considered to be much lower at 12% per annum. Moreover, the principal moratorium period has been considered to be higher at three years, and the repayment period at 12 years as opposed to the base case.

Higher daily fees

In order to improve the viability of the project, this scenario considers higher daily fees paid by traders. We propose higher fees of the larger trading area that will be available for traders, better hygiene facilities, and dedicated trading spaces allowing for full-day trade. The following case has been considered for pre-feasibility: Daily fees from small stalls to be USD 0.4 (TZS 1,000), daily fees from medium stalls to be USD 0.8 (TZS 2,000) and daily fees from large stalls to be USD 1.3 (TZS 3,000).

Table 6.9: Equity IRR under different scenarios

S. No.	Case	Base Case	VGF @10%	Development finance	Higher Fees
1	**Base case**	20%	24%	26%	22%
2	**20% increase in capex**	14%	17%	19%	17%
3	**20% increase in opex**	19%	23%	25%	22%
4	**20% decrease in revenue**	14%	17%	18%	NA
5	**Debt Interest rate @18% pa instead of 16% pa**	19%	22%	NA	21%
6	**Three-yearly tariff revision @20% instead of 25%**	18%	22%	25%	21%

Source: Consultant

Based on our analysis, we propose the following financial enhancement strategies to be applied in case the pre-feasibility of the project comes into question on account of proposed project estimates being revisited. For instance, if capex increases or revenues decrease, we recommend that government must provide 15-20% upfront VGF in order to make the project viable.

6.9 Reduced stall size

Currently, the size of small stalls in Sterio Market is 1.5-2.0 sq m. But based on the 'willingness to pay' survey conducted by the consultant, it was found that traders want larger stalls of 3-4 sq m. This forms the base case with G+2 building structure.

An additional scenario for the Project facility with smaller stall sizes has been assessed. Under this scenario, a smaller stall size of 2 sq m has been assumed. With the reduced stall size, the configuration of the market building can be revised from three floors (G+2) to two floors (G+1), decreasing the cost of the Project by ~30%, while the number of large and medium traders in the proposed market reduced to 300 and 600 traders, respectively. The number of small traders that can be accommodated decreased from 885 to 780. The overall market configuration change, cost and number of traders results in equity IRR increasing from 20.4% to 22.1%.

Table 6.10: Change in Project configuration under this scenario

Particulars	Proposed	Revised (under this scenario)
Small stall size	3 sqm	2 sqm
Medium stall size	6 sqm	6 sqm
Large stall size	10 sqm	10 sqm
Number of floors	3 (G+2)	2 (G+1)
Number of small traders	885	784
Number of medium traders	890	600
Number of large traders	440	300
Project capex	USD 6.6 million	USD 4.7 million
Equity IRR	19.8%	22.1%

Source: Financial model

The increase in Project returns provides a margin to further decrease monthly fees of TZS 15,000 for small stalls, TZS 35,000 for medium stalls and TZS 65,000 for large stalls to TZS 10,000, TZS 30,000 and TZS 60,000, respectively.

However, though a smaller stall size will result in higher returns from the project and lower the fees charged, it will not fulfill the requirement of stakeholders as based on the 'willingness to pay' survey conducted by consultant, it was found that traders want a larger stall size.

6.10 Lower occupancy of higher floors

Market occupancy depends on traders' demand. As per the market demand study conducted by the consultant, it was found that demand is high, and, hence, we have assumed 80% occupancy under a base case scenario.

An additional scenario for Project facility with lower occupancy of higher floors has been considered. This could arise if traders are not willing to move to higher floors of the market resulting in lower occupancy levels in the initial years and will increase with time.

Under this scenario, the occupancy of the first and second floors in the first year of operation can be considered at 50% (instead of 80%), and the same has been ramped up to 90% over the years. It can be observed that the change in occupancy on the higher floors results in a decrease in equity IRR from 19.8% to 17.8%. Although this scenario is not recommended as demand for the Project services is robust. Also, segregating traders on each floor based on type of goods they sell, will help lower traders' unwillingness to move to higher floors of the market building.

Table 6.11: Occupancy of floors

Building Floor	Proposed occupancy			Revised Occupancy		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Ground floor	80%	85%	90%	80%	85%	90%
1st & 2nd floor	80%	85%	90%	50%	55%	60%

6.11 Value for money

This section assesses the project's value for money (VfM) on qualitative as well as quantitative aspects. The quantitative aspects include ascertaining the net difference in cost for the government in implementing the project using public procurement vis-a-vis PPP procurement. The qualitative aspects deals with public sector capability, time, and the government's financing availability.

Quantitative assessment

Quantifying VfM hinges on comparing total cost associated with the PPP procurement approach vis-a-vis the conventional public sector comparator (PSC) procurement approach. The former is calculated as the NPV of total amount invested by the public sector, in the form of upfront VGF and/or annual payments made to a ProjectCo over the entire concession period plus the portion of retained risk by the public sector, i.e. total project risk less risk transferred to the SPV.

The PSC procurement total project cost is calculated as the sum of the present value (PV) of total cost, i.e. capex and opex, plus risks retained by the public sector. As the PSC approach is assumed to entail no SPV, the entire proportion of risk is borne by the government. As a means of quantifying the inherent project risks, the following categories of risk have been assessed:

- *Construction risks* - These are risks that have a direct impact on the capex of the project. These include cost and time overrun risks as well as design risk, i.e. the possibility that post roll-out, infrastructure and technical specifications are misaligned to the functional requirements for the services offered
- *Operational risks* - It includes factors that directly influence the opex of the project. This includes, inter alia, direct opex-overruns. Moreover, under a PPP procurement approach, an independent project management office (PMO) might be required to manage the contract and ensure that the project is

executed effectively and efficiently - as per the PPP agreement. The assessed need to bolster the personnel capacity of the PMO will result in additional opex

- *Financial risks* - It covers parameters that impact capital as well as operational components of the project. Specifically, interest rates and inflation rates that are higher than historical norms will result in higher cumulative cost over the project concession period. Similarly, foreign-currency denominated cost will be negatively impacted by devaluation/depreciation of the Tanzanian shilling relative to the USD.
- *Revenue risks* - It covers demand risk related to the project, which includes the possibility of potential revenue leakage. It also covers aspects of marketing and administrative capability of the operator to attract more customers and traders that will translate into higher revenue

The table below presents a high-level risk matrix, which encompasses the aforementioned risks. Four different scenarios, viz worst case, pessimistic, most-likely and optimistic, have been considered, and the allocation of risk probabilities and impacts have been considered in each case to arrive at a weighted average risk factor. Quantification of the impact of each risk on the PV of opex, capex and project revenue is predicated on probabilistically weighted averages, as per the following formula:

Impact on PV = weighted average risk factor × PV

Table 6.12: Weighted impact on PV[1]

Risk category	Specific risk	Probabilistically weighted loss (%)	Weighted impact on PV (USD million)
Construction risk	Cost overrun	9%	0.5
	Time overrun	34%	1.9
	Design risk	9%	0.5
Operational risk	Opex overrun	16%	0.2
	PMO cost overrun	16%	0.2
Financial risk	Interest rate risk	12%	0.8
	Exchange rate risk	12%	0.8
	Inflation risk	12%	0.8
Revenue risk	Revenue risk	35%	3.5

Source: Consultant (based on past experience in PPP Projects)

Given that the main driver of the PPP procurement approach is premised on effective transfer of risk to the ProjectCo, 90% of the total probabilistically weighted PV of risk is transferred while 10%, i.e. USD 0.9 million, is retained by the government. This 10% risk accounts for risks that have been assigned to the public sector and that the ProjectCo could exercise during the course of the project, and this includes: a) site risk, b) construction risks beyond ProjectCo's control (for instance, geotechnical faults that were unknown when contract was signed), c) events of default of the public sector, d) compensation on termination owing to public sector default, e) political risks, and f) force majeure risk.

The net cost under the PPP procurement approach is, thus, the PV of the VGF investment and/or annuity payments made to the ProjectCo plus the portion of retained risk minus the PV of tax revenue to be collected from the ProjectCo on profits that is generate from the project. The net cost for the PPP procurement approach for a 15-year concession period is USD (-0.5) million, i.e. it generates net revenue.

[1] Given the lack of empirical data in Tanzania, we had to make certain assumptions. The risk matrix assumption values in VfM analysis have been developed based on the consultant's experience in PPP Projects across sectors and across regions. We feel that we have been conservative in our assumptions.

On the other hand, under the conventional public-sector procurement framework, the total value of risk, i.e. USD 8.9 million, is borne entirely by the government. The net cost for public sector procurement has been obtained by adding the total PV of capex and opex and the entire retained risk, and subtracting from it the PV of Project revenue. The net cost for this approach comes out to be USD 5.6 million. This is summarized in the table below.

An assessment period equal to the concession period of 15 years has been considered. Also, as per the monthly economic review, March 2018 by Bank of Tanzania, 10-year Treasury bond rate in February 2018 stood at 15%, Similarly, Treasury bond rates for seven-, five- and two-year stood at 13%, 12% and 9% respectively. So, we can see that the discount rate applicable will also depend on the tenor of loan that the government will avail. Thus, considering these factors we have assumed an average discount rate (for public procurement) of 12% for the calculation of VfM.

Table 6.13: Value for money calculation

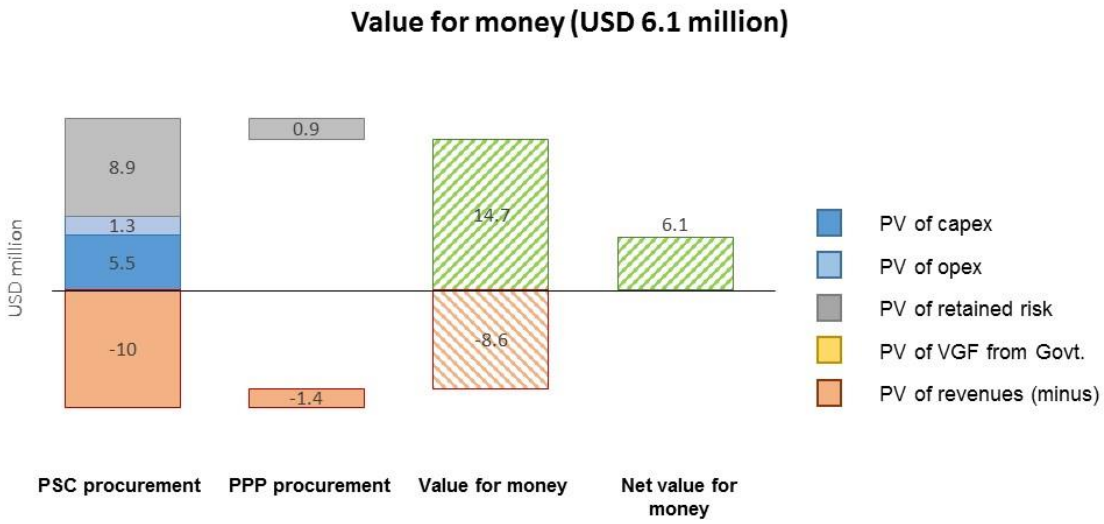
Variable	PSC procurement – net cost (USD million)	PPP procurement – net cost (USD million)
PV of revenue (minus)	10.0	1.4
PV of capex	5.5	-
PV of opex	1.3	-
PV of retained risks	8.9	0.9
Total PV of net costs	**5.6**	**-0.5**
Value for money	**USD 6.1 million**	

Source: Consultant

The above table suggests that from a public sector perspective, Project revenue in the case of public procurement accrues to the government. Whereas in PPP procurement, the public sector will only be entitled to revenue collected in the form of tax on profits. Also, in the case of public procurement, capex as well as opex are borne by the government, whereas in PPP procurement, the cost is borne by ProjectCo and, hence, the cost to the government is nil.

The VfM, as shown in the above table, has been obtained by comparing net cost for both PPP and public sector procurement approaches. The risk-adjusted net cost for PPP approach (USD -0.5 million) is significantly lower than that of the public sector procurement approach (USD 5.6 million). In other words, it is USD 6.1 million cheaper to the government to carry out the project as a PPP.

Figure 6.2: Value for money



Source: Consultant

Qualitative assessment

The VfM aims at comparing between conventional public procurement and the PPP mode. The pointers below provide additional understanding to this VfM from a qualitative standpoint:

- *Public sector capability and experience* - Though the TMC has developed several markets, it has limited experience in construction of a modern market as proposed. ProjectCo, with experience in this sector, can use its expertise and modern construction technology to develop the market, and can include features that the public sector might not have envisaged.
- *Time taken for project implementation* - Involving the private sector in various stages of project development, including design, construction, operation and maintenance, will ensure that the time-delays are minimized as traditionally the private sector is better incentivized, and, hence, more equipped for timely completion of projects (as otherwise it would affect their profit margin).
- *Demand for project* - There are several similar markets in Temeke District. The private sector, with its assumed high level of marketing skills and know-how, can use this opportunity to not only attract more traders to operate from the market, but also attract more customers to the market, ultimately generating higher revenue than a public entity could – all things being equal.

Based on the quantitative and qualitative assessments, we conclude that undertaking this project via the PPP mode has significant advantages as compared with public procurement. Summarizing, we recommend undertaking the project via PPP basis, and in particular through DBFOMT mode.

7. Management case

This chapter sets out institutional, legal and regulatory aspects as well as social and environmental aspects that are applicable to the proposed redevelopment of Sterio Municipal Market.

7.1 Institutional review

This section provides an overview of the applicable institutional structure, the approach undertaken for institutional review and the responses provided by the TMC with respect to the current institutional capacity, preparedness for PPP Projects and capability to execute the PPP Project efficiently.

Approach for undertaking the institutional review

The consultant has carried out a comprehensive assessment of the Project involving the investment committee members of the municipal council. A detailed questionnaire was prepared with specific questions related to assessing the institutional capability of the LGA. The frameworks and methodology provided in the World Bank PPP Screening Tool were utilized in creating the questionnaire. The questions were divided into three major groups:

- *Institutional capacity;*
- *Preparedness of the LGA for the PPP Project;*
- *Capability of the LGA to execute the Project effectively and efficiently.*

Based on the responses, a diagnostic report about the capability of the municipal council to manage the proposed PPP Project during the implementation and operational phases was prepared.

Table 7.1 Projects under Jurisdiction of TMC

Name of Municipal Council	Projects under their jurisdiction
Temeke Municipal Council	Sterio market

Source: Consultant

Institutional capacity of the TMC

- *Composition of the PPP team*: In the TMC there is an eight-member investment committee; six of them are form the core PPP team. However, all the investment committee members have their own full-time responsibility. The investment committee and the PPP team memberships are additional responsibilities. The PPP team does not have a technical expert / engineer, procurement officer and dedicated financial officer.
- *Academic qualifications and training in PPPs*: The members have basic qualifications such as bachelor's or master's degree relevant to their job roles, and so, it can be assumed that they possess the ability to understand the basics of PPPs. It is understood that the LGA has not executed any major contracts with the private sector in the past. As such, the team does not have any significant experience or expertise in PPPs. In terms of formal training in PPPs, all the six members in the PPP team have undergone World Bank PPP training/ MoF workshop on PPP for two weeks. Rest of the investment committee members have not undergone any PPP training yet. Therefore, the team will require substantial training in various aspects of the preparation of a PPP Project as the Project moves forward.

- *Budget constraints*: The TMC has shown surplus over the previous three years. Therefore, it can be assumed that the LGA will have some budget flexibility to engage one or two consultants. However, it is unlikely to have adequate funds for a robust PPP Project preparation exercise.

Preparedness of the LGA to execute PPP Projects

- *Moderate commitment*: The TMC is moderately committed to the Project implementation. It has not set aside indicative budget for some of the activities such as improvement of the drainage system.
- *Need for Project planning*: The TMC currently does not have well-defined plans to manage the Project; consult with the stakeholders; and implement external connectivity. No specific timelines have been identified for these tasks.
- *Need for technical assistance*: The TMC will require considerable technical assistance and hand-holding to successfully implement the Project preparation processes. It does not envisage any constraints delaying the implementation. It has already consulted the existing traders operating at that site and they are willing to relocate.

Capability of the LGA to execute the Project effectively and efficiently

- *Need for dedicated personnel within LGA:* There should be at least one dedicated person deployed in the LGA, who should be the primary contact point between the PPP team and central Project management support team. This person would be responsible for steering the Project from the LGA and who would be responsible for the overall progress and monitoring of the Project with respect to the timelines.
- *Support from the central government to fund hiring of transaction advisors:* As the surplus with the LGA might not be sufficient to procure full-time transaction advisors for the Project, it should estimate the overall budget depending amount of work and time required for the transaction advisor and put in a request for funds from the central government.

Key recommendations

Based on the survey and discussions with the officials of the LGA, the consultant suggests the following actions to strengthen its institutional capacity for implementing the PPP Project:

- *Central Project management support team*: There is a need for handholding of the LGA in various aspects of Project preparation. Therefore, a central pool of technical, financial, legal and E&S experts should brought on board. They could be on part-time basis to meet specific needs of individual PPP Projects. The support team could report to the PPP node and could assist all LGAs on the eight PPP Projects, including Temeke.
- *Hiring of transaction advisors***:** Public procurement for small Projects itself takes close to six months. Given that, the procurement for a PPP Project is expected to take one year or more. This is because of the intricacies and negotiations involved in a PPP procurement process. The central Project management support team could provide handholding support to the LGA for drafting the agreements.
- *Focused training and knowledge sharing*: The PPP team in the LGA would require continued and focused training on Project preparation, procurement and contract management as the PPP Project progresses. The staff should be acquainted with the knowledge of the best practice and tools being developed in the World Bank Group, so that they can benefit from the global repository of knowledge being created by the World Bank. It would also help them exchange ideas and experiences through a knowledge-sharing platform that could be created by the PPP Node for all the LGAs preparing PPPs in Tanzania and in the region.
- *Ensuring continuity of the LGA staff in the PPP unit*: Given that the Project preparation and procurement process will be spread over two-three years, it would be beneficial if the LGA staff who are getting trained

continued with the PPP unit until the processes are over. Frequent staff changes could disrupt the capacity development process.

- *Strengthening the PPP team*: Depending upon the development of a PPP pipeline in the LGA, it is suggested that full-time staff or consultants are recruited to the PPP team in order to address technical, financial and Project management issues.
- *Use of tools and applications:* It would be beneficial for the LGA to institute systems and processes to embed the tools and applications developed by the World Bank and other development partners, to streamline the PPP lifecycle process relevant for the contracting agencies. For further details refer to Section 17.

7.2 Regulatory and legal due diligence

The main findings of our legal due diligence are:

Assets (fixed assets and land)

- *Land title deed* – According to TMC officials, the project land is owned by the council by virtue of Government Notice No. 13 of 2000. Previously, LGAs were not required to have certificate of title for the land allocated to them for various projects. Therefore, TMC did not have a title for the Sterio Municipal Market. However, owing to increased trespassing and land disputes in areas with no titles, all LGAs are now required to survey and obtain title certificates for the land they own. Accordingly, TMC is in the process of obtaining the title and has requested the Commissioner of Lands at Ministry of Land (**the Commissioner)** to process the title (**TMC title**).
- *Right to acquire land* - Generally, LGAs have the right to acquire land or right to use any land within or outside its jurisdiction for the purpose of any of its functions given in Section 118 of the Local Government (District Authorities) Act, 1982 (LGDA Act). Specifically, in relation to PPPs, Section 12 of the PPP Act 2010 provides that where a PPP project requires acquisition of land for its implementation, it will be carried out in accordance with the Land Act, Village Land Act, Land Use Planning Act, Land Acquisition Act, and any other relevant laws.
- *Lease of land* - The Land Act states that non-citizens will not be allocated or granted land unless it is for investment purposes under the Tanzania Investment Act (Section 20 of the Land Act). Section 20(4) of the Land Act further states that a corporate whose majority shareholders or owners are non-citizens will be deemed to be a foreign company. A foreign company will not be able to own land in Tanzania under Granted Right of Occupancy (**GRO**), which is the highest form of title, but it can hold land through the Tanzania Investment Centre (**TIC**) granting the foreign company a derivative right for investment purposes. However, a foreign company can rent land without holding the title for a specified period in a lease/sublease agreement. According to Section 61(a) of the LGUA Act, LGAs may sell, exchange, let, mortgage or charge any land or premises in its ownership or disposition, with the approval of the Minister in the President's Office-Regional Administration and Local Government.

