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Facilité africaine de l'eau
Mobilising Resources for Water in Africa
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REPUBLIC OF KENYA

Nairobi Inclusive Sanitation Improvement Project

Appraisal Report

November 2019

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ABBREVIATIONS

AfDB	-	African Development Bank
ADF	-	African Development Fund
BPM	-	Bank Procurement Method
BPS	-	Borrower Procurement System
CSP	-	Country Strategy Paper
CSI	-	Core Sector Indicator
DPs	-	Development Partners
EA	-	Executing Agency
ESMF	-	Environmental and Social Management Framework
ESMP	-	Environmental and Social Management Plan
FM	-	Financial Management
FSM	-	Faecal Sludge Management
GoK	-	Government of Kenya
ICB	-	International Competitive Bidding
M&E	-	Monitoring & Evaluation
MoA	-	Ministry of Agriculture
MoE	-	Ministry of Energy
MoH	-	Ministry of Health
MWSI	-	Ministry of Water and Sanitation & Irrigation
NCB	-	National Competitive Bidding
NGO	-	Non-Governmental Organization
NWP	-	National Water Policy
O&M	-	Operation & Maintenance
PCR	-	Project Completion Report
PIT	-	Project Implementation Team
RBLF	-	Result Based Logical Framework
SDG	-	Sustainable Development Goals
ToR	-	Terms of Reference
USD	-	United States Dollars
WB	-	World Bank
WSP	-	Water and Sanitation Program

CURRENCY

Local Currency	:	Kenyan Shilling (KES)
1 Euro (EUR, €)	:	114.85 KES (ADB Exchange Rate as at 31 October 2019) 0.81 UA

LOGICAL FRAMEWORK ANALYSES

COUNTRY AND TITLE OF THE PROJECT: KENYA – NAIROBI INCLUSIVE SANITATION IMPROVEMENT PROJECT						
PURPOSE OF THE PROJECT: TO CONTRIBUTE TO INCREASE ACCESS TO SUSTAINABLE AND INCLUSIVE SEWERAGE AND FAECAL SLUDGE MANAGEMENT SERVICES FOR URBAN DWELLERS.						
	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Baseline	Target		
IMPACT	<p>Impact Contribute to improved health and quality of life through provision of safe and sustainable sanitation services.</p>	1. Incidence rate of diarrhoea.	1. 20% in 2018.	1. <15% by 2035.	<p>1. CIDP for Nairobi County/County Disease Surveillance Report; 2. JMP Reports; 3. MOH/WHO Reports; 4. Kenya Bureau of Statistics (KBOS).</p>	<p>Risk: Lack of political support and Government continued interest in Sewerage and FSM.</p> <p>Mitigation: Government and all actors to ensure continuous dialogue and transparency.</p>
		2. Proportion of people with improved access to sustainable sanitation.	2. 48% in 2018.	2. 100% by 2040.		
OUTCOMES	<p>1. Contribute to increased access to sustainable and inclusive Sewerage and Faecal Sludge Management (FSM) services in deprived urban, peri-urban and informal settlements of Nairobi.</p>	3. Reduced poverty levels.	3. 45.2% in 2018.	3. 20% by 2040.	<p>1. Project Progress, Monitoring & Evaluation Reports. 2. JMP/KBOS Reports. 3. WASREB Data</p>	<p>Risk: a) Community resistance to behavior change regarding improved Sewerage/FSM and hygienic sanitation practices. b) Inability to mobilize resources for downstream investments.</p> <p>Mitigation: a) Community sensitization. Increased social marketing and media involvement in hygiene and sanitation related activities. b) Active participation of the Ministry of Water and Sanitation & Irrigation, Ministry of Finance, and donors at every stage of project development, and effective organization of an investment forum.</p>
		1.1 Additional number of households (HHs) with likely access to improved and inclusive sewerage and faecal sludge collection services in deprived settlements in Nairobi.	1.1 NIL in 2019.	1.1 102,000 HHs with access to Sewers; 45,000 HHs with access to Ablution Blocks; 80,000 HHs with access to On-site facilities (at least 25% ¹ female headed) by 2024.		
		1.2 Proportion of collected sewage and faecal sludge likely to be safely treated for reuse/disposal.	1.2 TBD.	1.2 90% by 2024.		
	<p>2. Contribute to increased investments in Sewerage and FS management.</p>	2.1 Percentage increase in Sewerage and FSM investments in Nairobi's urban settlements (at least 30% targeting urban poor)	2.1 0 % in 2012.	2.1 40 % by 2024.		

¹ The Nairobi city estimates from KIHBS 2015/2016 for female headed household is 24%.

	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Baseline (2015)	Target		
OUTPUTS	<u>Component 1: Feasibility Studies and Engineering Design</u> 1. Preparatory and feasibility studies, including socio economic, technical and institutional assessments undertaken. 2. Preliminary engineering designs and related financial analyses and ESIA Scoping completed. 3. Final engineering designs, tender documentation, ESIA's and plans completed. 4. Consolidated Connection Strategy developed.	1. No. of preparatory and feasibility study reports prepared and approved. 2. No. of approved Sewage & FSM conceptual/preliminary designs / scoping reports. 3. No. of approved Sewage & FSM final designs/tender documents/ ESIA's/ management plans. 4. No. of Strategies developed.	1. Nil. 2. Nil. 3. Nil. 4. Nil.	1. 4 by 2024. 2. 4/4/4 by 2024. 3. 4/4/4/4 by 2024. 4. One (1) by 2024.	1. Project Progress Reports. 2. MWSI Reports. 3. WASREB Report	Risk: a) Unavailability of land for selection and design of FSM and Sewerage infrastructure. b) Inadequate assessments and design of FSM and Sewerage Infrastructure and services. Mitigation: a) Government to commit to allocate land as in-kind contribution on project commencement. b) Field verification through community sampling and surveys, and rigorous eligibility and selection criteria for acquisition of consultants.
	<u>Component 2: Project Management</u> 1. Project Implementation Team (PIT) instituted 2. Detailed procurement and implementation plans approved and implemented; and project reports prepared and submitted. 3. Management capacity enhanced. 4. Validation Workshop/ Investment Forum organized.	1.1 No. of PIT staff assigned. 1.2 No. of Project Steering Committee (PSC) meetings. 2.1 Approved procurement and implementation plans. 2.2 No. of Project Reports. 3.1 No. of MWSI/AWWD/NCWSC staff trained. 3.2 No. of manuals produced. 4.1 No. of validation workshops / Investment Forum organized / amount pledged/committed.	1.1 Nil. 1.2 Nil. 2.1 Draft plans. 2.2 Nil. 3.1 Nil. 3.2 Nil. 4.1 Nil.	1.1 6 staff by 2021. 1.2 6 by 2021. 2.1 Approved finalized plans. 2.2 1 Audit & 4 Progress Reports per year; 1 Completion & 1 Evaluation Reports 3.1 10 by 2024 3.2 2 by 2024. 4.1 6 / 1 / USD 60 million by 2024.	1. Minutes of PSC meetings. 2. Project Progress Reports. 3. Approved Plans. 4. Submitted Project Related Documents. 5. WASREB Reports	
COMPONENTS DESCRIPTION/KEY ACTIVITIES						
MAIN ACTIVITIES	<u>Component 1 : Feasibility Studies and Engineering Design</u> Phase 1: Preparatory and feasibility studies (socio economic, technical, financial and institutional assessments); 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 FMPs, connection strategy. Phase 3: Specifications, tender documentation and manuals.					
	<u>Component 2 : Project Management----</u> Establishment of Project Management (PIT, PSC); planning and procurement, technical and financial management, including project reporting and liaison with AWF; capacity building; organization of stakeholder validation workshops & Investment Forum.					
					CONTRIBUTIONS Total project cost: Euros 1,138,644.11 Financing Plan: <ul style="list-style-type: none"> ▪ AWF Grant: Euros 980,766.88 (86%) ▪ Government: Euros 157,877.23 (14%) 	

EXECUTIVE SUMMARY

Background: The project rationale is premised on the need to increase access to safe, sustainable and inclusive sanitation and hygiene, with improved management of sewage and faecal sludge for people living in deprived urban communities in Kenya. The project forms an integral part of Government efforts to improve access to sustainable sanitation in line with **Kenya's Vision 2030**, the **Big Four Development Agenda**, and the **SDG Sanitation Targets**. It will support preparation of feasibility studies and detailed engineering designs for twenty-two (22) peri-urban and informal settlements to facilitate delivery and access to sustainable sewage and faecal sludge management infrastructure and services in Nairobi. The Project demonstrates Government's commitment to improve the quality of life and living conditions of Kenyans, and provides opportunity for better city level sanitation planning, and increased sector investments in partnership with private sector financiers and development partners.

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

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

Component 1: Feasibility studies and engineering design consists of activities to provide opportunity to contribute to increase sustainable access to sewage and faecal sludge management infrastructure and services for people living in deprived urban centres in Nairobi. It involves studies, including socio economic, technical, institutional and financial assessments, campaigns, baseline studies and technical assessments, site selection and investigations, engineering design of collection and treatment infrastructure and services, and development of (a) innovative strategies to promote and market Sewage and FS reuse products, and (b) investment and implementation plans to facilitate future investments, among others. Adoption of a PPP model for O&M, along with staff training shall contribute towards sustainable delivery of services.

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

The project's **direct beneficiaries** are Nairobi County Council, Athi Water Works Development Agency, Nairobi Water and Sewerage Corporation, and Sector Ministries (Water and Sanitation, Agriculture, and Energy). Following realization of the downstream investments, the **direct beneficiaries** would be the (a) initial 1,103,370, and subsequently the 2,803,211 urban dwellers in deprived urban, peri-urban and informal settlements in Nairobi without adequate access to sustainable and inclusive sanitation, including sewage and faecal sludge management infrastructure and services. The study will contribute to the likely creation of about 300 new jobs following the implementation of the downstream investment projects. Other indirect beneficiaries are Private Sector Operators, local NGOs and CBOs.

Cost and financing: The AWF will co-finance the project along with the Recipient (Government of the Republic of Kenya through the Ministry of Water and Sanitation & Irrigation (MWSI)). AWF will contribute € 980,767 representing 86% of the total project cost of € 1,138,644. The Recipient will contribute the remaining €157,877. It is expected that the Project will commence in April 2020 and be implemented over a 32 months duration.

Recommendation: It is recommended that a Grant not exceeding €980,767 from the African Water Facility Special Fund be extended to the Government of the Republic of Kenya 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 through the Ministry of Water and Sanitation & Irrigation (MWSI) on by Athi Water Works Development Agency (AWWDA) 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 sustainable sewage and faecal sludge management and to achieve the SDGs for sanitation in urban Kenya by 2030.

1.1.2 The Government of Kenya (GoK) has adopted the Kenya Vision 2030; and has committed to improving the socio-economic status of Kenyans through key interventions like improved delivery of education, health, housing and water and sanitation services. Kenya's pursuit of sustainable development and shared prosperity is anchored in the **Big Four Development Agenda** that seeks to accelerate economic growth towards sustainable development by focusing on manufacturing, food security and nutrition, provision of universal health coverage and affordable housing. While about 12% of Kenyans defecate in the open, almost 80 percent of hospital attendance in Kenya is due to preventable diseases and about 50 percent of these illnesses are water, sanitation and hygiene related. This requires serious attention as access to safe water and sanitation is a human right, and the Kenyan Constitution mandates Government to take progress steps to realize this right.

