

AFRICAN DEVELOPMENT BANK



TANZANIA

DAR ES SALAAM BUS RAPID TRANSIT SYSTEM PROJECT- PHASE 2

APPRAISAL REPORT

OITC DEPARTMENT

September 2015

TABLE OF CONTENTS

1. STRATEGIC THRUST & RATIONALE	1
1.1 PROJECT LINKAGES WITH COUNTRIES STRATEGIES AND OBJECTIVES	1
1.2 RATIONALE FOR BANK'S INVOLVEMENT	1
1.3 DONORS COORDINATION	2
2. PROJECT DESCRIPTION	3
2.1 PROJECT DEVELOPMENT OBJECTIVE.....	3
2.2 PROJECT DESCRIPTION AND COMPONENT.....	3
2.3 TECHNICAL SOLUTION RETAINED AND OTHER ALTERNATIVES EXPLORED	5
2.4 PROJECT TYPE.....	5
2.5 PROJECT COST AND FINANCING ARRANGEMENTS	5
2.6 PROJECT'S TARGET AREA AND BENEFICIARIES.....	7
2.7 PARTICIPATORY PROCESS DURING PROJECT PREPARATION.....	8
2.8 BANK GROUP EXPERIENCE AND LESSONS REFLECTED IN PROJECT DESIGN	8
2.9 KEY PERFORMANCE INDICATORS	9
3. PROJECT FEASIBILITY	9
3.1 ECONOMIC AND FINANCIAL PERFORMANCE	9
3.2 ENVIRONMENTAL AND SOCIAL IMPACTS	10
4. IMPLEMENTATION	13
4.1 IMPLEMENTATION ARRANGEMENTS	13
4.2 MONITORING	15
4.3 GOVERNANCE	16
4.4 SUSTAINABILITY	16
4.5 RISK MANAGEMENT.....	17
4.6 KNOWLEDGE BUILDING.....	18
5. LEGAL INSTRUMENTS AND AUTHORITY	19
5.1 LEGAL INSTRUMENT.....	19
5.2 CONDITIONS ASSOCIATED WITH BANK'S INTERVENTION.....	19
5.3 COMPLIANCE WITH BANK POLICIES	20
6. RECOMMENDATION.....	20
APPENDIX I: COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATOR	I
APPENDIX II: TABLE OF ADB'S PORTFOLIO IN TANZANIA	II
APPENDIX III: RELATED PROJECTS FINANCED BY DONORS	III
APPENDIX IV: DETAILS OF PROJECT COST.....	IV
APPENDIX V MAP OF PROJECT AREA	V

Currency Equivalents

As of 01.03.2015

1 UA	=	1 SDR
1 UA	=	1.4074 USD
1 UA	=	2518.3924 TZS

Fiscal Year

Tanzania: 1 July – 30 June

Weights and Measures

1 metric tonne	=	2204 pounds (lbs)
1 kilogram (kg)	=	2.200 lbs
1 meter (m)	=	3.28 feet (ft)
1 millimeter (mm)	=	0.03937 inch (“)
1 kilometer (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

LIST OF ABBREVIATIONS	
ADF	African Development Fund
AGTF	Africa Growing Together Fund
BRT	Bus Rapid Transit
CPIA	Country Policy and Institutional Assessment
CSP	Country Strategy Paper
DART	Dar Rapid Transit Agency
EIRR	Economic Internal Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EU	The European Union
GDP	Gross Domestic Product
GHG	Green House Gas
GoT	Government of Tanzania
HDI	Human Development Index
IFMIS	Integrated Financial Management Information Systems
JICA	Japan International Cooperation Agency
MOW	Ministry of Works
MTP	Medium Term Plan
NGO	Non-Governmental Organization
NMT	Non-Motorized Transport
NSGRP	National Strategy for growth and Reduction of poverty (MKUKUTA in Swahili)
OITC	Transport and ICT Department
ONEC	Energy, Environment and Climate Change Department
OpsCom	Operations Committee (of Senior Management)
ORQR	Quality Assurance and Results Department
PCR	Project Completion Report
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PMO-RALG	Prime Minister's office regional Administration and local Government
RAP	Resettlement Action Plan
TANROADS	Tanzania National Roads Agency
UA	Units of Account
UDS	Urban Development Strategy
WB	World Bank

Loan Information

Client's information

BORROWER: THE UNITED REPUBLIC OF TANZANIA

EXECUTING AGENCIES: DAR RAPID TRANSIT AGENCY AND TANZANIA NATIONAL ROADS AGENCY.

Financing plan

Source	Amount (USD)	Instrument
ADB	97,420,000	Loan
AGTF	44,290,563	Loan
GOV. OF TANZANIA	17,610,000	Counterpart
TOTAL COST	159,320,563	

Key financing information for ADB and AGTF

Loan currency	United States Dollars (USD)
Loan Type	Enhanced Variable Spread Loan
Lending Rate	Base Rate+ Funding Cost Margin + Lending Spread
Base Rate	Floating Base Rate based on 6 month LIBOR with free option to fix the Base Rate
Funding Cost Margin ¹	Refer footnote 1
Lending Margin	60 basis points (0.6%)
Tenor	Up to 20 years inclusive of grace period
Grace Period	Up to 5 years
NPV (base case)	USD 44.67 million
EIRR (base case)	31.6%

Timeframe - Main Milestones (expected)

Concept Note approval	February, 2014
Project approval by ADB	September, 2015
Loan Agreement Signing	October, 2015
Effectiveness	December, 2015
Project Activities Completion	December, 2019
Closing Date	December, 2020
Last repayment	August, 2036

¹ The six months adjusted average of the difference between: (i) the refinancing rate of the Bank as to the borrowings linked to 6- month LIBOR and allocated to all its floating interest loans denominated in USD and (ii) 6-month LIBOR ending on 30 June and on 31 December. This spread shall apply to the 6-month LIBOR which resets on 1 February and on 1 August. The Funding Cost Margin shall be determined twice per year on 1 January for the semester ending on 31 December and on 1 July for the semester ending on 30 June.

PROJECT SUMMARY

Project Overview

1. The Dar es Salaam Bus Rapid Transit (BRT) Project-Phase 2 involves the construction of infrastructure that includes 20.3km of exclusive BRT lanes and Non Motorised Transport (NMT) facilities along Kilwa Road corridor and part of Kawawa Road. The project corridor traverses from Mbagala Area in Temeke District to the Central Business District where it connects with Phase 1 of the BRT system at the Kariakoo hub.

2. The project is expected to benefit an estimated population of at least 1.2 million representing some 25% of the Dar es Salaam City's population. Other beneficiaries include users of major city connecting arterial roads including Mandela and Nyerere Roads. Key outcomes include improved accessibility to the larger populations of Dar es Salaam particularly Temeke Municipality, reduced travel time to public transport commuters, improved air quality to travelers and residents living close to the roadway, improved property values arising from reduced congestion, and improved business environment for traders arising from improved accessibility, new market facilities and improved sanitation. The disadvantaged women, school children, handicapped and elderly are also poised to benefit from the new BRT system. At the moment, they cannot manage to comfortably use the existing public transport especially during peak hours. Finally, employment will be created during both the construction phase and the operations phases of the proposed BRT line.

3. The Provision of BRT system is expected to directly enhance and improve the traffic circulation and eliminate bottlenecks to traffic flow to various economic activity centers such as the industrial zones, and the vast populous residential areas of Temeke Municipality. The proposed project would therefore impact positively on the informal and formal businesses by providing them with improved accessibility and enhanced roadside air quality. It is further estimated that by improving the existing road and public transport system, the annual vehicular GHG emission rates in tones would drop by at least 60% due to improved average traffic operating speeds along the project corridor and particularly by the use large modern buses that uses modern technology and cleaner fuels in the BRT system.

4. The project development objective is to provide enhanced transport facilities that are reliable and cost effective, with a view to improve urban mobility, connectivity and accessibility to commuters and businesses and thereby supporting economic and social development of the city and the Country as a whole. It is also expected to result in reduced congestion and improved air quality along the project corridor.

5. The total cost of the project net of taxes is USD 159.32m (TZS 285.1 billion). The project is jointly financed by the Bank Group (61.1%), Africa Growing Together Fund (AGTF) (27.8%) and the Government of Tanzania (11.1%). The project will be implemented over a 4 year period (2016-2020).

Needs Assessment

6. The public transport system mainly consists of informal mini- and mid-sized buses called *daladala*. Bus services with conventional big buses are operated by Usafiri Dar es Salaam (UDA), a public entity, which operates fairly large buses. The current system is inadequate to provide reliable, safe and efficient public transport system for an estimated 5 million Dar es Salaam city inhabitants generating about 60 percent of the countries' revenue and 70 % of city's commuters use public transport. Hence, there is a need for improved public transport system from which the BRT project phase 2 has been conceived.

7. The project is aligned to Tanzania's Vision 2025, and the First Five-Year Development Plan-2010-2015, and the "Big Result Now" (BRN) initiative which underscores the need for increased investment in Transport infrastructure with a view to improve social-economic well-being of people

and thereby contributing to poverty reduction. Furthermore, the Dar es Salaam BRT Phase 2 project is part of the Six-Phased DART system Master Plan; and the ongoing Phase 1 that is being financed by the World Bank.

Bank's Added Value

8. The Bank is best placed and experienced to successfully finance BRT phase 2 project, owing to its experience in partnering with the GoT to deliver various projects. The project is part of the broader Dar es Salaam BRT Master plan and is in line with the Bank's Urban Development Strategy of 2011 and the Bank's ten years strategy objectives of Inclusive and green growth as well as development of private sector. The project will directly contribute to improvement of public transport system in Dar es Salaam and provide up to 2,500 direct local jobs, and promote private sector investments in urban infrastructure and services. Further, the Bank has a unique opportunity to demonstrate that by investing in BRT project, more people including children, women, elderly and the handicapped will comfortably use the system (inclusivity) and GHG emissions can sustainably be cut down to reduce the carbon 'footprint' in keeping with Bank's long-term Green Growth Strategy. In addition, the Bank also leverage its competence and relevance in the sector to attract development financial institutions to collaborate on projects financing.

Knowledge Management

9. The BRT phase 2 project is designed as a flexible, high performance bus-based rapid transit mode that combines a variety of physical, operating and system elements into a permanently integrated system. In this regard the project would therefore provide a mechanism for organizational learning and to promote best practices in urban Mass Transit Systems for use in other African cities facing similar challenges.

