African Water Facility
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Mobilising Resources for Water in Africa
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REPUBLIC OF ZAMBIA

Feasibility Studies and Detailed Designs for Integrated and Sustainable Urban Sanitation in Provincial Towns

Appraisal Report

2020

	Team Leader:	Franz Höllhuber, Principal Water and Sanitation Specialist	AHWS/AWF
Appraisal Team	Team Members:	Herbert Chinokoro, Senior Water & Sanitation Specialist	COZM
		Natan Masauso Jere, Procurement Officer	COZM
		Maurice Barasa Wanyama, Senior Financial Management Specialist	RDGS.4
		Collins Annoh, Sanitation Specialist Consultant	AHWS/AWF
		Rahel Ebba, Principal Sanitation Specialist	AWF
		Cecil Nundwe, Pr. Water Resources Managmt. Officer	AWF / RDGS
	Sector Manager:	Omari Mwinjaka	AHWS/AWF
	Country Manager:	Mary M. Monyau	COZM
	Sector Director:	Gladys Wambui Gichuri	AHWS/AWF
	Regional Director:	Josephine Ngure	RDGS

African Water Facility | Facilité africaine de l'eau
African Development Bank | Banque africaine de développement
BP 1387 Abidjan 01, Côte d'Ivoire, Immeuble CCIA,
Avenue Jean Paul II | CCIA 10th Floor, 10 R
africanwaterfacility@afdb.org
www.africanwaterfacilty.org

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ABBREVIATIONS

AfDB	-	African Development Bank
ADF	-	African Development Fund
BPM	-	Bank Procurement Method
CBO	-	Community Based Organization
CSO	-	Central Statistics Office
CUs	-	Commercial Utilities
DEWATS	-	Decentralized Wastewater Treatment System
DPs	-	Development Partners
EA	-	Executing Agency
ESIA	-	Environmental and Social Impact Assessment
EUR	-	Euro
FGD	-	Focus Group Discussion
FM	-	Financial Management
FMP	-	Facilities Management Plan
FS	-	Faecal Sludge
FSM	-	Faecal Sludge Management
GRZ	-	Government of Republic of Zambia
ICB	-	International Competitive Bidding
IWRM	-	Integrated Water Resources Management
JMP	-	Joint Monitoring Program
KAP	-	Knowledge, Attitude and Practices
M&E	-	Monitoring & Evaluation
MDG	-	Millennium Development Goal
MoA	-	Ministry of Agriculture
MoEn	-	Ministry of Energy
MoH	-	Ministry of Health
MWDSEP	-	Ministry of Water Development, Sanitation and Environmental Protection
NRWSSP	-	National Rural Water Supply and Sanitation Program
NUWSSP	-	National Urban Water Supply and Sanitation Program (2011-2030)
NWASCO	-	National Water Supply and Sanitation Council
NCB	-	National Competitive Bidding
NDP	-	National Development Plan
NGO	-	Non-Governmental Organization
NWP	-	National Water Policy
O&M	-	Operation & Maintenance
OSS	-	On Site Sanitation
PCR	-	Project Completion Report
PCU	-	Project Coordination Unit
PIU	-	Project Implementation Unit
PSC	-	Project Steering Committee
RBLF	-	Result Based Logical Framework
RPS	-	Recipient Procurement System
SDG	-	Sustainable Development Goal

SESA	-	Strategic Social and Environmental Assessment
SS	-	Sewage Sludge
ToR	-	Terms of Reference
USD	-	United States Dollars
WARMA	-	Water Resources Management Authority
WB	-	World Bank
WHO	-	World Health Organization
WSS	-	Water Supply and Sanitation
ZEMA	-	Zambia Environmental Management Agency

CURRENCY

Local Currency	:	Zambian Kwacha (ZMW)
1 Euro (EUR, €)	:	15.00 ZMW (ADB Exchange Rate August 2018)
		0.84 UA

LOGICAL FRAMEWORK ANALYSIS

COUNTRY AND TITLE OF THE PROJECT: REPUBLIC OF ZAMBIA – FEASIBILITY STUDIES AND ENGINEERING DESIGNS FOR INTEGRATED AND SUSTAINABLE URBAN SANITATION IN PROVINCIAL TOWNS

PURPOSE OF THE PROJECT: TO CONTRIBUTE TO INCREASE ACCESS TO SUSTAINABLE AND INCLUSIVE FAECAL SLUDGE MANAGEMENT SERVICES IN URBAN AREAS.

TEGRATED		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Baseline	Target		
IMPACT	Contribute to improved health and quality of life of the urban population through increased access to sustainable sanitation services.	1. Under-five mortality rate per 1,000 live births in Zambia.	1. 64% in 2018.	1. < 50% by 2030.	1. MOH/WHO Reports. 2. Zambia Central Statistics Office and Living Conditions Monitoring Survey Data.	**Risk**: Lack of political support and Government continued interest in FSM. **Mitigation**: Government and all actors to ensure continuous dialogue and transparency.
OUTCOMES	1. Contribute towards increased access to sustainable and inclusive Faecal Sludge Management (FSM) services and hygiene in urban centres.	1.1 Number of urban settlements with feasibility studies, designs and investment plans prepared based on City Wide Inclusive Sanitation (CWIS) approach. 1.2 Number of people (at least 30% of which is poor) that is likely to benefit from improved access to inclusive and sustainable sanitation, including improved FSM services (storage, collection, conveyance, treatment, and reuse/disposal	1.1 Nil in 2019. 1.2 Nil in 2019.	1.1 12 by 2023. 1.2 2.4 million by 2023.	1. NWASCO Sector Reports, 2. Project Progress, Monitoring & Evaluation Reports. 3. GZLSS Reports. 4. Commercial Utilities' Reports.	**Risk:** Community resistance to behaviour change regarding improved FSM and hygienic sanitation practices. **Mitigation**: Community sensitization. Increased social marketing and promotion of products/services by focusing on local supply chain; and media involvement in hygiene and sanitation related activities. Adoption of Demand Response Approach for selection of appropriate and sustainable technologies.
	2. Contribute towards increased investments in FS management.	2.1 Increase in financial commitments/pledges for CWIS/FSM investments in unsewered urban settlements	2.1 Nil in 2019.	2.1 90 million by 2024.		

	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Baseline (2015)	Target		
OUTPUTS	**Component 1: Feasibility Studies and Engineering Design** 1. Preparatory and feasibility studies undertaken. 2. Preliminary engineering designs and related financial analyses and ESIA Scoping completed. 3. Final engineering designs, tender documentation, ESIAs and plans completed.	1. No. of preparatory and feasibility study reports prepared and approved. 2. No. of approved FSM standard/preliminary designs / scoping reports. 3. No. of approved FSM final designs/tender documents/ SESA & ESIAs/ management plans.	1. Nil. 2. Nil. 3. Nil.	1. 12 by 2023. 2. 12 /12 / 12 by 2023. 3. 12/12/12/12 by 2023.	1. Project Progress Reports. 2. NWASCO Sector Reports 3. Commercial Utilities' Reports.	**Risk**: a) Unavailability of land for selection and design of FSM infrastructure. b) Inadequate assessments and design of FSM Infrastructure and services. **Mitigation:** a) Government to commit to allocate land for the purpose. b) Field verification through community sampling and surveys, and rigorous selection criteria for consultancy acquisition.
	Component 2: Project Management 1. Project Management Support provided. 2. Detailed procurement and implementation plans approved and implemented; and project reports prepared and submitted. 3. Stakeholder Workshops (Launch, Validation & SI Dissemination) / Investment Fora organized.	1.1 No. of PCU staff assigned. 1.2 No. of CU - PIU staff assigned. 1.3 No. of Project Steering Committee (PSC) meetings. 2.1 Approved procurement and implementation plans. 2.2 No. of Project Reports. 3. No. of Launch/Validation/ Dissemination Workshops / Investment Fora organized / amount pledged/committed.	1.1 Nil. 1.2 Nil. 1.3 Nil. 2.1 Draft plans. 2.2 Nil. 3. Nil	1.1 5 staff by 2020. 1.2 24 by 2020. 1.3 7 by 2020. 2.1 Approved finalized plans. 2.2 1 Audit & 4 Progress Reports per year; 1 Completion & 1 Evaluation Reports 3.1 1 / 4 / 10 / 1 / USD 90 million by 2023.	1. Minutes of PSC meetings. 2. Project Progress Reports. 3. Approved Plans. 4. Submitted Project Related Documents.	
MAIN ACTIVITIES	**COMPONENTS DESCRIPTION/KEY ACTIVITIES**					**CONTRIBUTIONS**
	Component 1 : Feasibility Studies and Engineering Design Phase 1: Preparatory and feasibility studies (socio economic, technical, financial and institutional assessments, including tariff setting, asset management, etc.); identification and selection of options, preliminary engineering designs and costing, site identification and selection, etc. Phase 2: Field investigations, detailed engineering designs and costing, cost benefit analyses, preparation of facilities management plans. Phase 3: Specifications, tender documentation and manuals. **Component 2 : Project Management** Engagement of Project Management (PCU, PSC); planning and procurement, technical and financial management, including project reporting and liaison with AWF; capacity building; organization of stakeholder validation workshops & Investment Fora.					**Total Project Cost** : **EUR 1,356,863** **Financing Plan:** ▪ AWF Grant: **EUR 1,033,568 (76%)** ▪ Government: **EUR 197,295 (15%)** ▪ Commercial Utilities and Town Councils: **EUR 126,000 (9%)**

EXECUTIVE SUMMARY

Background: The development agenda of the Government of the Republic of Zambia (GRZ) is articulated in the National Vision 2030 and the Seventh National Development Plan (7NDP - 2017-2021) which prioritize water and sanitation among the key sectors for economic growth. Accordingly, Government is implementing the National Urban and Rural Water Supply and Sanitation Program as a road map to improve access to sustainable water supply and sanitation services for Urban, Peri-urban and Rural dwellers in Zambia, and to achieve the Sustainable Development Goals. To improve sector performance, and in support of Program implementation, Government has undertaken sector reforms to improve the enabling environment by creating (a) Commercial Utilities to be responsible for urban and peri-urban water supply and sanitation; and (b) National Water Supply and Sanitation Council (NWASCO) for sector economic, and (c) support of the private sector for services delivery. In spite of the reforms, the water supply and sanitation sector is confronted with challenges like (a) limited sector capacity; (b) inadequate access to sanitation; and (c) insufficient investments.

Objectives: The overall objective of the project is to contribute to increase access to safe, sustainable and inclusive sanitation services, with improved hygiene and faecal sludge management services for people living in urban and peri-urban areas in Zambia. The specific objectives are to contribute to: (a) increase access to safe, sustainable and inclusive on site sanitation facilities; (b) increase access to efficient and sustainable faecal sludge management infrastructure and services; and (c) create opportunities for increased sub sector investments.

Description: The project will be implemented under two components with AWF support.

Component 1*: *Feasibility studies and engineering design consisting of activities that contribute to increase sustainable access to faecal sludge management infrastructure and services for people living in urban and peri-urban areas. It involves studies, including socio economic, technical, institutional and financial assessments, campaigns, baseline studies and technical assessments, site selection and investigations, engineering design for storage, collection and treatment infrastructure and services; and development of innovative strategies to promote and market FS reuse products, and preparation of investment and implementation plans to facilitate future investments, among others.

Component 2: Project management involves project and knowledge management activities.

The project's ***direct beneficiaries*** are the Urban and Peri Urban Dwellers, Municipalities, Commercial Utilities, NWASCO and Sector Ministries. With realization of the downstream investments, the ***direct beneficiaries*** would be the (a) initial 2,400,000, and subsequently by 2030, the additional 1,004,000 urban dwellers without adequate access to sustainable and inclusive sanitation services. The study will likely contribute to the creation of about 200 new jobs following realization of the downstream investments. Other indirect beneficiaries are Private Sector Operators, local NGOs and CBOs, etc.

Cost and financing: The AWF will co-finance the project along with the Recipient (Government of the Republic of Zambia) through the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) and Commercial Utilities (CUs). AWF will contribute € 1,033,568 representing 76% of the total project cost of € 1,356,863. The Recipient will contribute the remaining € 323,295. The Project is expected to commence in April 2020 and be implemented over a duration of 30 months.

Recommendation: It is recommended that a Grant not exceeding € 1,033,568 from the African Water Facility Special Fund be awarded to the Republic of Zambia for the implementation of the project as described in this appraisal report.

1 CONTEXT

1.1 Project Origin

1.1.1 The project is the outcome of a proposal submitted by the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) to the African Water Facility (AWF) in May 2019, together with a funding request for project preparation. The project seeks to contribute towards Government's effort to improve access to integrated and sustainable faecal sludge management and to achieve the SDGs for sanitation in urban areas in Zambia by 2030.

1.1.2 The Government of the Republic of Zambia (GRZ) has adopted the National Vision 2030 and the Seventh National Development Plan (7NDP - 2017-2021) both of which prioritize water supply and sanitation among the key growth sectors of the economy. The National Sector Vision is "Clean Water Supply and Sanitation for All by 2030". However, over the last two decades, in spite of Government effort to improve services delivery through reforms, the water supply and sanitation sector is confronted with challenges that include (a) a low rate of cost recovery, despite tariff increases in urban areas; (b) limited sector capacity; (c) limited access to sanitation; and (d) insufficient investments despite substantial foreign assistance.

1.1.3 It is estimated that Zambia requires a total investment of USD 5 Billion by 2030 (Proposed Water Sector Financing Mechanism, April 2017). This implies a total of USD 384 Million to be invested each year to achieve the Vision 2030 and SDG targets. However, given the limited sector investments in the past two decades in the face of the ever-growing population, access to adequate water supply and sanitation services has been limited, particularly in the Peri-Urban and Rural areas. This is evidenced by Zambia's inability to meet the 2015 MDG targets for sanitation, and the incessant reported cases of cholera. In this regard, Government is soliciting support from Cooperating Partners to complement its efforts in improving access to water supply and sanitation services, especially in the urban and peri-urban areas to help meet the Vision 2030 and SDG targets.

1.1.4 Government is implementing the National Urban and Rural Water Supply and Sanitation Program as road map for providing clean, safe and reliable drinking water and adequate sanitation services to residents in Urban, Peri-urban and Rural areas of Zambia, in line with Vision 2030, Seventh National Development Plan and the Sustainable Development Goals.