1.1.3 About 50 per cent of the Kenyan urban population resides in slum environments where sanitation conditions are appalling; and on average, schools have only one latrine per 100 pupils compared with the recommended maximum of 40 pupils per latrine. However, through recent Government efforts to promote delivery of household and public sanitation facilities, coupled with behavioural change campaigns through information, education and communication, access to sanitation has increased considerably in urban areas. For example, in Nairobi County, access to sewerage sanitation is currently over 50% compared to the national average of 16%. The remaining population therefore rely on various forms of on-site (un-sewered) sanitation, including open defecation. In several instances, the on-site facilities lack safe means of faecal sludge chain management (emptying, transportation, and disposal or re-use). The situation is worse in the deprived peri-urban and informal settlements with unfavourable hydrogeological conditions, inadequate water supply and lack of land tenure.

1.1.4 The AfDB provided funding support to implement the Nairobi Rivers Sewerage Improvement Project (NaRSIP I) in 2014. At the request of Government, the AfDB is supporting the implementation of NaRSIP II to rehabilitate the Dandora Wastewater Treatment Plant and construct 220 km of sewers by 2023 as a follow-up to NaRSIP I. It is imperative to initiate a set of all-inclusive last mile connection projects to achieve sewer network densification and optimization, and to extend coverage to previously unserved and deprived areas in Nairobi.

1.1.5 The proposed Project seeks to support Government efforts to provide inclusive and sustainable access to sanitation by 2030, in line with Government development aspirations and the SDGs through preparation of feasibility studies and detailed engineering designs for future investments. It is anticipated that the investments will contribute to improve public and environmental health, and the socio economic well-being of people living in Urban, peri-urban and informal settlements in Nairobi.

1.2 Sector Priorities

1.2.1 Article 21 of the Constitution of Kenya, promulgated in August 2010, obligates Government to take progressive steps towards realizing the citizenry constitutional right *to reasonable standards*

of sanitation and to clean and safe water in adequate quantities. Article 43 of the Constitution also states that, “*every person has the right to reasonable standards of sanitation and to clean and safe water in adequate quantities.* The Government of Kenya’s (GOK) Vision 2030 seeks to improve the socio-economic status of Kenyans through key interventions that include improved delivery of water supply and sanitation services, among others. Kenya’s sector vision is universal access to sustainable water supply and basic sanitation services by 2030. To achieve this, annual sector investment requirements amount to about \$12.9 billion for water supply, \$4.8 billion for sewerage, and \$658 million for basic sanitation and hygiene (SWA, 2017 Kenya WASH Sector Overview). Given a financing gap estimated as \$7.3 billion for water supply and \$4.5 billion for sewerage, available government budget is able to finance up to 44% (water supply) and about 6.5% (sewerage) of the required investments.

1.2.2 The Government has created an enabling environment for improved access to sustainable sanitation through institutional reforms and related formulation of relevant policies, strategies, and standards to guide sector development. The reforms have led to the creation of the Ministry of Water and Sanitation & Irrigation (MWSI) to guide and spearhead development of water resources, water supply and sanitation infrastructure, including sewerage and public onsite sanitation and related treatment and disposal facilities. The reforms have also sought to overcome some of the critical bottlenecks that include: (a) weak sector governance, particularly at the county level; (b) human resource constraints; (c) lack of a review mechanism to regularly assess progress; (d) limited sector financing that impacts on planning; and (e) insufficient tracking of WASH finances, among others.

1.2.3 In line with Vision 2030 and SDG targets for sustainable access to sanitation, the Government is mainly collaborating with Development Partners to increase sector investments in both sewerage and un-sewered sanitation, particularly in urban and informal settlements. Recent investments have included interventions to improve access to sustainable urban sanitation by (a) extending and strengthening the existing sewerage network; (b) constructing Ablution Blocks in areas with access to sewer lines; and (c) delivery of on-site household and public sanitation facilities supported by faecal sludge management services. The investments have been realized in collaboration with World Bank, AfDB, KfW, GIZ, BMGF and several NGOs.

1.3 Policy and Institutional Framework

1.3.1 A number of policies and strategies aligned to Vision 2030 governs the water supply and sanitation sector. The Policies and strategies include: Water Act, Water Policy (currently under review to include sanitation), Kenya Environmental Sanitation and Hygiene Policy (2016-2030), Kenya Environmental Sanitation and Hygiene Strategic Framework (2016-2020), Kenya Environmental Sanitation and Hygiene Prototype Bill, and Kenya Open Defecation Free Campaign Roadmap (2016- 2020), Public Health Act, and Environment Policy. The Big Four Agenda is aligned to the 2030 Sustainable Development Goals (SDGs), and the provision of water supply and sanitation services to Kenyans constitutes an underlying enabler for the attainment of the Agenda as well as the SDG’s no.6, 9 and 11.

1.3.2 *The National Water Policy 2019 (Draft Sessional Paper)* has been developed in line with the mandate, vision and mission of the Ministry responsible for water affairs in Kenya. In particular, the Policy builds on the achievements of the water sector reforms that commenced with the enactment of the Water Act, 2002 based on the principles outlined in the Sessional Paper No. 1 of 1999 on National Policy on Water Resources Management. The 2019 draft Water Policy considers (a) the provisions and spirit of the Constitution of Kenya; (b) Sessional Paper No. 10 of 2012 on Kenya Vision 2030; and (c) the lessons learnt since 1999.

1.3.4 The draft Policy takes into account the need for Kenya, at all levels of government, to take steps, through this Policy, law, institutional mandates, planning and financing, in order to secure universal coverage of the entire population through access to water, and sanitation in accordance with constitutional standards.

1.3.5 Articles 6, 174, 175 and 176 of the Constitution created a two-tier system of devolved government comprising the national and county government. The responsibility of developing, managing and maintaining water and sewerage infrastructure remains a national government function, but the responsibility of provision of water and sanitation services is vested in county governments. At the provincial or basin level, Water Works Development Agencies (formerly Water Services Boards (WSBs)) act as Asset Holders of water supply and sanitation infrastructure. AWWDA is one of the eight (8) Water Works Development Agencies (WWDAs) established under the Ministry of Water and Sanitation & Irrigation, under the Water Act 2016, vide Legal Notice No. 28 of 26th April 2019. The detailed Water and Sanitation Institutional Framework is presented in Annex 4.

1.4 Problem Definition

1.4.1 Status of Sanitation and FS Management

1.4.1.1 The Government of Kenya has created an enabling environment for improved access to sustainable sanitation through institutional reforms that have led to the creation of the Ministry of Water and Sanitation & Irrigation to guide development of sewerage and un-sewered sanitation and related treatment and disposal facilities, including promotion of behavioural change in urban, peri urban and informal settlements.

1.4.1.2 According to the JMP 2015 Update, while access to improved urban sanitation in Kenya increased from 27% in 1990 to 31% in 2015, open defecation (OD) remained unchanged at 3%. In Nairobi County, reportedly in 2014, about 47% of the urban population had access to improved sanitation while less than 1% practiced open defecation (State of Sanitation in Nairobi County, WSP, 2014). Currently in Nairobi County, access to sewerage sanitation is about 50%. The implication is that about half of the urban population in Nairobi rely on various forms of onsite household and public sanitation facilities, including OD, particularly in the peri urban and informal settlements.

1.4.1.3 The Ministry of Water and Sanitation & Irrigation, in collaboration with Development Partners like the AfDB, World Bank, KfW and NGOs, has embarked on various initiatives to address the challenges by developing and implementing water supply and sanitation improvement projects, with special focus on the peri-urban and informal settlements. The projects in the past, have targeted a limited number of settlements, and have mainly sought to improve access to both on-site and off-site sustainable sanitation but with mixed results, particularly for on-site sanitation in informal settlements, given the constraints associated with un-sewered sanitation.

1.4.1.4 Where access to sewers is provided, particularly in informal settlements, sewer manholes and inspection chambers are used for domestic solid waste disposal that affects the quality and characteristics of sewage from such areas. The practice also results in spilling of sewage onto road accesses in residential neighbourhoods with attendant public health and environmental risks. To help address the problem of solid waste disposal into sewers, the City County, acting through their Environmental Health Officers at ward level, has identified and designated points as transfer stations for solid waste disposal within deprived communities. Small-scale private waste collectors, who are notorious for dumping collected wastes into sewers, are required to send collected wastes to such sites for periodic evacuation by the City County. Additional effort to sensitize and create awareness among residents and waste collectors is paramount.

1.4.1.5 Faecal sludge management (collection, transportation, treatment and re-use) in most informal settlements and peri urban areas is still inadequate. Some of the household facilities have limited vehicular access to facilitate desludging when full. Households therefore resort to manual emptying and usually dispose of the collected septage in the immediate urban environment. Where feasible, Cesspit Emptying Operators provide desludging services to households with lined pits and septic tanks, and in some instances, they also discharge indiscriminately in the urban environment, despite effort by the NEMA and NCWSC to prevent the practice. The situation poses serious public health and environmental risks. Thus, limited progress has been made towards achieving national and SDG sanitation targets. The situation is attributable to the (a) slow pace in adopting appropriate technologies that take into account the limited land space and high-water table, particularly in Nairobi; (b) insufficient financial incentives provided for delivery of sustainable sanitation services; (c) low hygiene awareness; (d) ever increasing urban population, particularly in the informal settlements, among others.

1.4.1.6 In particular, the Ministry acting through AWWDA, and in collaboration with NCWSC and the City County, has been exploring the possible adoption of measures for densification of the existing sewer network to increase sewer connections, and therefore sanitation access to areas within the informal and peri urban settlements that are amenable to sewerage sanitation. The approach is being tested under an ongoing KfW funded Water and Sewerage Services Extension Project implemented in five (5) peri-urban and informal settlements (Kangemi, Kawangware, Gitari Marigo, Korogocho and Ngando) where limited land space availability and rocky geological formations have prevented access to on-site sanitation in the past. The project provides access to safe water supply and sanitation services by improving availability of household water supply and converting existing or non-existent on-site sanitation (dry latrines) to water based (pour flush) systems. The approach appears to be successful and sustainable. Upgrading to pour-flush method has proved to work in areas where.

1.4.1.7 Similarly, under a World Bank funded Output Based Aid (OBA) Project to develop sewer and water infrastructure in informal settlements, residential premises were provided opportunity for access to sewerage sanitation by converting their existing pit latrines into pour flush toilets, and connecting them to nearby sewer networks constructed under a previous World Bank funded project. The project successfully closed in February 2019 with positive outcomes.

1.4.2 Sewage and Faecal Sludge Management Challenges

1.4.2.1 The key challenges confronting the sanitation sub-sector in urban, peri-urban and informal settlements include: (a) limited uptake of appropriate technologies that address the limited landspace and hydrogeological conditions; (b) lack of adequate sewage and FS/Septage collection and treatment capacity, as most sewers are aged and require replacement or strengthening in most places, and only one FS/Septage discharge point (Nyiru) is available for use by the Cesspit Emptying Operators; (c) high construction costs in the light of limited financial capabilities of households; (d) high service charges up to Ksh.15,000 per trip, depending on haulage distance, ease of desludging and prevailing traffic conditions; (e) lack of financial incentives for increased sector investments; and (f) inadequate regulation and enforcement, leading to indiscriminate disposal in open spaces and nearby water bodies with resultant public and environmental health risks.

1.4.2.2 In addition, the existing potential for reuse is not adequately explored to maximize the related economic benefits. Several initiatives on FS reuse exist, but are not coordinated to derive synergies and draw lessons to improve performance. Reuse benefits can contribute to part recovery of operation and maintenance costs, and creation of job opportunities to improve livelihoods, particularly for the urban poor. A systematic and coordinated assessment of FS reuse market potential, including identification of potential users, likely production quantities and

related costs and revenue streams, together with development of strategies for promotion, marketing and sales provide opportunity for the potential to be explored to maximize related economic benefits.