  With this mandate, the LGA as the contracting authority for the purpose of a PPP, may sell or lease any land or premise it owns to ProjectCo in order to carry out a PPP project. However the process of transferring title in Tanzania may be cumbersome, i.e. as this is government property and, hence, any disposition must adhere to the procurement laws under the Public Procurement Act. Also, it is costly, i.e. buyer has to pay capital gains tax, which is 10% of the purchase price for a resident and 20% for a non-resident. It would, therefore, be advisable for the TMC to lease the land to ProjectCo for a specified period rather than to transfer the title to the latter. The provisions of the lease under the PPP agreement should include ProjectCo's obligations to build, operate and maintain the municipal market for 15 years. As there is no minimum required value for the lease, the parties will have to decide on this during negotiations. On expiry of the concession period, and in the absence of an extension, the TMC will resume operation and management of the market.

- *Land as security* - Land owned by the LGA can be used as security for a loan. According to Section 119(a) of the LGDA Act, with the approval of the Minister in the President's Office-Regional Administration and Local Government, LGAs may sell, exchange, let, mortgage or charge any land or premises in its ownership or disposition. Thus, with this mandate, TMC may use the land in the Sterio Municipal Market to secure a loan from a lender.

  As ProjectCo will only lease the land from the TMC and will not have the TMC Sterio Municipal Market title, ProjectCo cannot use the title as security. Moreover, Section 8(2) (b) of the PPP Act 2010 provides that the ProjectCo is responsible for mobilizing resources. Thus, ProjectCo will be required to secure funding without relying on the title.

  Moreover, Regulation 74 of PPP Regulations 2015 provides that the contracting authority and the Ministry of Finance must approve any proposed refinancing of the debt extended by lenders to the project. If ProjectCo requires securing a loan by using the land owned by the TMC in order to develop the municipal market, ProjectCo must seek the approval of the TMC and the Ministry of Finance. Any liabilities on the TMC and ProjectCo must be clearly mentioned in the PPP agreement in order to ensure that the TMC does not lose the land in case of a default. Additionally, the loan provided should not exceed the duration of the project. The loan can only be for a maximum of 20 years (where PPP agreement has been extended).

  In practice, though, TMC would be reluctant to allow the TMC title to be used as security for a loan. TMC would expect ProjectCo to finance the project without relying on the title as security for a mortgage.

PPP implementation

- *Eligibility for PPP* - The following is a non-exhaustive list of projects in productive and social sectors that are eligible for PPP in Tanzania (Section 4(4) of the PPP Act 2010) - agriculture, infrastructure, industry and manufacturing, exploration and mining, education, health, environment and waste management, information and communication technology, trade and marketing, sports, entertainment and recreation, natural resources and tourism and energy.

  The Sterio Market project falls under the trade and marketing category and, thus, qualifies to be developed under PPP. Further, the maximum limit for PPP projects to be carried out by an LGA is USD 70 million (Regulation 76(2) (a) of the PPP Regulations 2015). Thus, the project amount of USD 6.6 million falls within the scope of an LGA, in this case the TMC.

- *Transfer of assets* – As per Section 11(3) of the PPP Act 2010, a contracting authority and ProjectCo may enter into an agreement, which, among other things, provides that ProjectCo would return any assets belonging to the contracting authority at the end of the agreement period. Further, Section 11(4) of the PPP Act 2010 provides additional conditions to be included in the PPP agreement to ensure that ProjectCo performs the functions of the contracting authority on the latter's behalf for a specified period and is liable for any risks arising from deficiency in the performance of its functions.

  Also, the TMC may transfer any assets within the municipal market to ProjectCo for the duration of the PPP agreement. These assets may include facilities such as retail outlets, washrooms and parking, among others, which ProjectCo will build, operate and manage. ProjectCo can perform functions on TMC's behalf for a specified period, which will not exceed 15 years, as provided for under Regulation 76(2) (b) of PPP Regulations 2015. However, the duration may be extended for a maximum of five years in case of delay or unforeseen interruptions by both parties, project suspension not caused by ProjectCo or an unforeseen increase of cost arising from the contracting authority (Regulation 84 of the PPP Regulations 2015).

  At the end of the PPP agreement, ProjectCo will be required to hand back the assets to the TMC. The procedure and requirement for handing back the assets have been provided under Regulation 97 of PPP Regulations 2015; includes description of the assets to be handed over, maintenance requirements and the right of the contracting authority to inspect the assets before it being returned.

- *Right to collect user charge* - LGAs have been mandated to charge rent or fees with respect to the use or hire of land or premises (Section 61(b) of the LGUA Act). Further, Section 66(1) of the LGUA Act provides

that LGAs may charge fees for any service or facility provided by it or for any license or permit issued by the LGA. Thus, the TMC may charge rent, fee or tariff to businesses or persons occupying or using the facilities in the municipal market according to the bylaws. Under the PPP agreement, the contracting authority and ProjectCo may stipulate what the contracting authority will pay ProjectCo by way of compensation from a revenue fund of charges or fees collected by the ProjectCo from users or customers for the service provided.

Accordingly, the PPP agreement between the TMC and ProjectCo may provide (among other things) lease and collect rent from tenants (traders/merchants) occupying the buildings developed under the PPP. The transfer of these rights will be for the stated period in the PPP agreement, which should not exceed 20 years where there is an extension.

In terms of revenue derived from user rights, the PPP agreement should indicate how the revenue will be split between the LGA and ProjectCo. As ProjectCo is able to charge any user charges such as parking fees, shop rental fees and for use of facilities, ProjectCo may set up an account where such funds will be deposited. However, applicable taxes chargeable to users will be paid to the Tanzania Revenue Authority (TRA) and these will not be remitted to ProjectCo.

In conclusion, the Sterio Market Project can be undertaken on PPP basis. Once the tendering process has been carried out, the TMC and ProjectCo will enter into a PPP agreement, stipulating the terms. The duration of the PPP agreement should not exceed 15 years unless an extension, which will not exceed five years, has been granted.

With regard to land title, the TMC has to ensure that they obtain the TMC title prior to initiating the project. Failure to obtain the land title in time may cause delays in the commencement of the project. The PPP agreement between the TMC and ProjectCo will provide, among other things, for the TMC to lease out the land and its assets to ProjectCo.

Therefore, there will be no need for a separate lease agreement as this will be sufficiently provided for under the PPP agreement. We also recommend that the TMC should not permit the title to be used as security by ProjectCo to obtain funding. The ownership of buildings constructed on the land remains with the TMC. However, this is a key constraint in the PPP structuring as it prevents the use of the buildings as security for a loan.

7.3 Social and environment aspects

Social and environmental challenges

The Sterio Market Project involves social and environmental challenges. These challenges will differ from one phase to another (from construction to operation). Potential environmental challenges include construction demolition debris and other solid waste, air pollution, traffic management, noise pollution, water and soil pollution. Potential social challenges include risk of diseases, workers safety and rights, and temporary relocation of existing traders. The magnitude, extent and duration of these risks will be helpful in determining its severity, and will help in prioritizing the challenges accordingly. Lastly, appropriate mitigation strategies have been proposed to address these challenges. Further details are included in Section 13.

Project categorization

According to the IFC categorization scheme, the proposed Sterio Market Project in Dar es Salaam, Tanzania falls under Category B. Projects in this category entail business activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures. However, according to Tanzania EIA and Audit Regulations (2005), the proposed Sterio Market Project falls under the mandatory list, which entails a full-fledged environmental and social impact assessment.

IFC performance standards

The IFC Performance Standards (PS) which are relevant or will be triggered by the proposed redevelopment of Sterio Market include PS1, PS2, PS3 and PS4.

- PS1 covers assessment and management of environmental and social risks and impacts that require a thorough environmental and social assessment, which includes undertaking adequate stakeholder engagement and disclosure of project information.
- PS2 covers labour and working conditions, which recognizes that the pursuit of economic growth through employment and income generation should be accompanied by protection of fundamental rights of the workers.
- PS3 deals with resource efficiency and pollution prevention, which recognizes that increased economic activity and urbanization often lead to increased levels of pollution that may threaten citizens and the environment at the local, regional and global level. At the same time, more efficient and effective resource use and pollution prevention and GHG emission avoidance and mitigation technologies and practices have become more accessible and achievable in virtually all parts of the world.
- PS4 covers community health, safety and security, and recognizes that project activities, equipment and infrastructure can increase the community's exposure to risks. (These IFC PS are covered in detail in Section 13)

Relocation strategy

Currently, the TMC owns ~1.7 acres at the project site, which is sufficient for the development of a municipal market. Following guidance from the LGA and the project needs, we have only considered the existing 1.7 acre of land for development under the current project. Hence, Relocation Action Plan (RAP) would be required as the existing traders would need to be relocated, which has been explained under the relocation strategy.

TMC will relocate traders to Mwembe Yanga. The area is suitable for relocation as it is located along the main road and it is spacious to accommodate all traders. Traders opined that before relocating them to the new area, the TMC should provide basic services such electricity, sheds and washrooms.

More than 95% of the traders are willing to relocate. Their only concerns were availability of basic facilities like water supply and electricity at the relocation area, and assurance of receiving spaces after redevelopment of the market. They would only be willing after receiving assurance to getting their space back after construction, and assurance to be relocated in a place where they can continue to conduct their daily trading activity.

Currently, there are no facilities at the relocation site. Therefore, it has been proposed that provision for toilets, water and electricity is provided, with the cost borne by the TMC.

Based on the above, we do not discern any environmental or social impediment in the implementation of this project.

7.4 Social due diligence undertaken by World Bank

Based on the study conducted by the World Bank Safeguard Team, the following adverse impacts are associated with construction of the market:

- *Loss of livelihood:* Temporary loss of business and livelihood of 1,200 traders following temporary relocation
- *Social tension among stakeholders:* Potential conflict between traders and the TMC, and social tensions if thorough consultations on temporary relocation and subsequent return, and process of allocation of slots are not done
- *Influx of traders in destination markets*: Influx of traders in destination markets that have been proposed for relocation of traders from Sterio Market
- *Conflicts between traders of Sterio Market and host markets:* Potential conflicts between traders from Sterio Market and traders in host markets

Key recommendations by the World Bank Safeguard Team suggest that TMC should put in place the following before commencing construction:

- *Stakeholder consultations and engagement plan:* Prepare stakeholder consultation and engagement plan (SCEP) and communicate it to the Bank. The SCEP is critical, especially to inform people on the Project
- *Relocation action plan:* As part of the plan, conduct a social economic baseline survey and generate baseline data of all traders at Sterio Market. The baseline data should geo-reference traders with existing trading space, personal information, and the type of business a trader is engaged in. The data should be gathered based on business categories. Also, detail the process of temporary relocation, compensation for the temporary loss of income due to relocation, register all traders that are interested in returning to the market following its construction, and assigning designated slots to the traders
- *Detailed assessment of potential host markets:* Carry out a detailed assessment to ascertain current capacity for all proposed markets where traders from the market are expected to be temporarily hosted, and share the report with the Bank. In choosing host market, traders to be consulted
- *Assurance to traders:* The assurances should be in place that the trades will be given placement in the new constructed market on priority basis
- *Sensitization meetings:* Conduct meetings for Sterio Market traders and host markets on how to relate. This should go hand-in-hand with preparation of a code of conduct to guide working relations in host markets

The detailed social due-diligence undertaken independently by World Bank can be referred to in Section 18 of the final pre-feasibility report.

8. Next steps

This chapter ties together the conclusions from the previous chapters. It also explains the Project implementation and procurement plan, including the recommended bidding variables and procurement strategy. It deepens our understanding on how the Project's milestones can be achieved within the given timeframe.

8.1 Conclusion

Based on our current findings, we assess the proposed Project to be economically, commercially and financially viable, besides providing the VfM to TMC. The proposed Project meets all the requirements set out in local laws and regulations, particularly the PPP law.

Strategic case

We observe a strong demand for the Project's service - from both traders and consumers. We confirm that the Project is strategically aligned with various national development plans of Tanzania and will help improve the economic conditions and contribute to social welfare.

Economic case

The Project will result in an economic IRR of 15.2% and economic NPV of USD 2.3 million over 30 years. Even in the worst-case scenario (Project capex increases by 20%), the Project will give an EIRR of 13.7% and ENPV of USD 1.4 million over 30 years. We thus conclude that the Project is unequivocally economically viable.

Commercial case

We recommend a DBFOMT contract with a concession period of 15 years. Based on the PPP structure, the risks involved in the Project have been distributed among the contract parties.

We propose a three-floor structure, which will accommodate around 2,200 traders. It will have public toilets on each floor and parking space for vehicles – for both visitors' vehicles and trucks. Our recommended payment mechanism clearly points to the ProjectCo collecting the fees as this will ensure that the incentive structures are set right. A revenue sharing mechanism between the ProjectCo and the LGA might be considered. This section also presents details of the procurement procedure and its accountancy treatment.

Financial case

A VfM analysis was carried considering the PPP route for Project implementation, as PPP procurement is USD 6.1 million cheaper than public procurement. Also, based on the financial model, we found that the Project is financially viable with a Project IRR of 19% and an equity IRR of 20% for the concession period of 15 years.

Our Project estimates can be revisited in following phases of Project development. If capex or opex is higher or revenue is lower, then financial enhancement strategies might be required. For instance, if capex estimate increases by 20% or revenue estimates decrease by 20%, then an upfront VGF of 15-20% should be provided by the government to make the Project viable.

Management case

Capex is estimated at USD 6.6 million (within the maximum limit of USD 70 million), which renders the Project eligible for the PPP mode. The PPP agreement will be of 15 years. Land ownership will remain with TMC and it will lease it to ProjectCo during the concession period. TMC will not permit the TMC title to be used as a security for ProjectCo to obtain funds. From the social and environmental aspect, the Sterio Market Project can be classified under Category B of the IFC Categorization Scheme. Various IFC performance standards, which will be triggered by the Project, have been identified and mitigation strategies for the same have been formulated.

8.2 Procurement strategy and plan

This section covers the Project's procurement strategy including the type of procurement strategy to be followed, the bidding criteria for evaluation of bids, detailed plan to execute the procurement strategy, and select the preferred bidder.

Procurement strategy

The proposed procurement strategy aims at an international competitive bidding process in accordance with the Tanzanian PPP policy, PPP law and PPP Regulations 2015. It will be a two-phased procurement process, in which the first phase is the prequalification stage and the second is the proposal stage. We propose a two-envelope system with separate technical and financial proposals. We recommend a technical proposal evaluation as pass/fail and a scoring mechanism for the financial proposal.

As financial bidding variables we list the proposed end users' fees (the lower the better), required VGF (the lower the better) or a revenue sharing percentage (the higher the better). Decision on this will be addressed in the feasibility phase.

Finally, in the procurement process we recommend to pay attention to the structure of a consortium combining, for instance, a developer, EPC contractor and O&M contractor. It is crucial that the ProjectCo has adequate experience in all the PPP components, i.e. the DBFOMT components in addition to a sound financial position. Bid bonds or similar arrangements requiring bidders to commit to the terms of their bids should be considered.

The potential bidders will be provided guidance during the procurement process in order to improve participation by providing briefing sessions on what is involved in a PPP. Also, template financial models and a draft PPP agreement will be shared with the bidders.

An online data room will be established to provide background information on potential bidders. This will include standard building design plans, which bidders will be allowed to refine through the bidding process. The data room will also include a stock-take of the total number of traders, types of traders, the daily or monthly fees currently being paid by them, the current location and connectivity to the proposed Project site.

Project procurement plan

The plan consists of the following stages:

- *Stage 1 – Appointment of a transaction advisor:* After submission and approval of the final pre-feasibility report prepared by the technical and financial consultants, the PPP node will float a request for qualification (RFQ). RFQs submitted will be evaluated and then RFP will be floated to select the transaction advisor on a quality cost-based selection (QCBS) basis. In the QCBS method, a transaction advisor is selected on the basis of its technical and financial qualifications to carry out the transaction advisory services of the Project.
- *Stage 2 – Feasibility study and final procurement plan:* The selected transaction advisor will be responsible for carrying out a detailed feasibility study including the social and environmental study. After the approval of the same by the LGA and PPP node, the transaction advisor, in conjunction with the Project procurement

team of TMC, will be responsible for selection of ProjectCo for construction, operation and maintenance of the municipal market.

- *Stage 3 – Pre-qualification stage:* In this phase, the bidding documents including the RFQ, RFP and draft PPP agreement will be prepared. The procurement will be conducted in accordance with the PPP Policy, 2009; PPP Act 2010; and PPP Regulations 2011. According to the PPP Act 2010, a two-stage open-tender process needs to be adopted. In line with the PPP Policy, 2009, and the PPP Act 2010, an RFQ will be issued for the pre-qualification of bidders and shortlisting of qualified bidders.
- *Stage 4 – Bidding phase:* The shortlisted bidders will be issued the RFP, which will set out the bidding details and presentation of the financial and technical bids. A draft PPP agreement will also be issued in the bidding phase, and bidders will be asked to seek clarifications on it so that the PPP agreement can be finalized and final negotiations with the preferred bidder are minimal.

  A bidders' conference should be organized, in which the shortlisted bidders can raise questions. We recommend a two-envelope system separating financial and technical bids. The technical proposals should preferably be assessed on a pass/fail basis. Only the technical proposals that pass should proceed to opening the financial proposals.

First stage	•Request for qualification (RFQ) •Eligible and prospective bidders are pre-qualified
Second stage	•Request for proposal (RFP) or the bidding stage •Pre-qualified bidders are invited to submit their technical and financial proposals

- Stage 5 - *Signing of the PPP agreement* - TMC will be the contracting authority. The ProjectCo and the municipal council will be joint parties to the PPP agreement. The municipal council will be the main agency as per the PPP policy responsible for:

  a) Measuring outputs of the PPP agreement;

  b) Monitoring implementation of the PPP agreement and performance of the ProjectCo;

  c) Overseeing day-to-day management of the PPP agreement;

  d) Reporting on the PPP agreement in the contracting authority's annual report.

  Approval of the PPP node, established under PO-RALG, is required for material amendments to the PPP agreement. The PPP node will provide a variation only if it is satisfied that the PPP agreement, after the amendments, will provide value for money; affordability; and substantial technical, and operational and financial risk transfer to ProjectCo. Strict handover conditions will be outlined in the PPP agreement to ensure the asset is handed over in a well-maintained, workable condition.

- *Stage 6 - Monitoring during the construction period:* During the construction period, TMC can appoint an engineering agency with the requisite experience to review the designs prepared by the ProjectCo, provide recommendations for approval of the design, and supervise the construction works to ensure that the development of facilities meets the standards and specifications provided for in the PPP agreement. The engineering agency will provide periodic reports and updates to the municipal council regarding the progress of the construction until the commissioning of the facilities.

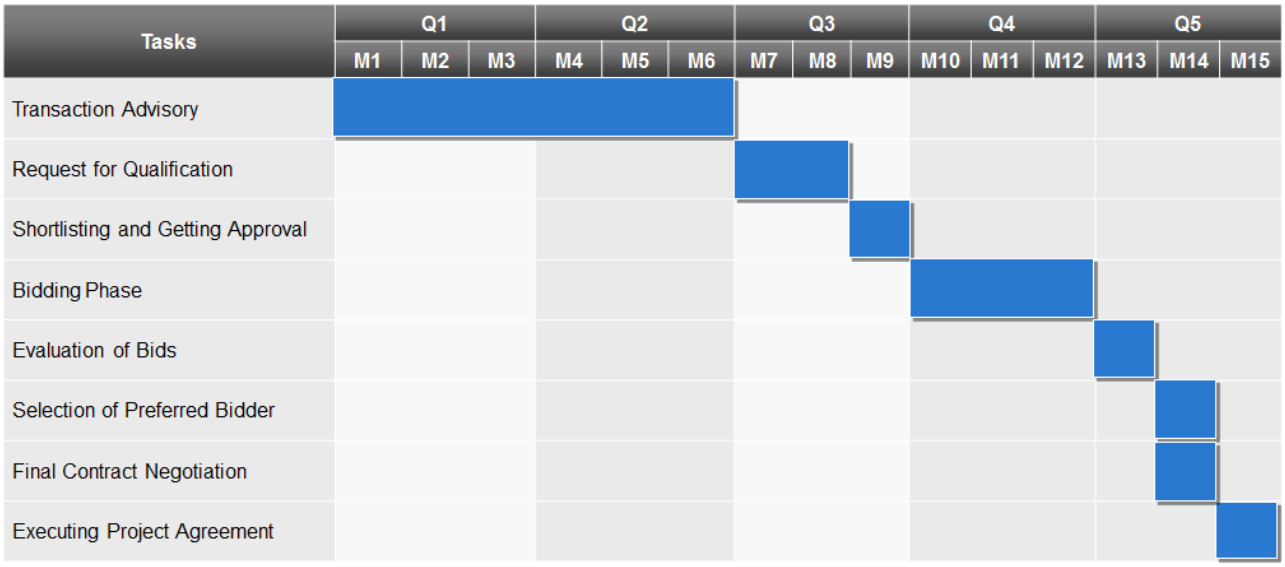
  The LGA will accommodate both authorized and unauthorized traders in the market building and will proactively restrict traders from operating on streets adjoining municipal markets. It will also prevent daladala operators from stopping randomly on nearby roads, so as to avoid user charges. If the LGA fails

to commit to these actions, the Project's revenue potential will be affected. It is unlikely that the ProjectCo will assume this risk, and therefore, it should be included in the PPP agreement in the roles and responsibilities of the LGA.