1.1.5 The Program provides opportunity for a number of sector related project interventions to be implemented to improve access to sustainable services. The proposed project is one such intervention that seeks to improve access to sustainable sanitation and hygiene services by (i) increasing access to improved household and public sanitation, (ii) improving collection, treatment and disposal infrastructure, and (c) building capacity for the sustainable management of sanitation facilities in urban and peri-urban areas of Lusaka, Livingstone, Choma, Ndola, Petauke, Chavuma, Mansa, Kapiri-Mposhi, Kabwe, Solwezi, Kasama and Chipata.

1.1.6 The proposed project will contribute to improve faecal sludge management services along the value chain through preparation of feasibility studies and engineering designs for future delivery of related infrastructure to improve public and environmental health, and thereby improve productivity in the selected urban communities, in line with the aspirations of the Seventh National Development Plan, Vision 2030 and the SDG targets for water supply and sanitation in Zambia.

1.2 Sector Priorities

1.1.7 The National Vision 2030 and the Seventh National Development Plan (7NDP: 2017-2021) both prioritize water among the key growth sectors of the economy. The National Sector Vision is to attain universal access to clean and safe water supply and sanitation for all by 2030. Government therefore places the provision of improved sanitation and hygiene on top of its agenda in realization of the need to achieve sound public health and reduce the disease burden among the people. In an effort to address the need, Government in 2016, created the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) as part of ongoing sector reforms to coordinate and promote efficiency and effectiveness in the delivery of water supply and sanitation infrastructure and services. The MWDSEP is responsible for sector policy formulation and monitoring.

1.1.8 As part of the reforms, the first National Water Policy launched in 1994 created a holistic framework for the sector and established the seven sector principles which govern the sector to date.: (a) separation of water resources management from water supply and sanitation, (b) separation of regulatory and executive functions, (c) devolution of authority to local authorities and private enterprises, and (d) achievement of full cost recovery in the long term, has been revised since 2010 to integrate cross-cutting issues like gender, HIV/AIDS and climate change, and to introduce integrated water resources management principles. GOZ has approved a new water and sanitation policy to capture emerging issues such as sustainable sanitation and inclusion of solid waste management ; and is further elaborating the Water Supply and Sanitation Act of 1998 to increase the commercial sustainability and efficiency of the eleven water utilities and an opportunity to further strengthen the roles of NWASCO.

1.1.9 About 98% of sector investments are financed by donors and INGOs. Currently, the major water and environmental sector Development Partners include the African Development Bank Group (AfDB), Agence Française de Development (AFD), the European Union (EU), the KFW and GIZ, DANIDA, UNICEF, USAID, JICA and the World Bank (WB). The International NGO/Civil Society Groups include WaterAid, CARE and World Vision.

1.3 Policy and Institutional Framework

1.3.1 A number of policies and strategies govern the water supply and sanitation sector, key among which include:

1) Vision 2030 that aims to achieve 90% access to Sanitation and 100% access to water by 2030;

2) Seventh National Development Plan (7th NDP), a multi-sectoral development plan with the theme: “Accelerating development efforts towards the Vision 2030 without “Leaving anyone Behind”. In line with the SDGs, the 7th NDP calls for enhanced provision of adequate water supply and safe sanitation under Outcome 3 which targets enhanced human development;

3) National Water Supply and Sanitation Policy that provides clear guidelines for implementation of Water Supply, Sanitation and Solid Waste Management in Zambia, and anchored in Vision 2030. The Policy underscores GRZ’s commitment to provide sustainable and equitable water supply, sanitation and solid waste management services for all;

4) National Rural Water Supply and Sanitation Program, 2016-2030 (NRWSSP) that guides implementation of water supply and sanitation activities in rural areas by the Local Authorities. The program has a dedicated sanitation and hygiene component;

5) National Urban Water Supply and Sanitation Program, 2011-2030 (NUWSSP) that guides the provision of water supply and sanitation in urban and peri-urban areas, and implemented by the established Commercial Water Utilities;

6) National Urban and Peri-Urban Sanitation Strategy that provides a framework for the implementation of urban and peri-urban sanitation projects and activities by various stakeholders, including the end users. Households are responsible for building their own toilets, but some assistance is provided for the poorest;

7) Open Defecation Free Strategy that targets Zambia to be open defecation free by 2030. The strategy also guides and outlines the process for the attainment of open defection free in an area.

1.3.2 In addition to creation of the Zambia Environmental Management Agency (ZEMA) and the Water Resources Management Authority (WARMA), the reforms have led to the creation of other key sector institutions that include:

(a) National Water Supply and Sanitation Council (NWASCO) established in 1997 and operationalized in 2000, and responsible for ***economic regulation*** of sector related services. NWASCO oversees tariff adjustments, minimum service levels, financial projection and investment planning, and corporate governance. NWASCO has successfully developed a framework for benchmarking, reporting and user engagement. NWASCO is financed through a 1-2% surcharge on water tariffs;
(b) Commercial Utilities (CUs), most of which have been established since 2000, involving grouping together the physical assets and personnel of several Local Authorities within a province. The CUs are legally and financially autonomous public entities that charge tariffs and operate based on commercial principles;
(c) Water and Sanitation Association of Zambia (WASAZA), established in 1999 to provide training, promote exchange of experiences on good practices, and support to increase public awareness. Currently, WASAZA has over 300 corporate and individual members;
(d) Zambia Emptiers Association established as a national association with over 60 members and a total fleet of 56 operational emptier trucks. Members operate mainly in Lusaka and other large towns.

1.3.3 Generally, the CUs and Local Authorities are directly responsible for sewerage and onsite sanitation services, respectively. Increasingly, due to the need to provide and sustain the operation and maintenance of treatment infrastructure, the CUs appear to have more responsibility for sanitation services delivery. Sanitation tariffs are usually 30 percent of water tariffs and are set without taking into account the performance of the sanitation subsector. Reportedly, 29% of the urban population is connected to sewers, and another 30% is served by septic tanks or improved household-level latrines. The coverage figures are low but are higher than the average figures in Sub-Saharan Africa.

1.3.4 Specific roles and responsibilities of some key institutions, including the private sector are presented in Annex 5.

1.4 Problem Definition

1.4.1 According to the 2017 Joint Monitoring Programme (JMP) Update[1], access to basic water supply and sanitation stands at 61% (42% rural and 84% urban) for water supply and 26% (19% rural and 36% urban) for sanitation. About 19% (32% rural and 3% urban) of the population

[1] UNICEF and WHO Joint Monitoring Programme, Progress on Drinking Water, Sanitation and Hygiene Update and SDG baseline, 2017

practice open defecation, while 14% (5% rural and 26% urban) have access to basic handwashing facilities with soap and water.

1.4.2 Poor access to water, sanitation and hygiene services coupled with a rapidly expanding population, poor urban planning, unhygienic practices and impacts of climate change present challenges for both public and environmental health. While the WSS Act No. 28 of 1997 provides for both on-site and off-site disposal of human excreta including collection and treatment, delivery of urban sanitation infrastructure and services in the past has focused on off-site sanitation and not on-site. Enforcement of regulation for on-site sanitation as provided under the Public Health Act has been inadequate, mainly due to fragmentation of institutional responsibilities.

1.4.3 According to the 2018 NWASCO Sector Report, the existing sewer network and septic tanks in urban areas provide sanitation coverage for about 47.3% of the estimated 4.39 million people served. In particular, the situation regarding on onsite sanitation systems and faecal sludge management (FMS) can be described as follows:

(a) Inadequate coordination of actors in the sanitation service chain;
(b) Poor construction of sanitation facilities leading to groundwater contamination;
(c) Inadequate regulation and standards for FSM and poor enforcement practices;
(d) Inadequate data on existing onsite sanitation infrastructure and services;
(e) Inadequate and environmentally unacceptable emptying and disposal practices for sanitation facilities, thereby adversely impacting on sanitation workers and public health;
(f) Uncontrolled pricing of services, resulting in unaffordability of services.

1.4.4 As a result of the inadequate environmental sanitation practices, cholera remains a challenge in Zambia. In the last decade, the country has witnessed cholera outbreaks with reported cases up to 7,300 in 2010. As at 19 April 2018, there had been 5,775 reported cases and 112 related deaths. Diarrhoea (non – bloody) remains among the top three causes of morbidity among children under five[2].

1.4.5 Zambia is burdened by child stunting, and the reduction rate of stunting prevalence among children under five years of age is less than 1% per year (from 45% in 2007 to 40% in 2014). Available evidence indicates that improved sanitation alone can decrease the risk of stunting by 13%, and the risk of severe stunting by 26%.[3] Stunting and child morbidity and mortality can be reduced through low-cost, high-impact hygiene and sanitation interventions in communities.

1.4.6 Zambia is one of the most urbanized countries in Sub-Saharan Africa. According to the Census of Population and Housing (2010), the total national population in 2010 was 13.1 million, of which, the urban population was 5.17 million (39.5 %). Between 2000 and 2010, while the overall population growth rate was 2.8 % p.a., the growth rate in urban areas was 4.2 %. The peri-urban areas have absorbed the bulk of Zambia's urban population growth, including the effects of the ongoing rural to urban internal migration. It is estimated that between 25% (smaller towns) and about 70% (large cities) of the urban population live in peri-urban areas. For, example, the city of Lusaka has 33 peri-urban areas that account for at least 60% of its entire population[4]. These low-income areas are characterized by inadequate economic and social infrastructure and services (National Urban Sanitation Strategy 2015). The project will therefore target such low-income areas, especially those affected by a high incidence of water and sanitation related diseases.

2 MoH Annual Statistical Bulletin (2012, released in August 2014)
3 Impact assessment, rural sanitation programme in Mali, Standford Laval, CEDLAS, & UNICEF
4 Source : NUWSSP, 2011

1.4.7 Faecal sludge treatment infrastructure is woefully limited. Existing facilities are mostly wastewater treatment plants that hardly achieve effluent standards due to capacity limitations resulting from increasing influent loads and dilapidated infrastructure. Examples are the municipal level Manchinchi Plant (Lusaka) and the Kanini Plant (Ndola) that have inadequate treatment efficiencies, as they are overloaded and were constructed in the 1970's without proper maintenance over the years . In addition, a few DEWATS facilities exist that serve small urban communities. Generally, the treatment facilities are in a deplorable state and pose a serious environmental risk.

1.4.8 Private Sector Operators provide various services for FS containment and collection in Zambia. In particular, Cesspit Emptier Operators charge between ZMW 700 and ZMW 2,000 per desludging trip, and pay multiple surcharges levied by public institutions per truck, e.g., ZEMA licensing fee of ZMW 3,800 every 3 years, high tipping fees (ZMW 30 to 36 per cubic meter of truck capacity), and high customs duty for truck importation. Yet, they face competition from public institutions like the Military, Commercial Utilities, etc., that charge lower desludging fees and do not pay any tipping fees. The current tipping fees, together with the largely unexplored FS reuse economic benefits, do not provide adequate incentives for Private Sector Participation in treatment and safe reuse or disposal. It is desirable to undertake an assessment and development of relevant business models that combine collection with treatment and reuse and consider appropriate service charges and tipping fees to ensure sustainability.

1.4.9 The proposed project will be implemented in line with the National Urban Water Supply and Sanitation Program and will focus on improving the enabling environment and providing adequate, safe and cost-effective non-sewered sanitation services to underserved urban and peri-urban areas, particularly areas prone to the frequent occurrence of water and sanitation related diseases.

1.5 Project Objective

1.5.1 The overall objective of the project is to contribute towards the wellbeing and improved living conditions of the urban poor in Zambia. The specific objectives of the project include:

(a) To increase access to safe, sustainable and inclusive onsite household and public sanitation;
(b) To increase access to efficient and sustainable FS management infrastructure and services, including production of affordable FS reuse end products to maximize economic benefits;
(c) To identify business opportunities and increase sub sector investments.

1.5.2 The project provides opportunities for lessons to be learnt regarding:

(a) Public private sector partnership in the delivery, operation and maintenance of sustainable on-site sanitation, and FS collection and treatment infrastructure and services;
(b) Cost recovery through user fees to fully finance operation and maintenance, and part of capital costs; and
(c) Production and sale of FS reuse products.

1.6 Beneficiaries and Stakeholders

1.6.1 Beneficiaries

1.6.1.1 The project's ***direct beneficiaries*** include: (i) Relevant Sector Ministries, including MWDSEP, Lands and Natural Resources, Energy, and CUs who will benefit from capacity building and training; and (ii) Private Sector Operators, local NGOs, Civil Society Organizations, Town Councils and Development Partners who will also benefit from participation in the

validation workshops and investment opportunities. Following the realization of the downstream investments, the ***direct beneficiaries*** would be the almost 2.4 million poor people living in urban areas, including Lusaka, Livingstone, Choma, Ndola, Petauke, Chavuma, Mansa, Kapiri-Mposhi, Kabwe, Solwezi, Kasama and Chipata, and without sustainable access to FSM infrastructure and services along the value chain (containment, collection, treatment and reuse). The urban poor people, who constitute about 40% of the entire urban population will benefit from provision of incentives and strategies to better promote and deliver onsite sanitation infrastructure, and adequate de-sludging services to reduce effluent discharges and pollution of the immediate environment. In the medium to long term, up scaling of the project is expected to benefit an additional 1,004,000 urban dwellers to contribute to increase access to safe and sustainable urban sanitation from about 31% currently to over 55% across Zambia by 2030.

1.6.2 Stakeholders

1.6.2.1 The following key stakeholder interests have been incorporated in project design through a consultative process:

(i) MWDSEP as project proponents, spearheading the effort to establish sustainable faecal sludge treatment and disposal infrastructure and services in provincial towns in line with the 7th NDP and Targets for 2030;

(ii) Private Sector interests to support effort to improve delivery of onsite sanitation and their participation in the construction of facilities, and provision of FS collection and reuse related services to improve access to sustainable FSM;

(iii) Commercial Utilities currently operate and maintain water supply and wastewater treatment infrastructure in provincial towns. They have expressed interest, and will enter into Partnership Agreements with the MWDSEP, NWASCO, Town Councils and Private Sector Operators to manage the FSM infrastructure and services; and

(iv) Town Councils interest to improve the current situation of poor access to sustainable faecal sludge management services in their respective areas of jurisdiction.

1.6.2.2 The ***Project Target Area*** covers the deprived areas in twelve (12) towns across eight (8) provinces in the country without sustainable access to faecal sludge service chain management. The twelve (12) towns have been prioritized based on population size and likely increased demand for FSM services, incidence of water-borne diseases, ongoing WSS interventions, ease of accessibility and equitable regional distribution. The list of urban settlements and their locations are presented in Annex 1 (Table A1).