1.4.2.3 To ensure sustainable delivery of infrastructure and services along the entire sanitation value chain (containment, collection, treatment and reuse), it is necessary that each link along the chain be developed, business opportunities identified, and appropriate business models elaborated. This is likely to attract private sector participation and financing to accelerate delivery along the chain, once the business models are demonstrable and can result in achieving some margin of profit. While upstream models for delivery of infrastructure and services for containment, collection and transportation are readily ascertainable, those for treatment and reuse require attention, particularly due to the limited tipping fees, (e.g. upto Ksh.60,000 for FS disposal at the Nyiru discharge point) and the largely unexplored FS reuse economic benefits. In addition, Emptier Operators complain about multiple annual surcharges levied by public institutions per truck, e.g., Ksh.8,000 by NEMA, and Ksh.20,000 by the City County. Together, the amount payable is a little over Ksh.7,300 KSH per month per truck. It is desirable that an assessment and development of relevant business models that combine collection with treatment and reuse be undertaken to ensure sustainability of such chain links.

1.4.2.4 In line with political and strategic requirements, an integrated approach to county-wide inclusive sanitation planning that allows sustainable access to household and public sanitation, including delivery of adequate sewage and faecal sludge management services, is desirable. With the recent increased awareness and the established need for support to meet the SDG targets for sustainable access to sanitation, Donors have been responding by refocusing development assistance to include interventions in sewage and faecal sludge (FS) management in different parts of the country.

1.4.2.5 The project therefore addresses the identified problem of limited access to sustainable sanitation, including inadequate provision of sewage and faecal sludge management infrastructure and services in Nairobi, to contribute towards improved health and socio economic well-being of urban dwellers in Nairobi, and Kenya as a whole.

1.5 Project Objective

1.5.1 The overall objective of the project is to contribute to the increase access to sustainable and inclusive sewage and faecal sludge management services, and provide opportunity to improve livelihoods among the poor in urban, peri-urban and informal settlements in Nairobi County, thereby improving their health and quality of life. The specific objectives of the project include:

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

1.5.2 The project adopts the guiding principles of City Wide Inclusive Sanitation, and the implementation strategies of the Kenya Environmental Sanitation and Hygiene Strategic Framework (2016-2020) that include provision of incentives and sanitation promotion and marketing, institutional strengthening and coordination, pro poor approach, cost recovery, private sector participation, and sound social and environmental management practices at the household and community levels to undertake feasibility studies and engineering designs for delivery of sustainable FSM and sewage infrastructure and services along the value chain.

1.6 Beneficiaries and Stakeholders

1.6.1 Beneficiaries

1.6.1.1 The project's *direct beneficiaries* include: (i) Relevant Sector Ministries; Ministry of Water and Sanitation & Irrigation (MOWS), Ministry of Public Health and Sanitation (MOPHS), Ministry of Agriculture (MOA), Ministry of Energy (MOE), and National Environmental Management Authority (NEMA), and Sector Institutions like Athi Water Works Development Agency (AWWDA), and Nairobi Water and Sewerage Company (NCWSC) who will benefit from the capacity building and training initiatives; (ii) Private Sector Operators, Community Leaders, Local NGOs, Civil Society Organizations; and (iii) Nairobi City County (NCC) and Development Partners who will also benefit from participation in the validation workshops and investment opportunities.

1.6.1.2 Following realization of the downstream investments, the *direct beneficiaries* would be the over one (1) million people living in twenty-two (22) peri-urban and informal settlements within Nairobi County, and without sustainable access to FSM sewage infrastructure and services along the value chain (containment, collection, treatment and reuse). The urban poor people, who constitute about 60% of the entire urban population will benefit from provision of incentives and strategies to better promote and deliver sewerred and non sewerred sanitation infrastructure, and adequate collection 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 1.7 million urban dwellers to contribute to increase access to safe and sustainable urban sanitation from about 31% currently to over 65% across Kenya.

1.6.2 Stakeholders

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

- (i) *MWSI/AWWDA*, as project proponents, spearheading the effort to increase access to sustainable urban sanitation infrastructure and services by consolidating and expanding gains made in recent interventions to densify existing sewer networks, thereby increasing access to sewerred sanitation, particularly in peri urban and informal settlements;
- (ii) *Private Sector* interests to support effort to improve delivery of sewerred and non-sewerred 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) *NCWSC* currently operate and maintain water supply and sewerred infrastructure within Nairobi. The *NCWSC* will conclude a Service Agreement with the *AWWDA* and the *NCC* to manage the FSM and sewerred infrastructure and services to be realized in the downstream investments; and
- (iv) *NCC* desire for support to improve the current situation of inadequate access to sustainable solid waste and faecal sludge/sewerred chain management services within the county.

1.6.2.2 The *Project Target Area* covers the twenty two (22) peri urban and informal settlements across four (4) regions and seven (7) constituencies within Nairobi County without sustainable access to inclusive sanitation service chain management. The settlements have been prioritized based on population size, current access to sanitation and likely increased demand for services, ease of accessibility, and equitable regional distribution. The list of settlements and their locations are presented in Annex 1.

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:

Preparation of Investment Projects and Programmes (Pillar I) 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 that provides opportunity for downstream investments to improve the environmental quality and social acceptance of improved and inclusive FS and sewage management along the value chain in several peri urban and informal settlements in Nairobi. Studies to improve on modalities for delivery of FS and sewage management related infrastructure and services, including tariff studies, arrangements for sustainable operation and maintenance of facilities, competitive pricing, and market potential of reuse contribute to ensure inclusive and sustainable access to urban sanitation and attainment of the SDGs and Government sector targets for 2030.

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 to organize investment fora to mobilize resources for sustainable investments in faecal sludge and sewage management infrastructure and services. The project is likely to identify business opportunities, and increase private sector investments in FS and sewage collection, treatment and reuse infrastructure and services.

2 THE PROJECT

2.1 Impact

2.1.1 The long-term goal is to contribute to increase access to sustainable and inclusive sanitation services for the urban poor, initially for about 1 million people, and subsequently, an additional 1.7 million people living in peri urban and informal settlements in Nairobi.

2.1.2 The expected impact is contribution to improved health and quality of life for the urban dweller living in deprived and unsewered areas across Nairobi County, through increased access to, and delivery of sustainable and inclusive faecal sludge and sewage 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 FS and sewage management services in peri urban and informal settlements.
- b) **Outcome 2.** Increased and prioritized investments in FS and sewage management infrastructure and services.

It is the expectation that the Government of Kenya and AWWDA, 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 main outputs:

- a) Preparatory and Feasibility Studies, including Baseline and Socio-economic Studies, and Preliminary Engineering Designs Prepared covering all the 22-peri urban and informal settlements.
- b) Field Engineering Investigations and Detailed Designs with ESIA's, Tender Documentation, including Technical Specifications, Manuals and Cost Estimates prepared for the 22-peri urban and informal settlements.
- c) Detailed Connection Strategy prepared.
- d) Knowledge management achieved.

2.3 Project Components and Activities

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

Phase 1

Component 1: Feasibility Studies and Engineering Design

2.3.2 Nairobi City, the commercial hub of Kenya and East Africa Community has an estimated population of about 4.9 million (based on population projection, 2009 KBS), and is expected to grow to 5.96 million people by 2022. The rapid population growth, coupled with poor urban planning has led to uncontrolled development of informal densely populated, unsanitary and insecure settlements (slums and squatters). Most of the on-site facilities lack safe means of faecal sludge chain management (emptying, transportation, and disposal or re-use). The situation is worse in the peri-urban and informal settlements with unfavourable hydrogeological conditions, inadequate water supply and lack of land tenure.

2.3.3 The result is serious public and environmental health risks, and pollution of nearby water bodies. The Government's Vision 2030 and Big Four Agenda, and AWWDA's Strategic Plan (2018 – 2022) require sustained effort to increase access to safe and inclusive urban sanitation towards attainment of the national targets for sanitation. This component will finance Engineering Consultancy Services to prepare feasibility studies and engineering designs, including a pro poor sewer connection strategy to meet the FS and Sewage Management requirements in twenty-two (22) peri urban and informal settlements. The Terms of Reference for the Consultancy Services shall comprise three (3) phases as follows:

- a) **Phase 1 - Preparatory and Feasibility Studies and Conceptual/Preliminary Designs** that will cover community engagement and feasibility studies, including socio-economic surveys, situational assessment, market demand and stakeholder analyses, FS quantification and valorisation, sanitation planning; and conceptual and preliminary designs & costing for collection, transportation, treatment, reuse/disposal for selected options, comparative financial and economic analyses, business opportunities. In addition, Phase 1 will provide for site identification and selection, and a validation workshop.
- b) **Phase 2 – Engineering Surveys, Detailed Design, Tender Documentation and ESIA** comprising detailed field investigations, engineering designs, tender documentation and ESIA's. The following specific activities shall be undertaken: topographic and geotechnical surveys, detailed designs and preparation of operation & maintenance plan, preparation of the relevant specifications and tender documentation, investment cost estimates and plan, environmental impact studies, cost benefit analyses, and a validation workshop.
- c) **Phase 3 - Preparation of Connection Strategy and Manuals** that will cover preparation of a pro poor strategy for sewer connection and uptake of on-site sanitation systems, and preparation of manuals to guide sanitation planning and design.

2.3.4 The Consultancy Services will require adoption and adaptation of data collection instruments prepared by WSP of the World Bank to collect data and carry out studies to ensure provision of citywide inclusive sanitation, including arrangements for sustainable delivery of FSM and sewage management services in the selected settlements within Nairobi.

2.3.5 The related **activities** are:

Phase 1

2.3.5.1 Preparatory and Feasibility Studies

1. *Community engagements* shall precede all other project activities in the target communities. The Consultant shall collaborate with the relevant AWWDA, NCWSC and NCC Environmental Health and Community Development Departments/Units 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. The socio-economic data shall be gender disaggregated. Project achievements shall be assessed in relation to the baseline.
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*** shall assess the types, percentage share, typical storage capacities, and modalities for construction and financing, related capital, and operation and maintenance costs, etc., of available onsite sanitation facilities. In addition, description and assessment of the existing arrangements for faecal sludge and sewage collection and transport, including available types, capacities, operation and maintenance, and ownership of collection vehicles and or equipment (Gulper/Manual Emptying, Cesspit Emptier/Vacutug, etc., for FSM), service quality and charges, how households/beneficiaries request and pay for services, etc., will be necessary. Relevant studies and field assessments shall be carried out to enable adequate characterization and quantification of generated faecal sludge and sewage; and estimation of the likely quantities to be collected taking into account the types of onsite facilities, accessibility, and development trends, etc.
 - (b) ***Treatment and Disposal*** shall include identification and assessment/audit of feasible treatment and disposal technologies available in Kenya and elsewhere, taking into account septage and sewage 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 Kenya and elsewhere, including production costs and related revenues, institutional arrangements, regulation and certification procedures, and financial viability/profitability, etc. The assessment will be based on review of available secondary data on reuse, and verification through surveys and FDGs; 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 in relevant settlements, with clear definition of the types and quantities of FS and SS end products, identification of potential users of FS and 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 faecal sludge 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 value chain.

- (e) **Recommendations** will be 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 settlement, 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* shall identify all relevant stakeholders, including public & private sector institutions, NGOs, households and individuals at the national, provincial, county 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. *Site Identification and Selection* shall 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.