Preliminary procurement schedule

The tentative procurement schedule presents the main tasks of procuring a transaction advisor, issuing request for qualifications, shortlisting the potential applicants and getting approval from a higher authority, in the bidding phase during which the request for quote is issued to potential applicants. The bids are evaluated and the preferred bidder is selected and notified. After this, the preferred bidder is invited for final contract negotiation and the Project agreement can be executed. The tentative procurement milestones are depicted in the figure below:

Table 8.1: Procurement plan



Source: Consultant

8.3 Project implementation plan

Clear definitions and procedures of the various tasks and administrative approvals from competent authorities at different stages of Project implementation process are necessary in running a successful PPP program. The main activities to be carried out by TMC are as follows:

Proof of land ownership

The municipal council has submitted the land title deed to the Consultant. The same has been verified.

Revision of fees

Underpinning the Project's feasibility, it is essential to increase the fees charged in return for providing space to petty traders, retail shops, clean washroom and shower facilities as well as car and cargo parking. Currently, the daily fees charged from small stalls is TZS 300 and large shops (kiosks) is TZS 500. The monthly fees charged by small stalls varies from TZS 5,000 to TZS 15,000, while the same for large shops/kiosks varies from TZS 30,000 to TZS 50,000. These fees are deemed low and not viable. Once the modern market is ready, daily fees can be increased to TZS 2,500 for large shops, TZS 1,500 for medium-sized stalls and TZS 750 for small stalls, while monthly charges would be TZS 65,000 for large stalls TZS 35,000 for medium-sized stalls and TZS 15,000 for small sized stalls. Further, the current car parking is TZS 1,000 per day and the fees should

be revised to TZS 500 per hour. The municipal council will need to amend the by-laws to reflect the revised rates.

Future increment in fees

Fees to be increased by the municipal council after every three years. The increment should be linked to the inflation rate implying that at current rates, the tariffs can be revised to the tune of 25% after every three years. The municipal council will need to include the by-laws to reflect the future increment in rates and will have to disseminate the outcome of the same to the petty traders.

Enforcement of authorized operations

Currently, close to 200 traders operate outside the Sterio Market, which leads to further congestion and lessening of the available space on Kabunga and Kasana streets, thereby causing inconvenience to other street users and resulting in challenges for the municipal council to maintain cleanliness in the areas where they operate. One of the reason the Sterio Market is being redeveloped is to provide adequate dedicated space to traders operating there, thereby reducing high congestion and freeing up space on these streets, which has been partly occupied by the petty traders. Once the Project is operational, the municipal council should take strict measures to ensure that all traders operate from their dedicated space in the market and discourage traders from operating on the streets by imposing strict penalties on them.

Resettlement of traders

The 1,200 existing traders will need to be relocated temporarily during the construction of the market. The municipal council is responsible to ensure that the resettlement process is completed in an organized way. Currently, the municipal market is highly congested. A site has been identified in the Mwembe Yanga area in Temeke Ward, for relocation and resettlement. Since Project construction will likely take over two years, traders should be assured in writing that they will get their space back in the modern market, and should be provided with alternative structures and basic services such as water, toilets and electricity in the relocation area. The municipal council will be required to make provision for the above mentioned amenities at the relocation site, if these amenities are not already available there.

Supporting infrastructure

Currently, the access roads leading to the Sterio Market are in poor condition and after redevelopment of the market, heavy traffic can be anticipated, which would lead to further deterioration of the existing roads. Further, the storm drainage connectivity is poor and storm water remains on the nearby ground as well as inside the market on account of leaking sheds. The municipal council should provide support for development of supporting infrastructure such as improving the condition of the existing access roads and storm water drainage connectivity.

Stakeholder consultations

There are close to 1,029 registered traders in the market and around 170 traders who trade outside the market, resulting in close to 1,200 traders operating in and around the market. The municipal council will be required to conduct stakeholder consultations and take their views on the proposed development of the market, and relocation and resettlement for the next 2-3 years, until the modern market is completely constructed with all the amenities. The municipal council should also consult the petty traders with respect to the facilities they would require in the relocated area and seek their consensus on the same.

Table 8.2: Implementation plan

Tasks	Selection of Transaction Advisor (0-0.5 Year)	Bidding Phase (0.5- 1 Year)	Construction Phase (1- 3 Years)	Operation Phase (3-15 Years)
Proof of land ownership				
Stakeholder Consultation				
Resettlement of traders				
Supporting Infrastructure				
Revision of fees				
Enforcement of authorized operations				
Increment of fees				

Source: Consultant

9. Annexure 1: Bill of quantities (BOQ)

The bill of quantities (BOQ) for the Project has been prepared using the bottom-up approach. The technical team has calculated the individual cost of development of market building, admin block, public toilets, plant & machinery, lifts, electrical room, etc. in order to arrive at the overall cost. Total capex for Sterio municipal market has been estimated to be TZS 15,307 million (USD 6.66 million) for a total built up area of 15,732 sq m. Hence, the cost/sq m of built up area has been derived as TZS 0.97 million (USD 423). Civil works denotes the major share of the total capex i.e. 59.3% whereas the electrical works indicates the second highest share of the total capex i.e. 7.2%. Consultancy fees and contingencies share 8.6% and 6.9% of the total Project cost respectively.

Table 9.1: Capex of the Project

S/No.	Particular of the work	Amount (in TZS Million)	Amount (in USD Million)	Percentage share of total Project cost
1	Site development	25	0.01	0.2%
2	Civil works	9,090	3.95	59.3%
3	Plant and Machinery	269	0.12	1.8%
4	Electrical works	1,115	0.48	7.2%
5	Common utilities	47	0.02	0.3%
6	Miscellaneous	53	0.02	0.30%
7	Consultancy fee @12.5%	1,318	0.57	8.6%
8	Contingency @10%	1,055	0.46	6.9%
	Grand total	**12,972**	**5.64**	-
9	VAT tax @18% of grand total	2,335	1.02	15.3%
	Total Project capex	**15,307**	**6.66**	100.0%

Source: Consultant

Table 9.2: Capex and area statement of the Project

Area Statement	Total built-up area (sq m)
Market building - low cost rental space, retail shops, admin block, toilets	13,338
Total built-up area of the toilets in market building	653
Total built-up area of the admin block	252
Total built-up area of the electrical room	36
Total built-up area available for stalls for traders	12,395
Land area for parking	1,150
Land area for internal movement	1,001
Land area for garbage collection hut	60
Land area available for other utilities/facilities	181
Total	**15,732**

Area Statement	Total built-up area (sq m)
Total Project capex (in TZS in Million)	**15,307**
Total Project capex (in USD in Million)	**6.66**
Cost per sq m of built up area (in TZS in Million)	**0.97**
Cost per sq m of built up area (in USD)	**423**

Source: Consultant

Table 9.3: Bill of Quantities (BOQ)

Sl No.	Particular of the work	Amount (in TZS Million)	Amount (in USD Million)
1	Site development		
1.1	Land development, drainage, miscellaneous services etc.	25	0.01
2	Civil works		
2.1	Preliminary Item	488	0.21
a	*Definition and terms*	*0*	*0.00*
b	*General requirements and provisions*	*0*	*0.00*
c	*Contractor's establishment on site and general obligation*	*177*	*0.08*
d	*Engineer's accommodation and attendance upon engineer and his site personnel*	*275*	*0.12*
e	*Environmental protection and waste disposal*	*36*	*0.02*
2.2	Sub-Structures	1,866	0.81
a	*Site preparation*	*21*	*0.01*
b	*Excavation and disposal*	*42*	*0.02*
c	*disposal of water and planking and strutting*	*2*	*0.00*
d	*Hardcore or the like*	*69*	*0.03*
e	*Anti-termite treatment*	*20*	*0.01*
f	*In situ concrete (plain and reinforced)*	*718*	*0.31*
g	*Reinforcement*	*224*	*0.10*
h	*Formwork to in situ concrete*	*501*	*0.22*
i	*Block work*	*142*	*0.06*
j	*Damp proof courses*	*10*	*0.00*
k	*In situ finishing*	*59*	*0.03*
l	*Three coats weather guard paint*	*59*	*0.03*
2.3	Frames (Beams and Columns)	2,332	1.01
a	*In situ concrete, reinforced*	*1,074*	*0.47*
b	*Reinforcement*	*1,257*	*0.55*
2.4	Walling and Fence	394	0.17
a	*Block work*	*250*	*0.11*
b	*Building fence*	*67*	*0.03*
c	*Decorating fence*	*77*	*0.03*

S/ No.	Particular of the work	Amount (in TZS Million)	Amount (in USD Million)
2.5	Roofing	223	0.10
a	*Roof covering*	*147*	*0.06*
b	*Structural timber*	*76*	*0.03*
c	*Carpentry sundries*	*0*	*0.00*
d	*Carpenters metal work*	*0*	*0.00*
2.6	Doors	299	0.13
a	*Wood work*	*235*	*0.10*
b	*Ironmongery*	*64*	*0.03*
2.7	Windows	120	0.05
a	*Aluminum windows*	*120*	*0.05*
2.8	Finishing	914	0.40
a	*Floor finishing (tile, slab or block finishing and skirting)*	*714*	*0.31*
b	*Wall finishing (in situ finishing)*	*200*	*0.09*
2.9	Painting and decorations	181	0.08
a	*Internal (plastering)*	*164*	*0.07*
b	*External*	*17*	*0.01*
2.10	Solid waste management		
	Garbage collection hut	7	0.00
	Trucks for collection of garbage	115	0.05
2.11	Water and drainage		
	Plumbing and drainage	1,363	0.59
	Overhead Tanks	120	0.05
2.12	Parking space	300	0.13
	Internal roads	261	0.11
2.13	Other facilities i.e. extra washing room/shower	109	0.05
3	Plant & Machinery		
3.1	2 No. Service lifts/Pulley system	269	0.12
4	Electrical works		
4.1	Panel boards, electric cables, fittings, street lights	1,022	0.44
4.2	DG set	93	0.04
5	Common utilities		
5.1	Toilet tools for hygiene	2	0.00
5.2	Firefighting system	43	0.02
5.3	Telephone, office furniture, personal computer, photocopier, fax, printer etc.	2	0.00
6	E&S capacity building cost @0.5%	53	
7	Consultancy fee @12.5%	1,318	0.57
8	Contingency @10%	1,055	0.46

S/ No.	Particular of the work	Amount (in TZS Million)	Amount (in USD Million)
9	Vat tax @18%	2,335	1.02
Total Project capex		**15,307**	**6.66**

Source: Consultant

10. Annexure 2: Willingness to pay

Below is the summary of findings obtained from the assessment conducted by the market assessment team with respect to acceptance of the Sterio Market redevelopment Project.

Participants of the survey

The assessment involved the market manager and about 150 traders who volunteered (i.e. ~14% of the traders). The market has about 1,200 traders, whereby 1,029 traders have a contract with the municipal council. The key findings of the willingness to pay undertaken at the Sterio Market are as mentioned under:

Services expected

- *Market facilities* - There should be toilets on each floor, a customer waiting area along with ceiling fans, provision of water and electricity for all the traders, and the market building should have cross ventilation.
- *Segregation of traders* - There should be segregation of traders - who deal in one trade - on one floor.
- *Parking and security* - The parking area should be close-by to attract the customers. The market should have indoor premises within the building to enhance security, and the access roads leading to the market should be improved.
- *Cleanliness* - There should be a proper waste collection mechanism.
- *Storage facilities* - There should be proper storage facilities along with cold rooms.

Willingness to pay

The key findings of the willingness to pay undertaken at the Sterio Market are as mentioned under:

Table 10.1: Market details as per the market manager

S/N	Item	Comments/ Views
i.	Current Fee from washroom and toilets	This is currently not part of the market revenue and the revenue is collected directly by the municipal council. However they charge TZS 200 and TZS 500 for using toilet and for showering respectively.
ii.	Number of trader operate in the Market	**There are:** • 1029- premises occupied by traders with contracts • 1200- Conduct trading activities in the market and are paying the daily levies Please Note: One of the reason that the number of premises available within the market do not compare with the total approximated number of traders is because there are some premises owned by a group of traders e.g. Chicken Slaughtering Shed comprise a total of 31 traders.
iii.	Issues Facing by traders	• The Market appears to have poor facilities, • It appears that there is no enough premises to accommodate traders, • The parking space appears not to be enough, • The market lack stores, • The access roads are congested and appeared to be in poor condition. • Some premise appear to be leaking

Source: Consultant

Table 10.2: Willingness to pay as per Kiosks owners (shops and butchers)

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently fees	They are paying: • A rent of TZS 30,000 monthly and • A levy of TZS 500 daily
iii.	Currently Area occupying	They ranges between 6-14.5 sq m
iv.	The required space	The current size appeared enough to some traders while others need more size. The reasonable size was agreed to be 9 sq m for kiosk and 15 sq m for butchers and shops.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Some were willing to pay more rent up to TZS 40,000 per month if they will double their daily sales while others request to pay same rent for some time and the rent to be revised latter. For the daily levy, the current TZS 500 appears a lot.
vi.	Willingness to be relocated during the Project redevelopment period	Traders may be willing only with assurance to get their space back after construction and the relocation area to be in close proximity.
vii.	Required facilities	The following are the facilities, features requested: • To be involved in all construction stages, • Stall should at least have ceiling fans and the front wall should have glasses for display, • Market to be provided with more parking spaces, • More access gate to be provided.

Source: Consultant

Table 10.3: Willingness to pay as per banana whole sellers

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 300 as entrance fee for a box of banana, • TZS 300 per day if arranging bananas on table of floor to be sold for retailers, • TZS 350 for a box of banana for cleanness, • TZS 200 for a box of banana for security,
iii.	Currently Area occupying	There are 200+ traders in approx.600sqm area i.e. each occupy approx. 3sqm.
iv.	The required space	2-3 times of what they now occupying.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Since they are currently paying up to TZS 850 for a box of banana the can pay up to TZS 1000 only if security and cleanness will be provided.
vi.	Willingness to be relocated during the Project redevelopment period	Traders may be willing only: • with assurance to get their spaces back after construction, • relocation area to be in the close proximity,
vii.	Required facilities	The following are the facilities, features requested: • Covered areas, • Market to be provided with more parking spaces, • They prefer operating in semi basement,

Source: Consultant

Table 10.4: Willingness to pay as per cassava whole sellers

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 4,000-12,000 as truck entrance fee depending on the size, • TZS 200-1,000 per day cleanness, • TZS 500 for security, Please note: security and cleanness is paid by those selling cassava on that particular day
iii.	Currently Area occupying	There are 80 traders in approx.600sqm area
iv.	The required space	The area appeared enough for the existing number of traders.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	The existing charges appeared a lot and they were not read to tell if they are ok with the increase of levies and truck entry charges upon redevelopment.
vi.	Willingness to be relocated during the Project redevelopment period	Not ready they have advised the construction to be undertaken on phases.
vii.	Required facilities	The following are the facilities, features requested: • Covered areas, • Market to be provided with more parking spaces,

Source: Consultant

Table 10.5: Willingness to pay as per traders selling chicken

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently fees	They are paying: • TZS 4,000-12,000 as truck entrance fee depending on the size, • TZS 10,000 as monthly rent, • TZS 400 daily fee, • TZS 8,000 per month for cleanness and security,
iii.	Currently Area occupying	There are 52 traders in approx.310sqm area and each trader have rent a chicken hut measured 5m^3
iv.	The required space	Current spaces appear enough.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	The truck entry fees appear a lot and they are not will for it to be revised. They have request others charged to be covered by the truck entry fees. Meaning not to pay anything after paying the entry fee.
vi.	Willingness to be relocated during the Project redevelopment period	They have advised the construction to be done on phases.
vii.	Required facilities	The following are the facilities, features requested: • To be provided with the modern kitchen huts not the existing one made of timber frame with chicken wire cladding, • Market to be provided with more parking spaces, • Proper facilities to be provided include storms water drainage channels.

Source: Consultant

Table 10.6: Willingness to pay as per traders at chicken slaughtering area

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently fees	They are sharing to paying for : • TZS 80,000 as monthly rent, • TZS 400,000 monthly cleanness, • TZS 800,000 monthly firewood, • TZS 100,000 monthly waste collection, • TZS 480,000 monthly waste water removal,
iii.	Currently Area occupying	There are 31 traders in approx.110sqm shed
iv.	The required space	Twice the current space will be enough for the existing traders
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	They can revise their rent to TZS 200,000 per month if provided with good facilities.
vi.	Willingness to be relocated during the Project redevelopment period	They are willing only with assurance of getting their space back after construction.
vii.	Required facilities	The following are the facilities, features requested: • A proper indoor slaughtering area with changing rooms, toilets/shower rooms, cold room, customer waiting are, small office • Market to be provided with more parking spaces,

Source: Consultant

Table 10.7: Willingness to pay as per coconut whole sellers

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 4,000-12,000 as truck entrance fee depending on the size, • TZS 300daily for retailers • TZS 3,000-5,000 for security, Please note: security is paid by those selling coconuts on that particular day
iii.	Currently Area occupying	There are 250 traders in a less than 0.5 acre area
iv.	The required space	0.5 Acre is will be enough for the existing traders.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	They can pay up to TZS 20,000 for truck entry fee when the business is good and they are to be provided with good facilities,
vi.	Willingness to be relocated during the Project redevelopment period	Ready with assurance to get their spaces back. All coconut traders to be relocated in one area which should be in a close proximity.
vii.	Required facilities	The following are the facilities, features requested: • Covered areas, • Market to be provided with more parking spaces,

Source: Consultant

Table 10.8: Willingness to pay as per food vendors

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 15,000 as monthly rent for those with kiosks, • TZS 300 daily all, • TZS 300daily for security, • TZS 100daily for cleanness,
iii.	Currently Area occupying	Kiosks measured approx. 9 sq m while there are also 55 food vendors operates in approx. 135 sq m shed
iv.	The required space	The size of Kiosks appeared reasonable however there should be additional cooking area and changing rooms.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	They can pay up to TZS 20,000 as monthly rent and up to TZS 500 as daily fees when the business is good and they are to be provided with good facilities,
vi.	Willingness to be relocated during the Project redevelopment period	Ready with assurance to get their spaces back. Advised for relocation to be done in writings.
vii.	Required facilities	The following are the facilities, features requested: • Modern restaurants with kitchen are, changing rooms, dining halls and store

Source: Consultant

Table 10.9: Willingness to pay as per pawpaw whole sellers

S/N	Item	Comments/ Views
a.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 4,000-12,000 as truck entrance fee depending on the size, • TZS 2,000-3,000 for security, • TZS 1,000-2,000 for security, Please note: security and cleanness is paid by those selling pawpaw on that particular day
iii.	Currently Area occupying	There are 140 traders in quarter of an acre area
iv.	The required space	0.5 Acre is will be enough for the existing traders.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Not ready to state how much they will be willing to pay more after redevelopment.
vi.	Willingness to be relocated during the Project redevelopment period	Ready with assurance to get their spaces back or the construction to be done on phases. To be relocated in a close proximity area with basic facilities and easy to access.
vii.	Required facilities	The following are the facilities, features requested: • Covered areas, • Good floor or platform for arranging their pawpaw. • Market to be provided with more parking spaces,

Source: Consultant

Table 10.10: Willingness to pay as per watermelon whole sellers

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently daily fees	They are paying: • TZS 5,000-30,000 as truck entrance fee depending on the size, • TZS 1,000-5,000 daily for security, • TZS 1,000 daily for security, Please note: security and cleanness is paid by those selling watermelon on that particular day.
iii.	Currently area occupying	There are 130 traders in approx. 300 sq m shed
iv.	The required space	3 time of the current space will be enough for the existing traders.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	They are willing to pay up to TZS 50,000 per truck but not more.
vi.	Willingness to be relocated during the Project redevelopment period	Advised construction to be done in phases however when necessary to be relocated they are ready with assurance to get their space back.
vii.	Required facilities	The following are the facilities, features requested: • Covered areas with cross ventilation, • Not to be relocated on upper floor after development. • Proper facilities include proper waste water collection mechanisms, • Market to be provided with more parking spaces,

Source: Consultant

Table 10.11: Willingness to pay as per traders operating on tables

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently fees	They are paying: • A rent of TZS 5,000 monthly and • A levy of TZS 300 daily • Security TZS 200 per table daily
iii.	Currently Area occupying	The original tables measured approx. 1 sq m, the traded request to be allowed to expand the tables which are now measured approx.2sqm
iv.	The required space	The current size appeared enough to some traders while others need more size. The reasonable size was agreed to be 4sqm.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Some were willing pay a daily fee od TZS 400. Some were not willing to propose or comment on the revised monthly payment. Few advised the rents should be revised base on rate of inflation
vi.	Willingness to be relocated during the Project redevelopment period	Traders may be willing only with assurance to get his space back after construction and the relocation area to be in close proximity.
vii.	Required facilities	The following are the facilities, features requested: • Indoor premises, • Tables with lockers, • Market to be provided with more parking spaces, • More access gate to be provided.