DAR ES SALAAM BRT INFRASTRUCTURE PROJECT

RESULTS-BASED FRAMEWORK

Country and project name: Tanzania: Dar es Salaam Bus Rapid Transit System Project- Phase 2 Purpose of the project: Improve Public transport system in the city of Dar es Salaam by constructing the 20.3 km of BRT infrastructure and provide reliable and cost effective public transport system and facilities.						
RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMPACT	1. Contribution to socio-economic growth and poverty reduction through Improved public transport system	1.1 Country economic growth rate	1.1 GDP 7%(2015)	1.1 improved to 9% by 2022	DART Reports and National bureau of statistics report	Risk: Unfavorable macro-economic conditions, conducive business environment & GoT commitment to BRN, Vision 2025 and MKUKUTA Mitigation: Continued Government & Development Partners support to BRN, Vision 2025 and MKUKUTA.
	1. Improved mobility and accessibility in Dar es salaam City. 2. Improved air quality along the Corridor 3 Increased participation of women <i>dala-dala</i> (minibuses) operators in BRT feeders 4 Skilled staff in BRT operations	1.1 Public transport Pax/day volume 1.2 Peak hour travel time 1.3 Transport costs 1.4 Road accidents 2.. GHG Emission concentrations (CO ₂ & CO)(ppm); 3. Number of women operating <i>dala-dala</i> and/or participating in BRT system 4. No. of staff trained	1.1 495000 pax/day (50% women) 1.2 90 min (2015) 1.3 TZS 1000 for longer 1.4 TBD (2015); 2.. CO ₂ ,250 tons/yr (2015); 3. 8 no 4. N/A	1.1 Pax volume to grow to 600000 pax/day by 2019 1.2 Reduced to 20 min by 2019 1.3 Trip cost reduced to TZS 700. 1.4 Reduction of accidents by 40% 2. Reduction of CO ₂ emissions to 60 tons/yr, (2019); 3. 10% of women <i>dala-dala</i> operators in the feeder routes to the BRT system 4. At least 5 key staff trained in key BRT operations skills	1.1 DART and Bank review reports; 1.2 Field measurements & monitoring studies;	Risk: Sustainability of investments in the city road network expansion and failure of DART to procure private buses operators Mitigation: The GoT Road Fund is in place and increased collection and remittance for road infrastructure maintenance and transparent procurement of buses operators and road show to potential bidders so that they are well informed
OUTPUTS	Output1 1.1 Construction of Kilwa road ¹ BRT infrastructure 1.2 Pilot traffic management system	1.1 Km of BRT infrastructure constructed (km); 1.2 Updated traffic Management system in place	1.1 NA 1.2 NA	1.1 20.3km (2019); 1.2 Traffic management system improved	1.1 Quarterly Progress Reports, 1.2 Bank supervision reports	Risk: Implementation delays due to utilities relocations Mitigation: The DART and GOT to finalize designs including utility mapping and oversee the project implementation. Risk: Project Cost Increase due to poor designs &

	Output 2: Training	2.1 HIV/AIDS Sensitization Sessions; 2.2 Road Safety campaigns 2.3 Workshop for women to participate in the BRT system operations	2.1 Nil sensitization; 2.2 Nil 2.3 8 No of Women	2.1 Conducted 36 sensitization sessions in at least 6 communities ² twice a year; 2.2 Safety campaigns done in 6 communities; 2.3 30 Women <i>dala-dala</i> owners inducted on participation in BRT system		unforeseen increases in material prices; Mitigation: Critical review of design & provision of adequate/reasonable amount of contingency in the project and close supervision. Risk: Failure of Private Sector to provide buses Mitigation: Robust financial viability mitigates this risk as the project is financially viable and attractive to private investors. In addition, procurement process will be transparent and potential bidders invited to comment on bidding documents. Risk: Delay in implementing of the RAP ; Mitigation: Implementation of RAP prior to project launch. Risk: Lack of support by the public transport industry Mitigation: continuous consultation with all stakeholders and educate them their involvement in BRT system
	Output 3: 3.1 Feasibility and detailed engineering study/design reports	Completed study	N/A	Study completed		
	Output 4 Urban Development project study reports	Completed study	N/A	Study completed	-	

¹ Road subsections: Kilwa, Kawawa South, Chang'ombe Roads, Gerezaani, Sokoine Drive, Bandari Street.

² Rolling Stock to be provided by Private Bus Operator

KEY ACTIVITIES	COMPONENTS	INPUTS (USD MILLION)	
	A. Civil Works: All works activities in the construction of pavement, road and drainage structures, depots, terminals and stations	Sources of Finance:	
	B. Consultancy Services: Comprises of (a) design review and supervision of works (b) feasibility design and detailed engineering design of priority intersections, (c) Road safety awareness and audit services (d) HIV/AIDS awareness, sensitization and gender empowerment (e) baseline data collection ESMP monitoring (f) technical and financial audit services	ADB	97.42
		AGTF	44.29
		GOT	17.61
	C. Traffic Management and Capacity Building:	<i>Components</i>	<i>Amount</i>
	D. Technical Assistance services and capacity building:	A	103.78
		B	9.78
		C	2.27
		D	3.18
		E	2.11
	E. Urban Development Support	F	15.04
	F. Compensation and Resettlement	Base cost	136.16
		Total cost with contingencies	159.32

DAR ES SALAAM BUS RAPID TRANSIT SYSTEM PROJECT

Indicative project time frame

[illegible]

NOTE: Pre-qualification would take on average five additional months

REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS ON PROPOSED LOAN TO TANZANIA FOR THE DAR ES SALAAM BUS RAPID TRANSIT (BRT) PROJECT.

Management submits the following Report and Recommendation on proposed ADB loan of USD 97.42 and AGTF loan of USD 44.29 million to the United Republic of Tanzania to finance the Dar es Salaam Bus Rapid Transit (BRT) project.

1. STRATEGIC THRUST & RATIONALE

1.1 Project Linkages with Countries Strategies and Objectives

1.1.1 Urban transport system in Tanzania has in the recent past been shaped by rapid economic change and increasing rate of motorization and inadequate public transport provision that is safe, reliable and comfortable. The current public transport infrastructure is inadequate as compared to demand according to the Master Plan for Urban Transport in the Dar es Salaam (2008-2030).

1.1.2 The development of Tanzania's transport infrastructure will be undertaken within the scope of existing plans for development. These plans include those that are oriented towards the general development of the economy such as the Vision 2025, the National Strategy for Growth and Reduction of Poverty (NSGRP) known, by its Swahili acronym, MKUKUTA, and the Five-Year Development Plan, Big Result Now (BRN) and those that guide the development of the transport sector such as the Implementation Strategy of the Transport Policy of 2011 to 2025, the Local Government Transport Programme (LGTP) and the Transport Sector Investment Programme (TSIP). In these strategies, the GoT has identified transport infrastructure as facilitator of rapid economic growth. The NSGRP under Cluster I: Growth for Reduction of Income Poverty identifies transport infrastructure as one of the cross-sector drivers of broad-based growth.

1.1.3 To address Public transport problem, the GoT through the Dar es salaam BRT project would provide an enhanced public transport system that is safe, affordable, reliable and cost effective. BRT infrastructure project is part of the broader BRT Master Plan for the Dar es Salaam City and is in line with the Bank's Urban Development Strategy (UDS-2011) pillars, that is, to support mass transit systems in Cities as well as Private sector development. The project is also in line with the Bank's Ten Year (2013 – 2022) Strategic twin objectives, that is inclusive and green growth since the BRT project is expected to provide good quality public transport service to all city's commuters especially low income earners by using large modern buses and thereby reduce Green House Gaseous (GHG) emissions. This project has also been identified in the Country Strategy Paper (CSP 2011-2015) under pillar 1(infrastructure support) as priority for development. The BRT project therefore, has been identified as priority for intervention to facilitate economic development and poverty reduction and contribute to the attainment of the objectives of MKUKUTA through easy movement of people that will enhance mobility and improve competitiveness of the City's business environment.

1.2 Rationale for Bank's Involvement

1.2.1 Tanzania needs Development Partners (DPs) to support its development programmes and thus Bank's involvement in this project is key to decongesting the major road corridor and aims amongst others at resolving infrastructure and mobility bottlenecks, particularly in Urban Transport sub-sector. The Bank's involvement also compliments efforts done by the World Bank and the Government of Tanzania to implement BRT phase 1. This urban transport project would contribute to the above by addressing the rapidly growing urban transport congestion that threatens to stifle the attractiveness of Dar es Salaam as a business centre of the country and imposes huge costs on the economy. The provision of better public transport infrastructure that is cost effective would improve access to jobs and other socio-economic activities including schools, health centres and markets.

1.2.2 Improved vehicle technology by use of BRT buses shall significantly reduce roadside concentration of GHG emissions and in consequence, improve air quality. Further, the Bank has a unique opportunity to demonstrate that by investing in better public transport systems (Mass rapid Transit Systems) and congestion relief infrastructure, GHG emissions can be reduced in line with Bank's long term Green Growth Strategy. Also for the Banks inclusive growth objective, the project is designed to be more user friendly as well designed to cater and be easily accessible for women, disabled people, children and the elderly who are disadvantaged in existing systems.

1.2.3 The project will also have trunk (main) BRT system coupled with feeder systems to make it more inclusive by linking the City's environs with the main BRT corridors along with Non- Motorised Transport (NMT) facilities such as pedestrian walkways and bicycle lanes. In addition, the project would reduce average peak hour travel time by public transport users along the corridor and increase average number of public transport passengers per day.

1.3 Donors coordination

1.3.1 Donor coordination is carried out at both sector and national levels, At sector level, donor coordination is done by the Ministry of Transport through a Joint Transport Sector Review (JTSR) with the Transport Sector Development Partner Group. Donors who are actively participating in the Transport sector include World Bank, EU, JICA, Korea, China, BADEA, Kuwait Fund and Millennium Challenge Cooperation (MCC).

1.3.2 JTSR is an annual meeting between the Government and Development Partners including the AfDB to harmonize development partners' responses and positions with respect to institutional, policy, financing and implementation issues. The DPs also conducts quarterly meetings to discuss strategic investment programmes for the GOT and there is continuous dialogue between Government and Development Partners (DPs) to ensure that results and outcomes are achieved in line with the targets agreed to. The DPs have been working with the Government using the Transport Sector Investment Programme (TSIP). The TSIP is the programme through which the Development Partners are engaging the Government in dialogue.

1.3.3 The Bank's proposed intervention for the Dar es Salaam BRT Phase 2 has utilized the WB financed detailed engineering design study and Study on Transport Master Plan for Dar es Salaam city prepared by GOT and JICA (2008). In addition, during preparation and appraisal extensive consultations with the major DPs active in the transport sector were conducted to share experience, harmonize procedures and co-ordinate interventions. The average five year sector expenditure is presented in table 1 below.