2.3.5.2 Conceptual and Preliminary Engineering Design

1. *Conceptual and Preliminary Engineering Designs and Costing* shall be prepared for FS and sewage collection, transport, treatment and reuse infrastructure, and services in the selected settlements. The designs shall be prepared for all selected peri urban and informal settlements, and shall be based on septage and sewage characteristics, projected development trends and rate of urbanization, and estimated design volumes. 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. In this regard, the respective roles of the NCWSC and NEMA in managing collection and transport facilities will be paramount.
4. *First Stakeholder Validation* will ensure stakeholder review and acceptance of recommended alternatives for facilities along the value chain. One county level validation workshop shall be organized to present the outcomes of all studies, and the conceptual and preliminary designs. The MWSI, acting through AWWDA shall be responsible for organizing the workshop.

Phase 2

2.3.5.3 Engineering Surveys 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. *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.
5. *Second Stakeholder validation* shall ensure further stakeholder review and acceptance of the final designs for approved facilities along the value chain. Similarly, a second county level validation workshop shall be organized to present the outcomes of the final designs and cost estimates.

2.3.5.4 *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 Public Procurement Authority of Kenya and the African Development Bank. Specifications for workmanship, materials and equipment shall be provided to facilitate quality procurement of all goods, works and services. The tender documents shall include bills of quantities that are prepared based on CESSM. Final cost estimates shall be derived based on priced bills of quantities and prevailing market unit prices, which will also form the basis for contract packaging and implementation scheduling.
2. *Preparation of Investment Plan(s)* is necessary to facilitate mobilization of financial resources among development partners. The plan(s) shall be prepared based on the planned implementation schedules, and shall indicate anticipated investments over a defined period.

2.3.5.5 *ESIA and FMPs*

1. *Preparation of ESIA* shall include an assessment of the potential environmental impacts for the designed faecal sludge and sewage management infrastructure and services, together with proposed mitigation measures. The ESIA Report and related Environment and Social Management Plan shall be prepared and submitted for approval by National Environment Management Authority, in accordance with NEMA guidelines. The Scoping Report and Terms of Reference shall be prepared and submitted for approval during the preliminary engineering design stage.
2. *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.

Phase 3

2.3.5.3 *Connection Strategy and Manuals*

1. *Preparation of a Connection Strategy* shall include review of the existing NCWSC (a) pro poor Social Connection Policy that subsidizes ‘first-time’ connections in Nairobi’s informal settlements and low income areas; (b) domestic water supply connection fee of KES 2,500 (Non-Refundable) and meter deposit fee of KES 2,500 (Refundable); and (c) sewer connection fee of KES 5,000 (Non-Refundable). In addition, the impact of NCWSC requirement for customers to purchase the requisite materials (pipes and fittings) for new connections will be assessed and appropriate recommendations made to improve access to inclusive sewerage and non-sewered sanitation. It is noted that the connection fee (excluding the cost of connection materials) is almost 100% of the average income a household in the informal settlements, compared to only 1% of that for a high-income household.
2. *Preparation of Manuals* will involve documentation of the various processes, procedures and standards adopted to prepare the feasibility studies, engineering designs and related O&M requirements and investment outlays, etc., to guide future preparation of sanitation plans and engineering designs for sanitation related infrastructure and services.

Component 2: Project Management

2.3.6 Staff from AWWDA shall provide project management services. A project implementation unit shall be established to 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. Government of Kenya and AWWDA will finance the related costs of activities under the component.

2.3.7 ***Capacity Enhancement:*** Institutions like AWWDA, NCWSC and NCC need strengthening, and to build capacity for design (AWWDA, NCWSC) and management (NCWSC and NCC) of FS and sewage collection and treatment infrastructure. Collaboration with the engineering design consultant’s team will ensure transfer of technical expertise and development of skills to improve the design capacity, particularly of AWWDA, and for better appreciation of the O&M requirements and sustainable arrangement for effective management of collection and treatment infrastructure and services. Currently, significant engineering design and management capacities exist within the AWWDA and NCWSC for sewerage infrastructure and services, and not FSM.

2.3.8 The related activities are:

1. *Establishment of the Project Implementation Team (PIT)* involves identifying and assigning key AWWDA staff as project staff to strengthen the AWWDA and MWSI’s capacity for project management. The PIT will oversee the coordination, implementation, and progress and monitoring of the project. The MWSI, acting through AWWDA shall provide the needed logistics, including transport, office space, communication, etc.
2. *Establishment of a Project Steering Committee (PSC)* that consists of members representing various stakeholders and relevant sector ministries shall provide oversight and guidance to the Project Implementation Unit, and shall participate in the review of implementation progress.
3. *Finalization and approval of plans and project reporting* will ensure that the existing draft implementation and procurement plans are reviewed and finalized by the PCT following the AWF’s no objection. The plans shall be detailed and shall cover all relevant project activities

till completion. The plans shall be revised once every year. In addition, all relevant project reports and documents shall be prepared and submitted in accordance with the AWF reporting requirements.

4. *On the Job Training of NCWSC and AWWDA* will strengthen and build capacity for design and management of FS collection and treatment infrastructure. AWWDA will work with the engineering design consultant's team to undertake field surveys and prepare engineering designs and related tender documents and drawings to improve their engineering design capacity. Similarly, the NCWSC staff will participate in the field investigations, and subsequently be provided training in sustainable O&M and FS and sewage management.
5. *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.
6. *Knowledge Management and MSW 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 on the job training of MSW staff to strengthen and build capacity for design, operation and maintenance of faecal sludge treatment infrastructure.
7. *Validation Workshops and Investment Forum*: Stakeholder validation workshops shall be organized by the project management team as described in Para 2.3.5.2 and 2.3.5.3 at the end of the preliminary and detailed design stages. An Investment forum shall be organized to mobilize resources for the downstream investments, on project completion.

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 FS and Sewage Management leading to unsuccessful implementation and wider uptake.	Medium	Lobby, advocacy, dialogue and transparency among actors. Endorsement and active participation of NEMA and the WASREB.
Community resistance to behaviour change regarding improved access to onsite sanitation, faecal sludge and sewage chain management and hygiene.	High	Community sensitization. Increased social marketing and media involvement in hygiene and sanitation related activities.
Inability to mobilize adequate resources for downstream investments. The Project's Logical Framework assumes the mobilization of resources to implement the downstream investment projects.	High	Active participation of the National Treasury and Ministry of Water and Sanitation & Irrigation, and effective organization of investment fora.
Unavailability of land for selection and design of FS and sewage management infrastructure, and the required environmental approvals may delay timely completion of the project.	Medium	The EA will commence land identification and acquisition before effectiveness, and will ensure timely approval of the ESMP.
Inadequate design of FS and Sewage Management Infrastructure and Services.	Medium	Rigorous eligibility and selection criteria with demonstrated competence in FSM and Sewerage 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 € 1 138 644, of which 34 % 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 86 % of the total project cost (estimated at € 980 767), 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 AWWD will finance the remainder amounting to € 157 877, mainly as in kind contribution for 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 Kenya's responsibility.

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

Component	Total Cost	AWF	MWSI/AWWD A
1. Feasibility Studies and Detailed Design	934.06	934.06	-
2. Project Management	150.36		150.36
Total Base Cost	1,084.42	934.06	150.36
Price Contingency (5%)	54.22	46.70	7.52
Total Project Cost	1,138.64	980.76	157.88
Percentage	100%	86.0%	14.0%

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

Category of Expenditure	Total Cost	AWF		MWSI/AWWDA
		FC	LC	LC
A. Services	934.06	715.58	218.48	-
B. Operating costs	150.36	-		150.36
Total Base Cost	1,084.42	715.58	218.48	150.36
Contingency 5%	54.22	35.78	10.92	7.52
Total Project Cost	1,138.64	751.36	229.4	157.88
% Contributions		66.0%	20.0%	14.0%

3 PROJECT IMPLEMENTATION

3.1 Grant Recipient and Executing Agency

3.1.1 The National Treasury of the Republic of Kenya will be the Grant Recipient, whereas AWWDA will be the Implementing Agency for the project. The Ministry of Water and Sanitation & Irrigation (MWSI) will provide oversight for the project, under the stewardship of the Principal Secretary. The MWSI is responsible for sector policy on water resources development, water supply and sanitation. The AWWDA was established in 2001 under the Water Act 2002, (now Water Act 2016) is responsible for efficient and sustainable provision of quality and affordable water and sewerage infrastructure and services in its area of jurisdiction through Water Service Providers, who in turn, are responsible for operations and maintenance of developed water and sanitation infrastructure. AWWDA has built internal capacity for project management including expertise for procurement and financial management.

3.1.2 Currently, the MWSI is composed of two (2) Directorates, namely:

- a) Directorate of Water (consisting of four (4) Technical Departments – Water Infrastructure, Water, Sewerage and Sanitation, Transboundary Waters, and National Water Resources); and
- b) Directorate of Shared Services (consisting of General Administration, Human Resources, Finance, ICT, Legal, etc.).

3.1.3 at the provincial level, the MWSI operates through several Water Works Development Agencies (including AWWDA) to develop sector related infrastructure and services to achieve its mandate.

3.2 Implementation Arrangements

3.2.1 AWWDA as the Implementing Agency will manage the Grant funds. A **Project Implementation Unit (PIU)** composed of staff of AWWDA shall be established to implement the project. The Project Implementation Unit shall consist of: (a) Project Manager, (b) Project Engineer(s), (c) Finance/Accountant, (d) Procurement/Contracts Management, (e) Environmental, (f) Social/Community Mobilization, and (g) M&E Specialists assigned from various departments within AWWDA. AWWDA shall submit the C.Vs of the selected PIT staff to the AfDB for no objection. The PIU will be supported by AWWDA’s in-house Procurement and Internal Audit Departments as necessary.

3.2.2 The PIU 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 PIU’s organization and institutional linkages are presented in Annex 6, PIU structure in Annex 7, and the Terms of Reference in Annex 8.

3.2.3 A **Project Steering Committee (PSC)** comprising members representing various stakeholders and relevant sector ministries, including the Ministry of Water & Sanitation, NEMA, NCWSC, NCC and the respective Communities, among others shall be established to review project progress and provide general guidance and oversight of project execution. The MWSI Permanent Secretary shall chair the PSC. The CEO of AWWDA shall act as the PSC Secretary. The PSC shall meet once every quarter and whenever need be.

3.3 Performance Management Plan

3.3.1 A result based measurement plan will form the basis for tracking the performance of the project and managing results. AWF in collaboration with the PIU 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 allocation notification	Mo
Establishment of the PIU and PSC	Mo + 1
Signature for the allocation of the Grant	Mo + 2
Satisfaction of pre-conditions	Mo + 3
Launching of the Project	Mo + 4
Recruitment of the consultant(s)	Mo + 6
Preparatory and feasibility studies and preliminary designs	Mo+18
Detailed site assessments and designs	Mo+24
Detailed specifications, tender documentation and investment planning	Mo + 26
Investment Forum	Mo + 26

3.3.2 The main performance indicators of the studies and designs are specified in the terms of reference presented in Annex 10.

3.4 Project Implementation Schedule

3.4.1 The project shall be executed over a period of 32 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 which allows two months for Grant Effectiveness. It is anticipated that the consultancy services will last over 20 months. The summarized project implementation schedule is presented in Table 5. A detailed schedule is presented in Annex 3.