Source: Consultant

Table 10.12: Willingness to pay as per Retailer Traders with temporary Trading Tables

S/N	Item	Comments/ Views
i.	Currently daily income	Not willing to share
ii.	Currently fees	They are paying: • A levy of TZS 300 daily
iii.	Currently Area occupying	Approx. 1 sq m
iv.	The required space	The current size appeared enough to some traders while others need more size. The reasonable size was agreed to be 4 sq m.
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Some were not willing to propose or comment on the revised monthly payment. Few advised the rents should be revised base on rate of inflation
vi.	Willingness to be relocated during the Project redevelopment period	Traders may be willing only with assurance to get their space back after construction and the relocation area to be in close proximity or the construction to be done on phases.
vii.	Required facilities	The following are the facilities, features requested: • Indoor premises, • Tables with lockers, • Market to be provided with proper facilities and more parking spaces,

Source: Consultant

Table 10.13: Willingness to pay as per second hand clothes retailers

S/N	Item	Comments/ Views
i.	Currently capitals	Not willing to share
ii.	Currently fees	They are paying: • A levy of TZS 300 daily per table or stall
iii.	Currently Area occupying	The areas are: • Tables are approx. 4 sq m, • Stalls are approx. 6 sq m
iv.	The required space	The current size appeared enough
v.	For providing better space (50% additional), better facilities which might results in 30% or 50% rise in income how much will you be willing to pay	Some were not willing to propose or comment on the revised monthly payment. Few advised the rents should be TZS 10,000 while daily levies to remain TZS 300.
vi.	Willingness to be relocated during the Project redevelopment period	Traders may be willing only with assurance to get their space back after construction and the relocation area to be in close proximity or the construction to be done on phases.
vii.	Required facilities	The following are the facilities, features requested: • Simple stalls and table to be arranged in a manner that both can be accessible, • Stores to be provided • To be relocated on ground floor or along the bounder wall outside the market as they are now.

Source: Consultant

Willingness to relocate

Currently, the TMC owns ~1.7 acres at the Project site, which is sufficient for the development of a municipal market. Following guidance from the LGA and the Project needs, we have only considered the existing 1.7 acre of land for development under the current Project. Hence, Relocation Action Plan (RAP) would be required as the existing traders would need to be relocated, which has been explained under the relocation strategy.

The relocation strategy submitted by the LGA proposes to relocate all traders to Mwembe Yanga area. The area is located along the main road and can accommodate all the traders. The traders opined that before relocating them to new areas, TMC should provide basic services such electricity, sheds and washrooms.

More than 95% of the traders are willing to relocate. Their only concerns were availability of basic facilities like water supply and electricity at the relocation area, and assurance of receiving spaces after redevelopment of the market. They would only be willing after receiving assurance to getting their space back after construction, and assurance to be relocated in a place where they can continue to conduct their daily trading activity.

Currently, there are no facilities at the relocation site. Therefore, it has been proposed that provision for toilets, water and electricity is provided, with the cost borne by the TMC.

11. Annexure 3: Demand study

This section provides a background of the current market rates for commercial and retail development in and around the Project area. It outlines the current revenue configuration of the Project and proposes various revenue sources that can be looked at to enhance overall revenue.

Property rates assessment

As per the 2012 National Census, the Temeke ward had a population of 26,047, which was ~7% lower than the 2002 National Census. The area is dominated by residential development with small-scale trading activities which include both retail and wholesale traders. The retail market has small shops, measuring between 9 sq m and 15 sq m, in buildings along the main roads. Rents start at USD 44 (TZS 100,000) per sq m per month, depending on the size and condition of the outlet. There are also few office premises. For a premise measuring 300 sq m, the rental is USD 1,320 (TZS 3,000,000) per month (exchange rate USD 1 = TZS 2,300).

Current revenue configuration

The market mostly accommodates wholesale traders and few retailers who operate on a contract or daily basis. The market is fully occupied, which has led to some traders operating outside the market. Commodities sold include perishable (fruits, vegetables, fish and meat), and non-perishable goods (grains and spices). There are food stalls and shops/kiosks selling kitchen utensils as well. The following table lists the current charges:

Table 11.1: Current revenue configuration

S/N	Types of premises	Quantity (units or traders)	Daily fees per unit/ traders (TZS)	Monthly fees per unit/shed (TZS)
1.	Kiosks type 1	66	500	30,000
2.	Kiosks type 2 (former second-hand clothes kiosks)	36	500	30,000
3.	Shops	8	500	50,000
4.	Kiosks type 3 – Butchers	6	500	50,000
5.	Kiosks type 4 - Attached outside the boundary wall	17	500	15,000
6.	Kiosks type 4 - Attached outside the boundary wall	1	500	30,000
7.	Chicken hutches	52	500	10,000
8.	Food vendors' huts	16	300	15,000
9.	Trading Shed A (Lutinda)	176	300	5,000
10.	Trading Shed B (Mahakama ya chai)	46	300	Not applicable
11.	Traders with temporary trading tables	600	300	Not applicable
12.	Chicken slaughtering shed	1	Not applicable	80,000
13.	Toilets	3	Not applicable	4,000,000
14.	Toilets (small)	1	Not applicable	1,000,000

Source: Consultant

12. Annexure 4: Legal due diligence

This section outlines additional laws that will be applicable for the implementation of the proposed Project.

Use and user rights

The Sterio Market is used as a market and some of the land identified under the Land Use Regulation includes Use Group D – shops, Use Group E - special retail services (including retail markets), and Use Group L - wholesale and storage warehouses. However, since we have not obtained the TMC title, we are unable to provide all the uses attached to the land as this is usually provided for in the title.

Some user rights in the Sterio Market include social services/amenities such as public toilets, parking as well as the rent and levies paid to TMC by vendors or suppliers in the market. ProjectCo may set up an account where such funds can be deposited. However, applicable taxes chargeable to the users will be paid to the TRA and will not be remitted to ProjectCo.

Section 11(4) of the PPP Act 2010 provides additional conditions to be included in the PPP agreement to ensure that the ProjectCo undertakes to perform the functions of the contracting authority on the latter's behalf for a specified period, and will be liable for risks arising from the performance of its functions. Government facilities, equipment or any other state resources required for the Project are transferred or made available to the ProjectCo in a timely manner, and public and private assets are clearly specified.

The PPP agreement between TMC and ProjectCo may provide (among other things) to lease and collect rent from the tenants (traders/merchants) occupying the buildings developed under the PPP.

Relevant environmental law and heritage rights, if applicable

In operating a market, TMC will have requirements such as waste management, solid waste management, urban upgrading through drainage canals construction, street lighting, ground water, infrastructure, maintenance of hygiene, and food safety among others. The requirements are provided for under Sections 106, 113, 114, 120 and 123 of the EMA. Further provisions in relation to food safety and hygiene are provided for under the TFDC Act.

Here's a list of relevant licenses which TMC should obtain for ProjectCo to operate the refurbished Sterio Market:

Table 12.1: Relevant licenses

Permit/consent/license	Issuing authority	Legislation	Duration
Workplace Registration Certificate	OSHA	Section 16 of the Occupational Safety and Health Act, Act No. 5 of 2003	The certificate is valid specifically for the workplace and occupier of the workplace for the whole lifecycle of the Project.
Compliance Certificate	OSHA	Section 17 (3) of the Occupational Safety and Health Act, Act No. 5 of 2003	The certificate is valid for one year and subject to inspection and renewal.
Fire Safety Certificate	FRF	Section 6 of the Fire and Rescue Act, Act No. 14 of 2007	The certificate is valid for the whole lifecycle of the Project and specific to the workplace or premises.

Permit/consent/license	Issuing authority	Legislation	Duration
		the Fire and Rescue Force (Safety Inspections and Certificates) Regulations, GN No. 106 of 2008	The certificate also subjects the holder to inspections.
Water Discharge Permit	Basin Water Board	Section 63 of the Water Resources Management Act, Act No. 11 of 2009 The Water Resources (Water Abstraction, Use and Discharge) Regulations, GN No. 190 of 2010;	The permit is valid for the period specified in the permit issued to the occupier.

Source: Consultant

Tax legislation

- *Main tax / revenue laws in Tanzania*- These include the East African Community Customs Management Act, 2004, Income Tax Act, 2004, Stamp Duty Act, Cap. 189, Tax Administration Act, 2015 and Value Added Tax Act, 2014.
- *Main tax / revenue law administered by LGA*- LGA which imposes obligations on how LGAs charge fees on various services within their jurisdiction.
- *TRA Tax Legislation imposes the following taxes / charges on all types of businesses*-Corporate tax of 30%, withholding tax on service fees of 5%, and value added tax of 18%.

Labor legislations

The main labor legislations that govern employees and labor matters in Tanzania are the ELR Act, ELR Rules thereunder, Labor Institutions Legislation, and the Wage Order. The ELR Act and ELR Rules provide the rights and obligations of employees and employers, the employment contract, wages, types of leave, holiday, probation, trade unions, and termination procedure among others.

It is important to offer employees contracts which comply with the provisions of the ELR Act, such as employee particulars, place of recruitment, job description, duration of the contract, probation, annual leave, notice of termination, employee benefits, i.e. social security contributions among others.

Notably, there are two types of employment contracts in Tanzania – contractual employment (a traditional 'employee') and an employment for service as an independent contractor. In the former, the employee signs an employment contract with the employer and works solely for the employer. The employer does not become a client of the employee. In the latter, the employer becomes a customer of the employee and the employee/contractor provides services not only to the employer but to others as well. The former is governed under the ELR Act whereas the latter is outside the typical employment regime.

The Wage Order provides that the minimum wages (hourly, daily, weekly, fortnightly and monthly) be paid to employees working in various sectors such as domestic workers, small-scale contractors, drivers, trade, industry and commerce as well as other sectors. ProjectCo will be required to adhere to the relevant employment legislation in relation to the employees it may intend to hire to carry out the operation and management of the Sterio Market.

It's worth noting that if ProjectCo intends to hire foreigners for the construction, operation and management of the Sterio Market, such foreign workers must obtain the relevant work and resident permits from the Ministry of Labor and Immigration Department, respectively. Any engineers and contractors must be registered with the Engineers Registration Board (ERB) and Contractors Registration Board (CRB), respectively. Recent legislative changes have provided a shift towards promoting local content in Tanzania, thus ProjectCo may be

required to outsource most of the goods and services from within Tanzania. Exceptions may be made where the level of expertise of the technology required cannot be sourced locally.

Foreign exchange legislation

Payment in foreign currencies for goods and services in Tanzania is quite unclear. On the one hand, Section 26 of the BOT Act provides that the legal tender in Tanzania is Tanzania Shillings (**TZS**) in the form of bank notes and/or coins. On the other hand, Section 5(b) of the Foreign Exchange Act provides that any person, resident or non-resident in Tanzania, may hold any amount of foreign currency in the country. Further, Section 5(d) of the Foreign Exchange Act authorizes a person, resident or non-resident, to open a foreign currency account with an authorized bank. Thus, a wide interpretation of Sections 5(b) and 5(d) of the Foreign Exchange Act may be read as allowing for foreign currency to be used in Tanzania. However, in December 2017, Finance Minister Philip Mpango stated that the law needs to be amended to the effect that Tanzanian residents should not have to pay in foreign currencies for goods and services in the country.

The Ministry of Finance also issued a public statement on its website declaring that it is not prohibited to make price quotations using foreign currencies, as stated under Section 5 of the Foreign Exchange Act. Nonetheless, these applications should mainly target foreign clients. Conversely, what may be prohibited is refusing to accept payment in TZS, which is the legal tender in Tanzania, as provided under Section 26 of the BOT Act. Thus, although one can request for payment in a foreign currency such as the US dollar, refusal to accept the equivalent payment in TZS could be construed as contravening Section 26 of the BOT Act.

Competition legislation

The Fair Competition Act 2003 prohibits anticompetitive agreements that are unenforceable if the object, and effect or likely effect of the agreement are to appreciably prevent, restrict or distort competition. The Fair Competition Act covers markets as well if the underlying agreements could be deemed to be anticompetitive.

Building and fire codes, as applicable

For ProjectCo to conduct business in Tanzania, it would require the following licenses and permits:

- Certificate of Incorporation issued by the Business Registration and Licensing Agency (**BRELA**);
- Business License from the Ministry of Trade and Industry;
- Tax Identification Number (**TIN**) Certificate issued by TRA;
- Value Added Tax (**VAT**) Certificate issued by TRA;
- Workers Compensation Fund Certificate by Workers Compensation Fund;
- Social Security Registration;
- Workplace Registration Certificate - Occupational Safety and Health Authority (**OSHA**);
- Compliance Certificate issued by OSHA;
- Fire Safety Certificate issued by Tanzania Fire and Rescue Force;
- Building Permit from TMC;
- CRB Registration; and
- ERB Registration.

Compliance with land usage regulations

The regulations are as follows:

- *Use Group D – Shops:* Buildings for retail trade or retail services but excluding cafés or restaurants, bars (licensed or unlicensed for the sale of intoxicating liquor), hairdressers, cleaners and dyers, shops for the sale of uncooked meats, fish or fried fish, retail markets and petrol service stations;
- *Use Group E* - Special retail services which include shops for the retail sale of uncooked meat or fish, fried fish and other hot food, retail markets and informal trade activities; and
- *Use Group L - Wholesale and storage warehouses:* Wholesale warehouses designed for storage of goods and transaction of business (other than retail business) relating to such goods; storage and transit warehouses and godowns (not including storage of offensive goods or materials); furniture repositories; and wholesale markets where there is no retail trade; including, in every case, the necessary offices.

Moreover, Section 38 of the LGUA Act provides that each planning authority will determine the planning space standards, density of buildings on land, height, design and appearance and sitting of buildings, manner of access to land and buildings in its area of jurisdiction in accordance with national standards.

Dispute settlement mechanism and legal jurisdiction

The PPP Act 2010 and PPP Regulations 2015 provide that disputes should be resolved through negotiation, mediation or arbitration (Section 22 of the PPP Act 2010). In addition, the PPP agreements will be governed by Tanzanian law. This infers that any arbitration proposed under a PPP agreement would have to be done pursuant to the Tanzanian arbitration laws as opposed to international arbitration. Section 11(1) of the Permanent Sovereignty Act provides that permanent sovereignty over natural wealth and resources will not be subject to proceedings in any foreign court or tribunal. There is a wide definition of natural wealth and resources which may encompass goods sold in the market. Therefore, our interpretation of this provision means that the Government of Tanzania 'refuses' to submit itself before any foreign court or tribunal. Accordingly, since the PPP agreement will be governed by Tanzanian law, the agreement will state that the arbitration will take place in Dar es Salaam.

13. Annexure 5: Social and environmental aspects

This section outlines various social and environmental challenges that the Project will face during different phases and how ProjectCo will overcome these challenges. It also covers the IFC Performance Standards triggered by this Project. ProjectCo will undertake Environmental and Social Impact Assessment (ESIA) and obtain environment certificate as per Tanzanian guidelines and the LGA needs to continuously monitor the same by maintaining the Environmental and Social Management System (ESMS).

Environmental and social challenges during the construction phase

- *Construction demolition debris and other solid waste* – Construction debris will be generated from site clearance as a result of demolition of the existing stalls and structures. Some of the materials can be salvaged by stall owners. Other solid waste includes spoil materials, used cement bags, wood and metal cuttings, etc. Mitigation measures include providing – (i) wind breakers of appropriate height (~10 meters could be provided); (ii) covering all loose soil or sand or construction or demolition waste or any other construction material that causes dust; (iii) regular water sprinkling on the exposed surfaces to reduce dust emission; (iv) adequate waste receptacles; and (v) regular waste collection.
- *Noise pollution* – High noise pitch arising from construction equipment and machinery can be a cause of complaints from the adjoined residents. This is because the site is within a high-density residential area. However, the major source of noise will be trucks that bring materials or supplies to the construction site. Similarly, vibrations of construction moving trucks and machinery may not be desirable and can affect substandard houses. Mitigation measures include - (i) controlling the duration of construction works, especially during the night time; (ii) providing noise dampening gadgets; (iii) ensuring regular maintenance of vehicles and machinery; (iv) make a quick inventory of presence of cracks to adjoining substandard houses, and provide prior information of what may happen when the Project commences.
- *Traffic management problems* **–** The Stereo Market in Temeke is located at a strategic spot and area around it is already built up. The access road is narrow and cannot accommodate many cars (single lane). It is, therefore, anticipated that there will be traffic jam after work commences on the site. Mitigation measures for the traffic impact during construction phase include: (i) managing the movement of construction equipment and construction-related vehicles during peak traffic hours, especially on Uhuru Street; (ii) traffic supervision during peak traffic hours on the streets surrounding the Project site; and (iii) creation of construction vehicle parking space within the Project area.
- *Soil and water pollution* – Construction vehicles will generate hydrocarbon discharges (from a limited working area) that will pollute the soil around it. Storm runoff will carry the freshly deposited oil and grease pollutants, and transfer it to the groundwater especially as the natural soil is sandy. To address this concern, key mitigation measures include – (i) ensuring regular maintenance of construction vehicles and machinery, and (ii) ensuring the contractor keeps on-hand appropriate equipment, supplies, and materials for containment and clean-up of chemicals in the event of a spill. These materials could include: commercially available spill kits for construction equipment; sorbents for containment and quick pick up of spilled liquids; shovels and backhoes for excavation of contaminated materials; drums, barrels, temporary storage bags for containment and transportation; absorbent pads, oil booms, mats, or equivalent; and washable, reusable rags for cleaning up small lubricant leaks in the machinery.
- *Risks of diseases* – Presence of large-scale construction activities and several workers can lead to the potential risk of communicable diseases. Mitigation measures include:

  - As the Project proposes to deploy local workers at the construction site during the working hours, who will return to their residential accommodation at the end of the day, this Project is not expected to result in significant increase in interactions or cause unwanted interactions with local communities. In most cases, such interactions lead to conflicts owing to negative social behavior such as theft, harassment, and even socially transmitted diseases (especially HIV/AIDS). Therefore, sexual interactions among workers and local communities, unplanned pregnancies and divorce among families are also expected to be low in the absence of worker camps and influx of an outside labor force.
  - Adequate information will be provided to workers to prevent communicable diseases and maintain proper hygiene and health standards.
  - The Project will provide proper drinking water and sanitation facilities for the workers, and adequate waste collection to properly manage hygiene and sanitation during the construction phase.