Table 1 Average 5-Year Sector Expenditure (UA million)

Table 1 Average 5-Year Sector Expenditure (UA million)			
Sector or subsector	Size		
	GDP	Exports	Labor Force
Road Transport Cont. – Tanzania*	3.3%		
Players - Public Annual Expenditure (average)			
	GOT ^a	Donors	
	UA 320 Million (57.6%)	UA 235.7 (42.4. %)	
Level of Donor Coordination			
Existence of Thematic Working Groups:			Yes
Existence of SWAPs or Integrated Sector Approaches:			Yes
ADB's Involvement in donor coordination***:			Member
* Average of the last five years(2009 – 2014) for transport ; ‘a’ - the last five years average			

2. PROJECT DESCRIPTION

2.1 Project Development objective

2.1.1 The project development objective is to improve urban mobility and accessibility in the City of Dar es Salaam through provision of enhanced transport facilities that are reliable and cost effective, and thereby supporting economic and social development of the city and the Country as a whole.

2.1.2 The BRT infrastructure along the Kilwa road corridor will address public transport problem, traffic congestion and provision of safe, reliable and accessible transport with a view to improve urban mobility and accessibility for City's public transport commuters by using standard and customized large articulated buses and feeder buses along the constructed 20.3 km of exclusive BRT lanes. Furthermore, the BRT system would have provision for employment of significant number of people under the project during construction and operational stages as well as improving air quality along the transport corridor and the city at large once operational.

2.2 Project Description and Components

2.2.1 The entire Phase 2 trunk system of 20.3 kilometers will be built along the middle of existing roads. A 9m wide median along Kilwa road is currently reserved for BRT lanes, terminals and stations. Throughout the entire corridor, there will be tree-shaded bicycle and pedestrian ways on both sides of the road. The average distance between bus stops will be 500 metres and system users will be encouraged to either walk or bicycle to the bus stops (privately operated bicycle parking facilities are planned at each bus stop). Ninety seven (97) articulated trunk buses with a capacity of 140 passengers will provide both normal (stopping at all stations) and express services (stopping only at connector stations). Additionally, a system of 105 feeder buses with a capacity of 60 passengers will transport passengers to the trunk system through feeder stations. Trunk buses will be accessed at the stations by the passengers at level which will enhance system capacity and comfort. The system is expected to operate for 18 hours from 5am to 11 pm. The bus fleet which will be under separate financing arrangement and operated by a Private Bus Operator and is expected to serve 495,000 passenger trips per day of which approximately 50% are women and 150 million trips annually.

2.2.2 The project involves the construction of BRT infrastructure along Kilwa Road from Mbagala to CBD (14.9 km), and Changombe Road to Kawawa Road (5.4 km) connecting to Phase 1 line at Magomeni area. The construction includes Terminals, Depots, Feeder Stations, NMT facilities and flyovers at Nyerere/Kawawa and Mandela/Kilwa roads intersection. The works on Kilwa road involve constructing two BRT lanes in the right of way provided in the center of existing mixed traffic lanes with service roads, bicycle lanes and pedestrian walkways. On the Changombe Road, Gereza street and Bandari street sections, the existing two lane roadways will be expanded to provide two BRT lanes in the center with two outside mixed traffic lanes plus service roads, pedestrian walkways and bicycle lanes, while the existing 4-lane roadway on Kawawa road will be expanded to accommodate two BRT Lanes in the center with two mixed traffic lanes on either side.

The main components of the Dar es Salaam BRT project comprise:

Civil Works consisting of construction of 20.3 km of BRT lanes with a width of 7m carriageway and Depot, terminals and stations in 2 lots as follows:

- i) Lot 1: Kilwa road from Mbagala to the CBD and Chang'ombe road, Part of Kawawa road, part of Sokoine Drive (20.3 km) including two fly overs and stations and terminals which are along the road,
- ii) Lot 2: Depot, terminal off the road and feeder stations

Consultancy Services consisting of:

- i) Supervision consultancy services for lot 1 and lot 2
- ii) Feasibility study and Detailed engineering design for priority intersection
- iii) Audit services and cross cutting issues

Others

- iv) Traffic management and capacity building
- v) Urban development support study
- vi) Technical assistances and capacity building
- vii) Project Audit and cross cutting consultancy services
- viii) Resettlement costs to cover compensation of affected people and other social and environmental management

2.2.3. Buses, fare collection system and ITS systems:

This component is part of BRT Phase 2 and will involve the procurement of Buses (Trunk and feeder systems Buses) by the private sector that will be operated by private bus operators who will enter into agreement with the DART Agency under Special Purpose Vehicle (SPV) arrangements upon completion of the physical infrastructure construction. It will also involve the services of fare collection systems (Automated fare collection system-AFCS) and Intelligent Transportation Systems (ITS) technologies for various BRT operational configurations. The operating design is based on peak hour demand from which bus fleets have been determined.

2.2.4 To achieve these objectives, along with fulfilling long term objectives to improve Dar es Salaam public transport system and urban mobility, the project activities were grouped into six main components summed up in the table 2.1 and presented in detail in Annex B9 of the report:

Table 2.1. Projects components and description

No.	Component Name	USD (m)	Description
A	Civil Works		
	Lot 1: Kilwa road , Chang'ombe road, part of Kawawa road and part of sokoine drive	80.49	Lot 1:Construction of 20.3km BRT infrastructure along Kilwa road from Mbagala to CBD, Chang'ombe road, part of Kawawa road, part of Sokoine drive from gerezani to City Council and two flyovers at Mandela/Kilwa road intersections and Nyerere/Kawawa road intersection and lot 2: Depots, terminals off the road and feeder stations
	Lot2:Depots,terminals off the road and feeder stations	23.28	
B	Consultancy Services		
	Design review/Supervision of Lot 1	3.27	Comprises of: a)Design review and supervision of works b)feasibility design and detailed engineering design of priority intersections, traffic management and capacity building c)Road safety awareness and audit services d) HIV/AIDS awareness, sensitization and gender empowerment e)Baseline data collection ESMP monitoring f) technical and financial audit services
	Design review/Supervision of Lot 2	0.93	
	Feasibility and Detailed design of critical Intersections	2.81	
	Audit services and crosscutting services	2.81	
C	Traffic Management and Capacity Building	2.27	Assessing current traffic flow pattern, design modern traffic signals install traffic signals and main control center and associated controls as well training operators
D	Technical Assistance services and capacity building	3.18	Providing support to BRT unit in TANROADS and training in BRT operational related aspects for DART Agency Staff
E	Urban Development Support	2.11	Comprises of urban institutional arrangement study and formulation of National Urban Development Programme for Dar es Salaam and secondary cities
F	Compensation and Resettlement	15.04	Resettlement and compensation of PAPs
	TOTAL BASE COST	136.19	

2.3 Technical solution retained and other alternatives explored

2.3.1 The alternative designs for the road were evaluated with regard to suitability of pavement and traffic capacity over the project life cycle. A calibrated traffic model was used in traffic operations analysis under existing and future conditions. Level of service in the existing traffic operations along the project corridor is poor especially in the intersections and through movements.

2.3.2 In this regard, two technical design alternatives were considered. The alternatives which were considered based on lane configuration to provide full Right of Way and type of pavements were: (i) the provision of grade separated (full Right of Way) at intersections for the main BRT carriageway as compared to shared Right of way (at grade), and; (ii) flexible pavement type using Asphalt concrete as compared to rigid pavement type using cement concrete. The use of grade separated junction (full Right of Way) and flexible pavement type were the technical solutions retained. The retention of using asphalt concrete pavement type has been justified in the light of traffic loadings and robust economic and financial analyses and two grade separated junction retained due to superior level of service (LOS) as compared to the shared Right of Way. The alternatives explored and reasons for rejections are shown in Table 2.2.

Table 2.2: project alternatives considered and reasons for rejection

Alternative	Description	Reasons for rejection
Use of Rigid Pavement	Construction of BRT lanes using cement concrete	High cost (Capital + Maintenance), higher than flexible pavement BRT lanes (asphaltic concrete BRT lanes) by 42.5 %
At grade junction at major intersection (shared right of way)	Construction of BRT lanes at grade at two major intersections instead of fly overs.	At grade solution has poor Level of Service as compared to elevated BRT lanes at major intersection where LOS would be very good (free access controlled and full right of way)

2.4 Project Type

The project is a standalone project with well well-defined works and implementation of economic and social measures which are specific. Therefore, an ADB loan is considered as the most appropriate instrument for the intervention of the Bank in this operation.

2.5 Project cost and financing arrangements

Project costs

2.5.1 The project costs (net of taxes) is USD 159.32 million (TZS 285.05 billion)] of which 141.7 is foreign cost or 88.95% of the total and the local cost is USD 17.60 million (TZS 31.49 billion) or 11.05 % of the total. The project cost estimate is based on feasibility and detailed design studies of the project and on consideration of unit prices of similar recent and ongoing international tenders in Tanzania. The project cost estimates by component and by category of expenditure are indicated in Table 2.3 and 2.4 respectively.

Table 2.3- Project Cost Estimates by Component (Net of Taxes) USD (million)

No.	Component Name	Foreign Cost	Local Cost	Total	% foreign
A	Civil Work				
A1	Lot1: Kilwa Road, Chang'ombe Road, Part of Kawawa road and part of Sokoine Dive and two flyovers	80.49	0.00	80.49	100
A2	Lot 2: Depot / Terminals / Stations	23.28	0.00	23.28	100
B	Consultancy Services	9.78	0.00	9.78	100
C	Traffic Management and Capacity Building	2.27	0.00	2.27	100
D	Technical Assistance services and capacity building	3.18	0.00	3.18	100
E	Urban Development Support	2.11	0.00	2.11	100
F	Compensation and Resettlement	0.00	15.04	15.04	0.00
	Total Base Cost	121.12	15.04	136.16	88.95
	Physical contingency (10%)	12.11	1.51	13.62	
	Price contingencies (3%FC,7%LC)	8.47	1.05	9.53	
	TOTAL	141.7	17.61	159.32	88.95

Table 2.4 – Project Cost by Category of Expenditures (USD Million)

No	Category	Foreign Cost	Local Cost	Total Cost	% of foreign
A	Works	103.78	0.00	103.78	100
B	Services	17.34	0.00	17.34	100
	Total Base Cost	121.12	0.00	121.12	100
	Physical contingency	12.11	0.00	12.11	100
	Price contingencies	8.47	0.00	8.47	100
C	Compensation/Resettlement	0.00	17.61	17.60	0.00
	TOTAL	141.7	17.61	159.32	88.95

Sources of Financing and expenditure schedule

2.5.2 The Bank financing will come from the ADB window in conjunction of a loan from the Africa Growing Together Fund (AGTF) to finance the BRT project.