1.7 Justification for AWF Intervention

1.7.1 The project fits within the revised AWF Operational Strategy (2017-2025) and mandate, with links to *two of the three AWF strategic pillars* as follows:

> ***(i) Preparation of Investment Projects and Programmes (Pillar 1)*** that will attract follow-on investments, and piloting innovative technologies and approaches that may lead to widespread adoption. The proposed project is conceived as a pipeline project with opportunity for downstream investments to improve the environmental quality and social acceptance of improved and inclusive FS/sewage management in the selected settlements in Zambia.
>
> ***(ii) Investment Promotion (Pillar III)*** to increase the number of public and private investment opportunities in the water and sanitation sector and to mobilize higher levels of financing for projects, particularly from the private sector. The feasibility studies and design will result in preparation of an investment plan that will serve as basis for resource mobilization for future

sector investments. The project is likely to identify business opportunities and increase private sector investments in FS/sewage collection and reuse infrastructure and services.

1.7.2 The project addresses issues relating to inclusive access, cost recovery and sustainability along the value chain. This is ascertained by: (a) the preparatory and feasibility studies to identify the bottlenecks for each link along the FSM chain, and to propose and develop appropriate interventions to overcome them while ensuring that each link is inclusive and self-sustaining as much as possible; (b) the likely partnership arrangement between the Commercial Utilities, MWDSEP, NWASCO, Town Councils and the private sector for operation and maintenance of FS infrastructure and related services; and (c) studies to explore and maximize the economic benefits and market potential of FS re use end products.

1.7.3 The project will contribute to create a favourable environment and build donor confidence to stimulate increased sector investments. AWF funding will enable the project objectives to be achieved, and will support activities to facilitate capacity building, and future investments in FSM along the value chain.

2 THE PROJECT

2.1 Impact

2.1.1 The long-term goal is to contribute to increasing access to sustainable and inclusive sanitation services for the urban poor, initially for about 2.4 million people, and subsequently, an additional 1.0 million people living in urban settlements in Zambia.

2.1.2 The expected impact is contribution to improved health and quality of life for the unserved urban dweller living in both sewered and unsewered areas across Zambia, through increased access to, and delivery of sustainable and inclusive faecal sludge management infrastructure and services.

2.2 Medium and Short Term Results

2.2.1 Medium Term Results and Outcomes

In the medium term, it is expected that the project will **contribute** to the following outcomes:

(a) **Outcome 1:** Increased access to sustainable and inclusive FSM/sewage services in un-sewered urban settlements
(b) **Outcome 2:** Increased and prioritized investments in FS/sewage management infrastructure and services.

It is the expectation that the Government of Zambia and the Commercial Utilities, in collaborative partnership with Development Partners and the private sector shall mobilize funds for the investments.

2.2.2 Outputs

In the short term, it is expected that the project will contribute the following outputs:

(a) Baseline and Feasibility Studies and Standard Designs/Preliminary Engineering Designs prepared for household and public sanitation delivery in the selected towns, based on the projected population;
(b) Effective and efficient financing mechanism for household sanitation developed;
(c) Field Engineering Investigations, Detailed Designs and SESAs prepared for the selected towns;
(d) Tender Documents, including Technical Specifications, and Cost Estimates prepared;

(e) Detailed procurement and implementation plans approved and implemented, and project reports prepared and submitted;
(f) Investment forum organized with pledges for investment;
(g) Knowledge management in the area of faecal sludge/sewage management achieved, including developed Manuals/Guidelines for enhanced operational performance of FSM/sewage facilities, and urban sanitation marketing tools and campaign messages.

2.6 Project Components and Activities

2.3.1 The project will comprise two (2) main components: Component 1 - Feasibility Studies and Engineering Design; and Component 2 - Project Management as follows:

<u>Component 1</u>: ***Feasibility Studies and Engineering Design***

2.3.2 The sanitation situation in most urban settlements is unsatisfactory. About 53% of the urban population in planned areas has access to on-site facilities. Capacity for collection, treatment and disposal is limited, and results in pollution of nearby water bodies and with serious risks to public and environmental health. The component will finance Consultancy Services to (a) improve on the enabling environment (legislative and regulatory framework), and (b) prepare feasibility studies and engineering designs to meet the FSM/sewage management requirements in twelve (12) selected towns. In addition, an investment round table will be organised to mobilize funds for investment financing.

2.3.3 The Terms of Reference for the Consultancy Services shall comprise three phases as follows:

- **Phase 1 - Regulatory Statutes, Preparatory and Feasibility Studies and Standard/Preliminary Designs** that include stakeholder consultations, legal drafting of Statutory Instrument (SI) for un-sewered sanitation, community engagement, sanitation baseline and socio-economic surveys, and feasibility studies (including situational assessment, stakeholder analyses, institutional needs assessments, market demand analyses, formative research, willingness to pay, FS quantification and valorisation, tariff setting). In addition, the Phase will include standard/preliminary design and costing for septage/sewage collection, transportation, treatment, reuse/disposal, business opportunities and site identification and selection, and organization of validation workshops.

- **Phase 2 - Field Investigations/Surveys, Draft Detailed Design and SESA** comprising detailed field investigations, design and SESAs. The following specific activities shall be undertaken: topographic and geotechnical surveys, detailed designs and preparation of operation & maintenance plan, strategic environmental and social assessments, cost benefit analyses, and validation workshops and reporting.

- **Phase 3 - Specifications, Tender Documentation, Manuals and Cost Estimates** that include preparation of the relevant specifications, tender documents, manuals and cost estimates.

2.3.4 The related **activities** are:

Phase 1

2.3.4.1 ***Regulatory Statutes Review***

1. *Regulatory Statutes Review* shall involve stakeholder consultations, dissemination workshops, and preparation of Statutory Instrument (SI) for un-sewered sanitation. The Consultant shall provide support to (a) organize stakeholder consultations and dissemination workshops; and (b) prepare the Statutory Instrument (SI) for un-sewered sanitation. The SI will serve as basis to develop by-laws on onsite sanitation by Local Authorities and CUs to facilitate enforcement.

2.3.4.2 ***Preparatory and Feasibility Studies***

1. *Community engagement* shall precede all other project activities in the target communities. The Consultant shall collaborate with the relevant MWDSEP and CU/LG staff to undertake this activity, ensuring adequate community entry and sensitization to facilitate subsequent surveys.

2. *Baseline studies (socio economic, Knowledge, Attitude & Practices (KAP), etc.)* will be carried out in all target communities to establish relevant baseline data for planning and design of project interventions along the value chain. Project achievements shall be assessed in relation to the baseline. The baseline studies shall include data capture based on relevant indicators provided in Annex 1 (Table A2) and from other sources.

3. *Technical Assessments* of existing sanitation facilities will be carried out for the different links of the value chain as follows:

   (a) ***Containment and Collection*** to assess the types, percentage share, typical storage capacities, market demand, and modalities for construction and financing, related capital, and operation and maintenance costs, etc., of available onsite sanitation facilities. Description and assessment of the existing arrangements for faecal sludge/sewage collection and transport, including characterization and quantification, etc.

   (b) ***Treatment and Disposal*** that include identification and assessment/audit of feasible treatment and disposal technologies available in Zambia and elsewhere, taking into account faecal sludge (FS) and sewage sludge (SS) characteristics, treatment efficiencies, investment and operation and maintenance costs, land space requirements, ease of operation, social acceptance, likely environmental impact, and reuse benefits, etc.

   (c) ***Reuse*** will consider assessment of the current practices for FS/SS/waste reuse production, marketing and sales in Zambia and elsewhere, including production costs and related revenues, institutional arrangements, regulation and certification procedures, and financial viability/profitability, based on review of available secondary data, and verification through surveys and Focus Group Discussions (FGD); and to establish a data base on producers and users of FS/waste reuse end products. The assessment will also include quantification and valorisation of faecal and sewage sludge, with clear definition of the types and quantities of FS and SS end products, identification of potential users of FS/SS reuse products, and assessment of the market/demand potential, including likely revenues to be accrued versus production costs.

   (d) ***An Integrated Assessment and Ranking*** of identified feasible options for faecal sludge and sewage collection, transport, treatment and reuse, taking into account the characteristics of FS and sewage, mode and costs (capital and O&M) of collection and transport, likely haulage distances based on identified and pre-selected disposal sites, applicable treatment technologies, market potential of reuse, etc. The assessment will also describe and consider the potential business opportunities for the different actors (private and public sector enterprises, NGOs, individuals, etc.) along the FSM value chain.

   (e) ***Recommendations*** made to address identified challenges/barriers in order to improve: (a) access to onsite household and public sanitation; clearly articulating private and public

sector roles, and defining actions to improve the delivery and financing mechanisms for onsite sanitation, including the types of technologies to be adopted, among others; (b) collection and transport capacity in each city, clearly indicating the best options for services delivery; (c) treatment and disposal capacity based on recommended collection and transport systems; and (d) economic benefits of reuse, including strategies for promotion, marketing and sales, clearly establishing profitability or otherwise of reuse.

4. *Stakeholder Analyses* to identify all relevant stakeholders, including public & private sector institutions, NGOs, households and individuals at the national, regional and local levels; their expected and actual roles and responsibilities for delivery of onsite sanitation, FS and sewage collection and transport, treatment and disposal including reuse. The analyses shall include prognosis for change.

5. *Institutional Needs Assessments* to clearly determine the institutional strengthening requirements of the MWDSEP (Sanitation Unit), and respective CUs and Local Councils for the selected project cities and towns. These shall include capacity building and training needs, staffing and logistics to improve their sector related operational performance.

6. *Formative Research, and Willingness and Ability to Pay Studies* to facilitate development of implementation strategies and to establish household/beneficiary willingness and ability to pay for onsite sanitation and sewerage services. Focus shall be placed on the residents of peri urban and deprived urban communities with limited access to sanitation services. Outcomes shall inform behavioural change communication strategies, tariff setting/restructuring and effort towards cost recovery.

7. *Tariff Setting/Restructuring* shall involve analyses and development of clear guidelines and mechanisms for tariff setting/restructuring to guide pricing and financial regulation of sanitation related services provided by both private and public sector entities, including the CUs and Local councils.

8. *Site Identification and Selection* to be carried out in collaboration with local authorities and in accordance with urban physical plans. A number of sites shall be identified, assessed and ranked and the most suitable recommended for prior selection, demarcation and subsequent acquisition for provision of treatment and disposal and/or transfer facilities to optimize haulage distances.

2.3.4.3 ***Standard/Preliminary Engineering Design***

1. *Standard and Preliminary Engineering Designs and Costing* shall be prepared for FS and sewage storage, collection, transport, treatment, reuse infrastructure, and services in the selected cities to improve access to household, public and municipal sanitation infrastructure, in collaboration with ZABS, ZEMA, LAs and CUs. Onsite Sanitation and FSM Standards shall be developed to cover the whole Sanitation Service Chain. The standard designs for municipal level infrastructure shall form the basis for preparation of the related preliminary designs, and shall take into account FS and sewage characteristics, projected development trends and rate of urbanization, and estimated design volumes for the selected cities. The designs shall consider and evaluate combinations of the recommended best options as alternatives for collection through treatment and reuse, clearly establishing the business model in each case.

2. *Financial and economic analysis* shall be carried out to assess the financial and economic viability of each alternative, and to determine and recommend the best alternative.

3. *Management Arrangements* to ensure adequate operation and maintenance of all facilities shall be defined. These will cover on site facilities, collection and transport, as well as treatment and reuse facilities.

4. *First Stakeholder Validation* will ensure stakeholder review and acceptance of recommended alternatives for facilities along the value chain. The provincial level validation workshop(s) shall be organized to present the outcomes of all studies and the engineering designs.

Phase 2

2.3.4.4 ***Site Investigations and Detailed Engineering Design***

1. *Site Investigations* shall include detailed topographic and geotechnical surveys to obtain technical and environmental data to enable adequate design. Data obtained shall also be used in assessing environmental impacts and related mitigating measures.

2. *Detailed Engineering Design* will involve preparation of process flow diagrams and detailed designs, including hydraulic, geotechnical, and structural computations for all components, as well as design of all electro mechanical units; preparation of detailed drawings to appropriate scales, indicating the facilities for site drainage, offices and vehicle/equipment parking and cleansing, perimeter fencing, etc. The general design layouts shall provide adequate road accesses to facilitate operation and maintenance, and performance monitoring; and shall indicate perimeter fencing and gate control facilities, and locations for temporary storage of solid waste screenings from the primary treatment processes.

3. *Management Arrangements* defined during the preliminary engineering stage shall be refined and finalized. A detailed description of the arrangements for managing the various components of the value chain shall be provided, together with development of specific promotion, marketing and sales strategies, and mechanisms for customer feedback and redress.

4. *Preparation of SESA* shall include an assessment of the potential environmental and social impacts for the designed faecal sludge and sewage service chain management infrastructure and services, together with proposed mitigation measures. ZEMA shall review and approve the SESA Report in accordance with environmental protection requirements. Scoping Report and Terms of Reference for carrying out an ESIA shall be prepared and submitted for approval during the preliminary engineering design stage as required.

5. *Preparation of Facilities Management Plan* (FMP) shall include detailed operation and maintenance guidelines and cost estimates for facility operation and maintenance (O&M), and the management arrangements defined for the various components of the value chain. The FMP shall highlight the safety requirements for plant operation and staff; and shall specify health and safety measures to protect workers, visitors and surrounding residents during operation and maintenance of the facility. The plan will include specifications for regular medical check-ups for operational personnel; and for environmental monitoring, operation and maintenance, effluent quality, among others.

6. *Financial and Economic Analyses* shall be performed for the finally selected and designed alternative, based on final cost estimates and design life span of the various components.

7. *Second Stakeholder validation* shall ensure further stakeholder review and acceptance of the draft final designs for approved facilities along the value chain. Similarly, provincial level validation workshops shall be organized to present the outcomes of the final designs and cost estimates.

Phase 3

2.3.4.5 ***Specifications, Tender Documentation and Investment Plans***

1. *Preparation of Specifications and Tender Documentation* will ensure compliance with open tender procedures and unit price contracts, and shall follow the formats prescribed by both the National Public Procurement Authority and the African Development Bank.

2. *Preparation of Investment Plans* is necessary to facilitate mobilization of financial resources among development partners. The plans shall be prepared based on the planned implementation schedules, and shall indicate anticipated investments over a defined period.

<u>Component 2</u>: ***Project Management***

2.3.5 Staff seconded from the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) shall provide project management support services on a near full time and priority basis. An existing and reconstituted Project Coordination Unit (PCU) of the MWDSEP shall undertake all project related activities, supported by a technical team that will play a supervisory role and provide technical guidance and support to review the consultant's outputs. The PCU shall be responsible to organize the Investment Forum.