- *Workers' safety and rights* – Work accidents and workers' remuneration can demoralize the staff, which can lead to many social problems. Mitigation measures include - (i) formulation and implementation of safety, health and environmental (SHE) guidelines, (ii) train workers, (iii) provide personal protection equipment for workers, and (iv) ensure all workers are given work contracts as well as register them with the Workers Compensation Scheme. As it will not be practical to create worker camps on the sites, it is suggested that the contractor employs local workers or provides for temporary accommodation away from the site. Temporary facilities could include catering services, clean drinking water, temporary toilets for men and women workers, and first-aid care.
- *Temporary relocation of traders* – There are two concerns related to temporary relocation of traders. First, traders might not agree to shift. Initial market interaction suggests that traders are likely to shift if they get a temporary relocation place and an assurance that they will be provided permanent stalls in the new market. To meet these requirements, the City Council is proposing to temporarily relocate the vendors to Mwembe Yanga area in Temeke Ward and set up temporary facilities there. In addition, the construction plan for the new market provides for accommodation for all vendors. Therefore, this issue can be resolved through further consultations with the vendors and communicating the related plans to provide the necessary assurances. Secondly, there is a concern that while these traders opt for temporary relocation, some new traders can illegally set up their stalls or undesignated market points can come up near the present market and continue to serve the Temeke residents. This could erode the potential market for traders that opt for temporary relocation. To address this concern, the Council shall discourage emergence of undesignated micro-markets during the construction phase through regular inspections and full enforcement, and create awareness amongst Temeke residents to support the Project.

<u>Environmental and social challenges during the operations phase</u>

- *Solid waste generation and haulage challenges* – Markets typically generate huge organic waste. The major sources are rotting goods (fruits, cereals, vegetables, etc.); packaging materials (mostly plant leaves or boxes); left-over food (from restaurants), sweepings, etc. Most of these are biodegradable in nature and smell bad. In addition, vegetable and fruit wastes attract flies and other insects. Moreover, in Dar es Salaam many municipalities have been experiencing solid waste haulage problems. The resource capacity does not guarantee a daily and, therefore, adequate market waste haulage. It is normal for uncollected market waste to be improperly stored at the site. Apart from becoming an eyesore, the uncollected waste is potential source of food contamination and other diseases such as dysentery and diarrhea. Principal mitigation measures include: (i) provision of adequate waste receptacles, and (ii) ensuring regular solid waste collection. The Project cost also includes creation of a waste aggregation system including garbage disposal truck for the market.
- *Noise pollution* – Though market activities generate noise (especially during peak hours and holidays), this is not really a concern in this case, since the market has been in existence in the area for many years. Mitigation measures include: (i) controlling the duration of market operations, especially at night; (ii)

providing noise barriers such as boundary wall, fences and natural greenery; and (iii) ensuring regular maintenance of vehicles and machinery within the market compound.

- *Traffic management problems* – Improvement in the market's infrastructure will attract many customers that can cause traffic concern. The access road to the market seems inadequate for even the existing traffic density. Mitigation measures for the traffic impact include improving traffic management around the market. These include: (i) widening the access road, (ii) clearing any obstruction to the market site, and (iii) creation of a parking space within the market area.
- *Effluents and hygiene* - This is a major concern. Many markets in Dar es Salaam are characterized by poor effluent (sewage) disposal facilities and hygienic practices. This exposes the traders and customers to public health risks. Toilets are not sufficient and generally poorly maintained. Many times there is no flowing water and the overflow of effluents is prevalent. This situation can cause both groundwater and surface water pollution. Mitigation measures include: (i) provision of adequate drainage around the site; (ii) installation of adequate toilets and sanitation facilities in the Project site; (iii) management of sewage discharge to Dar es Salaam central sewer; (iv) provision of efficient cleaning, sanitation and waste management services in the Project; and (v) training and advocacy for good hygienic practices for both market goods and toilets.
- *Risks of diseases* - Markets are typically exposed to risks associated with poor functioning of inadequate sanitary systems (public toilets and other wash points). Poor waste collection can aggravate the health risk. Mitigation measures include: (i) maintenance of good hygiene and sanitation in the market, and (ii) improved effluent and waste management as already mentioned.
- *Energy consumption* - Creation of a modern market could result in higher energy consumption. This could be minimized through the use of cost effective, and technical and financial feasibility measures to reduce energy consumption through energy-efficient design of the building and the use of low energy consumption equipment. The Project could also examine cost-effective options for rainwater harvesting.

IFC performance standards

The IFC performance standards (PS) that are relevant or will be triggered by the proposed Sterio Market Project include PS1, PS2, PS3 and PS4.

- *PS1:* Assessment and management of environmental and social risks, and the impact. This requires a thorough environmental and social assessment which includes undertaking adequate stakeholder engagement and disclosure of Project information. PS1 is consistent with the national legal requirement in Tanzania that requires all Projects to pass through an Environmental Impact Assessment process. According to the Environmental Management Act of 2004 (Cap. 191), it is mandatory to conduct ESIA for all development Projects to be implemented in Tanzania. The law also establishes a system for environmental and social impact assessment and administration that includes screening of Projects, guidelines to conduct ESIA, review, monitoring etc. The law mandates the National Environment Management Council (NEMC) to oversee ESIA process administration and give certification and relevant condition on Project implementation.

  Thus, the potential investor for the proposed Sterio Market will be required to undertake ESIA in line with Tanzania guidelines and obtain the Environmental Certificate before Project implementation.
- *PS2:* Labor and working conditions: PS2 recognizes that the pursuit of economic growth through employment creation and income generation should be accompanied by protection of the fundamental rights of workers. IFC believes that the workforce is a valuable asset for any business, and a sound worker-management relationship is key for sustainability of a company. Failure to establish and foster a sound worker-management relationship can undermine worker commitment and retention, and jeopardize the Project. The applicability of PS2 is established during the environmental and social risks, and impacts the

identification process in PS1. According to IFC, the implementation of the actions necessary to meet the requirements of PS2 is managed through the client's ESMS.

In Tanzania, three principal legislations address the issues of labor and work conditions: (i) Occupation Safety and Health Act (2003), (ii) Employment and Labor Relations Act No. 6 of 2004, and (iii) Workers Compensation Scheme Act. The legislation ensures that the workers are treated well and their rights are protected, including the right to work in a healthy environment. It also includes other issues pertaining to working hours, remuneration schemes, prohibition of child labor, etc. All these issues will be addressed in the ESIA report.

- *PS3:* Resource efficiency and pollution prevention: IFC recognizes that increased economic activity and urbanization often generate increased levels of air, water and land pollution; and consume finite resources in a manner that may threaten people, and the local, regional and global environment. There is also a growing global consensus that the current and Projected atmospheric concentration of greenhouse gases (GHG) threatens public health, and the welfare of current and future generations. At the same time, more efficient and effective resource use and pollution prevention, and GHG emission avoidance, mitigation technologies and practices have become more accessible and achievable in almost all parts of the world. These are often implemented through continuously improved methods similar to those used to enhance quality or productivity, which are generally well known to most industrial, agricultural, and service sector companies. The applicability of PS3 is established during the environmental and social risks, and impacts the identification process in PS1. According to IFC, the implementation of actions necessary to meet the requirements of PS3 is managed through the client's ESMS.

  In Tanzania several legislations address the efficient usage of resources and pollution prevention:

  a) The Environmental Management Act of 2004 – carrying out ESIA, dealing with pollution issues, waste management, environmental standards, etc.
  b) The Water Resources Management Act No. 11 of 2009 – water quality and sanitation
  c) Public Health Act 2009 – control of communicable diseases and ensuring hygienic handling of food in markets
  d) The Environmental Management (Air Quality Standards) Regulations, 2007
  e) The Environmental Management (Water Quality Standards) Regulations, 2007
  f) Solid Waste Management Regulation, 2009 GN. NO. 263 - addresses issues of solid waste management
  g) The Environmental Management Act (Hazardous Waste Control), 2009

  The ESIA for the proposed Sterio Market will respond to the requirements of these legislations. In addition, Tanzania is a signatory to several international treaties and conventions including climate change. The ESIA will also respond to relevant international aspects of the Project in respect to environmental and social sustainability.

- *PS4:* Community health, safety and security. PS4 recognizes that Project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration and/or intensification of impacts due to Project activities. While acknowledging the public authorities' role in promoting health, safety, and security of the public, PS4 addresses the investor's responsibility to avoid or minimize the risks and impact on community health, safety, and security that may arise from Project-related activities, with particular attention to vulnerable groups. Implementation of actions necessary to meet the requirements of PS4 is managed through the client's ESMS.

  In Tanzania, the EIA and Audit Regulations (2005) will require the investor for the Sterio Market to take appropriate actions and mitigation measures to ensure that the Project is safe for the workers and the

surrounding communities during mobilization, construction and operation phases of the Project. In addition, PS4 will be complied with by adhering to the requirements of other relevant legislation such as:

a) The HIV and AIDS (Prevention and Control) Act of 2008 - control of HIV/AIDS in Tanzania

b) Public Health Act 2009 – control of communicable diseases and ensuring hygienic handling of food in the markets

c) Occupation Safety and Health Act (2003) - health and safety during the construction and operation phases

d) National Gender Policy (2002)

Proposed mitigation measures

In order to offset the environmental and social-related changes that have been identified during this evaluation, the following mitigation measures have been suggested, as mentioned earlier:

Table 13.1: Social & environmental mitigation measures

No.	Impact indicator	Project activity	Potential impact	Impact qualifier			Mitigation	Monitoring
				Magnitude	Extent	Duration		
Construction phase								
1	Livelihood of existing traders	Temporary relocation of the existing traders	Loss of livelihood	M	SS	ST	Provide temporary market site and assist traders in the new location	Number of affected persons and relocated traders
2	Air quality	Demolition of the existing structures; foundation works; construction activities	Generation of debris, dust, PM10	M	SS	ST	Application of good construction practices and air quality management procedures, such as: (i) wind breakers of appropriate height (~10 meters); (ii) covering all loose soil or sand or construction or demolition waste or any other construction material that causes dust; (iii) regular water sprinkling on the exposed surfaces to reduce dust emissions; (iv) adequate waste receptacles; and (v) regular waste collection	Dust generation, PM10
3	Noise quality	Demolition of the existing structures; foundation works; construction activities	Noise and vibrations issues	S	SS	ST	Application of good construction practices and noise quality management procedures, such as: (i) controlling the duration of construction works, especially during the night; (ii) providing noise dampening gadgets; and (iii) ensuring regular maintenance of vehicles and machinery	Noise levels
4	Solid waste generation	Demolition of the existing structures; excavation of foundation	Generation of loose soil, waste material	M	SS	ST	Provide concurrent system for spoil materials collection; reuse the loose soil	Amount of soil and demolition waste generated

No.	Impact indicator	Project activity	Potential impact	Impact qualifier			Mitigation	Monitoring
5	Workers' safety and health	Demolition and construction works	Workers' safety	M	SS	ST	Formulation and implementation of SHE guidelines, including: (i) training of workers, (ii) provision of personal protection equipment for workers, and (iii) ensuring all workers are given work contracts as well as register them with the Workers Compensation Scheme. As it will not be practical to create worker camps on the sites, it is suggested that the contractor employs local workers or provides for temporary worker accommodation away from the site. In addition, temporary facilities could include, catering services for food and refreshments, facilities for clean drinking water, temporary toilets for men and women workers, and first-aid care	Number of worker safety accidents on site; number of trained workers; use of PPEs; health awareness program
6	Traffic accidents and delays	Movement of construction vehicles and transportation of materials	Road safety issues	S	R	ST	Traffic management measures, such as (i) managing the movement of construction equipment and construction-related vehicles during peak traffic hours, especially on Uhuru Street; (ii) traffic supervision during peak traffic hours on the streets around the Project site; (iii) smoothening the circulation roads around the market area to be one-way (except for Uhuru Street); (iv) not creating any direct entrance or exit from Uhuru Street rather having an entry and exit from side / circulating streets around the market, and (v) creation of construction vehicle parking space within the Project area	Implement traffic management plan; Number of traffic accidents
7	Soil and water contamination	Movement of construction vehicles, materials and construction activities	Pollution due to chemicals, oil and grease in soil and storm-water run off to water bodies and the Indian Ocean	M	R	ST	(i) Ensuring regular maintenance of construction vehicles and machinery, and (ii) ensuring that the contractor keeps on-hand appropriate equipment, supplies, and materials for containment and clean-up of chemicals in the event of a spill. These materials could include: commercially available spill kits for construction equipment; sorbents for containment and quick pick-up of spilled liquids; shovels and backhoes	Spillage from site

No.	Impact indicator	Project activity	Potential impact	Impact qualifier			Mitigation	Monitoring
							for excavation of contaminated materials; drums, barrels, temporary storage bags for containment and transportation; absorbent pads, oil booms, mats, or equivalent; washable, reusable rags for cleaning up small lubricant leaks in the machinery	
Operations phase								
1	Traffic accidents and delays	Transportation of goods and passengers to the market	Road safety issues	S	R	LT	Traffic management measures, including – (i) plan for widening of Uhuru Street; (ii) clearing the obstructions and widening of streets around the market – Utete, Sukobaz and Morogoro Streets; (iii) smoothening the circulation roads around the market area to be one-way (except for Uhuru Street); (iv) not creating any direct entrance or exit from Uhuru Street, rather having an entry and exit from side / circulating streets around the market; and (v) creation of parking space within the market	Number of traffic accidents
2	Solid waste and air quality	Goods storage and selling	Solid waste generation and risks of foul smell	L	SS	LT	Implementation of a solid waste management system, including (i) provision of adequate waste receptacles, (ii) ensuring regular solid waste collection, (iii) creation of a waste aggregation system, and (iv) use of garbage disposal truck for the market	Amount of waste generated; daily waste disposal via market's truck; Ambient Air Quality
3	Effluents and hygiene issues, risk of diseases	Goods storage and selling	Health hazards and diseases	L	R	LT	Implementation of sanitation and effluent management systems (public toilets and other wash points), including – (i) provision of adequate drainage at the site; (ii) installation of adequate toilets and sanitation facilities at the site; (iii) management of sewage discharge to the Dar es Salaam central sewer; (iv) provision of efficient cleaning, sanitation and waste management services in the Project; and (v) training and advocacy for good hygienic practices for market goods and toilets	Functioning public toilets; Sewage discharge; Epidemics eruption and number of causalities

No.	Impact indicator	Project activity	Potential impact	Impact qualifier			Mitigation	Monitoring
4	Noise quality	Goods storage and selling	Noise levels due to market operations	S	SS	LT	Implementation of noise control measures, including - (i) controlling the duration of market operations, especially during the night; (ii) providing noise barriers such as boundary wall, fences and natural greenery; and (iii) ensuring regular maintenance of vehicles and machinery operating within the market	Noise levels
5	Energy efficiency	Goods storage and selling	Energy consumption	M	SS	LT	This can be minimized through use of cost effective, and technical and financial feasibility measures to reduce energy consumption through energy-efficient design of the building and use of low energy consumption equipment. The Project could also examine cost-effective options for rain water harvesting	Energy savings

Impact qualifier: Magnitude (Mt): small (S), medium (M), and large (L)

Extent: site specific (SS), regional (R), national (N), and trans-boundary (TB)

Duration: short term (ST), medium term (MT), and long term (LT).

Note:

1. The cost of temporary relocation of traders and related facilities to be provided thereon will be estimated and borne by the local council, as per the temporary resettlement plan. It is anticipated that there is no requirement for involuntary resettlement and compensation.

2. Costs related to preparing and implementing the Environmental and Social Management Plan will be borne by a ProjectCo and will be part of the bill of quantities and the Project cost.

3. Costs related to monitoring of the implementation of the ESMP have been included in the design and supervision costs, and aggregated under the total Project cost estimates.

14. Annexure 6: Revenue collection

Market assessment revealed that the monthly revenue collected by the LGA has been inconsistent over the past one year. Maximum revenue collected in a month stood at TZS 80 million and minimum at TZS 43 million, which is only 54% of the maximum revenue. For five months, revenue collected decreased. Building on our assessment, we conclude that there has been a loss of revenue owing to inefficiency in revenue collection by the officials. Once the ProjectCo takes charge of the operations of the redeveloped market, it is envisaged that no revenue collection leakage will pertain as ProjectCo is incentivized to maximize revenue and collection of fees is its only source of income.

Table 14.1: Revenue collection of the Sterio Market (March 2017- February 2018)

Year	Month	Revenue collected (TZS)	Revenue collected (USD)
2017	**MARCH**	43,891,850	19,083
	APRIL	45,917,200	19,964
	MAY	45,623,160	19,836
	JUNE	45,770,180	19,900
	JULY	47,860,850	20,809
	AUGUST	45,765,080	19,898
	SEPTEMBER	46,096,700	20,042
	OCTOBER	44,379,800	19,295
	NOVEMBER	67,388,090	29,300
	DECEMBER	80,329,931	34,926
2018	**JANUARY**	69,083,730	30,036
	FEBUARY	69,016,080	30,007

Source: Consultant

15. Annexure 7: City infrastructure assessment

This section deals with the socio-economic profile, demographic status, and the key economic drivers of the TMC. It also details the current status, demand and deficit of the infrastructure levels across six major infrastructural segments, i.e., roads, water, solid waste, education, markets, and healthcare.

Socio-economic profile of TMC

- *Demographics* - Temeke municipality is located in the southern part of Dar es Salaam and covers 240 sq km. It is bordered by the Ilala municipality on the north and west, and the Indian Ocean and Kigamboni municipality on the east. It has good road and communication linkage to the rest of the city and country. The municipality is divided into 32 wards and 209 sub-wards. Population in the municipality, which was around 1.3 million as per the 2012 census, is estimated to have risen at an annual average of 4.6% to around 1.6 million in 2016. The male population was around 669,056 and female population around 699,825. During the year, the municipality had 348,151 households, with an average of five persons per household. The population density in 2016 was 6666 people per sq m.
- *Economic drivers* - Trade and industry are well-developed in the municipality, and comprise 49% share of the working population. This encompasses wholesale, sub-wholesale, retail, hotels, guesthouses, and financial institutions and related activities. There are nearly 40 major industries in the Chang'ombe Industrial Area, which is situated in the northern part of the municipality, and over 158 medium-scale industries located in Mbagala and Kurasini. Also, industries have set up in the newly designated industrial area at Vijibweni. Further, ~14.5% of the population is engaged in agriculture and livestock, which is also a major contributor to the overall municipality's economy.

Benchmarking of infrastructure metrics

The following section outlines the current status, demand and overall deficit of six types of infrastructure facilities, such as roads, water supply, solid waste, education, municipal markets, and healthcare. World Bank and World Health Organization norms, or norms applicable in comparable developing countries, have been considered for overall demand and deficit parameters.

Table 15.1: Status of infrastructure in TMC

LGA	Roads			Water supply		Solid waste	
	Tarmac/ gravel/ dirt	Good/ fair/poor condition	Single-lane/ Two-lane/Four-lane	% coverage	Per capita supply of water	Generation	Collection
Temeke	Total road length – 552 km Tarmac: 52 km (9.4%) Gravel: 110 km (20%) Dirt: 389 km (70.5%)	Good condition: 34 km (6%) Fair condition: 459km (83%) Poor condition: 59 km (11%)	All are single lane	60.78 million liters provided by DAWASA. 20 million liters provided by bore wells 46% connected to water supply grid. 22% depend on bore wells 32% depend on publicly available water sources	67 lpcd	1494 tonnes	964 tonnes

LGA	Schools						Municipal markets		Healthcare			
	No. of primary schools	No. of students enrolled	Average capacity of school	No. of secondary schools	No. of students enrolled	Average capacity of school	No. of municipal markets	Average area of municipal market	No. of hospitals	Average no. of beds per hospital	No. of health centers	Average no. of beds per health center
Temeke	131	169,652	185,640	63	51,531	20,160	19	2,000 sq m	2	180	8	13-18

Source: Discussions held with LGAs

Current infrastructure demand and deficit

- *Roads:* The council has a road length of 552 km with all the roads currently being single lane. While 70.5% of the roads are dirt roads, the remaining are either tarmac or gravel roads. Further, only 10% of the roads are in poor condition, while the remaining 90% are either in good or fair condition. Demand for development in the road sector is primarily driven by two factors:
  - Comparison with national-level norms
  - Roads in poor condition and requiring renovation

  As per the World Bank-published Africa Development Indicators, the average road density (road km/100 sq km of land area) of Tanzania is 9.6. Given the total road length of 552 km over an area of 240 sq km, the total road density in TMC is more than the country's norms by a significant margin, i.e., 230 km per 100 sq km. As a result, ~59 km (10% of the roads) need to be redeveloped.