Based on the cost estimate derived from the detailed engineering design studies and economic evaluation for the project, a financing plan was prepared based on co-financing by ADB, AGTF and Government of Tanzania (GOT) as follows:

- The ADB and AGTF loans finance Lots 1 and 2 (including supervision) and all other consultancy services
- GOT finances the compensation cost.

The financing plan of the project and source of financing are summarized in Table 2.5

Table 2.5 Sources of Financing (USD million)

Source of Financing	Foreign cost	Local Cost	Total Costs	% of Total
ADB(loan)	97.42	0.00	97.42	61.15
AGTF	44.29	0.00	44.29	27.80
GoT	0.00	17.61	17.61	11.05
Total Project Cost	141.71	17.61	159.32	100

Table 2.6: Expenditure Schedule by Component (USD Million)

No.	Component Name	2015/16	2016/17	2017/18	2018/19	Total
A	Civil Work	0.00	28.85	43.28	31.65	103.78
B	Consultancy Services	0.49	1.96	4.40	2.94	9.78
C	Traffic Management and Capacity Building	0.00	0.68	1.60	0.00	2.27
D	Technical Assistance services and capacity building	0.00	0.35	1.41	1.42	3.18
E	Urban Development Support	0.00	0.21	1.83	0.07	2.11
F	Compensation and Resettlement	4.68	8.36	4.68	0.00	17.61
	Total Base Cost	3.86	35.40	52.5	36.09	127.83
	Physical contingency	0.39	3.55	5.25	3.60	12.78
	Price contingency	0.27	2.48	3.67	2.52	8.94
	TOTAL	4.51	41.42	61.42	42.20	159.32

2.6 Project's target Area and Beneficiaries

2.6.1 The Dar es Salaam BRT project-Phase 2 serves the Kilwa road corridor and high density areas of Mbagala, Mtoni, Kurasini, Chang'ombe, Keko and Ilala among others and high employment densities in the CBD (Kariakoo and Posta). The direct beneficiaries of this project includes all public transport commuters along the corridors and its environs in Temeke and Ilala Municipality with estimated population of to be over 1.2 million.

2.6.2 The main and key outcomes for this project is reduced travel time by 60-70 minutes per trip for public transport commuters and reduced transport costs hence use these savings for other productive economic activities. The BRT system also target low income segment of the population to better to improve their quality of life through better access to socio-economic activities such as schools, health centers, markets and jobs by providing affordable and reliable public transport system. In addition, another direct benefit to targeted population is that women, children, elderly and the handicapped who are currently denied access to travel comfortable and safely especially during peak hours would able to do so as soon as the BRT system is in operation.

2.6.3 In addition to the above outcome, improved vehicle technology by use of BRT buses shall significantly reduce roadside concentration of GHG emissions and in consequence, improve air quality and thereby reduce people's illness related to air pollutions. Also, the project will have trunk (main)

BRT system coupled with feeder systems to make it more inclusive by linking the city environs with the main BRT corridors along with NMT facilities which will benefit cyclists and pedestrians. The project, by reducing average peak hour travel time by public transport users along the corridors is also expected to increase average number of public transport passengers per day. It is also expected that the provision of Park and Ride facilities in the system would attract modal shift as other motorists could park their cars and use the BRT system and thereby reducing traffic congestion.

2.7 Participatory process during Project preparation

2.7.1 The Government of Tanzania requested for financial assistance from the Bank towards the construction of BRT infrastructure for phase 2 in January 2014. The Bank thereafter held consultations with the executing Agency (DART) to assess the level of preparedness and prioritization of the project road. Further, public and stakeholder consultations for the proposed BRT project were held during the ESIA and RAP preparations. These consultations captured the major concerns associated with the project from all concerned and interested parties which included representatives of community based associations such as the *Daladala* Transporters Association (DARCOBOA), and Women *Daladala* operators. Dar es Salaam City Council and its Municipalities, TANROADS, Civil Society Organizations (CSOs). *Daladala* operators through their association agreed with Government plan to improve the public transport system and urged the GoT to include them in the operation side of the BRT system. Consultations ensured that both women's and men's views were taken on board in the project design, resettlement and compensation issues and issues of concern during project implementation. Hence, the project is supported by the stakeholders consulted during the project preparation.

2.7.2 In addition to fruitful consultations with the stakeholders, during preparation and appraisal of the project, the Bank also held discussions with the World Bank, and JICA in Tanzania during the preparation and appraisal missions that focused on lessons learned on completed and on-going projects, and policy coordination in the sector with regard to monitoring and supervision of projects under implementation. A summary of issues raised during consultation is provided in Technical Annex B8.

2.8 Bank Group experience and lessons reflected in project design Status and Impact of Prior Bank Intervention in the Sector

2.8.1 Since 1971 to date, the Bank Group financed 103 operations with a total Commitment, net of cancellations amounting to UA 1.55 billion. Of which, transport accounted for 28%.

2.8.2 The main lessons on past performance of Bank-funded transport sector operations in Tanzania are: (i) changes in designs during project implementation which led to cost overruns; and (ii) counterpart contributions towards project costs were higher than envisaged at appraisal as a result of scope changes. Both lessons are jointly mitigated through design review, a recommendation of recent PCRs.

2.8.3 Lessons of the Bank's prior activities and that of other donors from completed projects include proper safety monitoring during construction. Project design takes note of these so as to avoid road and site accidents, and undue delays to contractors. In addition, it has been noted in many projects lack institutional capacity to fully administer and implement projects and this is still a challenge and some are a result of weak governance structures. Technical Assistance is necessary to augment internal capacities of Executing Agency(s).

2.8.4 Key lessons learnt from completed projects also include mapping and re-location of utilities. The Phase 1 of BRT project has been seriously affected by late compensation and inadequate mapping and relocation of utilities on time. These challenges are well taken care by appropriate project design so as to avoid unnecessary delays to contractors and overall implementation of the project which are un-called for.

In the implementation of Phase 1, the procurement of rolling stock is late as compared to completion of construction of the physical infrastructure. For Phase 2, it is intended to start procurement of bus operators and rolling stock early enough to avoid delay. It has also been learned that the use of rigid pavement in Phase 1 of BRT was very expensive and thus Phase 2 of the BRT project has adopted the use of flexible pavement option which has been analyzed and by considering the life cycle costs.

2.8.5 Over the last 10 years, BRT systems have been or are being implemented in many cities in South America, and Asia as an effective low cost alternative to rail based rapid transit. A recent study drew important lessons from this experience. Amongst the lessons taken into account in the design of the BRT system include Planning, decision process, implementation approach, implementation, operations and structural (institutional) issues.

2.8.6 From international experiences, it has also been learnt that for capital cost effectiveness, BRT demonstrates relatively low costs per km of investment and BRT systems are able to operate with lower ratios of vehicles compared to total passengers. In addition, BRT systems are able to introduce higher operating efficiency and service productivity for transit systems that incorporate them. Furthermore, travel time savings and higher reliability enable transit agencies to operate more vehicle miles or km of service from each vehicle hour operated.

2.9 Key performance indicators

2.9.1 The achievement of the project objectives will be measured by the following indicators: (i) Improved mobility and accessibility to socio economic activities, reduced travel time and increased number of public transport users (ii) improved air quality along the project corridor; and (iii) improved quality of life for people in the project area of influence. Indicators for monitoring and evaluating project outcomes are included in the Project Logical Framework.

2.9.2 The project design has provided for a consultancy component dealing with baseline and periodic data collection and analysis as a basis for monitoring and evaluation of project objectives and outcomes during implementation. Other additional data shall include: transport cost and travel time for specific types of vehicle and trip, accident data, jobs created in the construction and related activities, gender differential in roles and responsibilities, and HIV/AIDS prevalence. The indicators will be measured at project inception, mid-term and completion. Where relevant, indicators will be disaggregated by gender.

3. PROJECT FEASIBILITY

3.1 Economic and financial performance

3.1.1 The methodology for the economic analysis is based on cost benefit analysis by comparing the “with” and “without” project scenarios over a period of 25 years, A discount rate of 12% was adopted. The economic costs consist of (i) the capital investment costs and (ii) the routine and periodic maintenance expenses. The financial benefits taken into account consist of the revenues that DART will receive from the BRT private operator. The economic benefits consist of savings in (i) vehicle operating costs; (ii) motorized traffic travel time for passengers (iii) non-motorized traffic travel time

for passengers and (iv) reduction in road maintenance costs. The measures of project worth used are the EIRR, FIRR, NPV and FNPV. Details are presented in Technical Annex B7.1 and B7.2. The summary of the economic and financial analysis for the selected pavement intervention is presented in Table 3.1.

Table 3.1: Key Economic and Financial Figures

EIRR(Base case)	31.6%
NPV (12% Discount)	US\$ 79.9 million
EIRR (+10% cost & -10% benefits)	19.6%
EIRR (+15% cost & -15% benefits)	14.1%
FIRR (Base case)	16.0%
FNPV	US \$1.7 million

3.1.2 The switch value (increment in cost) that would cause the project not to be viable was determined as over 15%. Whereby the EIRR would be less than the discount rate (opportunity cost) of 12%.

3.2 Environmental and social impacts

Environment

3.2.1 The Proposed Project Road has been classified by the Bank as Category 1 due to the potential disruption of urban activities likely to be experienced during construction. The proposed project intervention will lead to temporary and in some cases permanent loss of business for certain socio-economic groups along the project corridor. Land take shall result in affecting compensable assets that include residential structures, graves and annexes to structures, public infrastructure, community assets, and crops. A summary of the ESIA and RAP have been prepared and were approved and posted on the Bank's website on 27 March 2015 and distributed to the Board on 13 April 2015 under reference ADF/BD/IF/2015/42.

3.2.2 The negative impacts of the project include; (i) Land take, social and economic disruptions during the construction phase involving business facilities, informal livelihoods activities, dwellings and social amenities; (ii) Disruption of transportation patterns during construction; (iii) Disruption of utility services provision during relocation of utilities in the construction corridor; (iv) Dust and fugitive emissions along the corridor from construction vehicles and equipment; (v) Disruption of drainage to residential and business premises along the corridor that may result in flooding; (vi) Damage to un-reinstated material sourcing areas and improper soil and construction waste disposal; (vii) Soil and water contamination from oil and fuel spills and possible decommissioning of a petrol station.