3.4.2 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

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	31	32
1	Approval	◆																															
2	Signing		◆																														
3	Launch Workshop			◆																													
4	Acquisition of Consultancy Services	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5	Initial Planning and Community Engagement																																
6	Feasibility Studies																																
7	Preliminary Engineering Designs and ESIA Scoping																																
8	Stakeholder Validation Workshop																																
9	Connection Strategy																																
10	Detailed Engineering Designs and ESIA																																
11	Tender Documentation, Costing and FMPs																																
12	Investment Plan																																
13	Progress Reporting																																
14	Mid-Term Review																																
15	Audit																																
16	PCR																																

3.5 Procurement Arrangements

3.5.1 All procurement financed by the Grant shall be carried out in accordance with the *Procurement Framework for Bank Group Funded Operations, dated October 2015*. Specifically, procurement shall be carried out following the Bank’s Procurement Methods and Procedures using the relevant Standard Solicitation Documents. The procurement arrangements for the project are summarized in Table 6 below.

3.5.2 Implementing Agency Procurement Capacity: The Implementing Agency, AWWDA, would handle all project procurement. The AWWDA has a fully staffed Procurement and Disposal Unit (PDU) headed by a Principal Procurement Officer. The PDU is responsible for procurement of goods, works and services and has experience in managing procurement under Bank financed projects. The PDU is therefore sufficiently competent to handle procurements envisaged under the Grant. Detailed procurement arrangements are presented in Annex 4.

3.5.3 *Consultancy Services:* The acquisition of consultancy services amounting to € 904,494 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 assessment and design of FS and sewage collection and treatment infrastructure and preparation of tender documentation. Non-consultancy services including study stakeholder workshops, including mobilization, sensitization and facilitation (at an aggregate cost of € 29,570) will be financed from the grant resources and be procured through shopping. Advance contracting shall be used for acquisition of consultancy services.

3.5.4 Project Management and operating cost : Expenditures during project implementation including office supplies, utilities, consumables, advertising expenses, internet service, communication, fuel, maintenance and insurance of vehicles, costs related to staff travel, institutional stakeholder workshop and investment forum, etc., will be procured by the Government of Kenya (GoK).

3.5.5 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 Borrower and the Bank, are presented in the Procurement Plan (ref. Annex 4, Section 5).

Table 6: Procurement Arrangements (expressed in Euros)

S/N	Project Categories	EUROS					
		Borrower PMPS			Bank PMPS		
		OCB	LCB	Other	QCBS	Other	Total
1.0	Consulting Services						
1.1	Feasibility Studies & Detailed Design				[904,494]		904,494 [904,494]
2.0	Operating Costs						
2.1	Program Management & Operational Costs			150,359			150,359 [0.00]
2.2	Study Stakeholder Workshops					[29,570]	[29,570]
3.0	Contingency						
3.1	Provide for 5% Price Contingency			7,518	[45,225]	[1,479]	54,221 [46,703]
	GRAND TOTAL			157,877	[949,719]	[31,049]	1,138,644 [980,767]

*Figures in brackets are amounts financed by AWF

3.5.6 Procurement Plan: The Government of Kenya has expressed interest to use advance contracting for the studies. In this regard, the Recipient shall submit a request to the Bank for its approval, supported by a Procurement Plan covering the entire Project implementation period. The plan shall detail the contracts scheduled for procurement, together with the respective budgetary allocations, procurement methods and review procedures. The Bank shall review the procurement arrangements proposed by the Recipient in the Procurement Plan for its conformity with the Procurement Policy. The Plan shall be updated on an annual basis or as necessary. The Bank shall give prior approval to any proposed revisions to the Plan.

3.6 Financial Management Arrangements

3.6.1 The AWWDA, as the Implementing Agency for the Project, will be responsible for the implementation of the Project. The AWWDA will be fully accountable for the project funds and financial reporting of all the project's financial transactions. In line with the Country Systems, the Chief Executive Officer (CEO) of AWWDA will have the overall fiduciary responsibility for the grant. The project shall be implemented within the structures of the AWWDA and the financial management (FM) responsibilities shall be carried out by the existing Project Implementation Unit (PIU). The Board of Directors (BoD) shall provide policy and technical guidance, including approval of project work plans and budgets.

3.6.2 The Accountant in the PIU shall be responsible for the day-to-day processing of project financial transactions and shall ensure compliance with the GoK financial regulations and procedures, AWWDA's financial procedures manual as well as the Bank Rules and Procedures. As part of the internal control mechanism, the AWWDA's internal auditors shall include the

project in their internal audit program and shall conduct regular audits of the project systems, processes and transactions.

3.6.3 The PIU shall ensure that financial reports for the Project are prepared on a semester (six monthly) basis and shall be transmitted to the Bank, together with the progress reports, no later than forty five (45) days after the end of each semester. 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).

3.7.4 In line with GoK’s financial regulations and procedures and AWF audit arrangements, the project shall have its financial statements audited by (i) the Office of the Auditor General (OAG) and (ii) a private audit firm appointed by the AWF. In the case of the AWF audit arrangements, an independent private audit firm to be appointed by the AWF will carry out two financial audits (at mid-term and final audit) using AWF Rules and Procedures and the Bank’s Standard Audit Terms of Reference. The costs of the AWF’s audits will be borne by AWF.

3.6 Disbursement Arrangements

3.6.1. The Project will use the Direct Payment method for disbursements as laid out in the Disbursement Handbook. The direct payment requests shall be submitted to the Bank by the Recipient, in accordance with the Bank’s disbursement rules and procedures. The Recipient shall promptly notify the Bank and provide names and specimen signatures of the Grant’s designated officials.

3.6.2 In accordance with the Bank’s Disbursement Rules and Procedures, the disbursement and contract/payment currencies for the AWF source of financing is restricted to the Euro. Based on this currency restriction, the PIU shall ensure that all disbursements and contracts under the Grant are denominated in EUR to minimize foreign exchange risk to the contractors.

Table 7: Disbursement Schedule (Euro)

Item	Disbursement Method	Procurement Item	Amount	% of Total
1.	Direct Payment (Parts A,B & C)	Consultancy	949,719	96.8%
2.	Direct Payment	Workshops	31,048	3.2%
3.	Total		980,767	100.0%

3.7 Monitoring, Evaluation and Reporting

3.7.1 The PIU will develop and implement a monitoring and evaluation plan for the Project, based on the Logical Framework (LFA). 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 developed by the MWE.

3.7.2 The Consultants will submit all deliverables to the Project Manager for review, PSC validation and clearance.

3.7.3 AWF supervision and monitoring of project activities will be subject to PIU 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. 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 and “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 1 st 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 and sewage along the value chain in peri urban and informal settlements in Nairobi. The activities proposed in the preparatory and feasibility studies require consideration of environmental aspects and impacts of climate change.

4.2 Climate Change

4.2.1 The geographical range of the project is widespread, with sites in different regions of Nairobi, 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 and sewage management 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 The project aims to create the conditions to increase the participation of women, youth and other vulnerable groups in the preparatory studies and consultative processes, and management of faecal sludge and sewage infrastructure and services along the value chain in peri urban and informal settlements in Nairobi. The preliminary category according to Gender Marker System (GMS) is four during the study phase

4.3.2 The studies will propose concrete measures in the direction of enhancing the role of women in the sustainable management of infrastructure to be designed.

4.4 Social Equity

The project aims to create the conditions necessary to improve living conditions in the project areas, including:

- a) Permanent/sustainable access to improved onsite sanitation and sustainable FSM and sewage management services;
- b) Improvement of living conditions, health and safety and the consequent reduction in the prevalence and spread of waterborne diseases;
- c) Strengthening social cohesion through outreach activities of the structures that will be responsible for managing the FSM and sewage management infrastructure and services;
- d) The creation of jobs through the organization and better management of FS and sewage management value chain.

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 and sewage in Nairobi will ensure efficiency in project implementation and management, and the effectiveness of the FSM and sewage management investments in maximizing benefits. The likely institutional anchoring of management of FS and sewage infrastructure and services in NCWSC, and the opportunity for capacity building, learning, documentation and sharing of project related experiences will enhance the efficient delivery of FSM and sewage management 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 Kenyan Government Vision 2030, the MWSI and AWWDA Strategic Plans (2018 – 2021) and relevant sector policies and strategies. The project activities will apply an effective approach to provide sustainable and inclusive access to FSM and sewerage 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 and sewage management. The project activities relating to awareness raising, optimization of FS and sewage collection and transport, 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 MWSI will actively engage with donors at the beginning and at all stages of project implementation, 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 address the technical, financial and institutional issues arising from the implementation of the project constitute 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. MWSI, acting through AWWDA to sign Memoranda of Understanding for FSM and sewerage services with NCWSC and NCC, improved spatial and investment planning and NCWSC's partnership

arrangement with private sector entities, development partners and NGOs will contribute to the sustainable delivery of faecal sludge and sewage management services in Nairobi.

5 LEGAL INSTRUMENT

5.1 The financing instrument to be used for this project is a Grant, which will be governed by a Protocol of Agreement between the Republic of Kenya (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 Entry into force of the Protocol of Agreement: The Protocol of 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 of the Grant: The obligation of the Bank to make the first disbursement of the grant shall be conditional upon (i) entry into force of the Protocol of Agreement, (ii) nomination acceptable to the AWF of the Project Manager, and (iii) constitution of a Project Implementation Unit within AWWDA.

5.2.3 Other Conditions: The Recipient shall, in form and substance satisfactory to the Bank, fulfil the following conditions: (i) the establishment of a Project Steering Committee whose composition will be in line with section 3.2.3.

6 COMPLIANCE WITH POLICIES

This project complies with all applicable Bank policies as well as the AWF and 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 and sewage 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 and sewerage sanitation along the value chain, and is replicable in other urban centres in Kenya and other African countries.

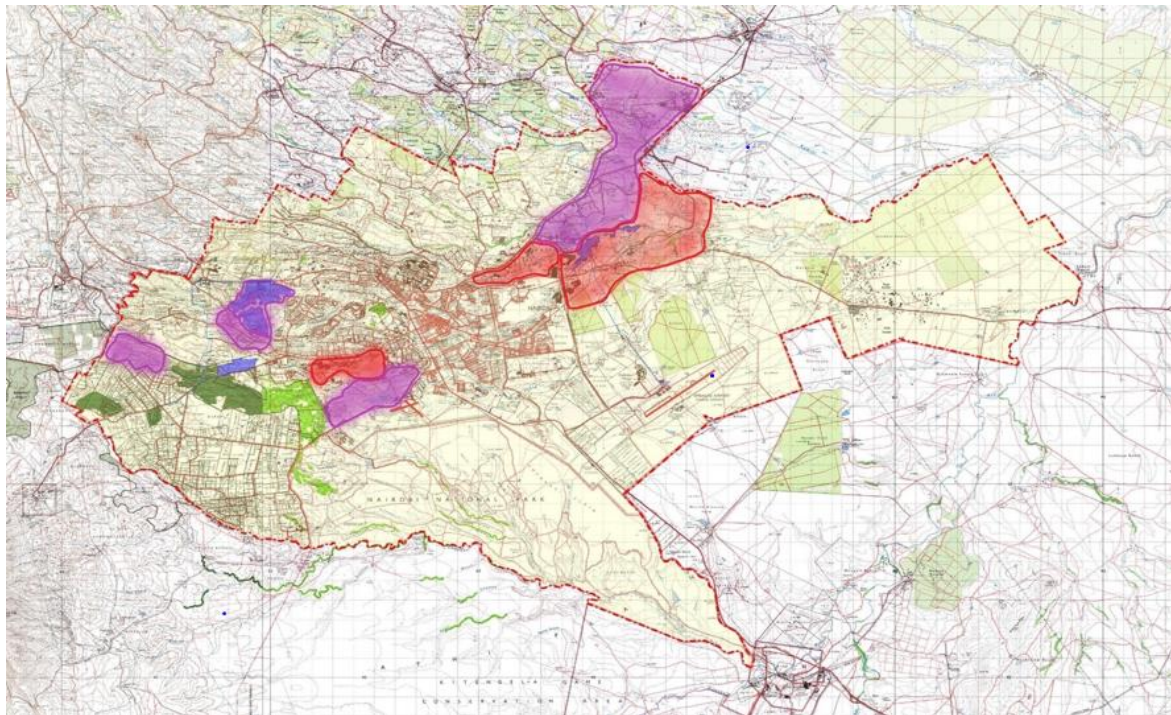
7.1.2 Given the clear logical framework and justifiable objectives, outputs and activities, and with adequate and sustainable implementation arrangements, there appears to be no outstanding issues that may adversely affect successful project implementation.