2.3.6 ***Capacity Enhancement:*** CUs and the MWDSEP need to build capacity for design and management of FS collection and treatment infrastructure. Collaboration with the Consultant's engineering design team will ensure transfer of technical knowledge and development of skills to improve the design capacity, and to better appreciate the O&M requirements and sustainable arrangement for effective management of treatment and collection infrastructure and services. In addition, study tours shall be organised to further enhance the capacity of selected staff.

2.3.7 The related activities are:

1. *Institution of the Project Coordination Unit (PCU)* involves identifying and assigning key MWDSEP staff as project staff to strengthen the MWDSEP's capacity for project management. The PCU will oversee the coordination, implementation and monitoring of the project. The MWDSEP shall provide the needed logistics, including office space, communication, etc.

2. *Establishment of the Project Implementation Units (PIUs)* involves identifying and assigning relevant CU staff to support project implementation at the provincial/town level. The PIUs will provide support to supervise and coordinate the Consultant's activities and to review related reports.

3. *Establishment of a Project Supervisory Team (PST)* consisting of representatives from the concerned CUs and various technical departments shall provide technical support and guidance to the Project Coordination Unit, and shall participate in the periodic review of implementation progress.

4. *Finalization and approval of plans and project reporting* will ensure that the existing draft implementation and procurement plans are reviewed and finalized by the PCU following the AWF's no objection. The plans shall be detailed and cover all project activities until completion. The plans shall be revised once every year. All relevant project reports and documents shall be prepared and submitted in accordance with AWF reporting requirements.

5. *On the Job Training of MWDSEP and CU staff* will strengthen and build capacity for design and management of FS collection and treatment infrastructure. MWDSEP and CU staff will work with the Consultant's team to undertake field surveys and prepare engineering designs and related tender documents to improve their engineering design and operation and maintenance capacity for sustainable FS management.

6. *Technical Assistance Support in CWIS* may be necessary to facilitate preparation of inclusive FSM designs and tender documentation. That notwithstanding, the Consultant's team will be expected to have expertise in CWIS.

7. *Knowledge Management and MWDSEP/CU Staff Training* involves various activities like development and production of IEC materials, and launch and completion workshops to document and disseminate project experiences and outcomes; and development of staff training and design manuals, and staff on the job training to strengthen and build capacity for design, operation and maintenance of faecal sludge treatment infrastructure.

8. *Validation Workshops and Investment Forum:* Stakeholder validation workshops shall be organized by the Project Coordination Unit as described in Para 2.3.4.3 and 2.3.4.4 at the end of the preliminary and detailed design stages. Additionally, an Investment forum shall be organised on project completion to mobilize resources for the downstream investments.

2.4 Project Risks

2.4.1 The possible risks that may arise during project implementation and mitigation measures as presented in the log frame and incorporated in project design are analysed in the following table:

Table 1: Risks and Mitigation Measures

Risk	*Impact on project*	*Mitigation Measures*
Lack of political support and Government disinterest in FSM leading to unsuccessful implementation and wider uptake.	Medium	Lobby, advocacy, dialogue and transparency among actors. Endorsement and active participation of the MWDSEP and Stakeholders.
Community resistance to behaviour change regarding improved access to onsite sanitation, faecal sludge chain management and hygiene.	High	Community sensitization. Increased social marketing and promotion of new products/services by focusing on local supply chain. Media involvement in hygiene and sanitation related activities. Use of the Demand Responsiveness Approach for selection and delivery of appropriate and sustainable sanitation technologies.
Unavailability of land for selection and design of FSM infrastructure, and the required environmental approvals may delay timely completion of the project.	Medium	Engage local and environmental authorities from the onset of the project.
Inadequate design of FSM Infrastructure and services.	Medium	Rigorous eligibility and selection criteria with demonstrated competence in FSM infrastructure design for acquisition of consultancy services.

2.5 Costs and Financing Plan

2.5.1 The estimated total cost of the project (excluding taxes) is € 1 356 863, of which 24 % is in local currency equivalent. Total cost includes provision for 5% price escalation contingencies. A breakdown of the proposed financing plan by Project Component and Source of Financing is summarized in Table 2 with details shown in Annex 2. Table 3 below provides an overview of the estimated costs by Category of Expenditure.

2.5.2 The AWF will finance 76 % of the total project cost (estimated at **€ 1 033 568**), mainly for the provision of consultancy services for preparatory and feasibility studies, site investigations, preliminary and detailed engineering design and tender documentation, and plans. The MWDSEP and CUs/Town Councils will finance the remainder amounting to **€ 323 295**, mainly as in kind contribution for land acquisition, support for community sensitization, project management and support staff salaries and operational expenses, office space, utilities, etc. All taxes related to the expenditures and activities of this project are the Government of Republic of Zambia's responsibility.

Table 2: Project Cost Estimates by Component and Sources of Financing (in '000 Euros)

Component	*Total Cost*	*AWF*	*MWDSEP/CUs/ Town Councils*
1. Feasibility Studies and Detailed Design	**826.9**	**826.9**	**-**
2. Project Management	**465.4**	**157.5**	**307.9**
Total Base Cost	**1,292.3**	**984.4**	**307.9**
Price Contingency (5%)	**64.6**	**49.2**	**15.4**
Total Project Cost	**1,356.9**	**1,033.6**	**323.3**
Percentage	***100%***	***76.2%***	***23.8%***

Table 3: Project Cost by Category of Expenditure (in '000 Euros)

Category of Expenditure	*Total Cost*	*AWF*	*MWDSEP/CUs/ Town Councils*
		FC	*LC*
A. Goods	35.0	35.0	
B. Services	826.9	826.9	-
C. Project Management Operating Cost	430.4	122.5	307.9
Total Base Cost	**1,292.3**	**984.4**	**307.9**
Contingency 5%	64.6	49.2	15.4
Total Project Cost	**1,356.9**	**1,033.6**	**323.3**
% Contributions		**76.2%**	**23.8%**

3 PROJECT IMPLEMENTATION

3.1 Grant Recipient and Executing Agency

3.1.1 The Republic of Zambia will be the Grant Recipient. The Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) will be the Executing Agency. The MWDSEP is responsible for development of policy on water resources development, sanitation and environmental protection. The MWDSEP consists of six (6) Departments, including the Water Supply and Sanitation Department that comprises two (2) units, namely, the ***Water Supply Unit*** in charge of urban and rural water supply and infrastructure development, and the ***Sanitation Unit*** in charge of rural and urban sanitation. The Sanitation Unit provides oversight for sanitation and hygiene services, in collaboration with CUs and Local Authorities.

3.1.2 In addition, the MWDSEP has jurisdiction over the **Water Resources Management Authority (WARMA)** that oversees water resources management, rights and related tariffs, the **Zambia Environmental Management Agency (ZEMA)** for environmental protection and management, and the **National Water Supply and Sanitation Council (NWASCO)** that is responsible for regulation of the provision of water supply and sanitation services in Zambia.

3.2 Implementation Arrangements

3.2.1 The MWDSEP will manage the Grant funds and shall be responsible for overall project coordination and execution. A **Project Coordination Unit (PCU)** comprising staff drawn from

within MWDSEP will be established to implement the project at ministerial level. The Project Coordination Unit will comprise a Project Director (PD) assisted by a multi-disciplinary team consisting of (a) Project Manager, (b) Finance/Accountant, (c) Procurement Specialist, (d) M&E Specialist, (e) Gender / Community Development Specialist, (f) Safeguard Specialist and (g) Project Engineer assigned from various departments within the Ministry. The PCU will be supported by MWDSEP's in-house Procurement Environmental and Internal Audit Departments. The PCU shall report to the MWDSEP Permanent Secretary.

3.2.2 The PCU will focus on project management and procurement. Specifically, this will include: (i) project coordination among stakeholders; (ii) procurement of consulting services; (iii) processing payment requests and (iv) preparation of project reports. The Project Manager (PM) shall co-ordinate all project related activities, including liaising with the various stakeholders and institutions. The PCU's organization and institutional linkages are presented in Annex 6, the PCU structure and Terms of Reference are presented in Annex 7 and Annex 8, respectively.

3.2.3 The respective Commercial Utilities will be responsible for project implementation at the provincial and local levels. The Utilities will each designate a focal point person (project engineer) from within the utility who shall collaborate with Local Authorities, key stakeholders and the consultants undertaking the assignment to ensure effective project implementation in their respective areas of jurisdiction. The respective focal point persons shall report to the PCU.

3.2.4 The existing **Project Steering Committee (PSC)** of the MWDSEP for ongoing projects implemented under the National Water and Sanitation Program with representation from various stakeholders, including the Commercial Utilities and relevant sector ministries shall review project progress and provide policy and strategic guidance and oversight over project execution. The PSC shall be chaired by the Permanent Secretary or his representative, and shall meet at least twice a year.

3.3 Performance Management Plan

3.3.2 A result based measurement plan will form the basis for tracking the performance of the project and managing results. AWF in collaboration with the PCU shall be responsible for tracking key indicators and targets from the logical framework. Table 4 below indicates the expected deliverables of the project within allocated timeframes.

Table 4: Global Performance Plan of the Project

DELIVERABLES	Time
Grant approval	Mo
Establishment of the PCU and PSC	Mo + 1
Grant signature	Mo + 2
Grant effectiveness	Mo + 3
Launching of the Project	Mo + 4
Recruitment of the consultant(s)	Mo + 6
Preparatory and feasibility studies and preliminary designs	Mo+16
Detailed site assessments and designs	Mo+22
Detailed specifications, tender documentation and investment planning	Mo + 24
Investment Forum	Mo + 24

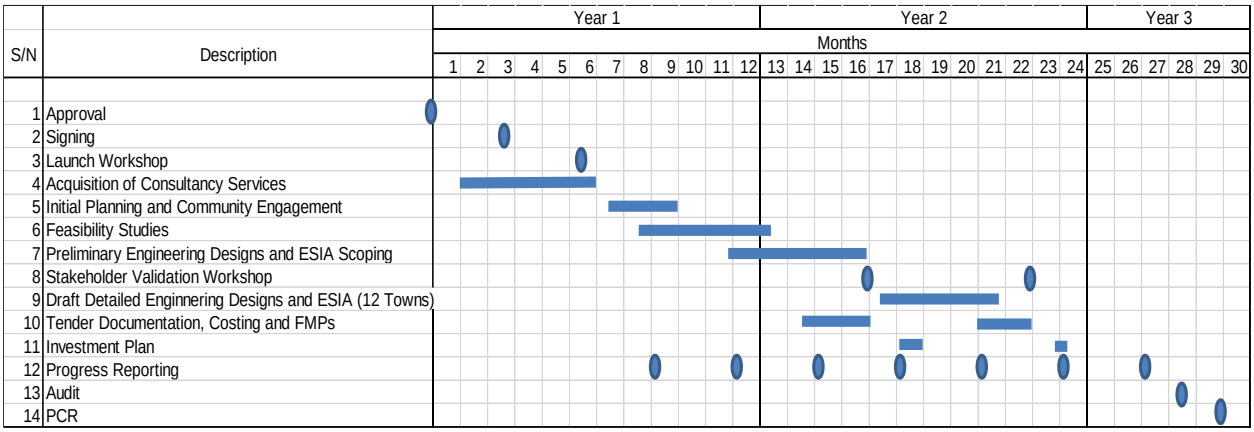
3.3.3 The main performance indicators of the studies and designs are specified in terms of reference presented in Annex 11.

3.4 Project Implementation Schedule

3.4.2 The project shall be executed over a period of 30 months from the date of Grant approval. The estimated project duration includes periods of submission of reports, observations, conducting workshops and finalization of reports. Signing of the Grant Agreement is planned for February 2020. It is anticipated that the consultancy services will last over 18 months. The summarized project implementation schedule is presented in Table 5. A detailed schedule is presented in Annex 3.

3.4.3 The Executing Agency will initiate advanced procurement actions in the recruitment of the Consulting Firm to fast track implementation of the project activities. This will allow project launching soon after the Grant is declared effective.

Table 5: Implementation Schedule Summary



3.5 Procurement Arrangements

3.5.2 The procurement of goods and acquisition of consulting services financed by the Bank will be in accordance with the ***Procurement Policy and Methodology for Bank Group Funded Operations (BPM) dated October 2015***, and following the provisions stipulated in the Financing Agreement. **Recipient Procurement System (RPS)** shall be used for all operational costs and goods procurement in accordance with the country's current Public Procurement Act and the respective Public Procurement Regulations, using the applicable Standard Solicitation Documents. **Bank Procurement Policy and Methodology (BPM):** Bank standard PMPs, using the relevant Bank Standard Solicitation Documents (SSDs) shall be used for consultancy services contracts, where the RPS is not applicable and BPM is considered the best fit for purpose. The Procurement arrangements for the project are summarized in Table 6 below.

3.5.3 **Procurement Risks and Capacity Assessment (PRCA):** the assessment of procurement risks at the Country, Sector, and Project levels and procurement capacity at the Executing Agency (EA), have been undertaken for the project and the findings have informed the decisions on the procurement arrangements being used for specific transactions or groups of similar transactions under the project. Detailed procurement arrangements are presented in Annex 4.

3.5.4 **Goods:** Contract for Goods in this case the procurement of a motor vehicle valued at **€ 35,000** will be carried out using Shopping or Simplified Bidding.

3.5.5 **Consultancy Services:** The acquisition of consultancy services amounting to **€ 826,850** will be procured through shortlisting of consulting firms under QCBS using available Bank's Standard Request for Proposal document. Consultancy services under this method will include feasibility studies, engineering designs and tender documents. Advance contracting may be used for acquisition of consultancy services.

3.5.6 **Stakeholder Workshops and Investment Forum**: Stakeholder workshops and investment forum (at an aggregate cost of **€ 110,000)** will be financed from the Grant resources and be procured using RPS.

3.5.7 **Project Management:** The Republic of Zambia (GRZ) will finance project related expenditures including office supplies, utilities, staff remuneration and travel costs, advertising, internet service, communication, maintenance and insurance of vehicles, etc. Fuel and lubricants (at an aggregate cost of **€ 12,500)** will be financed from Grant resources.

3.5.8 The procurement arrangements for the various components, elements, and items, under the different expenditure categories financed by the grant are presented in Table 6 below. Large-value contracts, each group of similar transactions/contracts, the different PMPs, estimated costs, oversight requirements, and the timeframe as agreed between the Recipient and the Bank are presented in the Procurement Plan (ref. Annex 4, Section 5).