3.2.3 Mitigation measures for the impacts have been included in the Environmental and Social Management Plan (ESMP) which will be verified during design review. These include (i) Resettlement and Compensation Plan has been prepared for persons and properties that will be affected by the project; (ii) A Traffic Management Plan has been developed and will be updated to include a Contingency Plan, alternative routes at Mbagala area where there is a major bus terminus, a Communication Strategy for the public and corridor users and involvement of Traffic Police to ensure enforcement of traffic rules and construction diversions throughout the construction phase. (iii) The project design has included in the Project Implementation Structure, a Utility Working Group comprising of Heads of the various utility bodies including TANESCO, DAWASA, TTCL, etc. who will meet on a weekly basis on site to resolve issues relating to the relocation of utilities and minimize disruption of services. (iv) The Contractor shall develop a Dust Management Plan including routine watering of exposed trafficked surfaces, haulage routes and sprinklers for the crushing plant. (v) Management of earthworks during dry season and proper disposal of construction spoil to avoid

blocking drainage systems and canals. (vi) The Contractor shall rehabilitate the quarry and borrow sites used for the project. (vii) An Oil spill Management Plan shall be developed by the Contractor for the management of site and equipment and a decommissioning plan by the Municipality Environmental Office for the petrol station. The estimated cost for implementation of the ESMP is TZShs 98.89 million and the cost of monitoring TZShs 95.68 million.

3.2.4 The positive impacts of the proposed BRT system include; (i) Generation of employment opportunities to Dar es Salaam City residents with recruitment of approximately 600-800 persons during the peak construction months. (ii) Improved air quality and reduction of emissions along the road corridor during implementation by introduction of high capacity busses using cleaner fuels and moving passengers at faster speeds than the current congestion. (iii) Improved public transport safety for school children, women and persons with disabilities. (iv) Reduction of total bus / kilometers in the corridor; (v) Reduction of operational costs per passenger / kilometer in public transport along the DART corridor; (vi) Reduced travel time for corridor users.

Climate Change

3.2.5 One key positive impact of the BRT system is the reduction of greenhouse gas emissions once operational. A majority of the current public transport providers are *daladala* minibuses carrying less than 20 people at a time. The emissions by BRT trunk buses carrying 140 passengers are estimated at 2,100g/km (since they will be compliant to EURO III and/or above emission standards), while emissions of the feeder buses carrying 60 passengers are 1,250g/km. For example, calculating the amount of NOX emitted by the *daladala* fleet in Phase 2, a total of about 160.23 metric tons of pollutants are emitted per day compared to 55.987 metric tons of pollutant emitted by BRT buses per day. Compliance with Safeguard policies and strategies, the project is in climate change category 2.

3.2.6 Adaptation measures to increase climate resilience and reducing impacts of flooding on the proposed project improving storm water drainage in the corridor catchment to mitigate flooding; use of appropriate flood return periods for sizing of drainage structures; reinstatement and re-vegetation of material sources. In addition, trees will be planted beside the entire walk ways along the project corridor.

Furthermore, Climatic conditions used for the design of road infrastructure are generally to accommodate temperature fluctuations and rainfall patterns which affect the configuration and structural behaviors of bridges, pavement types and profiles, sizing of drainage structures taking into account flood return periods and preserving natural habitat. In this regard, the engineering design adopted for the project complies with the standards commensurate with the environment and climate change thus has inherent adaptation features. The asphaltic pavement structure is sound, the bridge configuration and thermal movement are adequately accommodated, the drainage structures are well designed and safety factors are also built in the design to accommodate extreme conditions.

Gender

In line with the Bank's Ten Year Strategy, and the Gender Strategy (2014-2018), the project has endeavored to mainstream gender and pay particular attention to women who will be affected by the BRT system. While implementation of the project will not discriminate or impact negatively on one particular gender, it is anticipated that, by design the BRT system will cause some structural shifts in how the urban transport service is going to be provided. The changes shall be in displacement of *daladala* operators by the new buses. Consultations with women *daladala* operators revealed that most women entrepreneurs were not fully informed about the impending changes and how they would participate in the new dispensation. Secondly, it also transpired that the removal of *daladalas* from the main city routes would affect fish mongering and agricultural produce which is a domain of most women.

In response to these structural changes, the project has included in the design several measures aimed at mitigating any negative impacts that may affect women operators and enhancing their participation in the new system. In context of improving some feeder roads funded by World Bank (23 km), some *daladala* operators who will have been removed from the BRT routes, will be given priority by Surface and Marine Transport Regulatory Authority (SUMATRA) to ply in the new paved feeder roads to the BRT system, among which will be at least 30 women owners of *daladalas* either already operating in the BRT routes or those who will choose to take advantage of this new dispensation. As for the women produce traders, DART has agreed to modify the specifications of some of the bus designs to accommodate the type of cargo the women carry to sell in the city including agricultural produce and fish.

Furthermore, the project will conduct workshops for women *daladala* operators to enhance their understanding and participation in the BRT system and buying of shares which will be floated. The workshop shall be implemented in collaboration with DART and SUMATRA. Among the economic empowerment and job opportunities coming up with the BRT system, women shall be allocated a 25% share of construction jobs, and 30% of jobs created during operations. In order to enhance the participation of women in the job opportunities, the contractors shall be required to produce codes of conduct which dispel any abuse by employer and co-workers of women employees.

Social

Among the most significant social economic outcomes of this project are the easement of city traffic congestions, improved safety for all road users through separation of NMT from vehicles, and removal of the many *daladalas* from the city streets. The project shall directly impact on individual incomes through creation of job opportunities both during construction and during operations. It is expected that approximately 700 jobs will be created during the peak construction period; and another 2500 jobs will be created during operations. These will come in a form of services in areas of ticketing, driving, mechanics, wardens, traffic controllers, security, cleaning, supplies and others. In addition, there will be jobs created in areas of auxiliary services such as ITC support, finance, etc.

With regard to communicable diseases, the project will conduct health and hygiene sensitization campaigns to the workers during construction and communities living within the immediate zone of influence. The sensitization activities to be carried out by a specialized service provider shall include awareness and prevention of the spread of HIV/AIDS and TB (in collaboration with TACAIDS); the dangers of people loitering on the footbridges which have become a leisure outlet and yet exposes them to carbon emissions from motor vehicles, and safety issues; and encouraging communities to use designated areas/facilities for dumping rubbish.

Road safety

The project will also include among its programs, a road safety campaign for both motorists including motor cyclists and communities utilizing the BRT services and general pedestrians on the dynamics and functioning of the BRT system and understanding of the road signaling. Furthermore, adequate street lighting to cater for the widened road corridor will be included in the design. There will be traffic lights installed at each of the pedestrian crossings for passengers utilizing the BRT system. Two footbridges shall be constructed at Mbagala and Mtoni to ease up crossing of roads by communities. The selection of the actual locations and design shall incorporate beneficiary recommendations. To ensure inclusive utilization of the road, all footbridges shall be provided with ramps for wheel chairs; traffic lights and walkways shall be fitted with features for recognition by the blind. In addition, the road design shall undergo a technical road safety audit to ensure compliance with safety measures.

Involuntary resettlement

Construction of the main BRT corridor and ancillary works shall result in land acquisition and relocation of properties, private and public assets and utilities. The proposed works will to a large extent follow the existing alignment but there will be an increase in the road carriage way width to

accommodate the four lanes. This shall result in affecting a total of 387 compensable assets that include residential structures, graves and annexes to structures, public infrastructure, community assets, and crops. The project shall affect approximately 679 persons (project affected persons (PAPs)) in 194 households. Out of these are 73 owned housing structures (16 owned by women) with 296 tenants. Among the tenants are 119 female heads of families. Among the affected persons are 12 vulnerable people among whom are 6 elderly, 3 chronically ill, 2 widows and 1 physically disabled person. During compensation and resettlement more attention will be paid to the vulnerable and female headed households to ensure that the project benefits are shared between and amongst family members and contribute to the welfare of the affected families and individuals. A Full Resettlement Action Plan has been prepared in compliance with the Bank's Involuntary Resettlement Policy and will be implemented before contractors take over sites. A total budget of TSh.26, 902,493,744 has been set aside for the RAP implementation.

4. IMPLEMENTATION

4.1 Implementation Arrangements

4.1.1 The Tanzania National Roads Agency (TANROADS) will be the executing Agency for the project that will procure and manage the BRT infrastructure contracts. The DART Agency will be responsible for procurement of services bus operators (private), fare collection system and ITS systems as well as overseeing operations of the BRT system. The DART agency was established under the Executive Agencies Act on May 25, 2007. The urban development Support Component will be implemented by the Department of Urban Development in the Prime Minister's Office, regional Administration and Local Government (PMO-RALG).

4.1.2 TANROADS is a semi-autonomous road agency of the Ministry of Works with the responsibility for the maintenance and development of the classified trunk and regional road networks. TANROADS reports directly to the Minister, Ministry of Works and DART Agency reports to the Permanent Secretary, PMO_RALG. The TANROADS Board, consisting of 5 private sector members and 4 government Senior Officers, is advisory to the Permanent Secretary in line with the National Executive Agencies Act No 30 of 1997 and TANROADS establishment order. TANROADS has the requisite organizational capacity to maintain and develop the classified trunk and regional road network in Tanzania. It has a wealth of experience in management of Bank funded projects and other Development Partners projects as well. TANROADS has proper procedures for procurement, accounting and supervision. The establishment consists of a Chief Executive with its functions divided among five Directorates of Maintenance, Projects, Planning, Business Support, and procurement and contracts control.

4.1.3 The Chief Executive of TANROADS shall also designate a BRT Unit and the Manager of the unit as coordinator for the day-to-day management of the project. The BRT Unit for Phase 1 is currently paid with funds provided by the World Bank who is funding that phase. The funding of the Unit under Phase 2 will come from the Technical Assistance and Capacity Building Component. The execution of Phase 1 maintains Project Steering Committee (PSC) comprising of various representations from relevant GoT departments which provide overall coordination of the project. The implementation of Phase 2 will have a Technical Committee and the steering committee to ensure smooth execution of the project. The committees will also have a Utility Working Group comprising of Heads of the various utility bodies including TANESCO, DAWASA and TTCL, who will meet on a weekly basis on site to resolve issues relating to the relocation of utilities. The Memorandum of understanding (MOU) between TANROADS and DART Agency will be prepared for smooth implementation of the project.

4.1.4 The road works will be undertaken by competent and experienced civil engineering works contractor, while the supervision of the civil works will be undertaken by experienced engineering consulting firm, all to be procured competitively. The Consultant in collaboration with TANROADS will supervise and monitor implementation of the environmental and social management plans DART Agency will monitor the implementation of RAP.

4.1.5 TANROADS will be responsible for Maintenance of the BRT lanes during operations and DART Agency would be responsible for overseeing BRT operations with the bus operators from the Private sector. The bus operator would be responsible to purchase adequate buses, operating and maintain bus fleet along with associated ITS systems and fare collection system.

4.1.6 Procurement:

The BRT project will be implemented as three main lots (Lots 1 and 2), as described earlier, and procured under separate procurement rules if one lot financed by co-financier. The AfDB rules will be used for Lots and components it finances.