7.1.3 Recommendation

It is recommended that a Grant not exceeding € 980,767 from the African Water Facility Special Fund be awarded to the Republic of Kenya for the implementation of the Project as described in this Appraisal Report.

ANNEXES

ANNEX 1: MAP OF NAIROBI SHOWING PROJECT COMMUNITIES/AREAS



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 TOWN CLUSTERS

Region	Constituency	Selected Community/Area	Projected Population (Growth Rate 3% (KBOS))	
			2019	2044
Nairobi West	Dagoretti	Gatina	66,607	169,221
		Kabiria	13,232	33,618
		Kirigu	17,726	45,035
		Mutuini	8,371	21,267
	Kibera	Laini Saba	40,921	103,963
Nairobi East	Embakasi	Dandora A-Canaan	82,006	208,343
		Dandora B-Part of Gitaro Marigo	124,248	315,663
		Kariobangi South- (Korogocho, Dandora)	47,969	121,869
		Dandora-Mwengenye/Saika,	26,971	68,524
		Njiru-Maili Saba	147,854	375,635
		Mihang'o(Utawala)	22,936	58,273
Nairobi South		Viwandani	44,881	114,027
Nairobi Central		Huruma	105,264	267,433
		Kiamaiko	49,113	124,776
	Mathare	Mlango Kubwa	55,720	141,561
		Mathare 4A	27,263	69,264
Nairobi North	Kasarani	Githurai 45	127,161	323,063
		Ruai	35,961	91,365
	Kahawa	Kiwanja	24,621	62,550
		Kongo/Kahawa Soweto	23,876	60,658
	Roysambu	Njathaini	10,668	27,103
Total			1,103,369	2,803,211
Percentage of National Urban Population (%)				

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	<i>*This excludes the population with access to individual toilets. Access to shared facilities will be defined by distance.</i> (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	<i>*Dependent population = Total population - population w access to improved IHLs</i> (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) <i>where Desludging frequency of each SF = (No. of total desludging services completed for the SF) / (Age of the SF)</i>
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)	<i>*Estimated using water samples from across the city, including ground water, surface water, and pipe water*</i> (No. of water samples not contaminated with fecal coliform) / (No. of total water samples taken)
17	Incidence (per 1000) of fecal-oral pathway diseases	(No. of new fecal-oral pathway diseases occurring among the population) / (Total population in the city)

ANNEX 2: DETAILED PROJECT COSTS

COSTS FOR NAIROBI SUSTAINABLE SANITATION IMPROVEMENT PROJECT (NISIP) - (Amounts in Euro)							
COMPONENT 1: Feasibility Study, Detailed Designs, ESIA/RAP & Connection Strategy for NISIP							
<i>Part 1: Preparation of detailed feasibility study, detailed designs and preparation of tender documents for NISIP</i>							
<i>a: Remuneration</i>							
No.	Position	Unit	Quantity	Unit Cost (Euros)	Total Cost (Euros)	AWF Cost (Euros)	Counterpart Cost (Euros)
1	Team Leader	Person-Month	3.00	7,096.60	21,289.81	21,289.81	
2	Geotechnical/ soils Engineer	Person-Month	7.50	6,653.06	49,897.99	49,897.99	
3	Sanitation Engineer (2 No.)	Person-Month	15.00	6,653.06	99,795.97	99,795.97	
4	Water Engineer (1No.)	Person-Month	4.00	6,653.06	26,612.26	26,612.26	
5	Civil / Structural Engineer	Person-Month	6.00	6,653.06	39,918.39	39,918.39	
6	Surveyor(2No.)	Person-Month	8.00	4,435.38	35,483.01	35,483.01	
7	Electromechanical Engineer	Person-Month	4.00	4,612.79	18,451.17	18,451.17	
8	Draught Man/ CAD Operator	Person-Month	6.00	3,104.76	18,628.58	18,628.58	
9	Land Economist	Person-Month	6.00	4,435.38	26,612.26	26,612.26	
10	Financial and Economic expert	Person-Month	5.00	4,435.38	22,176.88	22,176.88	
11	Sociologist	Person-Month	8.00	4,435.38	35,483.01	35,483.01	
Sub-Total (a) Remuneration(Part.1)					394,349.33	394,349.33	
<i>b: Reimbursables</i>							
1	Office costs	Lumpsum	1.00	35,483.01	35,483.01	35,483.01	
2	Communications costs	Lumpsum	1.00	8,870.75	8,870.75	8,870.75	
3	Reports production costs	Lumpsum	1.00	8,870.75	8,870.75	8,870.75	
4	Local and international transportation	Lumpsum	1.00	17,741.51	17,741.51	17,741.51	
5	Geotechnical Investigations + Tests(provisional)	Lumpsum	1.00	44,353.77	44,353.77	44,353.77	
6	Purchase of Maps/Cadastrals	Lumpsum	1.00	1,774.15	1,774.15	1,774.15	
Sub-Total (b) Reimbursables (Part.1)					117,093.94	117,093.94	
TOTAL 1 PART 1					511,443.27	511,443.27	
<i>Part 2: Environmental and Social Impact Study for NISIP</i>							
<i>a: Remuneration</i>							
No.	Position	Unit	Quantity	Unit Cost	Total Cost (Euros)	AWF Cost (Euros)	Counterpart Cost (Euros)
<i>Key-Staff</i>							
1	Team Leader/Environmentalist	Person-Month	2.00	5,322.45	10,644.90	10,644.90	
2	Sociologist/RAP Expert	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
3	Surveyor	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
4	Land Surveyor	Person-Month	2.00	3,104.76	6,209.53	6,209.53	
5	Licensed Land Economist/Valuer	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
6	Water & Sanitary Engineer	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
<i>Non-Key-Staff</i>							
1	Ass. Sociologist	Person-Month	8.00	2,882.99	23,063.96	23,063.96	
2	Ass. Environmentalist	Person-Month	4.00	2,882.99	11,531.98	11,531.98	
3	Ass. Surveyor	Person-Month	2.00	2,705.58	5,411.16	5,411.16	
4	Data Entry clerks	Person-Month	2.00	4,435.38	8,870.75	8,870.75	

5	Field Enumerators	Person-Month	2.00	4,435.38	8,870.75	8,870.75	
Sub-Total (a) Remuneration (Part 2)					145,569.06	145,569.06	
b: Reimbursables							
1	Stakeholder Engagement						
	a) Study Stakeholder mobilization costs	PS	1.00	17,742	17,741.51	17,741.51	
	b) Study Stakeholder sensitization workshops	PS	1.00	8,871	8,870.75	8,870.75	
2	Data collection, entry, analysis, verifications.						
	(a)Environmental baseline surveys	Lumpsum	1.00	17,742	17,741.51	17,741.51	
	b)Households enumeration	Lumpsum	1.00	8,871	8,870.75	8,870.75	
	c)socioeconomic and livelihood surveys	Lumpsum	1.00	22,177	22,176.88	22,176.88	
	d)Assets Inventory	Lumpsum	1.00	2,218	2,217.69	2,217.69	
3	Valuation Logistics and data processing						
	a)Assets assessments and measurements	Lumpsum	1.00	13,306	13,306.13	13,306.13	
	b)Data entry, analysis, verifications, compensation rolls, etc.	Lumpsum	1.00	13,306	13,306.13	13,306.13	
4	Reports Production (printing, copying, etc.)						
	a)Valuation rolls and compensation schedules	Lumpsum	1.00	444	443.54	443.54	
	b)Draft Revised Reports		1.00	532	532.25	532.25	
	c)Final Reports		1.00	4,435	4,435.38	4,435.38	
5	Field Allowances (Lunches)	Day	250.00	27	6,653.06	6,653.06	
6	Communication costs between Consultant Office/Staff and Client/field	month	4.00	444	1,774.15	1,774.15	
7	Transportation	Vehicle Day	25.00	89	2,217.69	2,217.69	
8	Office rent	month	4.00	710	2,838.64	2,838.64	
9	Office equipment	Lumpsum	1.00	8,871	8,870.75	8,870.75	
10	Stationery and Office consumables	month	4.00	444	1,774.15	1,774.15	
Sub-Total (b) Reimbursables (Part 2)					133,770.96	133,770.96	
TOTAL PART 2					279,340.02	279,340.02	
Part 3: Development of a connection Strategy for effective Citywide Inclusive Sanitation.							
a: Remuneration							
No.	Position	Unit	Quantity	Unit Cost (Euros)	Total Cost (Euros)	AWF Cost (Euros)	Counterpart Cost(Euros)
Key-Staff							
1	Team Leader	Person-Month	4.00	5,322.45	21,289.81	21,289.81	
2	Water/Sanitation Specialist	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
3	Urban Planner	Person-Month	4.00	4,435.38	17,741.51	17,741.51	
4	Topographic Surveyor	Person-Month	2.00	3,104.76	6,209.53	6,209.53	
5	Environmentalist	Person-Month	4.00	3,104.76	12,419.05	12,419.05	
6	Financial and Economic expert	Person-Month	4.00	3,552.74	14,210.95	14,210.95	
7	IT/GIS Specialist	Person-Month	2.00	3,104.76	6,209.53	6,209.53	
8	Sociologist	Person-Month	4.00	3,104.76	12,419.05	12,419.05	

9	Draught Man/ CAD Operator	Person-Month	2.00	1,774.15	3,548.30	3,548.30	
Sub-Total (a) Remuneration (Part 3)					111,789.23	111,789.23	
<i>b:Reimbursables</i>							
1	Office costs	Lumpsum	1.00	6,653.06	6,653.06	6,653.06	
2	Communications costs	Lumpsum	1.00	2,661.23	2,661.23	2,661.23	
3	Reports production costs	Lumpsum	1.00	4,435.38	4,435.38	4,435.38	
4	Information, Communication and Educational Material	PS	1.00	8,870.75	8,870.75	8,870.75	
5	Local transportation	Lumpsum	1.00	4,435.38	4,435.38	4,435.38	
6	Facilitation of study Stakeholders meetings (Provisional sum)	Number	1.00	4,435.38	4,435.38	4,435.38	
Sub-Total (b) Reimbursables (Part.3)					31,491.17	31,491.17	
TOTAL PART 3					143,280.40	143,280.40	
GRAND TOTAL FOR COMPONENT 1					934,063.69	934,063.69	
COMPONENT 2: Project Management Costs							
	<i>Project Supervision/</i>						
1	Fuel & Lubricants & Transport	PS	1	26,612.26	26,612.26		26,612.26
	<i>Office Equipment & IT Support</i>						
1	Computers/Printers	No.	3	2,217.69	6,653.06		6,653.06
2	Internet services/communication	Month	12	443.54	5,322.45		5,322.45
3	Stationery & office consumables	LS	1	8,870.75	8,870.75		8,870.75
5	Community Engagement, and Compensation	PS	1	17,741.51	17,741.51		17,741.51
6	Institutional Stakeholder workshop and presentation in donor investment forum	PS	1	26,612.26	26,612.26		26,612.26
7	Staff Costs	Month	12	4,878.91	58,546.97		58,546.97
GrandTotal for Component 2					150,359.27		150,359.27
GRAND TOTAL PROJECT BASE COST					1,084,422.96	934,063.69	150,359.27
Add 5 % Contingency					54,221.15	46,703.18	7,517.96
TOTAL PROJECT COST					1,138,644.11	980,766.88	157,877.23
OVERALL TOTAL PROJECT COST (AWF+AWWDA COSTS)							1,138,644.11

ANNEX 4: PROCUREMENT ARRANGEMENTS

1. Executing Agency's Capacity

Implementing Agency Procurement Capacity: The Implementing Agency, AWWDA, would handle all project procurement. The AWWDA has a fully staffed Procurement and Disposal Unit (PDU) headed by a Principal Procurement Officer. The PDU is responsible for procurement of goods, works and services and has experience in managing procurement under Bank financed projects. The PDU is therefore sufficiently competent to handle procurements envisaged under the Grant.