Table 6: Procurement Arrangements (in Euros)

S/N	*Project Categories*	*Recipient PMPS*			*Bank PMPS*		
		OCB	*LCB*	*Other*	*QCBS*	*Other*	*Total*
1.0	**Consulting Services**						
1.1	Feasibility Studies and Design				**826,850**		**826,850 [826,850]**
2.0	**Goods**						
2.1	Motor Vehicle			35,000			**35,000 [35,000]**
3.0	**Workshops**						
3.1	Launch/Validation/SI Drafting Workshops/Investment Forum			110,000			**110,000 [110,000]**
4.0	**Operating Costs**						
4.1	Program Management and Operational Costs			200,400			**200,400 [12,500]**
4.2	Land Acquisition			120,000			**120,000** [**0,000**]
	Contingency						
	Add 5% price contingency			23,270	**41,343**		**64,613 [49,218]**
	GRAND TOTAL			**488,670**	**868,193**		**1,356,863 [1,033,568]**

Figures in brackets are amounts financed by AWF

3.5.9 **Procurement Plan:** The AWF shall review the procurement arrangements proposed by the Recipient in the Procurement Plan for its conformity with the Procurement Policy. The Plan shall cover an initial period of at least 18 months, and shall be updated on an annual basis or as necessary always covering the next 18 months period of project implementation. AWF shall give prior approval to any proposed revisions to the Plan.

3.6 Disbursement Arrangements

3.6.1 The AWF support for consultancy services estimated at **Euro 868,193** (including 5% contingencies), shall be disbursed through the Direct Payment Method upon verification and certification of invoices by the PCU. A Special Account shall be opened in the Central Bank of Zambia to receive AWF funds for payment of small recurring operating expenditures, including stakeholder workshops. All Grant proceeds shall be disbursed in Euros and in accordance with the Bank's disbursement rules and procedures. All contracts shall be denominated in Euros to minimize exchange risk to the consultants.

Table 7: Disbursement Schedule (Euro)

Item	*Disbursement Method*	*Procurement Item*	*Amount*	*% of Total*
1.	Direct Payment	Consultancy	868,193	84.0%
2.	Special Account	Goods, Workshops	165,375	16.0%
3.	Total		1,033,568	100.0%

3.7 Financial Management Arrangements

3.7.1 The fiduciary responsibility for the grant shall rest with the Permanent Secretary, who is the Accounting officer of the MWDSEP. The project will be implemented within the structures of the Executing Agency under the overall direction of the PD. The Project Steering Committee (PSC) shall provide policy and technical guidance, including approval of project work plans and budgets. Overall conclusion of the FM assessment is that MWDSEPs capacity to handle the FM aspects of the project satisfies AWF minimum requirements. Budgeting process within MWDSEP (from preparation, approval, execution, monitoring and reporting) is comprehensive and therefore adopted for the project. MWDSEP has implemented Bank funded projects including the ongoing Integrated Small Towns Water and Sanitation Project and Transforming Rural Livelihoods in Western Zambia generally satisfactorily. Lessons learned from implementation of the ongoing Bank funded projects have been incorporated in the design of the project.

3.7.2 The Project Coordination Unit (PCU) shall carry out the financial management (FM) responsibilities under the oversight and control of the Director, Department of Finance of the Ministry. The PCU Accountant shall carry out the day-to-day processing of project financial transactions and shall ensure compliance with the GRZ financial regulations and procedures as well as the Bank Rules and Procedures. The Accountant shall functionally report to the Director, Department of Finance, and administratively to the PM. The Accountant shall maintain separate records and ledger accounts in respect of the project transactions in line with the Government's Integrated Financial Management System (IFMIS), a computerized accounting system used for financial reporting on all government transactions. Plans are underway to acquire a computerized accounting software for processing donor-funded projects. The project shall be accounted for and reports generated using the computerized accounting software. All expenditures and related supporting documents shall be physically and properly archived, for supervision and auditing purposes. Similarly, the Project Implementation Units will maintain the relevant financial management records, and will be accountable to the PCU. As part of the internal control mechanism, the MWDSEP internal auditors shall include the project in their internal audit program and shall conduct regular audits of the project systems, processes and transactions.

3.7.3 The PCU, in collaboration with the CUs shall ensure that financial reports for the Project are prepared on a quarterly basis and transmitted to the Bank, together with the progress reports, no later than forty five (45) days after the end of each quarter. The financial reports shall include a statement of sources and uses of funds, with the uses of funds analysed by activities/components and categories, comparing actual expenditure with budget and notes explaining significant variations in expenditures. In addition, the project financial statements (PFS) will be prepared at mid-term of implementation and after the closure of the Project. The PFS will be prepared in accordance with International Public Sector Accounting Standards (IPSAS) and shall include Statement of Financial position, Statement of receipts and Expenditures, Cash Flow Statement and notes to the accounts.

3.7.4 In line with Bank's financial reporting mandatory requirements and AWF audit arrangements, two financial audit and post procurement reviews (at mid-term and final audit) shall be carried out. AWF shall appoint an independent private audit firm to conduct the audits. The

auditors shall be competitively recruited using AWF Rules and Procedures and based on the Bank's Standard Audit Terms of Reference. The costs of the audits will be borne by AWF.

3.8 Monitoring, Evaluation and Reporting

3.8.1 A monitoring and evaluation plan for the Project will be developed and implemented by the PCU, based on the Project Logical Framework (LFA) and indicators stipulated in the NWASCO Annual Sector Reporting. The plan will be prepared and submitted to the AWF after Grant approval. The LFA shall serve as the basis for a results based assessment of the outputs of the project during implementation and after completion. The plan will align with the existing M&E system of the MWDSEP. The mechanism for social accountability by obtaining complaints and feedback from project beneficiaries will contribute positively to achieve sound monitoring and evaluation of project implementation at household and community levels.

3.8.2 AWF supervision and monitoring of project activities will be subject to PCU submission of quarterly reports to the AWF. This will help maintain regular contact with the Recipient, and will enable diligent review of implementation progress. AWF may consider at any time the need to undertake field supervision missions. The Recipient shall prepare a Project Completion Report (PCR), which shall include details on project activities and outputs, and a comprehensive expenditure report on the utilization of the Grant. Preparation of the PCR shall commence on achievement of 85% disbursement of Grant Funds. All documents shall be transmitted to the AWF in soft and hard copies. The Recipient shall submit to the AWF the reports/documents noted in Table 8.

Table 8: AWF Reporting Requirements

Documents to be Submitted to the AWF	*Reporting Schedule*	*AWF Action*
1. Implementation and Procurement Plan	Within one month after Grant approval	Review and approval
2. Procurement Documents (various)	As noted in Procurement Plan	Review & "no objection"
3. Quarterly Progress and Financial Reports in AWF format (with report on expenditures)	Within three weeks of end of quarter	Review and comment
4. Annual Report including audited accounts	End of 1st quarter of following year	Review and comment
5. Project Completion Report in AWF format	Within 3 months after end of project.	Review and acceptance
6. Minutes of Project Management Meetings	Within 10 days of meeting	Review and comment
7. Minutes of other project related meetings/ Stakeholder Dialogue, etc.	Within 10 days of meeting	For information

4 PROJECT BENEFITS

4.1 Environmental Aspects

4.1.1 The project aims to create the conditions necessary to ensure the efficient, inclusive and sustainable management of faecal sludge along the value chain in urban communities in Zambia. The activities proposed in the preparatory and feasibility studies require consideration of environmental and social aspects and impacts of climate change, consistent with ZEMA environmental requirements.

4.2 Climate Change

4.2.1 The geographical range of the project is widespread, with sites in different provinces of Zambia. Many provinces in Zambia are already affected by climate change impacts, with temperature rises and the frequency of extreme weather events such as heavy rains, drought, flooding and disease being significant.

4.2.2 A key interaction between climate change and sanitation is the risk posed by increased extreme rainfall that lead to damage to sanitation infrastructure. Given the high levels of vulnerability and low adaptive capacity, actions that improve sanitation delivery and contribute to reduce vulnerability are important for building climate resilience. Climate change aspects that should be taken into account across FSM include impacts of extreme weather and potential damage or overflows on containment; impact of flooding on accessibility, including routes, on emptying processes and transport, and site selection and potential for damage in terms of treatment options.

4.3 Gender

4.3.1 In line with the National Water and Sanitation Program that ensures equity in the provision of water supply and sanitation by promoting social inclusion, the project aims to create the conditions necessary to increase the participation of women, youth and other vulnerable groups in the preparatory studies and consultative processes.

4.3.2 The studies will propose measures to enhance the role of women in the sustainable management of infrastructure to be designed. The measures will also ensure that the existing guidelines on information and training to mainstream gender are consistently applied and monitored.

4.4 Social Equity

The project will also create the conditions to improve living conditions of beneficiary communities through provision of sustainable access to improved onsite sanitation and sustainable FSM services; improvement of public and environmental health and safety and the consequent reduction in the prevalence and spread of sanitation related diseases; strengthening of social cohesion through outreach activities; and job creation. In particular, the project will (a) ensure gender balance in the selection and training of community water and sanitation committees in various management and technical skills; (b) ensure women's participation in site selection, technology choice and implementation; (c) promotion and participatory design of gender responsive WSS infrastructure; and (e) integration of menstrual hygiene management in school WASH.

4.5 Effectiveness and Efficiency

4.5.1 The use of an integrated and participatory planning approach to prepare the feasibility studies and engineering designs for inclusive and sustainable management of faecal sludge in Zambia will ensure efficiency in project implementation and management, and the effectiveness of the FSM investments in maximizing benefits. The likely institutional anchoring of management of FS infrastructure and services in Commercial Utilities, and the opportunity for capacity building, learning, documentation and sharing of project related experiences will enhance the efficient delivery of FSM services.

4.5.2 The opportunity to hold stakeholder workshops to validate findings and project results (outputs and outcomes), particularly with the selection of acceptable options and designs, and endorsement of the investment plan ensures ownership of the downstream investment projects by all stakeholders and donors. The project is fully in line with Government's Vision 2030, the 7th NDP and relevant sector policies and strategies. The project activities will apply an effective approach to provide sustainable and inclusive access to FSM services.

4.6 Financial Sustainability

4.6.1 The financial sustainability of the planned interventions will be ensured by the appropriate financial and economic assessment of the various options for inclusive and sustainable FSM. The project activities relating to awareness raising, planning and design for effective and inclusive FS

management, and charging and payment of affordable cost covering user fees for sustainable operation and maintenance of the facilities will contribute to enhance financial sustainability.

4.6.2 The MWDSEP will actively engage with donors at the beginning and at all stages of the implementation of the project, and will coordinate the organization of the Investment Forum at the end of the project.

4.7 Overall Sustainability

4.7.1 The mobilization and participation of partners to help address technical and financial issues arising from project implementation is one of the major pillars for the sustainability of project achievements.

4.7.2 The arrangement for on the job training of relevant staff in design, operation and maintenance of infrastructure will ensure long-term availability of skilled labour. Opportunity for improved spatial and investment planning, and MWDSEP's partnership arrangement with private sector entities, development partners and NGOs will contribute to the sustainable delivery of faecal sludge management services in Zambia.

5 LEGAL INSTRUMENT

5.1 The financing instrument to be used for this project is a Grant Agreement between the Republic of Zambia (the "Recipient") and the African Development Bank (the "Bank") as Administrator of the African Water Facility Special Fund.

5.2 Conditions Associated with Bank's Intervention

5.2.1 Condition Precedent to Entry into force: The Grant Agreement will enter into force on the date of its signature by the Recipient and the Bank.

5.2.2 Conditions Precedent to First Disbursement: The obligation of the Bank to make the first disbursement of the Grant shall be conditional upon entry into force of the Grant Agreement, establishment of a Project Coordination Unit (PCU), and nomination of a Project Director (PD) and a multi-disciplinary team consisting of: (a) a Project Manager, (b) a Finance Specialist / Accountant, (c) a Procurement Specialist, (d) a Monitoring and Evaluation Specialist, (e) a Gender / Community Development Specialist, (f) Safeguard Specialist and (g) a Project Engineer; assigned from various departments within MWDSEP, with qualifications and terms of reference acceptable to the Bank.

6 COMPLIANCE WITH POLICIES

This project complies with applicable Bank Group policies including the AWF Operational Procedures.

7 CONCLUSION AND RECOMMENDATION

7.1 Conclusion

7.1.1 The project offers an opportunity for increased access to improved sanitation and faecal sludge management in deprived urban settlements with financial contribution from the African Water Facility. The approach adopted is in line with AWF Operational Strategy and supports preparation of project pipeline for strategic investments in FSM along the value chain, and is replicable in other urban settlements in Zambia and other African countries.

7.1.2 Given the clear logical framework and justifiable objectives, outputs and activities, and with adequate and sustainable implementation arrangements, there appears to be no outstanding issues that may adversely affect successful project implementation.

7.1.3 The total project cost is € 1,356,863 of which the AWF is requested to fund € 1,033,568 constituting about 76 % of the project cost. The remainder is funded through in kind contribution by the Recipient and project beneficiaries.

7.2 Recommendation

It is recommended that a Grant of an amount not exceeding € 1,033,568 from the African Water Facility Special Fund be awarded to the Republic of Zambia for the implementation of the project on the terms and conditions described in this appraisal report.

ANNEXES

ANNEX 1: MAP OF ZAMBIA SHOWING PROJECT COMMUNITIES

Disclaimer
This map was provided by the African Development Bank exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning the legal status of a territory nor any approval or acceptance of these borders.

