# WATER SUPPLY SYSTEMS FOR **BUHONGWA, BUSWELU, KISESA AND USAGARA IN MWANZA CITY** AND NEIGHBOURING AREAS

ESIA Report for Simplified Sewer System AE/042/2020-2021/C/50

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#### **RECIPIENT**

| Organization | Name       | Position              | Date         |
|--------------|------------|-----------------------|--------------|
| MWAUWASA     | Neli Msuya | Ag. Managing Director | 31 July 2024 |
|              |            |                       |              |

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# **ACRONYMS**

| AFD      | Agence Française de Développement                                  |
|----------|--|
| DED      | Detailed Engineering Design  |
| DoE      | Department of Environment  |
| DP       | Domestic Point   |
| EA       | Environmental Assessment   |
| EIA      | Environmental Impact Assessment                                    |
| EIB      | European Investment Bank   |
| EIS      | Environmental Impact Statement                                     |
| ЕМР      | Environmental Management Plan                                      |
| E&S      | Environment and Social   |
| ESA      | Environmental and Social Assessment                                |
| ESIA     | Environmental and Social Impact Assessment                         |
| ESMF     | Environmental and Social Management Framework                      |
| ESMP     | Environmental and Social Management/Monitoring Plan                |
| ESS      | Environmental and Social Safeguard Standards                       |
| EU       | European Union   |
| EUR      | Euro   |
| GBV      | Gender Based Violence  |
| GRC      | Grievance Redress committee  |
| GRM      | Grievance Redress Mechanism  |
| GoT      | Government of Tanzania   |
| HIV/AIDS | Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome |
| IIP      | Immediate Investment Plan (for LVWATSAN)                           |

| LVWATSAN | Lake Victoria Water and Sanitation (Project)          |
|----------|---|
| мсс      | Mwanza City Council                                   |
| MEO      | Mtaa Executive Officer                                |
| MSF      | Multi-Stakeholder Forum                               |
| MWAUWASA | Mwanza Urban Water Supply and Sanitation Authority    |
| NEMC     | National Environment Management Council               |
| NGO      | Non-governmental Organization                         |
| PAP      | Project Affected Person                               |
| PFR      | Project Formulation Report (for LVWATSAN)             |
| РМС      | Project Management Consultant (for LVWATSAN)          |
| PMU      | Project Management Unit (for LVWATSAN)                |
| PPE      | Personal Protective Equipment                         |
| RAP      | Resettlement Action Plan                              |
| RPF      | Resettlement Policy/Planning Framework (for LVWATSAN) |
| SEA      | Sexual Exploitation and Abuse                         |
| SH       | Sexual harassment                                     |
| SEP      | Stakeholder Engagement Plan (for LVWATSAN)            |
| SER      | Supplementary Engineering Report (for LVWATSAN)       |
| STP      | Sexually Transmitted Diseases                         |
| STIP     | Short-term Investment Plan (for LVWATSAN)             |
| TANROADS | Tanzania National Roads Agency                        |
| TBS      | Tanzania Bureau of Standards                          |
| USD      | United States Dollar                                  |
| VEO      | Village Executive Officer                             |
| wно      | World Health Organization                             |
| WEO      | Village Executive Officer                             |
| WSDP     | Water Sector Development Project                      |

# **SYMBOLS**



# **EXECUTIVE SUMMARY**

# **Brief Description of the Project**

To achieve the Tanzania Vision 2025 goal of attaining good governance through the rule of law and the development of a robust economy, the Government of Tanzania, through the Ministry of Water, has invested and contracted funds for the implementation of water supply and sanitation projects in Mwanza City and satellite towns. The investment aims to provide a sound and robust water supply system for Mwanza City and the neighbouring areas. MWAUWASA (the Client) has been implementing the Lake Victoria Water Supply and Sanitation (LVWATSAN) Project covering Mwanza City, Bukoba and Musoma towns and the Satellite Towns of Misungwi, Magu and Lamadi on behalf of the Ministry of Water using EIB/AFD funds since 2013.