2. Procurement of Goods, Works and Consultancy Services

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 as* amended from time to time, using the relevant Bank Standard Bidding Documents and the provisions stipulated in the Financing Agreement. The Procurement arrangements for the project are summarized in Table 1 below.

2.1.1 **Consultancy Services:** The acquisition of consultancy services amounting to **€ 980,766.88** 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 assessment and design of FS and sewage collection and treatment facilities and preparation of tender documentation. Advance contracting may be used for acquisition of consultancy services. Non-consultancy services including study stakeholder workshops, including mobilization, sensitization and facilitation (at an aggregate cost of **€ 29,570**) will be financed from the grant resources and be procured through shopping.

2.1.2 **Project Management:** Expenditures during project implementation including stakeholder workshops and investment forum, office supplies, utilities, consumables, advertising expenses, internet service, communication, fuel, maintenance and insurance of vehicles, costs related to staff travel, etc., will be procured by the Government of Kenya (GoK).

3. Advertising

3.1 General Procurement Notice

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

4. Procurement Arrangements

4.1.1 The procurement arrangements for the various components, elements, and items, under the different expenditure categories financed by the grant are in Table 5 below. Large-value contracts, each group of similar transactions/contracts, the different PMPs, estimated costs, oversight requirements, and the timeframe as agreed between the Borrower and the Bank, are in the Procurement Plan

Table 1: Procurement Arrangements (expressed in Euros)

S/N	Project Categories	EUROS					
		Borrower PMPS			Bank PMPS		
		OCB	LCB	Other	QCBS	Other	Total
1.0	Consulting Services						
1.1	Feasibility Studies & Detailed Design				[904,494]		904,494 [904,494]
2.0	Operating Costs						
2.1	Program Management & Operational Costs			150,359			150,359 [0.00]
2.2	Study Stakeholder workshops					[29,570]	[29,570]
3.0	Contingency						
3.1	Provide for 5% Price Contingency			7,518	[45,225]	[1,479]	54,221 [46,703]
	GRAND TOTAL			157,877	[949,719]	[31,049]	1,138,644 [980,767]

Figures in brackets are amounts financed by AWF

5. Procurement Plan

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 always covering the next 18 months period of project implementation. AWF shall give prior approval to any proposed revisions to the Plan.

Tentative Procurement Plan- CONSULTANTS				
1	General			
	Country/ Organization:	Kenya/Ministry of Water and Sanitation & Irrigation		
	Program Name:	Nairobi Sustainable and Inclusive Sanitation Improvement Project		
	Program SAP Identification #:	X		
	Grant Number:	X		
	Executing Agency:	Ministry of Water and Sanitation & Irrigation		
	Approval Date of Procurement Plan:	X		
	Date of General Procurement Notice:	X		
	Period Covered by these Proc. Plans:	Jan 2020 to June 2021		
2	Consulting Services: Prior/Post review Threshold			
	Selection Method	Prior review Threshold (UA)	Post review Threshold (UA)	Frequency of Review
	1. QCBS	All	-	All prior review
	2. LCS	All	-	All prior review
	3. Individual	All	-	All prior review

3	<i>Consulting Services: Selection Method and Time Schedule for 3 Years</i>						
	Description	Selection Method	Lump sum or Time-Based	Estimated Amount in EU (000)	Prior/Post Review	EOI Publication Date	Contract Start Date
3.1	Feasibility Studies and Detailed Design	QCBS	TB	904.49	Prior	Feb 2020	Aug 2020
3.2	Study Stakeholder Workshops	Shopping	LS	29.57	Post		
	Total Cost			934.06			

6. Bank's Oversight of Borrower's Procurement

6.1 Oversight under BPS: Under BPS, procurement oversight will be carried out according to national procurement laws and regulations. National oversight institutions comprising the Procurement and Disposal Unit (PDU) and Office of the Auditor General (OAG) will conduct their own audits as per national laws and regulations. Independent auditors will also carry out monitoring of transactions or groups of similar transactions under the project, where necessary, relying on the national audit reports as input to their independent reviews. The Borrower shall, based on these, compile and submit annual audit reports to the Bank.

6.2 Oversight under BPM: Procurement undertaken through Bank shall be subject to prior/post review, as detailed in the plan.

ANNEX 5: POLICY AND INSTITUTIONAL FRAMEWORK

1. Introduction

1.1 A number of policies and strategies aligned to Vision 2030 governs the water supply and sanitation sector. The Policies and strategies include: Water Act, Water Policy (currently under review to include sanitation), Kenya Environmental Sanitation and Hygiene Policy (2016-2030), Kenya Environmental Sanitation and Hygiene Strategic Framework (2016-2020), Kenya Environmental Sanitation and Hygiene Prototype Bill, and Kenya Open Defecation Free Campaign Roadmap (2016- 2020), Public Health Act, and Environment Policy. The Big Four Agenda is aligned to the 2030 Sustainable Development Goals (SDGs), and the provision of water supply and sanitation services to Kenyans constitutes an underlying enabler for the attainment of the Agenda as well as the SDG's no.6, 9 and 11.

1.2 The National Water Policy of 1999 and the Water Act 2002 triggered the reforms to improve water resource management, meet the growing demand for water and sanitation services, attract more professionals into the sector, attract greater investment, and create a modernized sector that is robust and more capable of responding to emerging challenges such as climate change and urbanization.

1.3 *The National Water Policy 2019 (Draft Sessional Paper)* has been developed in line with the mandate, vision and mission of the Ministry responsible for water affairs in Kenya. In particular, the Policy builds on the achievements of the water sector reforms that commenced with the enactment of the Water Act, 2002 based on the principles outlined in the Sessional Paper No. 1 of 1999 on National Policy on Water Resources Management. The 2019 draft Water Policy also takes into account (a) the provisions and spirit of the Constitution of Kenya, promulgated in August 2010. Article 43 of the Constitution states that, “*every person has the right to reasonable standards of sanitation and to clean and safe water in adequate quantities*”; (b) Sessional Paper No. 10 of 2012 on Kenya Vision 2030; and (c) the lessons learnt since 1999.

1.4 The draft Policy takes into account the need for Kenya, at all levels of government, to take steps, through this Policy, law, institutional mandates, planning and financing, in order to secure universal coverage of the entire population through access to water, and sanitation in accordance with constitutional standards. The Policy has recognized elements of the water sector that are enablers for Kenya to meet the different objectives and these include priorities in education, training, technology, research and innovation; affirmative action; gender mainstreaming; taking action to mainstream climate actions in the water sector; as well as institutional arrangements, including devolved mandates. Further, the policy addresses Kenya's priorities and actions for investment planning, resource mobilization and financing.

1.5 Article 21 of the Constitution obliges Government to take progress steps towards realizing the citizenry constitutional right *to reasonable standards of sanitation and to clean and safe water in adequate quantities* . Articles 6, 174, 175 and 176 create a two-tier system of devolved

government comprising the national and county government. The responsibility of developing, managing and maintaining water and sewerage infrastructure remains a national government function, but the responsibility of provision of water and sanitation services is vested in county governments. At the provincial or basin level, Water Works Development Agencies (formerly Water Services Boards (WSBs)) act as Asset Holders of water supply and sanitation infrastructure. AWWDA is one of the eight (8) Water Works Development Agencies (WWDAs) established under the Ministry of Water and Sanitation & Irrigation, under the Water Act 2016, vide Legal Notice No. 28 of 26th April 2019. The institutional framework consists of the following:

- (a) Ministry of Water and Sanitation & Irrigation with Directorates for Water Development, Water Resources Management and Sanitation responsible for sector policy formulation, planning and performance monitoring and evaluation;
- (b) Ministries of Public Health, Environment and Education responsible for promotion of public health and related policies, environmental management and protection, school sanitation, respectively.
- (c) Water Sector Trust Fund responsible for resource mobilization and sector financing of pro poor initiatives;
- (d) Water Works Development Agencies (formerly Water Services Boards (WSBs) acting as Asset Holders responsible for development of water and sewerage infrastructure.
- (e) County Governments responsible for oversight of the delivery of water supply and sanitation services through local level water and sewerage companies;
- (f) Water Service Providers (Water and Sewerage Companies) directly responsible for the provision and day to day management of water and sanitation services;
- (g) The Private Sector (water and sanitation infrastructure operators, contractors, consultants and suppliers of goods).
- (h) Donors and NGOs responsible for various sector development activities, including sector financing in collaboration with Government.

2. Activities Undertaken by Sanitation and Water Sector Institutions

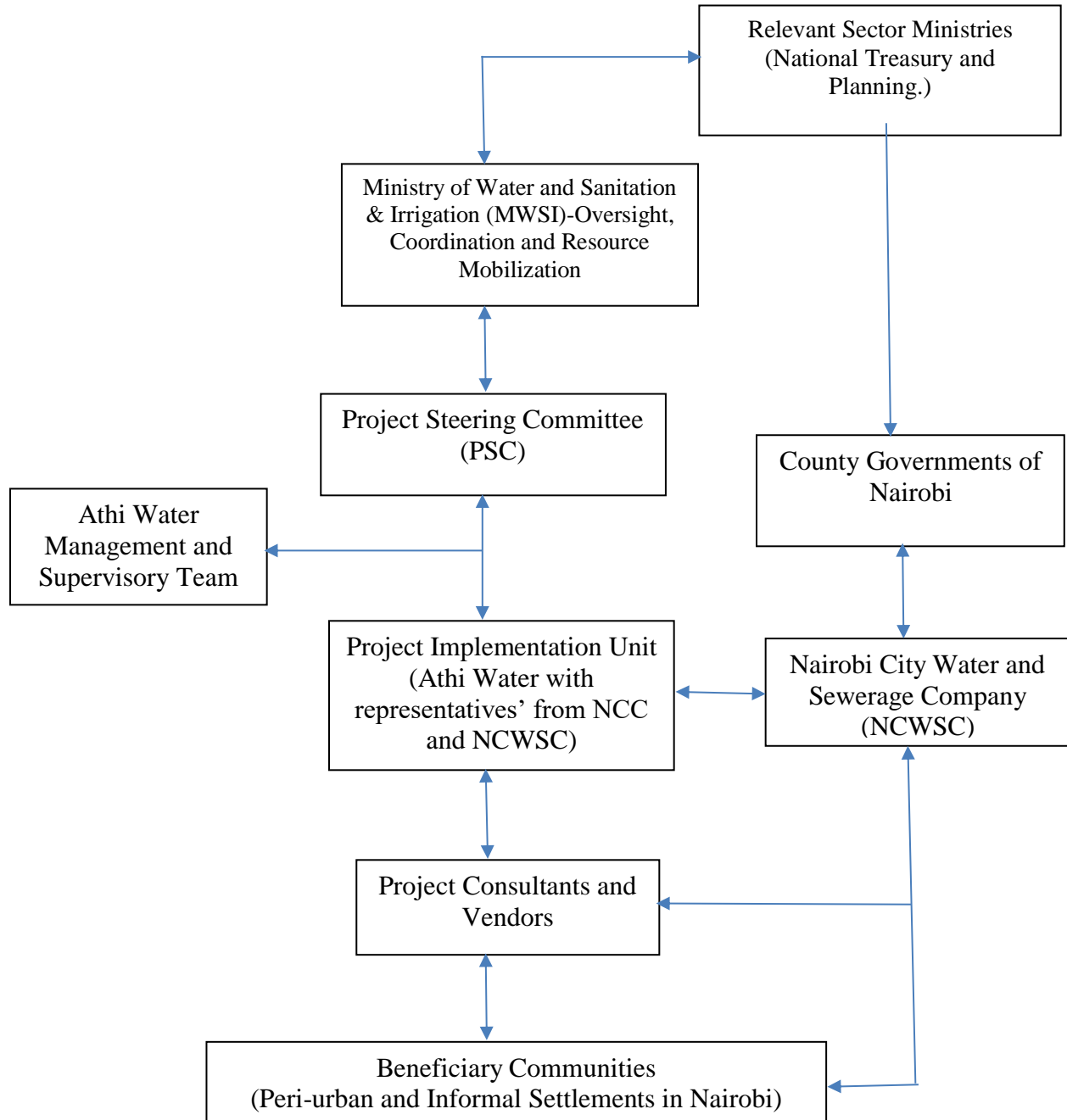
The specific roles and responsibilities, and activities of some key institutions include:

- a) Ministry of Water and Sanitation & Irrigation:* 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 monitoring and evaluation to track performance, 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 Ministry of Education for development of sanitation related infrastructure and software activities in schools, and Ministry of Water and Sanitation & Irrigation for development of public sanitation and sewerage infrastructure;
- c) Ministry of Education and Sports:* 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, and community development and mobilization.

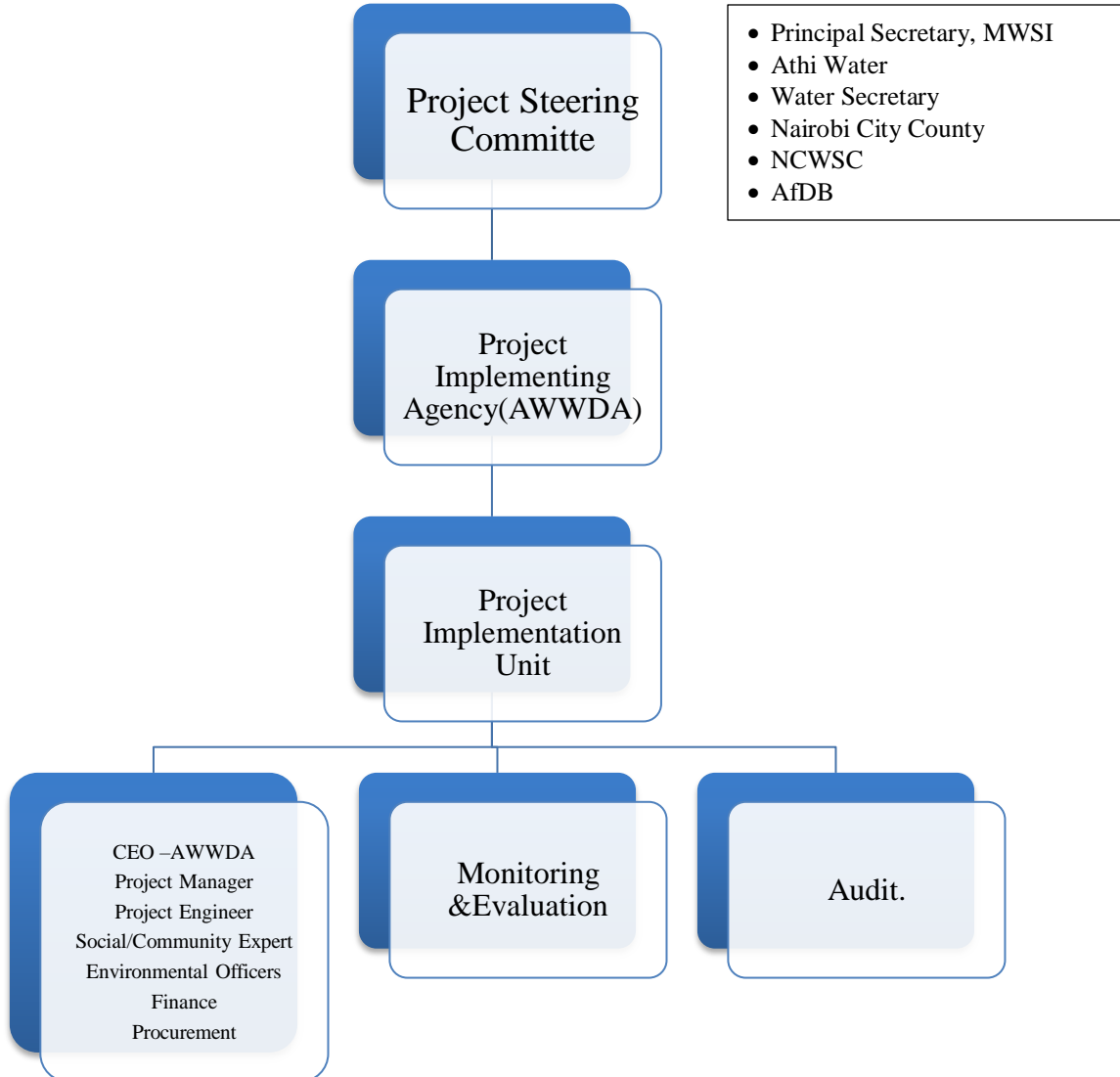
- e) *Ministry of Finance*: Responsible for resource mobilization and sector allocation, coordination of development partner resources, and financial reporting, and compliance monitoring and reporting on sector and national development objectives.
- f) *Water Works Development Agencies (WWDAs)*: The WWDAs act as Asset Holders and are primarily responsible for development of water and sewerage infrastructure and services. WWDAs sign Agreements with Water Service Providers for the operation and maintenance of developed infrastructure and services.
- g) *Water Services Regulatory Board (WASREB)*: The Water Services Regulatory Board is a public institution established in March 2003 as part of the comprehensive water sector reforms. The institution's mandate is to oversee the implementation of policies and strategies relating to provision of water and sewerage services. WASREB sets rules and enforces standards that provide guidance and ensure that consumers are protected and have access to efficient, affordable and sustainable services.
- h) *National Environment Management Authority*: 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.
- i) *Water Services Providers (Water and Sewerage Companies)*: Responsible for operation and maintenance of water supply and sewerage infrastructure and services.
- j) *County Governments*: Responsible for oversight of the delivery of water supply and sanitation services by Water Service Providers at the local and county levels.
- k) *Private Sector (PS) Cesspit Emptier 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 Nairobi, where demand for FSM services is high. Operators are often reluctant to operate in the peri urban and informal settlements due to (a) inadequate road accesses; (b) absence of sites for FS treatment and disposal; and (c) 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. Operators also complain about multiple annual surcharges levied by public institutions per truck, e.g., 8,000 Ksh by NEMA, 20,000 Ksh by the City County, and upto 60,000 Ksh as tipping fees for FS/Septage disposal at the Nyiru discharge point. Together, the amount payable is a little over 7,300 Ksh per month per truck. However, given service charges between Ksh 4,000 and Ksh 15,000 per desludging trip, and assuming 15 trips per week, an average of about Ksh 572,000 revenue could be generated per month per truck.
- l) *Other Private Sector Entities*: Consultants, Contractors and Suppliers provide various services to develop, operate and maintain relevant water supply, sanitation and sewerage infrastructure and services.

The project offers an opportunity to further examine and implement appropriate technologies for faecal sludge and sewage chain management, including institutional arrangements for sustainable operation and maintenance, and enhanced faecal/sewage sludge reuse to contribute to cost recovery.

ANNEX 6: PROJECT ORGANIZATION AND INSTITUTIONAL LINKAGES



ANNEX 7: PROJECT IMPLEMENTATION UNIT



ANNEX 8: PROJECT IMPLEMENTATION UNIT 'S TERMS OF REFERENCE

- 1. The Project Manager** – Will be based in the AWWDA, and He/she will be at least a Principal Engineer with 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 MWSI 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 MWSI, NCWSC, NCC, Central Government and other local stakeholders on meetings/workshops required by the project consultants.
 - Assist in needs identification and development of options for project intervention.
 - Ensure that senior staff of the AWWDA, MWSI and MOF are fully involved and informed of project progress.
 - Organize investment fora to present the project results for funding consideration.

- 2. Finance/Accounting and Administration Officer** will be seconded staff from the AWWDA. 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. Monitoring and Evaluation Officer** will be seconded staff from the AWWDA. 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. **Project Engineer (s)** shall be seconded from AWWDA, and shall work together with other key members of the PIU to 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. **Procurement/Contract Specialist** shall be seconded from AWWDA and 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 PIU staff and advise and provide guidance on procurement issues.
 - Assist AWWDA to procure goods and services in accordance with the provisions of the African Development Bank Guidelines and Kenyan procurement 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. **Environmental and Social Safeguard Specialist** 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 PIU.

- 8. Community Development & Gender Specialist** 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 Implementation Unit (PIU) 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.
- 5.5 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.

7. Visits by Representatives of Governments, Donors of AWF

- 7.1 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.
- 7.2 These visits may also include the participation of government representatives and donors AWF in roundtables and other events.

8. Cards, Brochures and Newsletters

- 8.1 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.
- 8.2 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."
- 8.3 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.
- 8.4 Copies of publications including electronic copies should be made available to the AWF.

9. 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.

10. 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.

11. Vehicles, Supplies and Equipment

- 11.1 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.

- 11.2 This condition can be the subject of negotiations between AWF and the gift recipient since some supplies and equipment may be exempted.
- 11.3 The gift recipient must provide proof of compliance with this rule (emailing digital photos is recommended).

12. Photographs and Audio-visual Productions

- 12.1 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.
- 12.2 All photos must be submitted with a complete legend, and the information needed to assign ownership.
- 12.3 The AWF will be permitted to use or reproduce photos submitted to it without payment of royalties.
- 12.4 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.
- 12.5 Copies of the film (s) / document (s) must be provided to the AWF.

13. Commemorative Plates or Safety

- 13.1 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.
- 13.2 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.

14. Promotional Items

- 14.1 Before taking any decision on the production of these items, it is necessary to consult the Communications Officer of the AWF.
- 14.2 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



THE REPUBLIC OF KENYA

MINISTRY OF WATER AND SANITATION & IRRIGATION



**ATHI WATER WORKS DEVELOPMENT AGENCY
(AWWDA)**

NAIROBI INCLUSIVE SANITATION IMPROVEMENT PROJECT

**FEASIBILITY STUDIES, DETAILED DESIGN, TENDER
DOCUMENTATION, ESIA & CONNECTION STRATEGY FOR FAECAL
SLUDGE AND SEWAGE SERVICE CHAIN MANAGEMENT IN PERI-
URBAN AND INFORMAL SETTLEMENTS**

TERMS OF REFERENCE

August 2019