TABLE A1: LIST OF SELECTED CITIES AND TOWNS

S/N	*Province*	*Name of Town*	*Present Population*	*Urban Poor Population*	*2030 Projected Population*
1	Lusaka	Lusaka	2,627,716	472,989 (18.0%)	4,216,050
2	Southern	Livingstone	185,003	51,801 (28.0%)	249,872
3		Choma	298,224	171,777 (57.6%)	355,867
4	Copperbelt	Ndola	574,437	178,075 (31.0%)	710,636
5	Central	Kabwe	234,055	77,238 (33.0%)	269,759
6		Kapiri-Mposhi	329,278	223,909 (68.0%)	439,790
7	Northern	Kasama	306,462	156,296 (51.0%)	418,188
8	Eastern	Chipata	554,230	399,046 (72.0%)	694,539
9		Petauke	391,708	321,201 (82.0%)	520,189
10	Northwestern	Chavuma	40,807	35,502 (87.0%)	46,927
11		Solwezi	313,747	156,874 (50%)	424,967
12	Luapula	Mansa	282,333	155,283 (55%)	358,837
TOTAL			**6,138,000**	**2,399,991**	**8,705,621**

Source: *Zambia Population and Demographic Projections, 2011-2035, and Mapping Subnational Poverty in Zambia, CSO*

TABLE A2: LIST OF SOME CWIS INDICATORS (PROPOSED)

#	*Indicator*	*Definition*
1	% of population with access to improved individual toilets	(Population with access to improved individual toilets) / (Total population in the city)
2	% of slum population with access to improved individual toilets	(Slum population with access to improved individual toilets) /(Total slum population in the city)
3	% of population with access to improved shared facilities	**This excludes the population with access to individual toilets. Access to shared facilities will be defined by distance.* (Population with access to shared facilities) / (Total Population - Population with access to individual toilets)
4	% of public and community toilets that adhere to principles of universal design	**Dependent population = Total population - population w access to improved IHLs* (Total no. of functional CT seats) / (Total dependent population in the city / 1000)
5	% of Public Toilet/ Community Toilet users who are women	(No. of women users of PT & CT) / (No. of total users of PT & CT)
6	% of OSSs that have been desludged	(No. of OSS that have been desludged) / (No. of total OSS in the city)
7	Average desludging frequency	Σ(Desludging frequency of each sanitation facility) / (No. of total SF in the city) *where Desludging frequency of each SF = (No. of total desludging services completed for the SF) / (Age of the SF)*
8	% of desludging services completed mechanically (cesspool trucks)	(No. of desludging services completed mechanically each year) / (No. of total desludging services completed each year)
9	% audit compliance of desludging operators (PPE gear and truck maintenance)	(No. of desludging operators who are audit compliant with city regulations on PPE gear, and truck maintenance) / (No. of total desludging operators in the city)
10	% of collected FS disposed at treatment plant or designated disposal sites	(Volume of collected FS that is disposed at TP or designated disposal sites) / (Volume of total FS collected)
11	% of collected FS (collected from slum locations) disposed at treatment plant or designated disposal sites	(Volume of collected FS that is disposed at TP or designated disposal sites for slum population) / (Volume of total FS collected from slum population)
12	Effectiveness of FS treatment in meeting prescribed discharge standards for water and biosolids	(No. of samples meeting effluent and biosolids standard) / (Total no. of samples collected)
13	Treatment capacity as a % of total generation (generation excludes FS that is safely disposed onsite - composting toilets, EcoSan, etc.)	(Combined maximum volume of FS that all TPs in the city can treat) / (Total volume of FS generated in the city - volume of FS that is safely disposed onsite)
14	% of treated FS that is reused	(Volume of treated FS that is reused) / (Total volume of treated FS)
15	% of treatment cost recovered	(Amount of total gov. revenue generated across FSM value chain) / (Total cost of current FS treatment)
16	% of water contamination compliance (on fecal coliform)	**Estimated using water samples from across the city, including ground water, surface water, and pipe water** (No. of water samples not contaminated with faecal coliform) / (No. of total water samples taken)
17	Incidence (per 1000) of faecal-oral pathway diseases	(No. of new faecal-oral pathway diseases occurring among the population) / (Total population in the city)

ANNEX 2: DETAILED PROJECT COSTS

(Amounts in Euro)

Description	*Unit*	*Quantity*	*Unit Cost*	*Total Cost*	*AWF Cost*	*MWDSEP / CU Cost*	*Other*
Component 1: Feasibility Studies and Design							
Key Staff							
Project Manager/Team Leader	person- month	10	12,000	120,000	120,000		
Design Engineer	person- month	7	16100	112,700	112,700		
Sociologist/Gender Expert	person- month	8	7000	56,000	56,000		
Environmental Specialist	person- month	6	7000	42,000	42,000		
Geodetic Engineer/Surveyor	person- month	4	6000	24,000	24,000		
Institutional Development Expert	person- month	4	11000	44,000	44,000		
Quantity Surveyor	person- month	6	6000	36,000	36,000		
Non Key Staff							
Economist/ Financial Analyst	person- month	3	11000	33,000	33,000		
Other Professionals (Legal, Process, Structural, Electro mech., etc.)	person- month	6	7000	42,000	42,000		
Technicians (drafting, field survey supervision - technical/socio economic & environmental, etc.)	person- month	10	2500	25,000	25,000		
Data Entry Clerks	person- day	100	45	4,500	4,500		
Field Enumerators (field data collection - socio economic, technical assessments, environmental)	person-day	250	45	11,250	11,250		
Sub Total				**550,450**	**550,450**		
Reimbursables							
Per Diem, miscellaneous travel expenses, etc.	Day	480	100	48000	48000		
Local Transportation Costs	month	24	2600	62400	62400		
Office rent / Office furnishing / Clerical asst.	month	24	1000	24000	24000		
Communication	month	24	250	6000	6000		
Maps, drawings, reports, tender documents, plans, etc.	LS	1	22000	22000	22000		

Description	*Unit*	*Quantity*	*Unit Cost*	*Total Cost*	*AWF Cost*	*MWDSEP / CU Cost*	*Other*
Socio-economic surveys (Provisional Sum)	LS/Town	12	2000	24000	24000		
Geotechnical surveys (Provisional Sum)	LS/Town	12	2500	30000	30000		
Geodetic Surveys	LS	12	2000	24000	24000		
SESA/ESIAs/ESMPs	LS	12	3000	36000	36000		
Sub Total				**276,400**	**276,400**		
Component 2: Project Management							
Project Supervision / Community Engagement Support							
Per Diem for PCT Staff	Day	240	35	8400		8400	
Fuel & Lubricants	LS	1	12,500	12500	12500		
Office Equipment & IT Support							
Computers/Printers	No.	4	1500	6000		6000	
Internet services/communication	Month	30	750	22500		22500	
Stationery & office consumables	LS	1	13000	13000		13000	
Transport	LS	1	35000	35000	35000		
Office Space/Furniture, etc.	Month	30	2200	66000		66000	
Investment Forum	LS	1	15000	15000	15000		
Stakeholder Workshops (Launch/Validation)	Number	5	12000	60000	60000		
Stakeholder Workshops (SI Drafting)	Number	10	3500	35000	35000		
Staff Costs	Month	24	3000	72000		72000	
Land Acquisition	LS	1	120000	120000			120000
Sub Total				**465,400**	**157,500**	**187,900**	**120,000**
Total Project Base Cost				**1,292,250**	**984,350**	**187,900**	**120,000**
Add 5% Price Contingency				**64,613**	**49,218**	**9,395**	**6,000**
Total Project Cost				**1,356,862.50**	**1,033,567.50**	**197,295.00**	**126,000.00**

ANNEX 3: PROJECT IMPLEMENTATION SCHEDULE

The Project shall be implemented over a duration of 30 months according to the following time schedule:

S/N	Description	Year 1												Year 2												Year 3					
		Months																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	**Approval**	◆																													
2	**Signing**			◆																											
3	**Launch Workshop**						◆																								
4	**Acquisition of Consultancy Services**		■	■	■	■	■	■																							
5	**Initial Planning and Community Engagement**								■	■	■																				
6	**Feasibility Studies**									■	■	■	■	■	■	■															
	Socio Economic								■	■	■																				
	Technical									■	■	■																			
	Institutional/Financial										■	■																			
	Site Identification, Screening and Selection										■	■	■																		
7	**Preliminary Engineering Designs and ESIA Scoping**											■	■	■	■	■	■														
	Preliminary Engineering Designs											■	■	■	■	■															
	Definition of Management Options														■	■	■														
	Financial and Economic Analyses															■	■														
	ESIA Scoping														■	■	■														
8	**Stakeholder Validation Workshop**																◆						◆								
9	**Detailed Engineering Designs and ESIA**																	■	■	■	■	■	■								
	Site Investigations																	■	■												
	Detailed Engineering Designs																		■	■	■										
	Management Options																				■	■									
	ESIAs																			■	■	■	■								
	Financial and Economic Analyses																					■	■								
10	**Tender Documentation, Costing and FMPs**															■	■					■	■	■							
	Specifications															■						■									
	Tender Documentation and Costing															■	■						■	■							
	FMPs																					■	■	■							
11	**Investment Plan**																		■						■						
12	**Progress Reporting**								◆			◆				◆			◆			◆			◆			◆			
13	**Audit**																												◆		
14	**PCR**																													◆	

ANNEX 4: PROCUREMENT ARRANGEMENTS

1. Executing Agency's Capacity

Executing Agency Procurement Capacity: The ***Ministry of Water Development, Sanitation and Environmental Protection*** will be responsible for the procurement of goods and acquisition of consulting services. The EA's overall capacity, compliance performance, and operational track record to implement procurement actions under the project, have been examined with respect to the assessment findings of the sector staff capacity and project design and complexity.

2. Procurement of Goods, Works and Consultancy Services

2.1 **Recipient Procurement System (RPS):** Goods contracts and operational costs will be carried out using the Recipient's Procurement System (RPS) in line with the Recipient's Zambia Public Procurement Act of 2008 and the Public Procurement Regulations of 2011 or as may be amended, utilizing the appropriate National Standard Solicitation Documents (SSDs) and administrative procedures.

2.1.1 **Goods:** Contracts for Goods in this case the procurement of a motor vehicle valued at *Euro 35,000.00* will be carried out using shopping or Simplified Bidding. The specific goods to be procured including the methods are defined in Table 1.

2.1.2 **Workshops and Investment Forum:** Workshops and Investment forum ***(Euro 110,000.00)*** under the project will be conducted following the RPS through *a prior approved work plan and Budget*.

2.2 Bank Procurement Policy and Methodology (BPM): Contracts for Consultancy services will be carried out using the Bank Procurement Policy and Methodology (BPM) in line with the *Bank's Procurement Policy for Bank Group Funded Operations October 2015 Edition*, using the Bank's Standard Solicitation Documents (SSDs).

2.2.1 The acquisition of consulting services financed by the Bank will be in accordance with the ***Procurement Policy for Bank Group Funded Operations dated October 2015***, using the relevant Bank Standard Solicitation Documents (SSDs) and the provisions stipulated in the Financing Agreement. The Procurement arrangements for the project are summarized in Table 1 below.

2.2.2 ***Consultancy Services:*** The acquisition of consultancy services *with an estimated cost of* ***Euro 826,850.00*** involving baseline, feasibility studies, preliminary and final engineering designs, tender documentation and investment planning will be carried out using *the Quality and Cost Based Selection Method (QCBS).* The services shall be acquired through shortlisting of consulting firms using available Bank's Standard Request for Proposal document. Advance contracting may be used for acquisition of the consultancy services.

2.2.3 **Project Management:** Expenditures during project implementation at an aggregate cost of **€ 187,900**, including office supplies, utilities, consumables, advertising expenses, internet service, communication, maintenance and insurance of vehicles, staff remuneration and travel costs, etc., will be procured by the Government of Zambia (GRZ). Grant resources will be used to finance fuel and lubricants at an aggregate cost of **€ 12,500.**

3 Advertising

3.1 General Procurement Notice

The text of a General Procurement Notice (GPN) will be agreed with the EA and it will be issued for publication in UNDB online and in the Bank's Internet Website, upon approval of the Financing Proposal.

4 Procurement Arrangements

4.1 All procurement of goods and acquisition of consulting services to be financed by the Bank will be in accordance with the Bank's Procurement Policy Framework of October 2015 and the provisions to be stipulated in the Financing Agreement. The Bank's new dynamic procurement policy allows Bank financed contracts be to be handled through the use of Recipient Systems, within an acceptable fiduciary compliance framework.

4.2 The procurement arrangements for the various components, elements, and items, under the different expenditure categories together with specific contracts to be financed by the grant and procured using RPS and BPM with respective oversight requirements, and the timeframe as agreed between the Recipient and the Bank, are documented in the Procurement Plan which has been agreed with the Bank. The table below shows some of the tentative categories to be covered under the project.

Table 1: Procurement Arrangements (in Euros)

1.	**Consultancy Services**	**RPS**	**BPM**			**Total**
1.1	*Baseline and feasibility studies, preliminary and final engineering designs, and investment planning*		*826,850 (QCBS)*			826,850
2.	**Goods**					
2.1	*Motor Vehicle*	*35,000 (Shopping)*				
3.	**Workshops**					
3.1	*Investment Forum*	*15,000*				*15,000*
3.2	*Stakeholder Workshops (SI Drafting)*	*35,000*				*35,000*
3.3	*Stakeholder Workshops (Launch and Validation)*	*60,000*				*60,000*
4.	**Operating Costs**					
4.1	*Fuel/ Lubricants*	*12,500*				*12,500*

*RPS *– Recipient Procurement System*

*BPM ** - Bank Procurement Policy and Methodology*

5 Procurement Plan

5.1 The Recipient, during project appraisal, is required to develop a detailed Procurement Plan (PP) covering the entire scope of implementation of the project in the initial 18 months, and which has provided the basis for the procurement packaging in this project appraisal report (PAR). AWF shall review the procurement arrangements proposed by the Recipient in the Procurement Plan for its conformity with the Grant Agreement and its Rules. The Plan shall cover an initial period of at least 18 months, and shall be updated on an annual basis or as necessary to reflect the actual project

implementation needs and improvements in institutional capacity, always covering the next 18 months period of project implementation. AWF shall give prior approval to any proposed revisions to the Plan.

5.2 The PP has been agreed between the Recipient and the Bank and is available at the *Ministry of Water Development Sanitation and Environmental Protection*. The Recipient shall implement the PP in the manner in which it has been agreed with the Bank/AWF. ***The Procurement Plan is presented below:***

1. **General**

Country/Organisation: Project/Programme:	**Zambia** **Integrated and Sustainable Urban Sanitation Project**
Loan No:	
Implementing Agency, Address:	**Ministry of Water Development , Sanitation and Environmental Projection**
Bank's Approval Date of Procurement Plan:	TBA
Date of General Procurement Notice:	TBA
Period Covered by these Proc. Plans:	18 Months

SERVICES

2. **Prior Review Threshold:**

Procurement decisions subject to Prior Review by the Bank as stated in the Appraisal Report

	Prior review	
Procurement Method	Threshold	Frequency of Review
	(UA equiv.)	
1. QCBS	All Contracts	All Contracts in accordance with Appendix 1 of the rules for prior review and During Supervision, follow up and procurement Audit Missions for Post Review

Procurement Packages with Methods and Time Schedule for 18 months

Description of Contract	Lot No.	Selection Method	Lump Sum or Time Based	Estimated amount in (Euro)	Prior or Post Review	EOI Publication	Contract Start Date
Consultancy Services : baseline and feasibility studies, preliminary and final engineering designs, and investment planning	-	QCBS	Lump Sum	*826,850*	Prior	01/02/20	15/07/20

Total				***826,850***			

6 Bank's Oversight of Recipient's Procurement

6.1 Oversight under RPS: Under RPS, procurement oversight shall be carried out according to national procurement laws and regulations. National oversight institutions comprising the national Public Procurement Oversight Body (PPOB) and the national Supreme Audit Institutions (SAI) in this case the ZPPA and the Office of the Auditor General will be conducting their own audits as per national laws and regulations. Monitoring transactions or groups of similar transactions under the project will, however, be also carried out by independent financial and procurement auditors, relying on the national audit reports[5] as input to their independent reviews. The TORs of such audits shall be agreed with the Bank and their costs financed under the project. The Recipient shall, based on these, compile and submit annual audit reports to the Bank.