The Consultant has been engaged for the feasibility study, preliminary designs, tender documentation and construction supervision of Buhongwa, Buswelu, Kisesa and Usagara Water Supply Project. The funds available for the project implementation did not include for the implementation of the sanitation project, and MWAUWASA together with the MoW are considering seeking additional funding from AFD, EIB and the EU to ensure the continuation of implementation of Stage 1 works required in for water supply in southern parts of Mwanza City and Neighbouring Areas together with simplified sewer systems in ten low income areas in Nyamagana and Ilemela Municipalities of Mwanza City. Consequently, MWAUWASA requested additional services to be provided by the Consultant to carry out project feasibility study and preliminary designs together with cost estimates for a simplified sewer system in the ten selected areas.

MWAUWASA has recently implemented simplified sewer systems (SSS) in some pilot areas in Mwanza and intends to implement similar models in the selected ten (10) locations within Mwanza Municipality.

The specific objective of the assignment is to prepare a technical feasibility study and preliminary designs for Simplified Sewer Systems in 10 areas of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika.

The simplified sewer systems will collect wastewater from the areas and feed into the main sewer line, which goes to the Sewer Treatment Plant in Butuja, Ilemela. The Client provided the

Consultant with previous designs of the SSS that they have implemented in order that the Consultant can use it as a model. The Client also provided the relevant drawings and information on the existing sewer network in order for the Consultant to establish which sewers to connect the SSS to in each area.

#### **Project Location**

The project area is located in Mwanza City (Nyamagana) and Ilemela Municipal areas on the southern shores of Lake Victoria in Northwest Tanzania. Mwanza City is made up of Nyamagana and Ilemela Districts. The target areas for the Simplified Sewer System are indicated in Figure 1 below.

Mwanza City Council is located on the southern shores of Lake Victoria (Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika) in northwest Tanzania. It is situated between the latitudes 2 015' and 2 031' South of Equator, Longitude 32 0 45' and 33 0 East. Mwanza City is characterised by an urban settlement with a commercial and industrial set up.

Ilemela Municipal Council lies on the southern shores of Lake Victoria within Mwanza Region between Latitude 2015" and 2031" South of the Equator and Longitude 320 45" and - 3302" East of Greenwich approximately 1,140 metres above sea level. The municipality is bordered by Lake Victoria on its Northern and Western parts with a distance of about 12 kilometres, whereas on its Eastern part it is bordered by Magu District and on its Southern part is bordered by Mwanza City Council. It is located 16 Kilometres West of Mwanza International Airport. This council has a total surface area of 1080.55 sq. kms out of which 828.45 sq.kms (77%) is covered by water body (Lake Victoria) and 252.10 (23%) sq. kms are land area.

The selected ten (10) project areas are located in thirteen (13) different wards of Pasiansi, Kawekamo, Ibungilo, Kitangiri, Kirumba, Nyamanoro, Nyasaka, Isamilo, Mbugani, Mabatini, Buzuruga, Igogo and Mkuyuni. All the selected areas are smaller than their respective wards, but some project areas overlap within more than one ward.

#### Policy, Legal and Administrative Framework

This chapter lists and discusses the national laws, rules, and regulations that are relevant to the project. The goal of this chapter is to help you understand the regulatory framework's goals with regard to the social and environmental effects of the project activities that are being suggested. Tanzania's national legal requirements as well as pertinent international standards will be followed

in the creation of this EMSP report. Tanzania's ratified conventions, conventions, and international organization directives shall also be taken into account.

#### Applicable National Laws and Policies

The National Environmental Policy, 1997, National Women and Gender Development Policy, 2000, Construction Industry Policy, 2003, National Transport Policy, 2003, National Policy on HIV/AIDS, 2001, Sustainable Industries Development Policy, 1996, National Human Settlements Development Policy, 2000, National Health Policy, 2003 and National Employment Policy, 1997.

#### National Legislation and Regulations

The Environmental Management Act (EMA) 2004, The Water Supply and Sanitation Act, 2019, The Road Act, 2007, The Solid Waste Management Act, 2009, The Employment and Labour Relations Act, 2004, The Occupational Health and Safety Act, 2003, The HIV and AIDS (Prevention and Control) Act, 2008, Workers Compensation Act, 2008, The Penal Law (The Penal Code as Amended by the Sexual Offences Special Provisions Act 1998.), The Environmental Impact Assessment and Audit Regulations, 2005 and The Environmental (Registration of Environmental Experts) Regulations, 2005.