All procurement of works and acquisition of consulting services financed by the Bank will be in accordance with the Bank's "*Rules and Procedures for Procurement of Goods and Works*", and "*Rules and Procedures for the Use of consultants*" both dated May 2008 and revised July 2012. All procurements shall be based on the relevant Bank Standard Bidding Documents and Request for Proposal. The project Procurement Plan has been prepared by the Executing Agency and approved by the Bank, copy is attached in Annex B3.

TANROADS will be responsible for the procurement of works and consultancy services. The resources, capacity, expertise and experience of TANROADS have been assessed and found to be adequate to carry out the procurement activities required for the project.

4.1.7 Financial Management and Disbursement Arrangements:

The assessment based on Bank's FM Implementation Guidelines-2014 concluded that the overall risk is "Substantial". However if the Proposed mitigation measures as per attached technical annex financial management report risk table, Annex 1, are implemented the Project will be able to (1) use the funds for the intended purposes in an efficient and economical way, (2) prepare accurate, reliable and timely periodic financial reports, and (3) safeguard the entities' assets.

In line with the Paris Declaration on Aid Effectiveness and Accra Agenda for Action, the project will substantially make use of the Country's financial management systems. The project's financial management transactions will be managed within the existing set-up at TANROADS. The day-to-day management will be as per the rules and procedures as stipulated in TANROADS' Financial Management Regulations of June 2013. The Director of Business Support assisted by the Head of Finance and Chief Accountant will be responsible for the Financial Management function of the Project. A designated Project Accountant with relevant knowledge and experience acceptable by the Bank will be part of the Project team and will be supervised by the Head of Finance and Chief Accountant under the leadership of the Director of Business support. The Project will prepare quarterly reports (Financial and Physical) which are in line with TANROADS reporting requirement and submit them to the Bank with 45 days after the end of each quarter. TANROADS has experience in managing Bank financed projects and other Development Partners like the World Bank, The Japanese International cooperation Agency (JICA), and European Union. None of the ongoing projects are appearing in our portfolio flagship, but there is big concern regarding the use of manual system which is prone to errors and omission, counterpart funds and high expenditure arrears (reflected in the CFRA 2014 and PEFA 2013). The Government is working with the IMF to address the issue of arrears and East Africa has conducted a study on arrears which identifies the challenges facing the Government of

Tanzania in ensuring timely payment and proposes options and recommendations to address them. TANROADS has been urged to utilize the computerized systems for projects by upgrading the system and or training accounting staff on the application of the Sun- Financial system.

The Internal Audit Department will audit the project financial transactions at least once annually. The internal audit reports will be shared with the Bank during supervision missions.

The project financial statements will be prepared within three (3) months after the closure of every financial year and presented to external auditors. The project audit will be conducted by the Controller and Auditor General (CAG) or a Private Audit firm appointed by CAG and agreed with the Bank based on the Bank's audit terms of reference. The audit report, complete with a Management Letter, will be submitted to the Bank not later than six months after the end of the financial year. The project will also be subjected to a Value for Money (VfM) audit once at Mid Term or when substantial work has been done. The cost of the audit will be borne by the project if undertaken by an Auditing Firm.

The Project will mainly use the Direct Payment method to pay contractors/suppliers whereas the Special Account method will be used for financing all eligible operation and capacity building costs. The four disbursement methods are prescribed in the Disbursement Handbook which can be accessed from the Bank's website.

Special Accounts in USD and local currency will be opened at a bank acceptable to the Bank. The Government of Tanzania will also open an account in local currency for the counterpart funds. The Bank will issue a disbursement letter, which will provide specific guidelines on key disbursement procedures and practices. The content of the disbursement letter will be discussed during negotiations.

4.2 Monitoring

4.2.1 The overall procurement, project supervision and monitoring falls under the Chief Executive of TANROADS. The authority is well organized with qualified and experienced professionals. TANROADS will assign a project Manager under the BRT unit to coordinator for the close follow up and timely response to correspondence forwarded from the Consultants and Contractor. The Authority will attend tripartite monthly progress meetings and conduct site visits to discuss and address issues related to progress of works. TANROADS shall also be responsible for monitoring the Result Based Logical Framework in consultation with appropriate institutions. The monitoring of environmental and social mitigation measures will lie with Environmental and Social Unit of TANROADS and DART Agency respectively and the National Environmental Management Council (NEMC). On the Financial Management and Auditing aspects, the existing accounting and reporting systems of the authority meet the Bank's minimum requirements to provide, with reasonable assurance, accurate and timely information on the status of the project required by the Bank. In addition to the Bank's implementation support and review of the performance of the project through periodic visits and during the mid-term review, TANROADS will produce Quarterly Borrowers Progress Reports and submit to the Bank. The Bank's implementation monitoring time frame is indicated in Table 4.1.

Table 4.1 – Implementation Monitoring Timeframe

<u>Timeframe</u>	<u>Milestone</u>	<u>Monitoring process / feedback loop</u>
Q2 – 2016	Project Launching	Supervision and Progress Report
Q3 – 2016	Procurement of Civil Works Completed	Procurement Plan/Progress Report
Q4 – 2017	30% of Civil Works completed mid-term review	Midterm Review & Progress Report
Q4 – 2018	Substantial completion of civil works	Supervision and Progress Report
Q4 – 2018	Completion of Civil works	Supervision and Progress Report
Q4 – 2019	End of Defects Liability period	Supervision and Progress Report
Q4 – 2020	Project Completion	Project Completion Report

4.3 Governance

4.3.1 Tanzania has mixed achieved governance results, attaining its best score for political stability and lowest for regulatory quality. The Mo Ibrahim Index of African Governance shows that in 2014, Tanzania overall score of was 58.9 (out of the highest possible score of 100) which is higher than African average of 51.5 and ranked 15th out 52 African countries. Similarly, Tanzania's ranking in the Bank Group's overall Policy and Institutional Assessment (CPIA) rating has remained at 4 for the past five years, while its governance rating has remained at 3.8.

4.3.2 In general, the government is undertaking a number of reforms to improve governance including a series of public financial management (PFM) and public sector reforms supported by development partners. The Government has established an institution namely Prevention and Combating of Corruption Bureau (PCCB) with a view to enhance accountability in government as well as undertaking programmes that strengthening legal and judicial reforms and revamping the country's fiduciary environment. The Bank is also supporting the ongoing efforts through the Institutional Support for Good Governance (ISP II).

4.3.3 For the sector governance, the National Transport Policy describes how the transport sector will contribute to national goals and objectives and facilitate the optimal development of the national economy. The vision of the policy is "to have efficient and cost-effective domestic and international transport services to all segments of the population and sectors of the national economy with maximum safety and minimum environmental degradations. Among the goals of the National transport policy is to have an appropriate mechanisms in place to ensure effective intermodal coordination and communication between the user, the operator, the regulator and the government on all transport questions and issues. The Government has specific goals designed to address high transport costs and access restrictions attributable to sector inefficiencies including improving urban mobility and reducing congestion. In pursuance of the above, a strategy has been formulated to provide the framework for implementing the directives of the national transport policy. In addition, the government has established an autonomous DART Agency through an act of parliament to specifically manage and oversee the Bus rapid Transit operations in Dar es salaam City

4.3.4 At project level, this project will be implemented by Government Agency (TANROADS) using the Country's Public Financial Management (PMS) systems along with stipulated Bank's system hence it will adopt all the Governance and Anti -Corruption policies and guidelines of the Country. The Executive Board of TANROADS will provide an oversight role with a mandate from the Ministry Works. The Bank will provide some oversight especially during supervision missions and follow up meetings. All the Anti-Corruption measures that pertain to TANROADS and the Government will apply to this project.

4.3.5 In the procurement process for international Competitive bidding, governance risk will be mitigated through the Bank's strict application of its standard rules and procedures. The banks supervision missions and financial audits will ensure conformity between the terms of reference, services provided, works done, disbursements made and loan agreement

4.3.6 The specific governance risk mitigation measures of the project include: (i) the appointment of independent Auditor to ensure that funds are used efficiently and for the intended purposes; and (ii) Bank prior review and approval of all project procurement activities.

4.4 Sustainability

4.4.1 For effective management of the BRT system, the GOT has established the DART Agency dedicated for management of all BRT system operations including overseeing the private Bus operator

and revenue collections. On the other hand TANROADS will be responsible for maintaining road infrastructure (particularly the bus ways) through the road fund. The contractor will be responsible for road maintenance during the construction and the one year defect liability period. Key to the financial sustainability of the system is that passenger fares can be appropriately adjusted when necessary. The financial model developed to assess the viability of the system used a TSh 450 flat fare for a single trunk, feeder bus trip and a TSh 600 fare for a combined trunk and feeder bus trip. These fares are comparable with what current *daladala* (mini buses) users are paying. That is, they are slightly higher for short trips, but considerably cheaper for long distance trips. Bus urban transport fares are regulated by SUMATRA (the Surface and Marine Transport Regulator). DART Agency, with the help of the fund manager, will make system revenue and expenditure forecasts and based on them propose fare adjustments, if needed, for consideration by SUMATRA. SUMATRA is an autonomous regulatory authority and has a broad-based Board of Directors including private sector representatives. As per its creating law when considering proposed fare adjustments it needs to take into account both system operating costs and affordability. Judging from the performance of SUMATRA, there is confidence that DART fare adjustments will be dealt with correctly and efficiently.

4.4.2 The road sub sector has undergone reforms that include the establishment of TANROADS for the management and maintenance of roads and the Road Funds Board (RFB) to manage the Road Fund (RF). The RF is ring fenced financing from fuel levies, transit fees and overloading charges for road maintenance and its revenues have increased two times from over the last seven years from TZS 255.6 billion in 2008/9 financial year to over TZS 524.01 billion in 2014/15. The sustainability of the project will depend largely on the ability of TANROADS to implement timely maintenance of the roads infrastructure. Part of revenue from the BRT system would be dedicated for other BRT infrastructure maintenance. The fuel levy is at the level of approximately 0.16 per liter, slightly higher than the optimal for maintenance of USD 0.15 per liter and therefore adequately funding the country's routine maintenance requirements and part of periodic maintenance needs by 80%. To fully fund the maintenance gap, the government is planning to expand the fuel levy tax base to include other sources and an increase in fuel levy.

4.4.3 In addition, performance-based maintenance contracts for the bus ways and traffic signals are proposed to be effected. Funding for the bus way maintenance contract should be provided by the Road Fund since bus operations will contribute substantially to the fuel levy and the financial requirement for the routine and periodic maintenance of the Project is within the financing capacity of the Road Fund.