- *Water supply:* DAWASA provides ~60.78 million liters per day, even as 20 million liters per day is extracted from bore wells. Thus, the total daily water supply is ~81 million liters. Given the total population of the municipal council is 1,205,949, the per capita per day water supply is only 67 liters. While 46% of the households are connected to the water supply grid, close to 26% of the population source water from bore wells. The remaining 32% depend on publicly available sources of water. As per the norms in comparable developing countries, the water supplied per day per capita (lpcd) should be between 100 and 135 liters. So, there is an approximate deficit of 33 to 68 liters per capita per day.

- *Solid waste:* Some 1,494 tonnes of solid waste is generated per day and only 964.6 tonnes is collected. Currently five trucks with a carrying capacity of 10-15 tonnes, two skip loaders with a carrying capacity of 3-4 tonnes, and hired compactor with a capacity of 18-20 tonnes are doing the collection. All the vehicles combined make 20 trips to the Pugu Kinyamwezi landfill site. As many as 14 additional trucks of 15 tonnes will be required to make two trips on a daily basis or the current trucks need to make three trips on a daily basis to meet the collection deficit.

- *Education:* There are 131 primary schools (government + private) with around 185,640 students. However, 169,652 students are currently enrolled, resulting in a high enrolment ratio of 91%. The total number of students in the 7-13 year age group (who are eligible for primary education) is 147,049, after taking into account that parents enroll their children in primary education at the age of 5-6 years. It was stated private schools did not face any deficiency in infrastructure, while the government-run schools face a massive deficit, as more than 200 students are forced to study in a 90-seater classroom with just 45 desks.

  There are 63 secondary schools (government + private) which have a capacity of 20,160 students. However, the total number of students currently enrolled is 51,531, resulting in an unreasonable enrolment ratio of 255%. It was stated private schools do not face any deficiency in infrastructure. However, government-run schools face a massive deficit, as more than 250 students are forced to study within the limited space in a 90-seater classroom with 40 desks. The total number of students within the age group of 14-19 years (who are eligible for secondary education) is 46,377. This is mainly on account of parents enrolling their children in primary education at the age 5-6 years, which culminates into students being eligible for secondary education at an early age. Assuming a capacity of 320 students per secondary school, 98 secondary schools would be required.

- *Markets:* Currently, the municipal council's 19 markets have an average area per market of ~2,000 sq m. This translates into retail space of 0.03 sq m per capita, which is on the very low side. Compared with other comparable developing nations, which have a retail space of 0.19 sq m per capita, there is a deficit of 0.158 sq m per capita. Assuming the average municipal market size is ~2,000 sq m, 95 additional markets would be required to match the same standards as that of other developing nations.

- *Healthcare:* WHO-recommended standards mention having at least five beds per 1,000 population. Given that TMC has a population of 1,205,949, a total of 6,029 beds would be required. However, there are only

two hospitals having a total of 360 beds each and eight health centers having an average of 15 beds each. Hence, only 480 beds are available within the municipal council, which means a deficit of 5,549 beds or ~92% of the total requirements.

Table 15.2: Summary of current status, demand and deficit of infrastructure sectors

TMC	Current status	Demand	Deficit
Roads	Total road length 552 km 29% tarmac or gravel 71% dirt roads	Redevelopment of roads that are in poor condition and need to be renovated.	59 km of roads need to reconstructed
Water	Per capita supply: 67 lpcd Connection: 46% DAWASA 26% bore wells 32% public sources of water	Per capita supply: 135 lpcd Coverage: 100% DAWASA	Per capita supply: 68 lpcd Connection: 54% DAWASA
Solid waste	Collection/ generation ratio = 64% No of trucks = 10 No of trips – 2 per day	Collection/ generation ratio= 100%	Collection/ generation ratio= 36% Additional number of trucks = 14 or number of trips – 3 per day.
Education	**Primary schools** Capacity = 185,640 students Eligibility: 169,652 **Secondary schools** Capacity: 20,160 Enrolment: 51,531	Primary and secondary schools should be enough to provide education to all	98 secondary schools would be required
Municipal markets	Total markets = 19 Retail space = 0.03 sq m per capita	Retail space = 0.19 sq m per capita	Retail space = 0.16 sq m per capita. Additional markets = 95
Healthcare	480 beds across two hospitals and eight health centers	6,029 beds as per WHO norms	Additional 5,549 beds required

Source: Discussions held with LGAs

Key conclusions:

- *Roads:* It was observed that only 9% of the roads were tarmac roads. Most of the roads are gravel or dirt roads, and would become unusable during the rainy season. Further investments would be required in terms of redeveloping the roads network.
- *Solid waste:* It was found that in the municipal council, only ~64% of the waste collected ended up at the Pugu Kinyamwezi landfill. The LGA's collection capability is constrained due to lack of sufficient truck loaders, compactors and skip loaders.
- *Water supply:* We observed 46% of the households are connected to the water supply network. Close to 54% of the population depends on bore wells and other public sources of water such as public water taps, etc. Further investments would be required in the water supply sector in terms of connecting households with investments in water pumping sets and pipelines.
- *Education:* Government-funded primary schools face a significant deficit in terms of student capacity. As a result, often, more than 45 students study in a class at the primary education levels. The situation is even more severe in the case of government-funded secondary schools wherein class sizes are often more than 40 students. Hence, the number of students per class in both government primary and secondary

schools is about double the norm. Investment is required to set up of both primary and secondary schools, ensuring that class sizes and occupancy rates comply with the norm (maximum of 45 students in primary education classes and 40 students in secondary education classes).

- *Municipal markets:* The municipal council has allocated low per capita retail space in municipal markets. The retail space per capita is only 0.03 whereas in comparable countries this stands at 0.19. Investments are needed to increase market area per capita resulting in better shopping opportunities and reducing current congestion at the existing markets.
- *Healthcare:* The municipal council faces a deficit in terms of number of beds for hospitals as per the WHO norms, which delineate five beds for every 1,000 persons. The existing number of hospital beds stands at 480 across hospitals and health centers, with a deficit of 5,549 beds as benchmarked by the WHO. Investments are required to increasing capacity in hospitals and health centers.

Potential PPP sectors

We have identified infrastructure sectors where PPP Project could be developed in the coming years. Presented below are the identified priority sectors and pertinent details.

Table 15.3: Potential Infrastructure sectors and areas for future PPP Projects.

Infrastructure sector	Sub-segment
Urban transport	Bus terminals
	Car parking
Housing	Residential houses
	Satellite town
Municipal markets	Municipal markets

Source: Discussions held with LGAs

16. Annexure 8: Municipal finance assessment

This section provides an overview of the key revenue sources and major expenditure heads across the municipal council and the inferences drawn from the provided information. Revenue and expenditure Projections for the coming five years have been calculated extrapolating historical trends over the past five years.

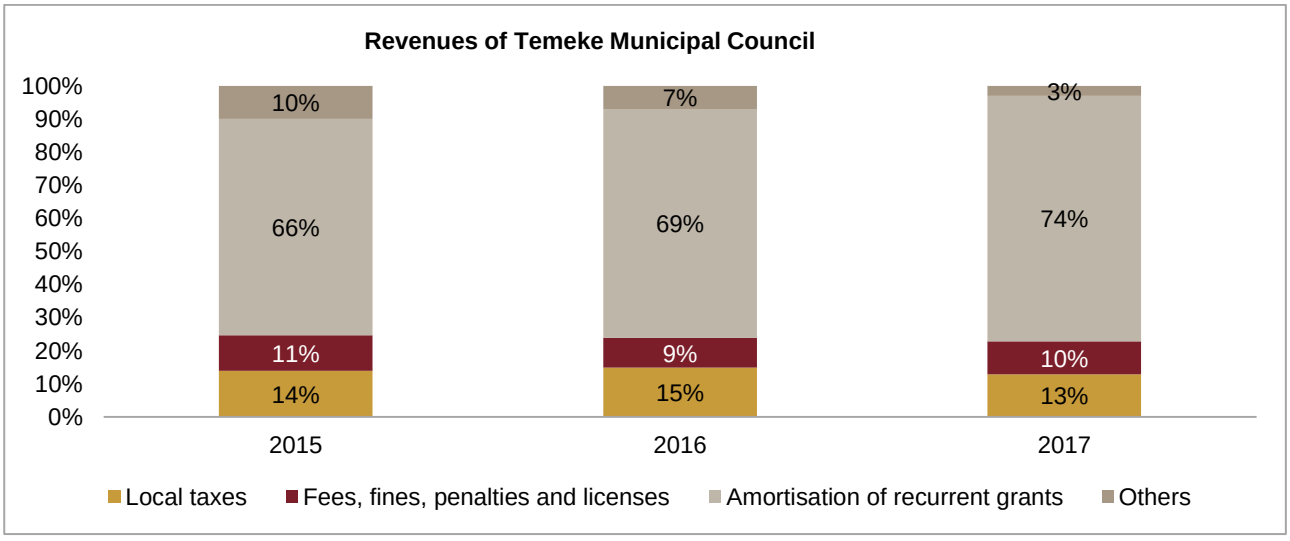
Revenue trend

The council's revenue increased to TZS 148 billion in 2016 from TZS 117 billion in 2015, but dipping to TZS 128 billion in 2017 owing to lower collection of local taxes. Revenue majorly consists of local taxes, fees, fines, penalties and licenses, revenues generated from exchange transactions, amortization of recurrent and capital grants, and interest income.

Over the past three years for which the data is available, the council seems dependent on the recurrent and capital grants, which have contributed to around 70% of the total revenue. Local taxes averaged around 14% of the total revenue; fees, fines, penalties, and licenses, around 9%, and the remaining came from other sources and finance income and exchange transactions

The property tax component contributes to 10-14% of the tax revenue component, which, in turn, is merely 15% of the total revenue generated. Thus, the property tax component comprises a negligible 2-3% of the overall revenue. Further, the Local Government Act has been amended in fiscal 2017, owing to which the Tanzania Revenue Authority (TRA) has the mandate to collect property tax in all districts instead of the municipal authorities. This action by the central government further limits the ability of the municipal councils to generate revenue from the increasing residential and commercial settlements across Dar es Salaam. Currently, property tax is levied at 0.15% on residential properties and 0.20% on commercial properties for the Dar es Salaam region.

Figure 16.1: Revenue categories 2013-2017 (as % of total revenues)



Source: Discussions held with LGAs

Table 16.1: Summary of revenues over the past three years

Year	Revenues (TZS bn)
2015	117
2016	142
2017	128

Source: Discussions held with LGAs

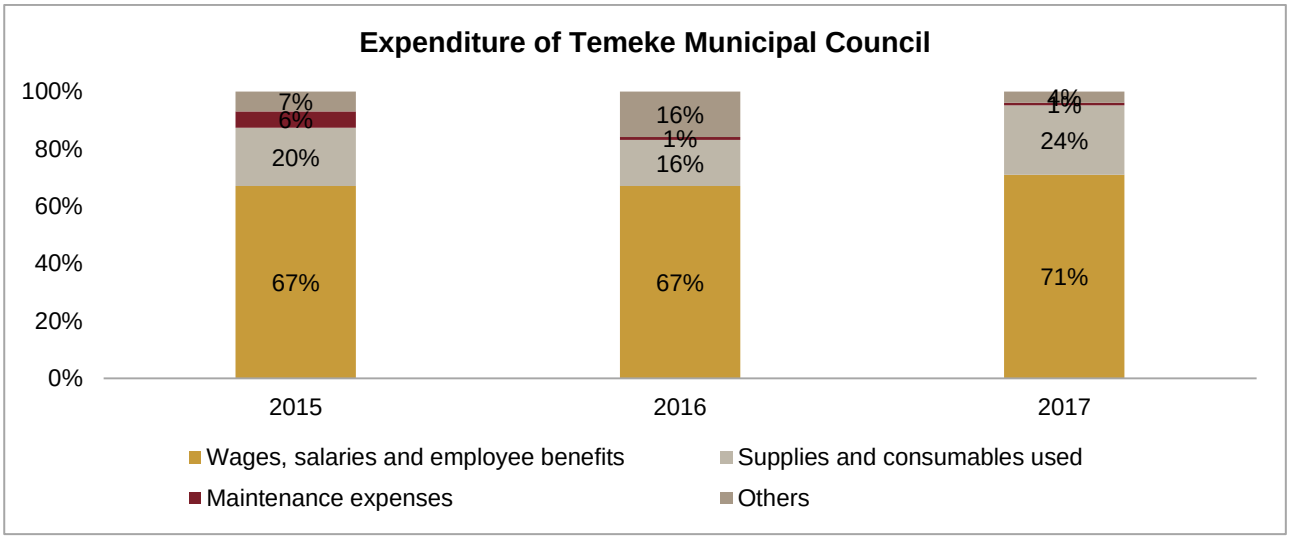
Expenditure trend

The council's expenditure was TZS 116 billion in 2015, which increased to TZS 142 billion in 2016. The increase was primarily driven by the rise in salaries and employee benefits due to an increase in contracted staff. As a result, other consumption items such as supplies and consumables rose.

However, the council's expenditure decreased to TZS 121 billion in 2017 due to a fall in expenses related to wages, salaries and employee benefits, decrease in finance costs, and depreciation of property, plant and equipment. The surplus was TZS 265 million in 2015, which slightly decreased to TZS 183 in 2016 before increasing to TZS 7,159 million in 2017.

Wages, salaries and employee benefits averaged ~69% of the expenses, while supplies and consumables averaged ~20%, and depreciation of property, plant and equipment averaged ~4%. The average surplus over the past three years was ~1 % of the revenue.

Figure 16.2: Expenditure categories 2015-17 (as % of total expenditure)



Source: Discussions held with LGAs

Table 16.2: Summary of expenses over the past three years

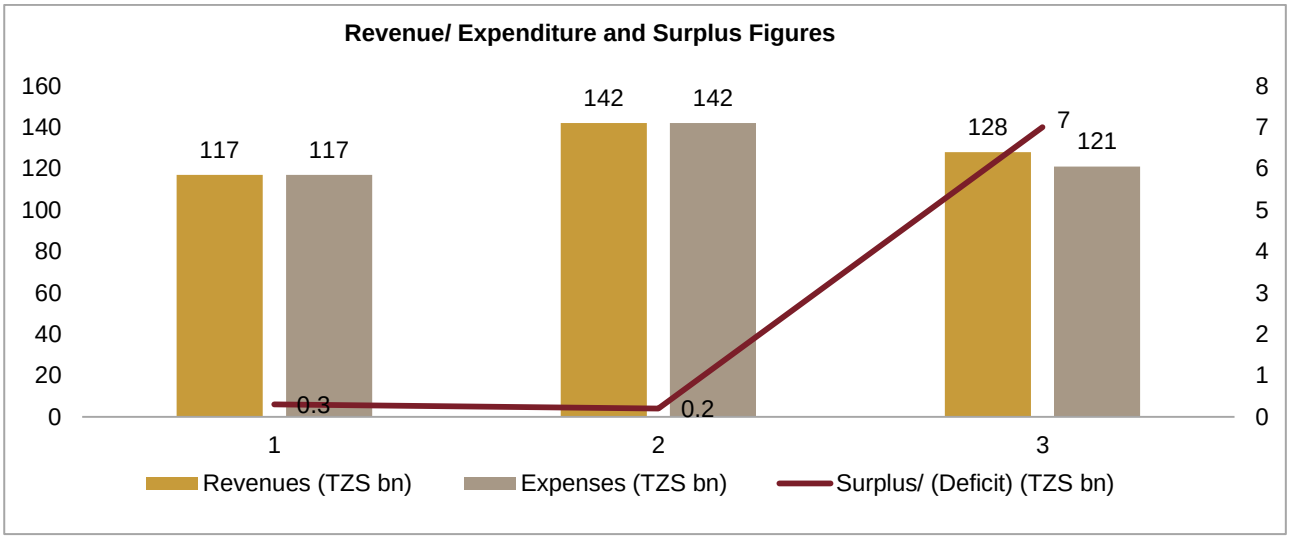
Year	Expenses (TZS bn)
2015	117
2016	142
2017	121

Source: Discussions held with LGAs

Conclusions

The TMC has a current surplus as per the respective income statements. However, the surplus amounts are very insignificant at 1% of revenue. Thereby, the council's financial capability to provide any funding support to PPP Projects is highly constrained. The central government would be required to step in to provide viability gap funding, if required.

Figure 16.3: Revenue, expenditure and surplus figures for the past three years



Source: Discussions held with LGAs

Table 16.3: Summary of revenues, expenses and surplus/deficit over the past three years

Year	Revenues (TZS bn)	Expenses (TZS bn)	Surplus/ (Deficit) (TZS bn)
2015	117	117	0.3
2016	142	142	0.2
2017	128	121	7.0

Source: Discussions held with LGAs

Financial Projections

This section provides the future Projections of revenue and expenditure trends as well as the forecasted surplus/deficit trends for the next five years. The compound annual growth rate for the past five years has been considered for future Projections.

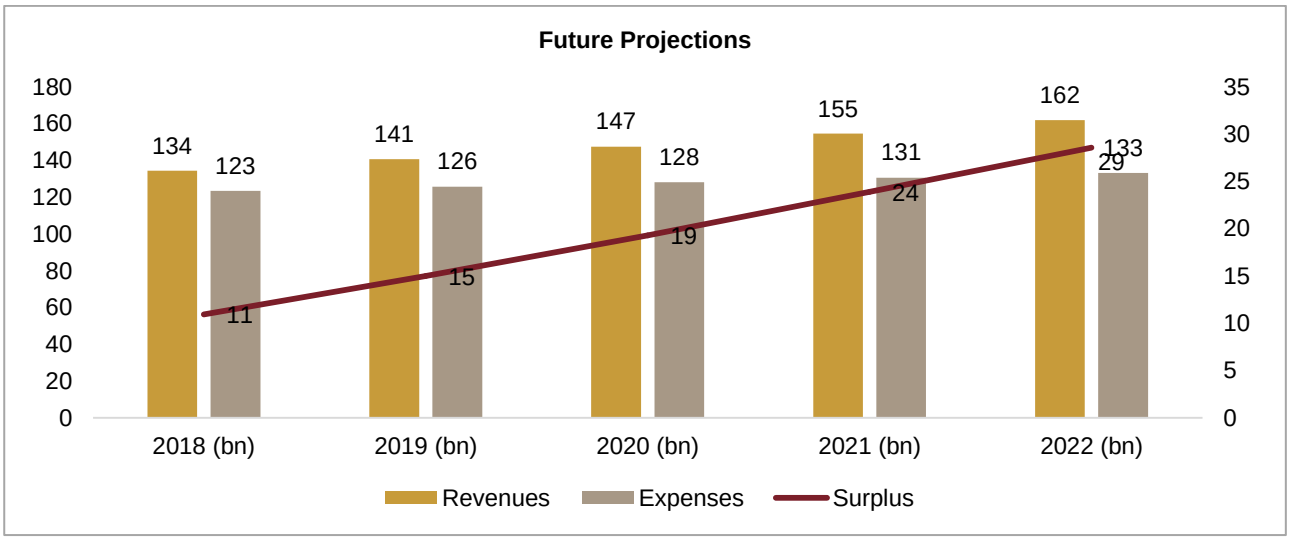
- *Revenue, expenditure and surplus Projections* - The revenue and expenditure Projections for the next five years has been calculated by extrapolating the past revenue and expenditure trends for the past five years of the respective LGAs. The surplus/ deficit trends for the next five years have been calculated by subtracting the future expense trend from the future revenue trend.

Table 16.4: Future revenue, expenses and surplus Projections

LGA	Past CAGR (%)	2018 (TZS bn)	2019 (TZS bn)	2020 TZS bn)	2021 (TZS bn)	2022 (TZS bn)
Revenues	4.79	134	141	147	155	162
Expenses	1.93	123	126	128	131	133
Surplus		11	15	19	24	29

Source: Discussions held with LGAs

Figure 16.4: Future revenue, expenses and surplus Projections



Source: Discussions held with LGAs

17. Annexure 9: Institutional review of TMC

This section provides an overview of the applicable institutional structure, the approach undertaken for institutional review and the responses provided by the TMC with respect to the current institutional capacity, preparedness for PPP Projects and capability to execute the PPP Project efficiently.