#### **Plans**

The National Plan of Action to End Violence Against Women and Children in Tanzania 2017/18 – 2021/22, The World Bank Environmental And Social Framework (ESF), Vision for Sustainable Development and World Bank Environmental And Social Policy For Investment Project Financing.

#### Environmental and Social Standards

The ones observed are Environmental And Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts, Environmental and Social Standard 2: Labor and Working Conditions; Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management, Environmental And Social Standard 4: Community Health And Safety; Environmental And Social Standard 5: Land Acquisition, Restrictions on Land Use And Involuntary Resettlement, Environmental And Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources, Environmental and Social Standard 8: Cultural Heritage; Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure.

#### International obligations and treaties

- Working Environment (Air Pollution, Noise and Vibration) Convention
- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (also known as the 1972 London Convention)
- The 1991 Bamako Convention
- ILO Minimum Age Convention (C138), 1973.

#### Administrative framework

The legal institutions for environmental management in the country include;

- Minister responsible for Environment
- National Environmental Advisory Committee
- Department of Environment
- National Environment Management Council (NEMC)
- Sector Ministries
- Regional Secretariat
- Local Government Authorities (City, Municipal, District, Township, Ward, Village, sub-village "Kitongoji")

#### **Results of Public Consultations**

Stakeholder consultation, or public involvement in environmental decision-making, is, at its core, an effective way for the project team to communicate with the community. The purpose of the stakeholder consultation process is to inform the locals about the development and help them understand and accept the upcoming developmental activities in the area. Open communication among the stakeholders reduces the perceived possibility of negative environmental effects. In exchange, the public's input is utilized to help improve environmental management and project design.

In order to comprehend the various facets of public and stakeholder concerns, interests, and recommendations regarding the project, the consultant team created the Consultation Plan. Focused group discussions (FGDs), one-on-one meetings, and personal interviews were all included in the consultation plan. These methods aided in identifying the participants' problems and the best ways to address them. A number of one-on-one and public meetings were held in the project area to engage with the communities and government agencies. During the stakeholder consultation with wards and communities of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo, and Bugarika, MWAUWASA officials also collaborated with the consultant team to engage with the community.

#### **Description of the Major Significant Impacts**

The following significant impacts were assessed:

A. Impacts During Mobilization Phase

#### Positive impacts

i) Employment opportunities

#### Negative Impacts

As the study is not involving Geotechnical Survey and Topographical Survey of the area due to meandering of pipes around the proposed site areas. No anticipated Negative Impact at this stage.

B. Impacts during Construction phase

#### Positive Impacts

- i. Employment opportunities
- ii. Increase in income for local people
- iii. Skills development

#### **Negative Impacts**

- i. Soil Erosion
- ii. Land degradation
- iii. Health and Safety Risks
- iv. Health and Sanitation Issues
- Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential areas.
- vi. Waste Generation and Management
- vii. Noise pollution
- viii. Air pollution
- C. Impacts during Operation Phase

# Positive Impacts

- i. Reduction of the nutrient's inflow into the lake
- ii. Less pollution of the soil
- iii. Improvement of the sanitation conditions
- iv. Community Health Benefits

- v. Social and Economic Benefits
- vi. Improved Sanitation Coverage
- vii. Increase of revenue collection for MWAUWASA

#### Negative Impacts

- i. Maintenance Challenges
- ii. Odor and Aesthetic Concern
- iii. Potential for Groundwater Contamination
- iv. Temporal Social Disruptions

#### **Alternatives Considered**

The project alternatives considered in this project were no project alternatives, choosing UPVC pipes and steel pipes instead of the HDPE, building a solids-free sewers instead of simplified sewerage system, building conventional gravity sewers instead of simplified sewerage system and alternative design and technology. This is vital in ensuring that the proponents and decision-makers have a wider knowledge base from which they can choose the most appropriate option for the proper implementation of this project.