4.5 Risk management

The design of the project assumes several risks which might affect the attainment of project objectives. The risks and mitigation measures are discussed as follows:

4.5.1 Impact Risk:

Unfavorable macro-economic conditions and Non-conducive business environment in Tanzania is likely to undermine private consumption due to high inflation arising from high electricity and fuel costs. The GoT has embarked on aggressive regulation of power tariffs and fuel prices to curb unnecessary increases in energy costs and strongly emphasizes fast-tracking of proposed infrastructural developments and accelerated budget execution. These measures are intended to spur growth and expand the economy to facilitate lower debt to GDP ratio resulting in increased aggregate demand and investor confidence.

4.5.2 Outcome Risks:

Sustainability of investments in the city transport network expansion will provide the needed capacity to meet the public transport demand in the long-term thereby reducing the chronic long travel times on

grid road network in Dar es Salaam. Continued prioritization of investments in the Country's transport infrastructure in the national budget by the Government coupled with continued donor support to infrastructure development, and GoT's plans to raise additional funds through infrastructure bonds will no doubt bridge the funding gap needed for sustained investments in the city public transport network. Bus urban transport fares are regulated by SUMATRA (the Surface and Marine Transport Regulator) taking into account both system's operating costs and affordability.

4.5.3 Output/implementation Risks:

(i) *Project implementation:* Delays in fulfilment of conditions precedent to first disbursement can delay project implementation and result in escalation of costs. The preparation of the project has ensured that conditions precedents to first disbursement are kept to a minimum and are aligned with the implementation schedule. Furthermore implementation delay will be mitigated by: recruiting suitably experienced contracting parties; use of Advance Contracting procedures; and close supervision by the Executing Agency and the Bank during project implementation. The Bank's TZFO is strategically positioned to provide proactive support to the Government to assure successful implementation of the project.

(ii) *Implementation of RAP* may cause delays in the project. The existence of well-prepared RAP and the Government's commitment to start the process of compensating the PAPs well before project start will significantly minimize this risk.

(iii) *Cost Overrun:* is another risk which the project is likely to face. This risk will be mitigated by use of recent data for cost estimation and provision of adequate contingencies within the cost estimates.

(iv) *Operational:* the risk due to DART agency failure to procure the services (bus operator and fare collector) from private sector and the affordability risk. These risks will be addressed by using procurement process that is fully transparent. Public Procurement Regulatory Authority (PPRA) will conduct procurement audits. And SUMATRA will regulate transport fares.

4.6 Knowledge Building

4.6.1 This project provides the opportunity for new skills to be developed within the sector. It enables the Bank to intervene in building the knowledge capacity of the sector in a manner that empowers the sector agencies to better conceive, plan, design and implement BRT projects.

4.6.2 Congestion problems cannot sustainably be addressed by building new roads and expansion of roadway capacity alone. There is need for improved public transport demand management practices to complement physical measures aimed at tackling traffic congestion as well as improve mixed traffic management. In this regard, the introduction of a bus based mass rapid transit system and a traffic management and capacity building component in this project has been provided for under the project focusing on simpler methods that would quickly result into improved overall traffic flow and that would not require significant capital intervention. Illustrations on how BRT system impact on reductions in GHG emissions over time is expected to generate ideas and a framework for addressing public Transport problem in other African cities facing similar challenges. The monitoring and evaluation component framework under this project has been designed to provide mechanism for organizational learning to promote best practices in urban public transport management

5. LEGAL INSTRUMENTS AND AUTHORITY

5.1 Legal Instrument

The financing instruments to be used for this operation are an ADB Loan of USD 97.42 million and an AGTF Loan of USD 44.29 million to the United Republic of Tanzania. The loans will be governed by two Loan Agreements to be signed between the Bank and the United Republic of Tanzania. In the case of the AGTF Loan, the Bank will sign the Loan Agreement in its capacity as the administrator of the AGTF.

5.2 Conditions associated with Bank's Intervention

A. Conditions Precedent to Entry into Force of the Loan Agreements:

The Loan Agreements shall enter into force subject to fulfilment by the Borrower of the provisions of Section 12.01 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements of the ADB applicable to Sovereign Entities.

B. Conditions Precedent to First Disbursement of the Loans:

The obligations of the Bank to make the first disbursement of the each of the Loans shall be conditional upon the entry into force of the relevant Loan Agreement and the fulfilment by the Borrower, in form and substance satisfactory to the Bank, of the following conditions:

- (i) Submission of an updated RAP with a Works and Compensation Schedule detailing a timeframe for the compensation and/or resettlement of PAPs;
- (ii) The opening of a special account denominated in USD in a bank acceptable to the Bank for receipt of part of the proceeds of the Loan;
- (iii) Assignment to the Project of a Project Accountant with qualifications and experience acceptable to the Bank.

C. Other conditions of the loan

The Borrower will provide evidence in form and substance acceptable to the Bank of the following:

- i) Prior to the commencement of civil works on any civil works, having fully compensated and/or resettled all Project Affected Persons affected by such works in accordance with the ARAP.
- ii) Co-option of representatives of utility companies (TANESCO, DAWSACO and TTCL, onto the existing Project Steering Committee not later than three [3] months from the date of signature of the Loan Agreement.

iii) Undertakings by the Borrower

The Borrower will make an undertaking under the Loan Agreements as follows:

- (i) To conclude, within 30 months of signature of the Loan Agreement, a Service Provision Contract between DART and the chosen service provider for Phase II; and
- (ii) Carry out, and cause its contractors to carry out, the project in accordance with: (a) Bank's rules and procedures; (b) national legislation; and (c) the recommendations, requirements and procedures set forth in the ESMP prepared for the project;

- (iii) TANROADS to upgrade Epicor 7.1 to version 10 which can accommodate Project activities. As a short-term solution TANROADS shall train accounting staff on the application of the currently available Sun Financial system which is capable of meeting all Projects financial management requirements of the Bank and other development partners.

5.3 Compliance with Bank Policies

This project complies with all applicable Bank policies.

6. RECOMMENDATION

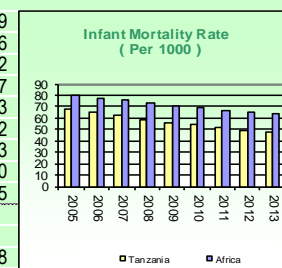
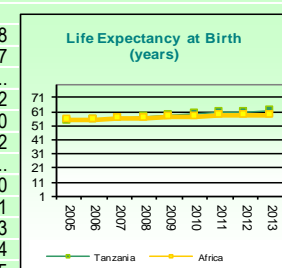
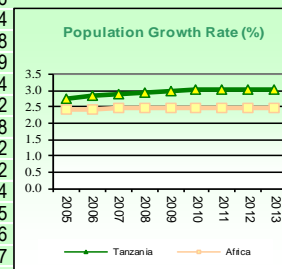
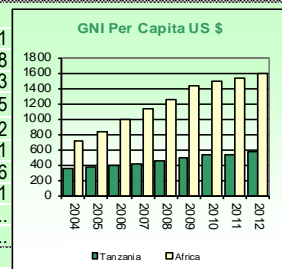
6.1 Implementation of the project will enhance mobility in the City of Dar es salaam particularly along the project corridor and will improve accessibility to socio economic activities by reduction of travel time and transport costs.

6.2 In general, the project has been well conceived and is technically feasible, socially and environmentally sustainable, and economically justified and viable.

6.3 Management recommends that the Board of Directors approve the proposed ADB loan of USD 97.42 million and the AGTF loan of USD 44.29 million to the United Republic of Tanzania for the purposes of financing the project described in this report subject to the conditions stipulated above.

APPENDIX I: COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATOR

	Year	Tanzania	Africa	Develo- ping Countries	Develo- ped Countries
Basic Indicators					
Area ('000 Km²)	2011	947	30,323	98,458	35,811
Total Population (millions)	2013	49.3	1,109.0	5,909.3	1,252.8
Urban Population (% of Total)	2013	27.6	40.2	47.7	78.3
Population Density (per Km²)	2013	49.5	46.9	70.7	23.5
GNI per Capita (US \$)	2012	570	1,719	3,815	38,412
Labor Force Participation - Total (%)	2012-2013	46.8	37.4	67.9	72.1
Labor Force Participation - Female (%)	2012-2013	49.6	42.5	38.6	44.6
Gender -Related Development Index Value	2007-2011	0.527	0.502	0.694	0.911
Human Develop. Index (Rank among 187 countries)	2012	152
Popul. Living Below \$ 1.25 a Day (% of Population)	2008-2011	67.9	40.0	20.6	...
Demographic Indicators					
Population Growth Rate - Total (%)	2013	3.0	2.5	1.3	0.3
Population Growth Rate - Urban (%)	2013	4.7	3.4	2.5	0.6
Population < 15 years (%)	2013	44.9	40.9	28.3	16.4
Population ≥ 65 years (%)	2013	3.2	3.5	6.1	16.8
Dependency Ratio (%)	2013	92.9	77.9	52.4	49.9
Sex Ratio (per 100 female)	2013	100.0	100.0	103.3	94.4
Female Population 15-49 years (% of total populatic	2013	22.7	24.0	53.1	45.2
Life Expectancy at Birth - Total (years)	2013	61.5	59.2	68.4	77.8
Life Expectancy at Birth - Female (years)	2013	57.4	60.3	70.3	81.2
Crude Birth Rate (per 1,000)	2013	39.2	34.8	21.2	11.2
Crude Death Rate (per 1,000)	2013	8.5	10.4	7.6	10.4
Infant Mortality Rate (per 1,000)	2013	48.0	61.9	39.8	5.5
Child Mortality Rate (per 1,000)	2013	70.7	97.4	56.3	6.6
Total Fertility Rate (per woman)	2013	5.2	4.6	2.6	1.7
Maternal Mortality Rate (per 100,000)	2010	460.0	415.3	240.0	16.0
Women Using Contraception (%)	2013	38.4	34.9	62.6	71.3
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2011	0.8	47.1	117.8	297.8
Nurses (per 100,000 people)*	2004-2011	24.2	132.6	202.7	842.7
Births attended by Trained Health Personnel (%)	2006-2011	48.9	52.6	66.3	...
Access to Safe Water (% of Population)	2012	53.2	68.8	87.2	99.2
Access to Health Services (% of Population)	2000	42.0	65.2	80.0	100.0
Access to Sanitation (% of Population)	2012	12.2	39.4	56.9	96.2
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2012	5.1	3.9	1.2	...
Incidence of Tuberculosis (per 100,000)	2012	165.0	223.6	144.0	23.0
Child Immunization Against Tuberculosis (%)	2012	99.0	83.0	81.5	96.1
Child Immunization Against Measles (%)	2012	97.0	74.0	83.0	94.3
Underweight Children (% of children under 5 years)	2005-2012	16.2	19.7	17.0	1.4
Daily Calorie Supply per Capita	2009	2,363	2,481	2,675	3,285
Public Expenditure on Health (as % of GDP)	2011-2012	2.9	2.9	3.0	7.5
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2012	93.0	101.9	109.4	100.9
Primary School - Female	2012	94.5	97.9	107.6	100.6
Secondary School - Total	2012	35.0	47.4	69.1	100.2
Secondary School - Female	2012	32.6	44.0	67.8	99.7
Primary School Female Teaching Staff (% of Total)	2012	51.6	46.6	58.0	84.3
Adult literacy Rate - Total (%)	2010-2012	67.8	62.0	80.3	99.2
Adult literacy Rate - Male (%)	2010-2012	75.5	70.7	85.9	99.3
Adult literacy Rate - Female (%)	2010-2012	60.8	53.7	74.9	99.0
Percentage of GDP Spent on Education	2010-2012	6.2	5.3	4.3	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	13.1	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	0.2	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	37.3	23.0	28.2	35.0
Per Capita CO2 Emissions (metric tons)	2010	0.2	1.2	3.0	11.6



Sources: AfDB Statistics Department Databases;

last update :

May 2014

United Nations Population Division, World Population Prospects: The 2012 Revision;

World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

For any given interval, the value refers to the most recent year available during the period

Note : n.a. : Not Applicable ; ... : Data Not Available.