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6.2 Oversight under BPM: Procurement undertaken through Bank shall be subject to prior or post review, as well as Independent Procurement Reviews. In addition to the prior review of certain transactions by the Bank, it is recommended that two (2) procurement supervision missions be undertaken annually to carry out post reviews of the Recipient's procurement actions.

[5] *While the Bank recommends to have these procurement audits carried out on an annual basis, they should be carried out in an efficient manner taking into account the number of contracts awarded during the concerned year of activities.*

ANNEX 5: POLICY AND INSTITUTIONAL FRAMEWORK

1. Policies and Strategies

1.1 The National Sector Vision is to attain universal access to clean and safe water supply and sanitation for all by 2030. Government therefore places the provision of improved sanitation and hygiene on top of its agenda in realization of the need to achieve sound public health and reduce the disease burden among the people. In an effort to address the need, Government in 2016, created the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) as part of ongoing sector reforms to coordinate and promote efficiency and effectiveness in the delivery of water supply and sanitation infrastructure and services. The MWDSEP is responsible for sector policy formulation and monitoring.

1.2 As part of the reforms, the 1994 National Water Policy that emphasized among others: (a) separation of water resources management from water supply and sanitation, (b) separation of regulatory and executive functions, (c) devolution of authority to local authorities and private enterprises, and (d) achievement of full cost recovery in the long term, has been revised since 2010 to integrate cross-cutting issues like gender, HIV/AIDS and climate change, and to introduce integrated water resources management principles.

1.3 The key sector related policy, strategies and programs include:

- Vision 2030[6] that aims to achieve 90% access to Sanitation and 100% access to water by 2030;
- Seventh National Development Plan (7th NDP), a multi-sectoral development plan with the theme: "Accelerating development efforts towards the Vision 2030 without "Leaving anyone Behind". In line with the SDGs, the 7th NDP calls for enhanced provision of adequate water supply and safe sanitation under Outcome 3 which targets enhanced human development;
- Draft National Water Supply and Sanitation Policy that provides clear guidelines for implementation of Water Supply, Sanitation and Solid Waste Management in Zambia, and anchored in Vision 2030. The Policy underscores GRZ's commitment to provide sustainable and equitable water supply, sanitation and solid waste management services for all;
- National Rural Water Supply and Sanitation Program (NRWSSP) that guides implementation of water supply and sanitation activities in rural areas by the Local Authorities. The program has a dedicated sanitation and hygiene component;
- National Urban Water Supply and Sanitation Program, 2011-2030 (NUWSSP) that guides the provision of water supply and sanitation in urban and peri-urban areas, and implemented by the established Commercial Water Utilities;
- National Urban and Peri-Urban Sanitation Strategy that provides a framework for the implementation of urban and peri-urban sanitation projects and activities by various stakeholders, including the end users. Households are responsible for building their own toilets, but some assistance is provided for the poorest;
- Open Defecation Free Strategy that targets Zambia to be open defecation free by 2030. The strategy also guides and outlines the process for the attainment of open defection free in an area.

1.2.6 Key legislative instruments that support policy and enforcement include:

[6] Ministry of Finance and National Planning. 2006. Vision 2030. Government of Republic of Zambia

- Water Supply and Sanitation (WSS) Act No. 28 of 1997 that defines sanitation as the disposal, on-site or off-site, of human excreta including collection and treatment. Section 9 of the Act provides for the formation of Water Supply and Sanitation Utilities (Commercial Utilities) by Local Authorities; and creation of National Water Supply and Sanitation Council (NWASCO) to regulate water supply and sanitation service providers to ensure effectiveness, efficiency and sustainability of service provision, whilst protecting consumers;
- Water Resources Management Act No.11 of 2011 that provides for the establishment of the Water Resource Management Authority (WARMA) to manage available water resources;
- Zambia Environmental Management Act No. 12 of 2011 that provides the legal framework in the management and protection of the environment and natural resources, and the establishment of the Zambia Environmental Management Agency (ZEMA) to manage and control pollution of water resources;
- Public Health Act which governs delivery of environmental sanitation services, and provides for regulation of on-site sanitation.

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2. Institutional Framework

2.1 In addition to creation of the Zambia Environmental Management Agency (ZEMA) and the Water Resources Management Authority (WARMA), the reforms have led to the establishment of other key sector institutions that include:

a) National Water Supply and Sanitation Council (NWASCO), established in 1997 and operationalized in 2000, and responsible for ***economic regulation*** of sector related services. NWASCO oversees tariff adjustments, minimum service levels, financial projection and investment planning, and corporate governance. NWASCO has successfully developed a framework for benchmarking, reporting and user engagement. NWASCO is financed through a 1-2% surcharge on water tariffs;
b) Commercial Utilities (CUs), most of which have been established since 2000, involving grouping together the physical assets and personnel of several Local Authorities within a province. The CUs are legally and financially autonomous public entities that charge tariffs and operate based on commercial principles;
c) Water and Sanitation Association of Zambia (WASAZA), established in 1999 to provide training, promote exchange of experiences on good practices, and support to increase public awareness. Currently, WASAZA has over 300 corporate and individual members;
d) Water Kiosks which have been in existence since 2005, are operated by private individuals under contractual agreement with the Commercial Utilities and the Local Authorities. Kiosk operators buy piped water in bulk for sale at a slightly higher regulated price of about 1 US Cent per 20 litres to users. The operators supplement their income by selling various other essential commodities;
e) Zambia Emptiers Association established as a national association with over 60 members and a total fleet of 56 operational emptier trucks. Members operate mainly in Lusaka and other large towns.

2.2 Currently, the major water and environmental sector Development Partners include the African Development Bank Group (AfDB), Agence Française de Development (AFD), the European Union (EU), the KFW and GIZ, DANIDA, UNICEF, USAID, JICA and the World Bank (WB). The International NGO/Civil Society Groups include WaterAid and World Vision. About 98% of sector investments are financed by donors and NGOs.

2.3 Generally, the CUs and Local Authorities are directly responsible for sewerage and onsite sanitation services, respectively. Increasingly, due to the need to provide and sustain the operation

and maintenance of treatment infrastructure, the CUs appear to have more responsibility for sanitation services delivery. Sanitation tariffs are usually 30 percent of water tariffs, and are set without taking into account the performance of the sanitation subsector. Reportedly, 29% of the urban population is connected to sewers, and another 30% is served by septic tanks or improved household-level latrines. The coverage figures are low, but are higher than the average figures in Sub-Saharan Africa.

Specific roles and responsibilities of some key institutions include:

a) *Ministry of Water Development, Sanitation and Environmental Protection:* Responsible for sector policy and standards, managing and regulating water resources, and related development and management priorities. The Ministry is also responsible for overall sector performance monitoring and evaluation, and effectiveness of development programmes;

b) *Ministry of Health:* Responsible for hygiene and sanitation promotion for households, and acts through the Public Health Division of the Ministry. The Ministry coordinates with relevant sector ministries for development of sanitation related infrastructure and software activities in schools, households and public places;

c) *Ministry of Education:* Responsible for delivery of school sanitation facilities and hygiene education together with promotion of handwashing in primary schools;

d) *Ministry of Gender:* Responsible for gender responsive policy development to protect and promote women's rights, curb gender-based violence and reduce gender inequalities;

e) *Ministry of Finance:* Responsible for resource mobilization and sector allocation, coordination of development partner resources, and financial reporting, and compliance monitoring and reporting on sector and national development objectives;

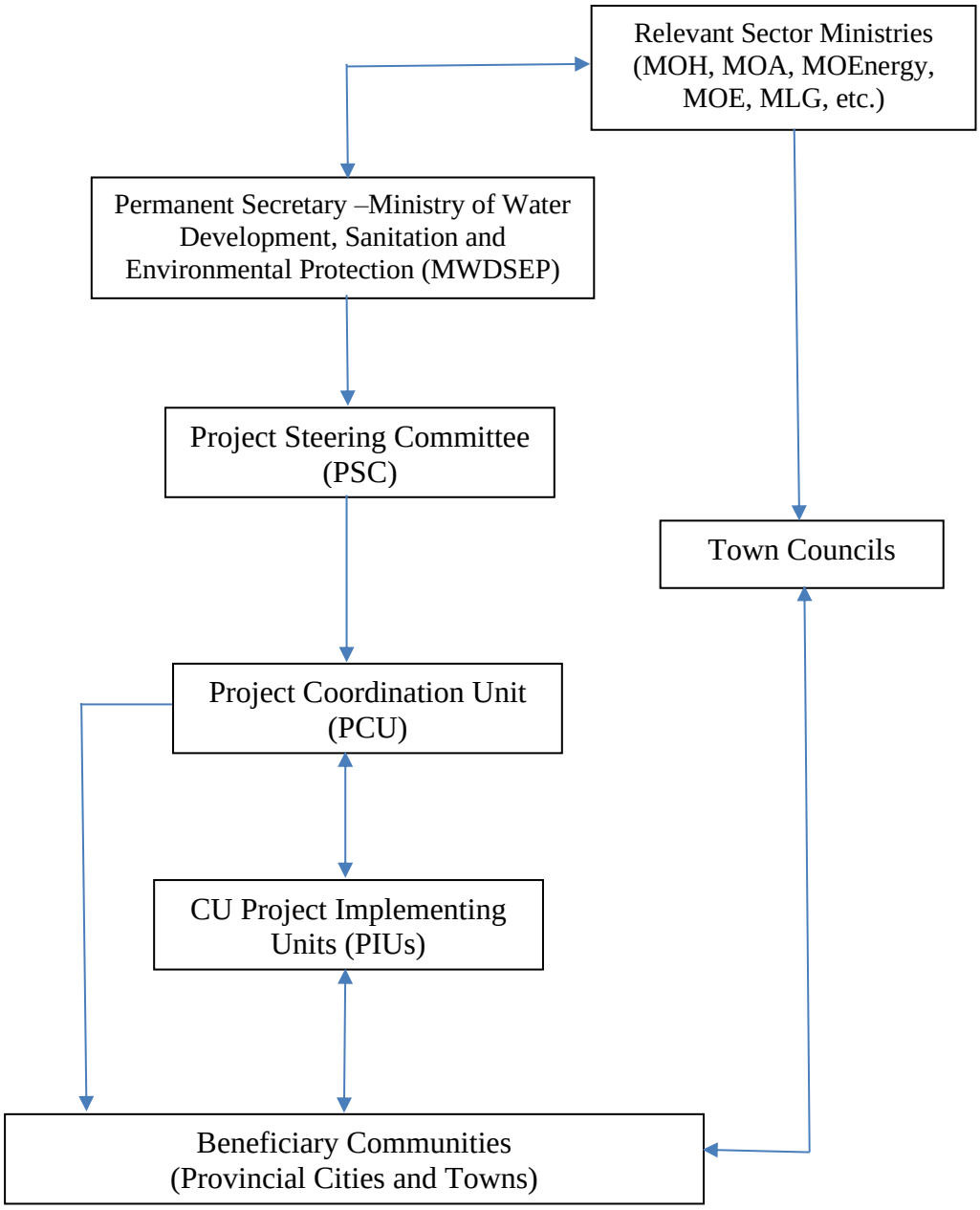
f) *Zambia Environment Management Agency:* Responsible for ensuring protection of the environment through enforcement of environmental management laws and regulations at the national and local levels, in collaboration with sector Ministries.

g) *Town Councils:* Responsible for delivery of environmental sanitation services including solid waste management and on site sanitation and enforcement of related by-laws, in collaboration with relevant ministries and agencies.

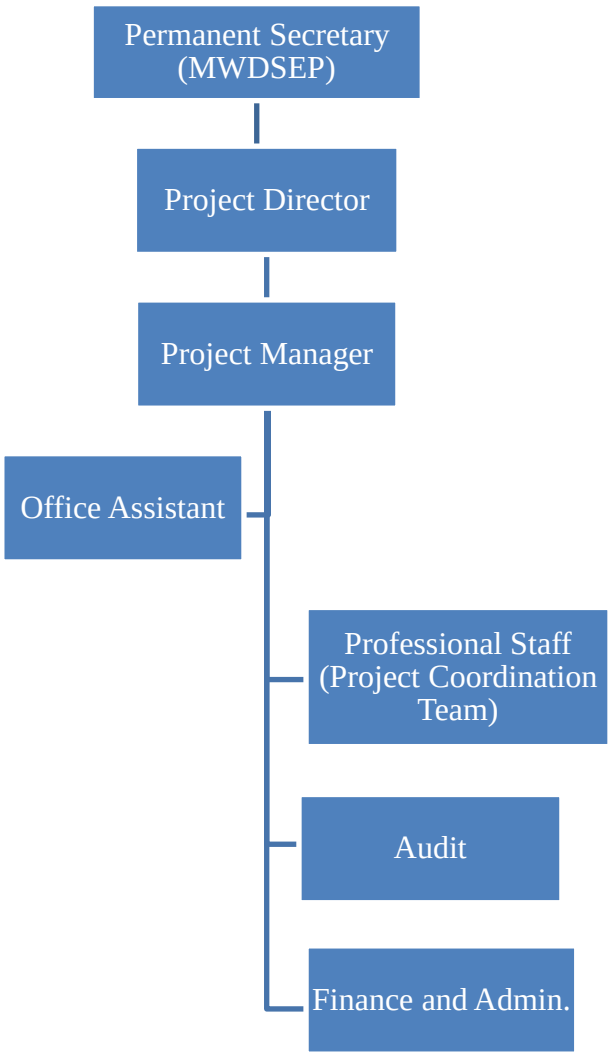
h) *Private Sector (PS) Operators:* Organized as an Association of Cesspit Emptier Operators, the private sector operators are mainly responsible for provision of Faecal Sludge (FS) collection and transportation services through contracting and franchising arrangements. Members of the Association own and operate highly depreciated trucks that require major repairs or replacement. They mainly operate in Lusaka, where demand for FSM services is high. Current service charges are between ZMW 700 and ZMW 2,000 per desludging trip. Operators are often reluctant to operate in the up-country small towns due to (i) absence of sites for FS treatment and disposal; (ii) long haulage distances and related costs; and (iii) limited capacity of households to pay for the services. Operators have limited access to credit and affordable spare parts, which impacts adversely on their operations. In addition, Operators complain about (i) multiple surcharges levied by public institutions per truck, e.g., ZEMA licensing fee of ZMW 3,800 every 3 years, (ii) high tipping fees (ZMW 30 to 36 per cubic meter of truck capacity), (iii) high truck import duty, and (iv) competition from public institutions like the Military, Commercial Utilities, etc.

i) *Other Private Sector Entities:* Consultants, Contractors and Suppliers provide various services to develop, operate and maintain relevant sanitation infrastructure and services.