#### **Recommendations and Plan for Mitigation of the Impacts**

The National Environment Management Council (NEMC) places a strong emphasis on project implementation that avoids, minimizes, and plans for effect mitigation. The goal of the mitigation measures plan is to guarantee that the project's execution preserves and enhances the natural environment. Following the plan, the proponent must put the suggested mitigation measures into practice in order to stop or lessen the project's negative effects on the environment and society. Enhancement measures, however, are also offered to increase the project's beneficial effects. In order to reduce negative effects and maximize noteworthy positive effects, it is advised that the Proponent put the recommended mitigating measures into practice and carry out regular monitoring exercises.

#### **Environmental and Social Management Plans**

The approaches for managing and monitoring the environment and society include information on the effects, suggested defensive measures, accountable groups, when to act, and expected expenses. While the monitoring plan will monitor the efficacy of the mitigation measures, the impact management plan will assist in implementing enhancement and mitigation measures of the impacts identified at the proposed development. As stated in this report, the Proponent is responsible for making sure the monitoring strategy is followed.

#### **Proposed Monitoring and Auditing**

An essential part of making sure environmental and social issues are addressed, whether a project is successful or not, is the environmental and social monitoring plan. This is especially true for projects that have the potential to have an impact on the environment and social well-being of the surrounding community. In this ESIA, "monitoring" is defined as the methodical gathering of data by repeated measurements in order to give details on the features and operations of environmental and social variables pertinent to the impact and mitigation strategies implemented for the project under consideration. The monitoring plan aids in confirming that the suggested mitigation strategies successfully manage the evaluated consequences.

In cooperation with appropriate organizations, such as the Occupational Safety and Health Authority and the National Environment Management Council, among others, MWAUWASA is dedicated to making sure that monitoring and auditing of this project are in place.

#### **Decommissioning**

Since decommissioning will occur in the far future, it is often impossible to predict with certainty what the precise conditions will be for mitigation. Because of this, it is currently not possible to propose precise mitigation measures regarding the environmental effects of decommissioning works with a fair degree of assurance. The proponent shall, by a predetermined Plan and mitigating measures of project removal impacts on site, carry out all phases of decommissioning, including but not limited to engineering, environmental assessment, permitting, and mitigation activities associated with the removal of the structures.

In order to respond to specific events throughout the monitoring phase, the proponent is required to monitor the environmental impacts both during and after project removal. The proponent is responsible for removing the structures in a way that minimizes any negative effects on the environment, pays all outstanding debts to suppliers, contractors, government agencies, and labor unions, and returns the site to its pre-construction state.

#### **Conclusion and Recommendations**

In conclusion, the project will strengthen MWAUWASA's environmental planning, management, and monitoring capacities while improving the environmental and health conditions of the communities of Ilemela and Nyamaga. Ensuring optimal environmental advantages requires efficient operation and maintenance. Surface water pollution will be reduced and Lake Victoria's quality will be improved via the Simplified Sewerage System.

# 1. INTRODUCTION

# 1.1. BACKGROUND OF THE PROJECT

To achieve the Tanzania Vision 2025 goal of attaining good governance through the rule of law and the development of a robust economy, the Government of Tanzania, through the Ministry of Water, has invested and contracted funds for the implementation of water supply and sanitation projects in Mwanza City and satellite towns. The investment aims to provide a sound and robust water supply system for Mwanza City and the neighbouring areas. MWAUWASA (the Client) has been implementing the Lake Victoria Water Supply and Sanitation (LVWATSAN) Project covering Mwanza City, Bukoba and Musoma towns and the Satellite Towns of Misungwi, Magu and Lamadi on behalf of the Ministry of Water using EIB/AFD funds since 2013.

The Consultant has been engaged for the feasibility study, preliminary designs, tender documentation and construction supervision of Buhongwa, Buswelu, Kisesa and Usagara Water Supply Project. The funds available for the project implementation did not include for the implementation of the sanitation project, and MWAUWASA together with the MoW are considering seeking additional funding from AFD, EIB and the EU to ensure the continuation of implementation of Stage 1 works required in for water supply in southern parts of Mwanza City and Neighbouring Areas together with simplified sewer systems in ten low income areas in Nyamagana and Ilemela Municipalities of Mwanza City. Consequently, MWAUWASA requested additional services to be provided by the Consultant to carry out project feasibility study and preliminary designs together with cost estimates for a simplified sewer system in the ten selected areas.