APPENDIX II: TABLE OF ADB'S PORTFOLIO IN TANZANIA

March 2015

		SOURCE OF FINANCE	APPROVAL DATE	CLOSING DATE	APPROVED AMOUNT (UA million)	TOTAL DISBURSED	DISB RATE
A. NATIONAL OPERATIONS:							
AGRICULTURE							
1	Marketing Infrastructure, Value Addition and Rural Finance Program (MIVARFP)	ADF Loan	29-Jun-2011	31-Dec-2016	40.00	10.80	27.0%
2	Bagamoyo Sugar Project Standby Facility	ADB Loan	23-Apr-2014		77.28	0.00	0.0%
	Bagamoyo Sugar Project	ADB Loan	23-Apr-2014		77.28	0.00	0.0%
SUB-TOTAL (AGRICULTURE)					194.56	10.80	5.5%
TRANSPORT							
2	Singida-Minjingu-Babati Road Upgrading	ADF Loan	17 Sep 2007	30-Jun-2015	60.00	55.34	92.2%
3	Tanzania Road Sector Support Programme I	ADF Loan	2-Dec-2009	31-Dec-2015	152.00	84.55	55.6%
4	Tanzania Road Sector Support Programme II	ADF Loan	5-Apr-2012	30-Sep-2017	140.00	23.16	16.5%
SUB-TOTAL (TRANSPORT)					352.00	163.05	46.3%
WATER SUPPLY/SANITATION							
5	Rural Water Supply and Sanitation Programme II	ADF Loan	15-Sep-2010	31-Dec-2015	59.00	53.50	90.7%
		RWSSF Grant	15-Sep-2010	31-Dec-2015	5.80	5.80	100.0%
6	Zanzibar Water & Sanitation Project	ADF Loan	11-Nov-2008	31-Mar-2015	25.00	22.36	89.5%
		RWSSF Grant	11-Nov-2008	31-Mar-2015	2.78	2.75	98.9%
7	Zanzibar Urban Water & Sanitation Project	ADF Loan	19-Dec-2012	31-Dec-2017	14.00	0.41	2.9%
SUB-TOTAL (WATER SUP/SANIT)					106.59	84.82	79.6%
ENERGY							
8	Electricity V Project	ADF Loan	14 Dec. 2007	30-Jun-2015	28.68	13.46	46.9%
		ADF Grant	14 Dec. 2007	30-Jun-2015	1.32	1.01	76.2%
9	Iringa-Shinyanga Transmission Line	ADF Loan	26-Oct-2010	31-Oct-2016	45.36	8.21	18.1%
SUB-TOTAL (ENERGY)					75.36	22.67	30.1%
SOCIAL							
10	Support to Maternal Mortality Reduction Project	ADF Loan	11-Oct-2006	31-Dec-2014	40.00	37.33	93.3%
11	Small Entrepreneurs Loan Facility (SELF) II	ADF Loan	10-May-2010	31-Dec-2015	20.00	18.75	93.8%
12	Alternative Learning and Skills Development (ALSD) II	ADF Loan	29-Jun-2011	31-Dec-2016	15.00	1.52	10.1%
13	Support to Technical Vocational Education and Training & Teacher Education	ADF Loan	2-Apr-2014	31-Dec-2019	34.00	0.00	0.0%
SUB-TOTAL (SOCIAL)					109.00	57.61	52.8%
MULTI-SECTOR							
14	CRDB SME Partial Credit Guarantee Facility	ADB Loan	22-Jul-2008	1-Apr-2016	1.39	1.37	98.6%
15	Institutional Support for Good Governance (ISPGG) II	ADF Loan	20-Sep-2010	31-Dec-2014	5.20	4.70	90.4%
16	EFC Tanzania- Fund for Africa Private Sector Assistance (FAPA)	FAPA Grant	1-Jun-2012		0.62	0.00	0.0%
SUB-TOTAL (MULTI SECTOR)					7.21	6.07	84.2%
TOTAL (NATIONAL)					844.71	345.01	40.8%
B. MULTINATIONAL OPERATIONS:							
1	Dsm-Isaka-Kigali/Keza-Musongati Railway Phase2	ADF Loan	17-Nov-2009	31-Dec-2015	1.66	0.99	59.6%
2	Arusha - Namanga - Athi River Rd Upgr. (TZ/Ken)	ADF Loan	13-Dec-2006	31-Dec-2014	0.54	0.30	55.1%
		ADF Grant	18 Dec. 2006	31-Dec-2014	3.50	3.27	93.5%
3	East Africa Transport and Trade Facilitation (EAC)	ADF Grant	29 Nov. 2006	30-Nov-2015	6.20	3.37	54.3%
4	Transit Transport Facilitation Agency (TTFA)	NEPAD IPPF Grant	22-Dec-2010	31-Dec-2015	0.32	0.19	59.0%
5	Arusha-Holili/Taveta-Voi Road Project	ADF Loan	16-Apr-2013	31-Dec-2018	79.90	0.00	0.0%
6	Lake Victoria Water Supply & Sanitation Programme Phase II	ADF Grant	17-Dec-2010	31-Dec-2015	17.48	3.90	22.3%
7	The EAC Payments & Settlement Systems Integration Project (EAC - PSSIP)	ADF Grant	5-Dec-2012	30-Jan-2017	15.00	0.82	5.5%
8	Regional Rusumo Hydropower	ADF Loan	27-Nov-2013	31-Aug-2019	22.41	0.00	0.0%
9	EAC Railway Sector Enhancement Project	NEPAD IPPF Grant	29-Jun-2012	31-Dec-2015	0.82	0.28	34.0%
SUB TOTAL (MULTINATIONAL)					147.83	13.11	8.9%
GRAND TOTAL (NATIONAL AND MULTINATIONAL)					992.54	358.12	36.1%

APPENDIX III: RELATED PROJECTS FINANCED BY DONORS

Project Name	Donor	Region	Amount(USD)
Upgrading of Marangu-Mkuu and Mwika-Kilacha Road Sections (32 Km)	NORAD	Kilimanjaro	19.30
Upgrading of Ndundu-Somanga Road (60 Km)	KUWAIT/OFID/GOT	Coastal	6.60
Rehabilitation Korogwe-Mkumbara – Same Road (172 Km)	IDA	Tanga	57.40
Bus Rapid Transit – Dar Es Salaam – Phase 1: 20.9km	IDA	Dar-es-Salaam	290.0
Rehabilitation of Tanga-Hororo Road (65 Km)	MCC	Tanga	54.09
Upgrading of Namtumbo-Songea Road (71.4 Km)	MCC	Ruvuma	50.90
Construction of Malagarasi Bridge : Design and Build	S Korea	Kigoma	25.00
Rehabilitation of Arusha – Minjingu (98km)	IDA	Arusha	52.50
Upgrading of Paramiho-Mbinga Road (78km)	MCC	Ruvuma	59.63
Upgrading of Laela-Sumbawanga Road (95.3km)	MCC	Rukwa	97.14
Upgrading of Ikana-Laela Road (6x.2km)	MCC	Mbeya/Rukwa	68.00
Upgrading of Tunduma-Ikana Road (63.7km)	MCC	Mbeya	66.90
Upgrading of KigomaKidawe-Uvinza Road (76.6km)	ABUDHABI	Arusha	60.99
Rehabilitation of ChalinzeSegera-Tanga Road	DANIDA	Tanga	109.22
Rehabilitation of Iyovi-Iringa Road (150km)	DANIDA	Iringa	105.86
Rehabilitation of Iringa-Mafinga Road (69km)	DANIDA	Iringa	53.51
Widening of New Bagamoyo Road	JICA	Dar-es-Salaam	54.17
Construction of Rusumo Bridge	JICA	Kagera	18.14
TOTAL		USD	1,269.35

APPENDIX IV: Details of project Costs

Table 1. Project Cost Breakdown by Component and Source (USD million)

Component	Funding Source			
	AfDB	AGTF	GoT	TOTAL
A. Civil Work				
A1. Lot 1: Kilwa Road and Chang'ombe/Kawawa road	55.34	25.15	0.00	80.49
A2. Lot 2: Terminals/Depots/Feeder Stations/park and ride facilities	16.01	7.28	0.00	23.28
B. Consultancy Services				
B1. Design Review/Supervision of Lot 1	2.25	1.02	0.00	3.27
B2. Design Review/Supervision Lot 2	0.64	0.29	0.00	0.93
B4. Feasibility and Detailed design of critical Intersections	1.93	0.88	0.00	2.81
B5. Road Safety awareness and audit	0.48	0.22	0.00	0.70
B6. HIV/AIDS Sensitization	0.48	0.22	0.00	0.70
B7. Baseline Data Collection and ESMP Monitoring	0.48	0.22	0.00	0.70
B8. Technical and financial Audit Services	0.48	0.22	0.00	0.70
C. Traffic Management and capacity Building	1.56	0.71	0.00	2.27
D. Technical assistance and capacity building	2.19	0.99	0.00	3.18
E. Urban Development Support	1.45	0.66	0.00	2.11
F Compensation and Resettlement	0.00	0.00	15.04	15.04
Base Cost	83.29	37.86	15.04	136.19
Physical contingency (10%)	8.33	3.79	1.50	13.62
Price Escalation (3% FC, 7% LC)	5.83	2.65	1.05	9.53
Total	97.45	44.29	17.61	159.32

APPENDIX V The BRT Project Map – Phase 1 to 6