ANNEX 6: PROJECT ORGANISATION AND INSTITUTIONAL LINKAGES



ANNEX 7: PROJECT COORDINATION TEAM



ANNEX 8: PROJECT COORDINATION TEAM 'S TERMS OF REFERENCE

1. **The Project Manager** will be assigned from the MWDSEP and should have at least a master's degree in a civil engineering or any related field, and a minimum of 10 years' professional experience in municipal engineering, and with demonstrable experience in the planning, design and construction of water and sanitation infrastructure. He/She will be responsible for coordinating the following activities:
   - Perform the day-to-day management of the project implementation activities.
   - Participate in project launching and acquisition process for the Main Consulting Firm(s).
   - Provide an oversight role on the management and implementation of all project-related activities, and prepare work and procurement plans for the project period.
   - Provide all monthly and quarterly progress reports, and other project related documentation to the MWDSEP and AWF on administrative, financial, accounting, contracting, implementation and monitoring issues, and ensure liaison with the AWF.
   - Ensure close collaboration with the project consultants' team, and coordinate and monitor Consultants' performance, and facilitate capacity-building activities.
   - Liaise with MWDSEP, Commercial Utilities (CUs), Municipalities, Town Councils and other local stakeholders on project related activities, including meetings/workshops required by the project consultants.
   - Assist in needs identification and development of options for project intervention.
   - Ensure that senior staff of relevant public institutions are fully involved and informed of project progress.
   - Organize investment fora to present the project results for funding consideration.

2. **The Finance and Accounting Officer** will be assigned by the MWDSEP and should have at least a bachelor's degree in accountancy or full ACCA/CIMA/CA-Zambia, and a minimum of 5 years' similar professional experience. He/she will:
   - Keep track of and register all financial transactions related to the implementation of the project in accordance with project financial management requirements.
   - Ensure that an externally appointed and independent auditor audits accounts yearly.
   - Prepare monthly and quarterly financial statements and reports and submit to the Project Manager as inputs for progress reporting; and provide general administration support.

3. **The Monitoring and Evaluation Officer** will be assigned by the MWDSEP and should have at least a bachelor's degree in M and E, or any other related field and a minimum of 5 years' similar professional experience. He/she will:
   - Develop and maintain an M & E database for the project.
   - Lead development of and oversee the review of project level Monitoring & Evaluation (M&E) plan and associated work plans for each component/activity as reflected in the results framework;
   - Serve as focal point for providing M &E inputs on Implementation Progress Reports (IPRs); and prepare and submit M&E inputs as per the results framework to the Project Coordinator as inputs for progress reporting.
   - Ensure quality control of M&E outputs (e.g., surveys, etc.) by contributing substantively to the design and field testing of field survey data capture and monitoring methodology; and review, supervise the design and implementation of the surveys, participatory data

collection protocols, data verification techniques, and other technical evaluation and analytical tasks under the project.

5. **The Project Engineer** shall be assigned by the MWDSEP and should have at least a bachelor's degree in Civil/Environmental/Sanitation Engineering with a minimum of 10 years' similar professional experience. He/she will perform the following key functions:
   - Provide assistance to review and approve Consultant's designs and related reports regarding septage/faecal sludge and sewerage management infrastructure and services.
   - Assist Project Manager to make technical decisions concerning project management and implementation in compliance with the defined project implementation protocols.
   - Provide backup support and other engineering services as may be assigned by the Project Manager in achieving the project objectives.

6. **The Procurement/Contract Specialist** shall be assigned by the MWDSEP and should have at least a bachelor's degree in Purchasing and Supply or any other related field with a minimum of 5 years' similar professional experience. He/she shall perform the following key functions:
   - Provide guidance to the Project Manager on all procurement matters and provide support regarding contract management.
   - Work in coordination with the Project Consultants, Vendors and PCU and PIU staff and advise and provide guidance on procurement issues.
   - Assist MWDSEP to procure goods and services in accordance with the provisions of the African Development Bank Guidelines and Public Procurement Authority regulations.
   - Participate in detailed preparation, verification and periodic update of Procurement Plans, and maintain procurement reporting system in accordance with the provisions of the Project Appraisal Report.

7. **The Environmental and Social Safeguard Specialist** shall be assigned by the MWDSEP and should have at least a bachelor's degree in Environmental or Social Science or any closely related field with a minimum of 5 years' similar professional experience. He/she shall have the following responsibilities:
   - Provide overall policy and technical direction for safeguards management under the Project, and assist the Project Manager to manage the Consultancy services for environmental and social assessments.
   - Prepare terms of references to undertake Environmental and Social Assessments following the African Development Bank and national regulatory requirements; and assist with the review and endorsement of safeguards documents, and ensure consistency with national environmental regulations.
   - Closely coordinate with Consultants and other stakeholders for timely preparation of Environmental and Social Impact Assessments and Management Plans and Resettlement Action Plans as necessary.
   - Ensure that applicable measures in the ESMP are included in the design, and conditions on compliance with ESMP are included in the bidding documents, liaising closely with the Procurement Specialist of the PCU.

8. **The Community Development & Gender Specialist** shall be assigned by the MWDSEP and should have at least a bachelor's degree in Gender, Community Development or related field with a minimum of 5 years' similar professional experience. He/she shall have the following responsibilities:

- Design a framework for undertaking Knowledge, Attitude and Practices/Perception (KAP) surveys within the participating settlements, and provide support to undertake all relevant feasibility studies.
- Liaise with local communities, private enterprises and relevant government stakeholders on all matters relating to the socio-economic impacts of community and private sector consultations and engagements.
- Technically support the Project Core/Project Implementation Units (PC/PIUs) in managing the social development and gender related issues of the project.
- Provide technical inputs on community development and social inclusion (including gender) to all project outputs and activities, as necessary.
- Provide support to develop Knowledge Management products and lesson learning and sharing tools sensitive to women issues for the project.

ANNEX 9: GUIDELINES ON AWF COMMUNICATION AND VISIBILITY

1. Background

1.1 Communication and branding are very important to the AWF. Indeed, the AWF considers communication as a strategic function firmly linked to its business strategies and objectives. Regular communication with stakeholders helps strengthen the credibility of FEF and ensuring their confidence and esteem, which in turn help to strengthen and protect the reputation of the AWF. Communication is also an activity related to access to information. The AWF is a multilateral fund that is accountable to a board of directors who expects FEF complies with the highest standards of accountability and transparency. Thus, the AWF has committed to make every effort to communicate, share and report to its stakeholders and the general public all the information that will be useful and relevant. This commitment requires effective and regular communication on achievements, progress and results of the AWF using all available means, in a timely manner. All these are part of good business conduct AWF, and are essential to attract and retain donors, and maintain its "social license" of operation.

1.2 The branding is to ensure that the public knows the existence of the AWF and can distinguish it from other funds or organizations in the field of water. Branding is the use of a recognizable visual marker, logo, which embodies the AWF and carries his identity. The brand recognition is achieved over time, through activities designed to increase brand visibility, for repeated use and exposure logo at strategic locations and times. The AWF logo is used as a seal or a signature to indicate the financial support of AWF or a special collaboration.

1.3 The AWF has prepared guidelines on communication and visibility to the attention of partners, AfDB Regional Offices and grantees to help FEF more effectively achieve its goals of communication and visibility, as provided in the long-term communication strategy of the AWF in 2006 voted by its Board of Directors in 2006.

2. General Conditions

2.1 Before embarking on any process for the preparation of communication activities on the project funded by AWF, it is strongly recommended to contact the communications officer to the secretariat of the AWF, taking also informed the project manager of the AWF.

2.2 As a minimum, and to the extent possible, the logo of the AWF is to be applied to all communication documents regarding the project funded by the AWF. The proper use of the logo must be discussed with the head of communications of the AWF.

2.3 The AWF should be mentioned orally as a donor of the project it funds at public events in which the project is involved, and should also be mentioned as a donor in all PowerPoint presentations on projects funded by the AWF, using the name and logo of the AWF appropriately.

2.4 The logo should be obtained on request from the head of communications of the AWF.

2.5 The relevant documents and publications of the project must contain the logo of the AWF, and this sentence on the cover page: "This project / program / study is funded (e) by the African Water Facility."

2.6 Implementing agencies and implementation must always have a link to the AWF website on the page of their website on the project / activity funded by the AWF. The website is: www.africanwaterfacility.org .

3. Validation Process

The management of the AWF is responsible for the final validation of any communication product of the AWF.

4. Press Releases Media and Advisory

A press release of the AWF is broadcast at launch (approval or signature) and completion of the project.

4.1 Press releases AWF should always include a quote from the Coordinator of the AWF, which must also be validated.

4.2 The AWF appreciates and encourages any initiative to produce joint press releases with its partners (between the start and end of the project).

4.3 Where the gift recipient wants to produce a press release, it is necessary to coordinate this activity with the head of communications of the AWF in order to receive a quote from the Coordinator of the AWF, as appropriate, and obtain approval.

4.4 The AWF should be included in the title and / or the first paragraph of the press release, if any.

4.5 The press release should include the logo of the AWF, in addition to mention that funding was provided by the AWF and the amount of such financing.

4.6 If a press conference is planned, the press release should include the name of a high-level representative of the AWF will be present at the press conference, if appropriate.

4.7 All press releases must bear the name and contact information for the communications of the AWF and the head of communications / media relations of the gift recipient.

4.8 The text description of the AWF ("About AWF") must be added to the text, including the address of the AWF website. Please contact responsible for communications AWF to get the latest version, if needed.

4.9 The MEF is responsible for the final validation of all press releases following an editorial process involving publishers.

4.10 The above rules also apply to media advisories.

5. Press Conferences

5.1 The press conference to launch the projects funded by the AWF to be organized in cooperation with the AWF, as far as possible.

5.2 The invitations should bear the logo of the AWF.

5.3 The AWF logo must appear conspicuously with any banner or poster used during the conference.

5.4 Press kits should include a press release with the logo of the AWF.

5.6 If possible, a banner AWF must be available and implemented to serve as a backdrop for meetings television and photography.

6. Press Visits

Journalists are invited to visit the project funded by the AWF, accompanied by representatives of the AWF or focal point FEF housed within the authority / government of the gift recipient.

Visits by Representatives of Governments, Donors of AWF.

6.1 The project visits by government officials and AWF donors are encouraged. These should be prepared in coordination with the AWF and focal points of the AWF host government. This may also include meetings with local beneficiaries.

6.2 These visits may also include the participation of government representatives and donors AWF in roundtables and other events.

7. Cards, Brochures and Newsletters

7.1 All relevant pamphlets and brochures of the project / program financed by the AWF should incorporate the basic elements of the visual identity of the AWF, i.e. the logo of the AWF with or without its slogan.

7.2 Leaflets and brochures produced by the gift recipient must also incorporate a definition of the AWF, or descriptive text, see section "Press releases and media advisories."

7.3 The cover page of all documents relating to the project financed by the AWF must clearly identify the activity as part of an activity funded by the AWF.

7.7 Copies of publications including electronic copies should be made available to the AWF.

8. Electronic Communication

Any electronic communication disseminating information on projects funded by the AWF, including websites, newsletters and social media must include a link to the website of the AWF.

9. Safety

The executing agency must produce billboards, posters or banners to promote their activities funded by the AWF or related to the AWF at exhibitions and other events, which will be placed at strategic locations visible to all.

10. Vehicles, Supplies and Equipment

10.1 The AWF generally requires that vehicles, supplies and equipment financed by the AWF are clearly identified, and visibly carry the logo of the AWF and the phrase "Provided with the support of the African Water Facility" in English, French or Portuguese, or any official language of the country or institution, if applicable.

10.2 This condition can be the subject of negotiations between AWF and the gift recipient since some supplies and equipment may be exempted.

10.3 The gift recipient must provide proof of compliance with this rule (emailing digital photos is recommended).

11. Photographs and Audio-visual Productions

11.1 High-resolution professional digital photographs (300 dpi) project funded by AWF must be provided to the AWF throughout the different phases of the project to document the progress of actions and events related to the project, which will be used in print or electronic publications.

11.2 All photos must be submitted with a complete legend, and the information needed to assign ownership.

11.3 The AWF will be permitted to use or reproduce photos submitted to it without payment of royalties.

11.4 Whenever required, audio-visual materials must acknowledge the support of the AWF, highlighting the AWF logo at the beginning and / or end of the movie / documentary.

11.5 Copies of the film (s) / document (s) must be provided to the AWF.

12. Commemorative Plates or Safety

12.1 If relevant, the gift recipient must place a permanent plaque or other type of commemorative signs in the most visible part of the building, infrastructure or near the project site has been funded by AWF, next to the name the implementing agency and / or the name of the project visible to visitors.

12.2 If necessary, the plate or signalling may contain the following sentence: "This [Infrastructure's name] was funded by the African Water Facility" next to the logo of the AWF.

13. Promotional Items

13.1 Before taking any decision on the production of these items, it is necessary to consult the Communications Officer of the AWF.

13.2 Promotional items bearing the logo of the AWF can be distributed in support of communication activities for the project financed by the AWF. It may be T-shirts, caps, pens, notebooks, USB sticks, etc.

ANNEX 10: CONSULTANCY SERVICES TERMS OF REFERENCE

REPUBLIC OF ZAMBIA

MINISTRY OF WATER DEVELOPMENT, SANITATION AND ENVIRONMENTAL PROTECTION

TERMS OF REFERENCE

FOR

CONSULTANCY SERVICES FOR FEASIBILITY STUDIES AND DETAILED DESIGN OF FAECAL SLUDGE SERVICE CHAIN MANAGEMENT IN SELECTED URBAN CENTERS IN ZAMBIA

May 2020