Approach for undertaking the institutional review

The consultant has carried out a comprehensive assessment of the Project involving the investment committee members of the municipal council. A detailed questionnaire was prepared with specific questions related to assessing the institutional capability of the LGA. The frameworks and methodology provided in the World Bank PPP Screening Tool were utilized in creating the questionnaire. The questions were divided into three major groups:

- *Institutional capacity;*
- *Preparedness of the LGA for the PPP Project;*
- *Capability of the LGA to execute the Project effectively and efficiently.*

Based on the responses, a diagnostic report about the capability of the municipal council to manage the proposed PPP Project during the implementation and operational phases was prepared.

Table 17.1: Projects under Jurisdiction of TMC

Name of Municipal Council	Projects under their jurisdiction
TMC	Sterio market

Source: Consultant

Institutional capacity of the TMC

The responses provided by the investment committee members on this aspect are as follows:

Table 17.2: Survey responses with respect to the current institutional capacity

Questions	Response	Consultant Comments
PPP focal point within LGA	Yes	There is a PPP focal point with TMC
Investment committee within LGA	Yes	There is an investment committee with TMC
No of members in investment committee	8	The total number of members =8
No of members who have undertaken PPP training	6	The number of members who have undergone the training is 6
Members full time or on deputation (part time)	Full time	The team is deployed full time in the TMC. However, they have additional responsibilities too
LGA got any experience in giving contracts to the private sector?	No	The LGA does not have any major experience with large and complex procurements
The LGA personnel got enough experience in handling PPP Projects	No	Their experience is not sufficient for handling larger PPP Projects

Questions	Response	Consultant Comments
Does TMC have access to transaction advisors and/ or consultants for Project preparation and procurement?	No	TMC doesn't have budgets or ability to procure consultants/ transaction advisors on their own.

Source: Discussions held with the LGA officials

- *Key findings*
  - *Composition of the PPP team*: In TMC, there is an eight-member investment committee; six of them are form the core PPP team. However, all the investment committee members have their own full-time responsibility. The investment committee and the PPP team memberships are additional responsibilities. The PPP team does not have a technical expert / engineer, procurement officer and dedicated financial officer.
  - *Academic qualifications and training in PPPs*: The members have basic qualifications such as bachelor's or master's degree relevant to their job roles, and so, it can be assumed that they possess the ability to understand the basics of PPPs. It is understood that the LGA has not executed any major contracts with the private sector in the past. As such, the team does not have any significant experience or expertise in PPPs. In terms of formal training in PPPs, all the six members in the PPP team have undergone World Bank PPP training/MoF workshop on PPP for two weeks. Rest of the investment committee members have not undergone any PPP training yet. Therefore, the team will require substantial training in various aspects of the preparation of a PPP Project as the Project moves forward.
  - *Budget constraints*: The TMC has shown surplus over the previous three years. Therefore, it can be assumed that the LGA will have some budget flexibility to engage one or two consultants. However, it is unlikely to have adequate funds for a robust PPP Project preparation exercise.

Preparedness of the LGA to execute PPP Projects

The responses provided by the investment committee on this aspect are as follows:

Table 17.3: Survey responses with respect to the current level of preparedness

Questions	Response	Consultant Comments
Has the TMC got a Project plan for the PPP Project and set deadlines?	No	Currently, it has not set any deadlines. It needs to create a detailed Project plan for the proposed PPP Project and set the deadlines. This will help it monitor the progress of the Project and seek assistance from PPP Node when required.
Standard terms of reference (TORs) for consultants	No	The LGA is not aware that generic TORs are available. It would require to draft specific functional TORs for transaction advisors, environmental and social, monitoring and evaluation, and contract management.
Have social consultations been undertaken	Yes	Some level of consultations with traders have been undertaken. However, more extensive and formal consultations would be needed to generate a consensus about the temporary relocation plan and thereafter the Project plan.
LGA plans to undertake social consultations	NA	The TMC will require assistance in preparing a Project-specific social consultations plan. It also requires assistance to manage environment and social issues.
Identified the requirement of connecting infrastructure and utilities	Yes	The present study has helped the LGA benefit from discussions held with the World Bank staff and consultants. The LGA now has a better understanding of what infrastructure linkages are required for the Project. However, it has not budgeted for funds

Questions	Response	Consultant Comments
		to be used for providing support utilities. Specific planning, preparation and budgeting for the full requirements are needed.
Require land acquisition	No	We understand no additional land is required. This is because the Project involves redevelopment of the existing market and also the site for the temporary relocation of traders has been identified. However, there might be some need for right-of-way for strengthening the road infrastructure and connecting utilities. The LGA would need to plan separately for this.
Have a resettlement plan	Yes	An outline of temporary relocation strategy has been prepared. This would need to be transformed into a more detailed temporary resettlement action plan and the LGA will require external technical support for this.
Any cost the LGA will incur for the Project preparation and related studies?	No	As mentioned above, the budgets have not been prepared; hence, the LGA is unlikely to provide funds as of now.
LGA budgeted the funds for the same?	No	Same as above
Internal and external stakeholders been identified	Yes	As mentioned above, the only stakeholders identified as of now are the existing traders. However, there is a need to identify and engage with other key stakeholders such as the residents and other establishments in the surrounding area; government entities dealing with water supply, sewerage, electricity, road improvements and traffic management; maritime authorities; and other statutory agencies.
Plan to engage with stakeholders?	Yes	It is good that the LGA has the intention to interact with the stakeholders. However, a comprehensive and time-bound engagement plan is required.
Any constraints that may delay the Project implementation	No	Tanzania has never developed a municipal market through PPP. But there are private sector players active in the building construction industry in the country. The proposed consortium should have experience in construction in general and also in building and operating a market. This will be helpful in managing the Project.
Project management plan to address the issues	No	This would be required moving forward.

Source: Discussions held with the LGA

- *Key findings:*
  - *Moderate commitment*: The TMC is moderately committed to the Project implementation. It has not set aside indicative budget for some of the activities such as improvement of the drainage system.
  - *Need for Project planning*: The TMC currently does not have well-defined plans to manage the Project; consult with the stakeholders; and implement external connectivity. No specific timelines have been identified for these tasks.
  - *Need for technical assistance*: The TMC will require considerable technical assistance and hand-holding to successfully implement the Project preparation processes. It does not envisage any constraints delaying the implementation. It has already consulted the existing traders operating at that site and they are willing to relocate.

Capability of the LGA to execute the Project effectively and efficiently

The responses provided by the investment committee members on this aspect are as follows:

Table 17.4: Survey responses with respect to current capability of executing PPP Projects

Questions	Response	Consultant Comments
Average time for procurement	6 months	This is likely to be for smaller public procurement and not for the PPP Project
Problems faced in procurement	Yes	Lack of provision of funds by the central government is one of the key issues faced during the procurement
Past experience of implementing PPP Project	No	The TMC has no experience in PPP procurements.
Effective in managing contractual risks	NA	The TMC has no awareness about managing contractual risks on account of lack of experience in PPP procurements.
Has Project management capability	No	Given lack of experience in implementing proper large-scale Projects, the Project management capability is limited.
Develop a dedicated Project management unit	Yes	This would be required for both steering the Project preparation process and managing the contract.
Awareness of key contractual risks in the implementation of PPP	No	Given the lack of experienced personnel in the PPP team, the TMC is unaware of the typical contractual risks which need to be taken care of during implementation of the Project
Help of independent consultants for engineering and procurement required	No	Even though the TMC is financially better than the other LGAs, it has not sought help of independent consultants for engineering and procurement. This is because of financial constraints.
Hire independent engineers or consultants	No	Though the TMC has had surplus over the last three years, it has not hired independent consultants for engineering and procurement when needed on account of financial constraints. The central government should provide for budgetary transfers as operational grant so that the TMC can hire some reputed, recognized consultants.
Help of independent consultants for Project management and monitoring required	No	The TMC has not sought help of independent consultants for managing and monitoring a Project as these are done by in-house personnel. Project management and monitoring is not conducted on regular basis, which lead to further delays in completion of Project.
Hire independent consultants to periodically assess Project performance	No	The TMC does not have experience in hiring independent consultant for periodic assessment of Project performance. The central govt. should provide for budgetary transfers as operational grant so that it can hire some reputed, recognized consultants for this purpose.

Source: Discussions held with LGA

- *Key findings:*
  - *Need for dedicated personnel within LGA:* There should be at least one dedicated person deployed in the LGA, who should be the primary contact point between the PPP team and central Project management support team. This person would be responsible for steering the Project from the LGA and who would be responsible for the overall progress and monitoring of the Project with respect to the timelines.

– *Support from the central government to fund hiring of transaction advisors:* As the surplus with the LGA might not be sufficient to procure full-time transaction advisors for the Project, it should estimate the overall budget depending amount of work and time required for the transaction advisor and put in a request for funds from the central government.

Key Recommendations

Based on the survey and discussions with the officials of the LGA, the consultant suggests the following actions to strengthen its institutional capacity for implementing the PPP Project:

- *Central Project Management Support Team*: There is a need for hand-holding of the LGA in various aspects of Project preparation. Therefore, a central pool of technical, financial, legal and E&S experts should be created. This could be sourced on a part-time basis to meet the specific needs of individual PPP Projects. The support team could report to the PPP Node and could be utilized for assisting all the LGAs on the eight PPP Projects, including those of Temeke.
- *Hiring of transaction advisors***:** Public procurement for small Projects itself takes close to six months. Given that, the procurement for a PPP Project is expected to take one year or more. This is because of the intricacies and negotiations involved in a PPP procurement process. The central Project management support team could provide handholding support to the LGA for drafting the agreements.
- *Focused training and knowledge sharing*: The PPP team in the LGA would require continued and focused training on Project preparation, procurement and contract management as the PPP Project progresses. The staff should be acquainted with the knowledge of the best practice and tools being developed in the World Bank Group, so that they can benefit from the global repository of knowledge being created by the World Bank. It would also help them exchange ideas and experiences through a knowledge-sharing platform that could be created by the PPP Node for all the LGAs preparing PPPs in Tanzania and in the region.
- *Ensuring continuity of the LGA staff in the PPP unit*: Given that the Project preparation and procurement process will be spread over two-three years, it would be beneficial if the LGA staff who are getting trained continued with the PPP unit until the processes are over. Frequent staff changes could disrupt the capacity development process.
- *Strengthening the PPP team*: Depending upon the development of a PPP pipeline in the LGA, it is suggested that full-time staff or consultants are recruited to the PPP team in order to address technical, financial and Project management issues.
- *Use of tools and applications:* It would be beneficial for the LGA to institute systems and processes to embed the tools and applications developed by the World Bank and other development partners, to streamline the PPP lifecycle process relevant for the contracting agencies.

Overall findings:

During the PPP training workshop it was found that while the LGAs could not formally describe issues related to technical and financial feasibility of the Projects, such as IRR, DSCR, WACC, they were able to outline the Project needs, revenue and cost profiles in relation to the Project. This indicated that there is a heightened awareness of the PPP approach and a general intent to adopt/ explore it. However, the staff still lack systematic utilization of the basic concepts of a PPP feasibility. It is likely that similar issues might be faced during procurement and contract management activities.

18. Annexure 10: Social due diligence by World Bank

Sterio Market, one of renowned markets in Dar es Salaam, is located in Temeke Ward in Temeke Municipality. The market is owned by TMC and is spread over an area of 6,840 sq m residing on unsurvey plot. According to Sterio Market's chairman, the market serves 1,700 traders, of which 400 operate outside the market. Like other markets in Dar es Salaam, the market has two parallel administrations, which work together. The first administration represents interest of traders, while the second administration oversees the council's interests.

In terms of organization, the market has 17 units, which represent different categories of traders selling different commodities in the market. Some of these commodities are vegetables, coconut, banana, meat and chicken, fruits, cassava, etc. Although the market was initially meant for wholesale, currently, a significant number of retailers are hosted in the market.

Site visit shows that the market operates under hectic condition due to deteriorated market environment. The market face challenges in terms of shortage of trading spaces, washroom, deteriorated market infrastructure, parking area, storage spaces, etc. This has necessitated the construction of a modern market with three floors, parking space, and other supporting infrastructure. The new market is well connected and the new construction will not require improvement of access roads. According to the TMC investment team, the Project will last for one year and traders will have to be temporarily relocated.

The market administration representing traders confirmed to be aware of the upcoming market plan. However, they insisted that it is important for TMC to involve them in all stages to avoid misunderstanding and conflict in the future.

The TMC investment team reported that they are preparing a relocation plan. The market will be constructed in phases, during which some traders will be relocated to Evareti area, which is close to the Sterio Market and can accommodate 600 traders. However, traders would prefer the whole market to be relocated at the same time and resettled in one place because they also trade among themselves and depend on each other.

Evareti area is currently used as parking space, which also functions a makeshift garage. The area is full of exotic trees of aesthetic environmental value, which need to be preserved. It borders with the Madenge Primary School and in between there is football playground which is used by pupils from the same school. Immediately next to Madenge Primary School is the Yombo Market. These situations make Evareti site unconducive for the market. Relocating 600 people in this area will lead to clearing of trees which are fully grown, frustrate learning environment let alone sport activities.

Traders opined that it is better if TMC relocates them to Mwembe Yanga area. This area is more suitable because it is located along the main road and can accommodate all traders. They also opined that before relocating them, TMC should provide basic services such electricity, sheds and washrooms in the new areas.

Potential impacts

The following adverse impacts are associated with the construction of Sterio Market:

- Temporary loss of business and livelihoods of 1,700 traders following temporary relocation to pave the way for construction
- Potential conflict between traders and TMC, and social tensions, if thorough consultation on temporary relocation and subsequent return and slot allocation, is not done
- Influx of traders in destination markets that have been proposed for relocation of traders from Sterio Market

- Potential conflicts between traders from the Sterio Market and traders in host markets

Recommendations

The client has to undertake the following before starting the construction of Sterio Market:

- Prepare the SCEP and communicate it to the bank. The SCEP is very important, especially for informing people on the Project
- Prepare a RAP. As part of the RAP, conduct a socio-economic baseline survey and generate baseline data for all traders at the Sterio Market. The baseline data to geo-reference traders with existing trading space, personal information, and the type of business a trader is engaged in. These data should be gathered based on business categories. Detail the process of temporary relocation, compensation for the temporary loss of income due to relocation, registering all the traders that are interested in returning back to the market following the completion of the upgrade and assigning the designated slots to the traders
- Carry out a detailed assessment to ascertain the current capacity for all proposed markets where traders from Sterio Market are expected to be temporarily hosted and share the report with the bank. Traders should to be consulted while selecting the host market.
- Assurance should be given that trades will be given placement in the new market on the priority basis and following the registration information included in the database
- Conduct sensitization meetings for both Sterio market traders and host markets on how to relate. This has to go hand in hand with the preparation of the code of conduct, which will guide working relations in host markets

19. Annexure 11: Project-screening tool values

The Project screening tool (PST) is an Excel-based tool that screens Projects to determine their potential suitability for PPP procurement. It has been developed by the World Bank Group Infrastructure, Public-Private Partnerships and Guarantees, in partnership with the Global Infrastructure Hub. The PST evaluates a Project on six parameters: strategic suitability, preliminary feasibility, risk assessment, PPP suitability, fiscal affordability and institutional capacity. The PST contains structured questions detailing each of the parameters. The tool helps identify deficiencies in Projects, suggest areas for improvement and reach an overall conclusion on the suitability of Projects for PPP.

Sterio Market scores 3.5 out of maximum possible score of 5.0 on the six parameters presented in the project screening tool. The market has a strong case for its strategic suitability and preliminary feasibility as there is a high demand from traders, which will lead to high occupancy of stalls within the market. The market facility will have multiple revenue sources like daily fees from traders, washroom fees, parking fees, and advertisement, which will make the Project viable as user charges are adequate to cover capex and opex. However, the Project involves temporary relocation of close to 1,200 traders for a period of three years, and faces slightly higher risks in terms of Project execution and implementation, resulting in a low level of PPP suitability. The institutional capability is also limited as TMC is yet to execute any PPP Project.

Table 19.1: PST score based on various parameters

Name of Project	Strategic suitability (10%)	Preliminary feasibility (30%)	Risk assessment (20%)	PPP suitability (20%)	Fiscal affordability (10%)	Institutional capability (10%)	Total score (100%)
Temeke Sterio Market	5.0	4.7	2.5	2.0	5.0	2.0	**3.5**

Table 19.2: PST evaluation based on various parameters

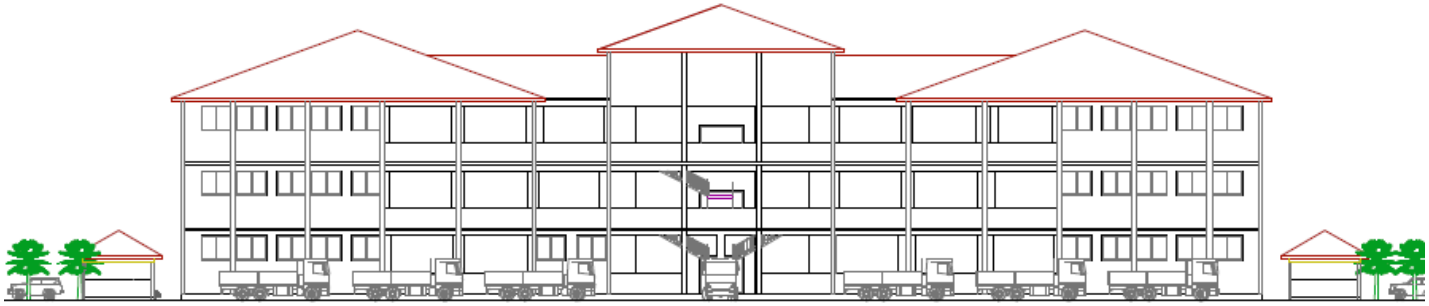
Parameters	Questions	Final pre-feasibility
Strategic suitability	Is there a consensus on users' and stakeholders' expectations from the Project?	Yes
	Does the technical solution clearly address the service need in a cost-effective and affordable manner?	Yes
	Is the user base identified for the Project in terms of users, geography, growth trends, etc.?	Yes
Preliminary feasibility	Are the life cycle costs for major components of the Project reasonable and affordable?	Yes
	Will the completed Project be carbon neutral or net carbon negative, in terms of GHG emissions?	No
	Is there support for the Project from affected communities and key stakeholders?	Yes
	Is the economic rate of return likely to be higher than the threshold ERR requirements of the government?	Yes
	Is there a preliminary financial analysis based on assessment of NPV or IRR of Project's cash flows?	Yes
	Are the demand Projections backed by surveys or demand forecasting models using reliable historical data?	Yes
	Are the financing assumptions (D/E ratio, interest rate, debt tenure and cost of equity) comparable to similar Projects?	Yes
Risk assessment	Have similar PPP Projects achieved financial close in the country or region?	No
	Are there financiers who will be interested or have expressed interest in PPP?	Skip
	Will there be independent reviews of designs, monitoring of construction progress and oversight during the testing and commissioning phases?	Yes
	Will the PPP have a ready baseline of demand or offtake that has been well established either through historical data or through firm off-take commitments or through an exclusivity of service area?	Yes
	Are costs of mitigating the environmental and social impacts of the Project considered in the PPP?	No
PPP suitability	Are the modeling assumptions backed by historical or empirical data?	Yes
	Is the VFM for the Project greater than the threshold VFM requirement?	Yes
	Will the VFM for the Project remain greater than the threshold rate in case of stress (or low) case scenario?	Yes
	Is favorable response expected from the private sector towards the Project? For example, as gauged by the contracting agency through preliminary market consultations or similar investor interactions	Skip

Parameters	Questions	Final pre-feasibility
	Have similar PPP Projects been successfully implemented in the past in the country or in the region?	No
	Is the Project eligible for government funding support?	No
	Is the Project eligible for funding/ guarantees from multilateral/ donor agencies?	No
Institutional capability	Does the proposal have a Project plan on the next stages of the Project with identified deadlines and responsibilities allocated?	No
	Has the contracting agency budgeted funds, or does it have access to funds, to complete Project preparation? This includes the costs of preparing required studies, securing land, resettlement costs, and environmental and social impact cost mitigation	No
	Does the Project plan incorporate a strategic communications plan to engage with internal and external stakeholders of the Project during the next stages of the Project?	No
	Has the contracting agency been effective in managing key contractual risks and monitoring performance of PPP Projects during their operations phase?	Skip
	Will the contracting agency insist on Project-level disclosure to the public in relation to Project performance and in meeting contractual obligations from time to time?	Skip

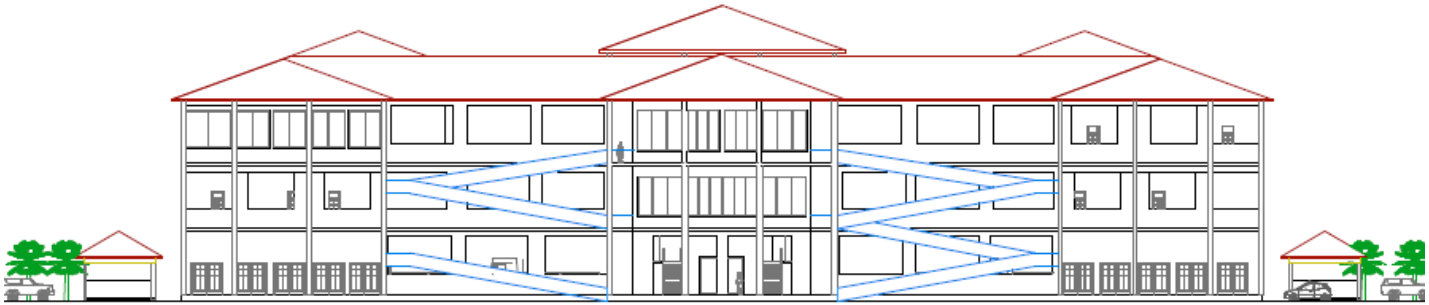
20. Annexure 12: Conceptual drawings

Figure 20.1: Front and rear elevation of the proposed market

The following drawings showcase the front and rear elevations of the proposed Project facility. It will be a three-floor market (ground + 2 floors). There would be provision for stairs, ramps and service lifts for traders to move goods to the higher floors. Car parking would be available at the front end, while cargo trucks would be stationed at rear end of the municipal market.



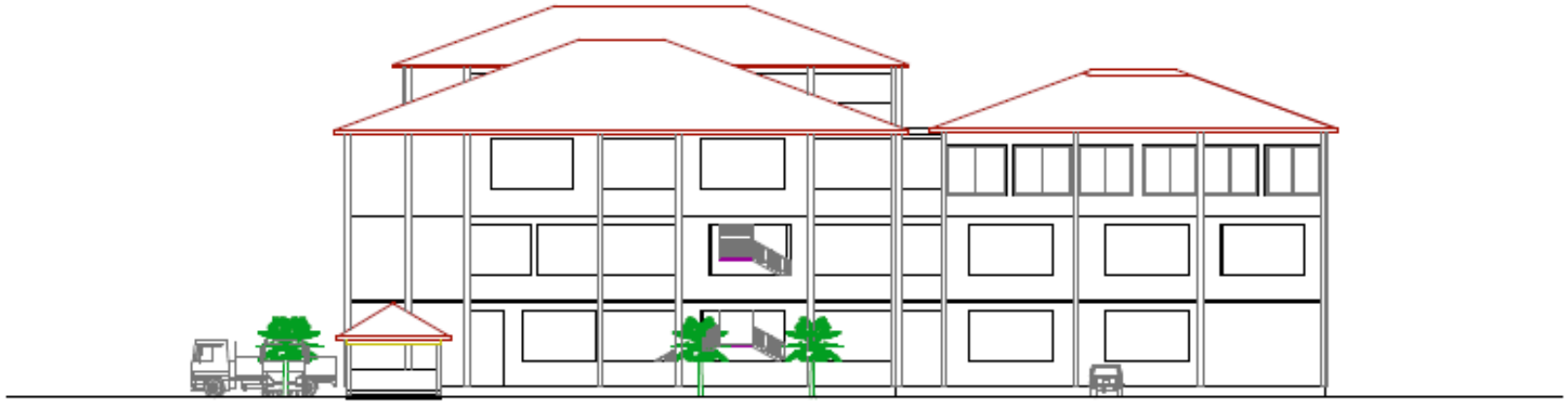
ELEVATION 3



ELEVATTION 1

Figure 20.2: Side elevation of the proposed market

The following drawings showcase the side elevations of the proposed Project facility. Customers' vehicles would be tentatively parked at the front end of the market. The parking area would have a number of windows for sufficient ventilation.



ELEVATION 2

ELEVATION 4

Figure 20.3: Ground floor plan of the proposed market

The following drawing showcases the ground floor plan of the proposed Project facility. The ground floor of the market will have a mix of large, medium and small stalls mainly selling perishable goods. There would be connectivity to higher floors through stairs, ramps and service lifts. Adequate number of shower rooms and washrooms would be also be provided. Parking facility would be available at front and rear ends for cars during the day and for cargo trucks at night.

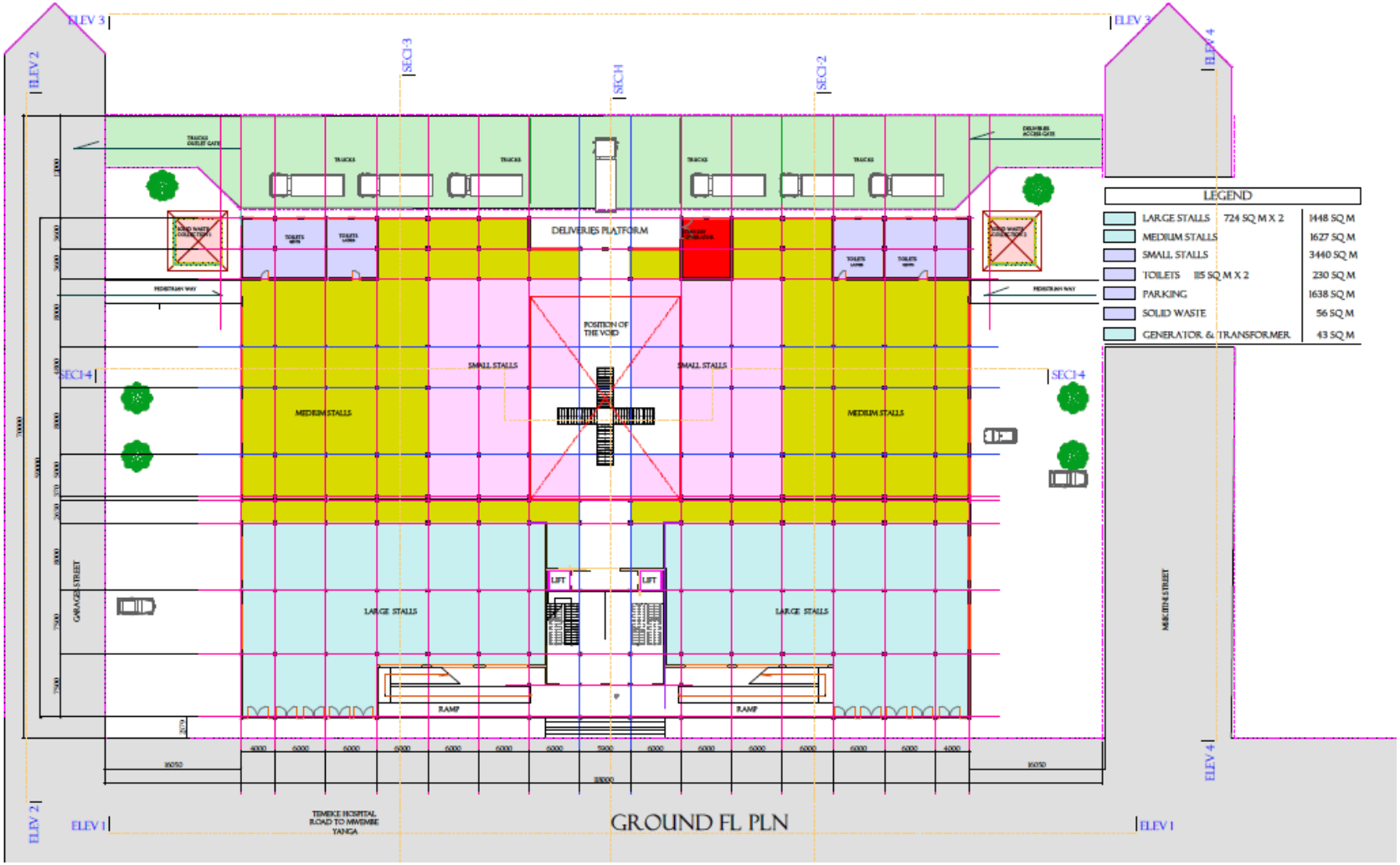


Figure 20.4: First floor plan of the proposed market

The following drawing showcases the first floor plan of the proposed Project facility. The first floor of the market will be connected with the higher and lower floors of the market via staircases and ramps. The first floor would be occupied by mix of small, medium and large traders mainly selling non-perishable goods. Adequate number of shower rooms and washrooms would be also be provided.

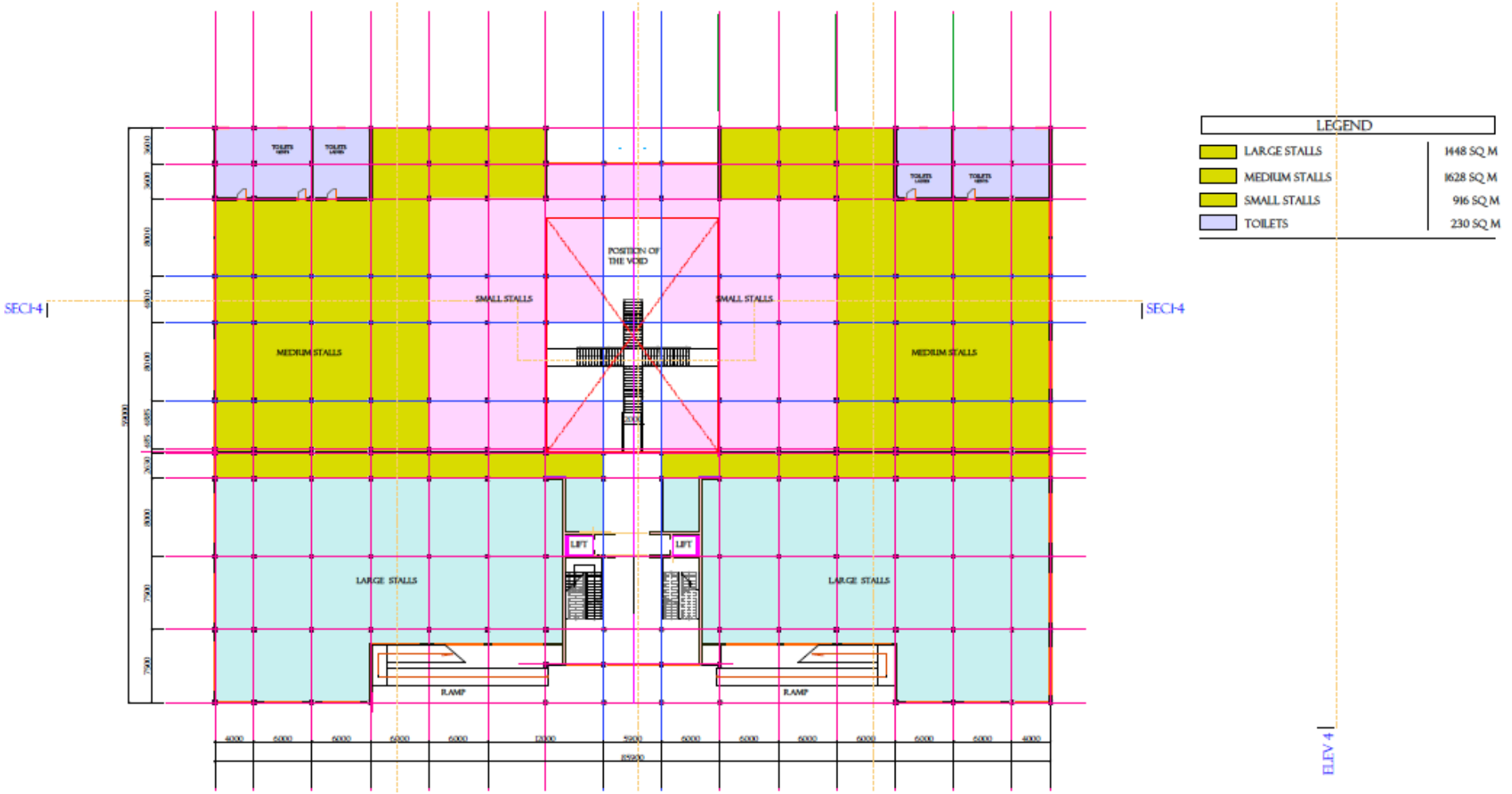


Figure 20.5: Second floor of the proposed market

The second floor of the market will be connected with the upper and lower floors of the market via staircases and ramps. The second floor would be occupied by mix of small, medium and large traders mainly selling non-perishable goods. There will also be provision for two bulk storage units on this floor. Adequate number of shower rooms and washrooms would be also be provided.

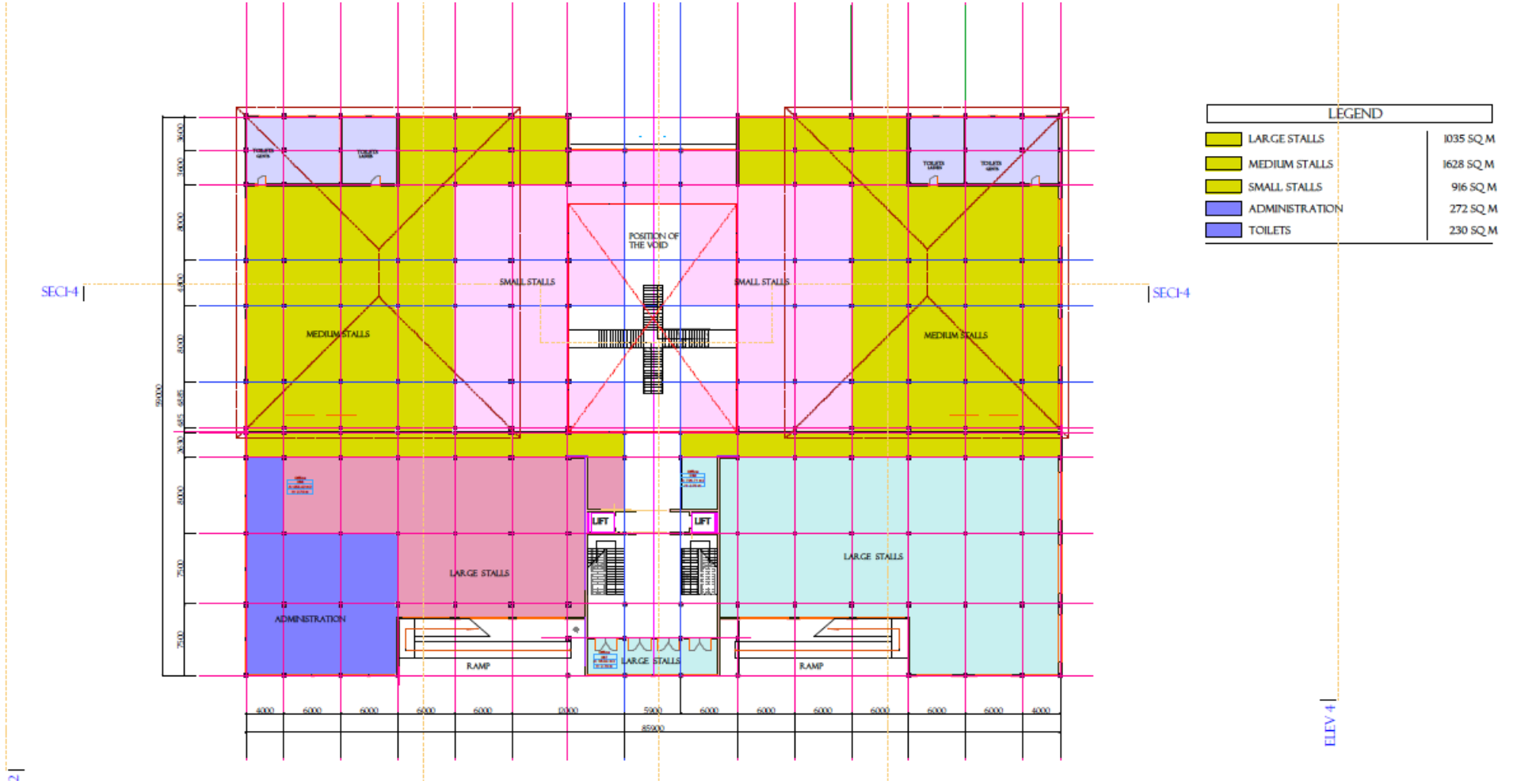
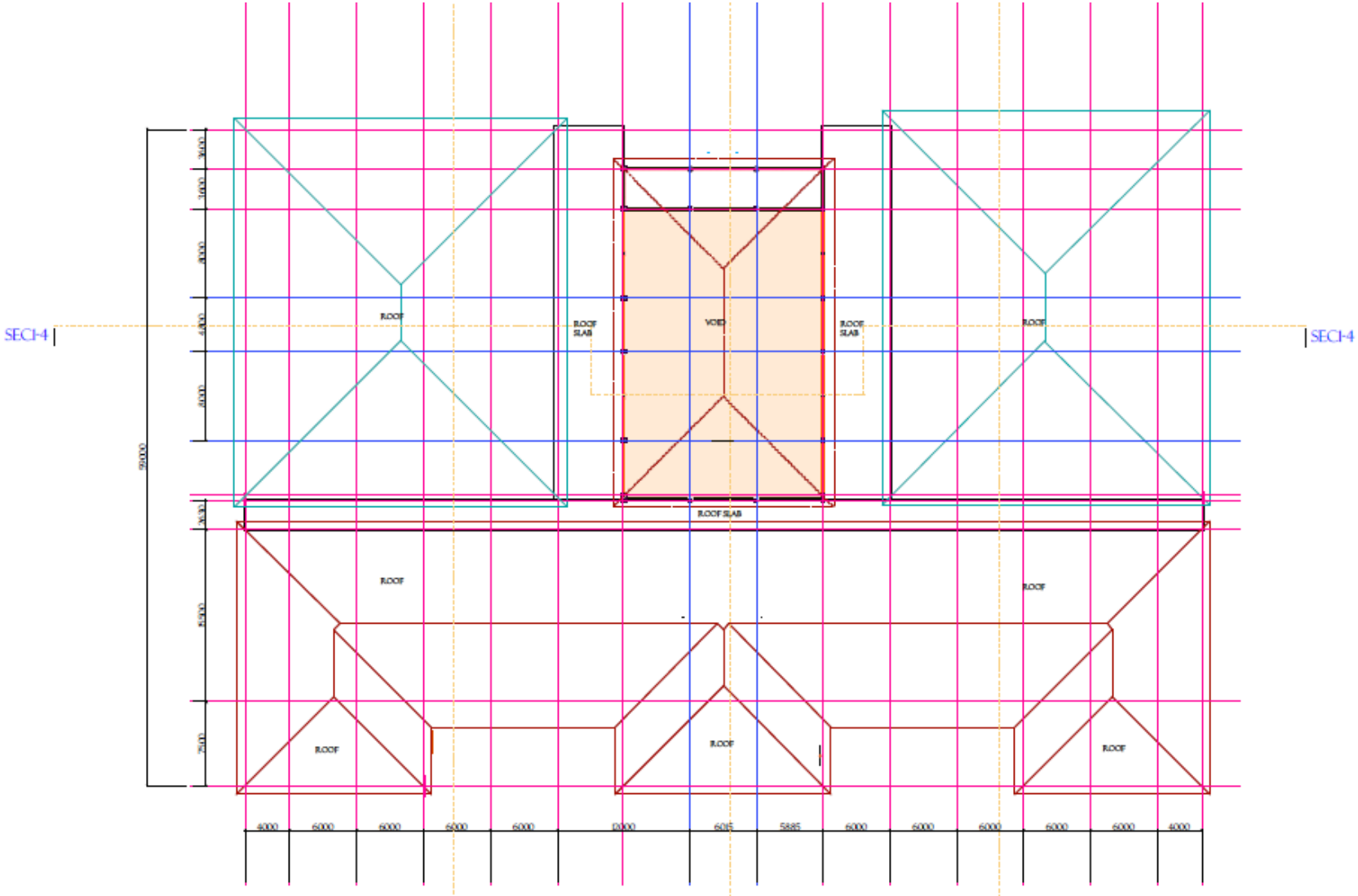


Figure 20.6: Roof plan of the proposed market



About CRISIL Limited

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