The main objective of the original Consultancy Services provided by SEURECA in JV with NETWAS (Tz) was to carry out Feasibility Studies, Environmental and Social Impacts Assessment (ESIA), Detailed Engineering Designs, Preparation of Tender Documents and Supervision of the Works Contract for water supply systems for Buhongwa, Buswelu, Kisesa and Usagara wards in Mwanza City and Neighbouring Areas.

The main objectives of the services contracted under Addendum No. 2 to SEURECA in JV with NETWAS (Tz) assignment are two-fold: -

 Update the Water Supply Feasibility Study and Preliminary Designs to incorporate extension of Butimba WTP including solar system for Mwanza South Water Supply Project

- Prepare Feasibility Study and Preliminary Designs for Simplified Sewer Systems in Ten Areas
- Conduct prerequisite Environment and Social Impact Assessment together with Resettlement Action Plans, Gender Action Plan, Implementation Plan and Logical Framework.

The scope of services to be executed under Addendum No. 2 consultancy services comprises of the following:

- Review of designs for extension of Butimba water treatment plant
- Review of designs for Butimba solar power generation plant
- Simplified Sewer Systems in 10 areas (Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika)
- Complete and update the infrastructure feasibility studies, including technico-economic considerations, O&M considerations, and carbon-footprint calculations
- Complete and update overall E&S documentation (ESIA & RAP)
- Design a project-specific gender-inequality reduction action plan (Gender Action Plan GAP)
- Update the project basic presentation (overall budget, log frame, procurement plan, etc.)

MWAUWASA has recently implemented simplified sewer systems (SSS) in some pilot areas in Mwanza and intends to implement similar models in the selected ten (10) locations within Mwanza Municipality.

The specific objective of the assignment is to prepare a technical feasibility study and preliminary designs for Simplified Sewer Systems in 10 areas of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika.

The simplified sewer systems will collect wastewater from the areas and feed into the main sewer line, which goes to the Sewer Treatment Plant in Butuja, Ilemela. The Client provided the Consultant with previous designs of the SSS that they have implemented in order that the Consultant can use it as a model. The Client also provided the relevant drawings and information on the existing sewer network in order for the Consultant to establish which sewers to connect the SSS to in each area.

#### 1.2. RATIONALE OF THE SSS PROJECT

Due to the nature of the area being located in the rocky hills with steep slope and characterized by unplanned settlements with no roads for vehicles access, the onsite sanitation system is the challenges and conventional sewer networks are inappropriate or difficult to implement due to the area's physical conditions, unplanned and dense housing together with prevailing low income levels. These houses are congested with the areas considered to have high population density compared to the lower lands of the City. The project areas are generally composed of low-income households with limited accessibility from the main roads to the houses with the types of houses that are comparatively low-cost houses.

Due to the above mentioned factors, the upper rocky hills areas are currently facing various environmental and social challenges such as improper sewerage management, lack of access to proper sanitation, improper solid waste management, and the resultant health hazards, etc. These conditions impede socio-economic growth and degrade the environment.

Implementation of the simplified sewerage system in those areas will improve sanitation conditions through simplified sewerage systems that will contribute significantly to public health outcomes, Proper disposal of human waste that will help to prevent the spread of waterborne diseases, leading to healthier communities and reduced healthcare costs. Also the Simplified sewerage system materials and construction methods will reduce the financial burden on municipalities and residents, making sanitation infrastructure more affordable and accessible.

#### 1.3. LVWATSAN - MWANZA PROJECT FUNDING

The Project is financed under the European Union (EU) Africa Infrastructure Trust Fund within the overall context of the EU and Africa Strategic Partnership. The European Investment Bank (EIB) and the Agence Française de Développement (AFD) are responsible for financing the project. The overall cost of the project is not yet known as currently MWAUWASA together with the MoW are considering seeking additional funding from AFD, EIB and the EU to ensure the continuation of implementation of Stage 1 works required in for water supply in southern parts of Mwanza City and Neighbouring Areas together with simplified sewer systems in ten low income areas in Nyamagana and Ilemela Municipalities of Mwanza City. The total Project cost will be estimated after signing the contract.

### 1.4. Scope of the Project

MWAUWASA has recently implemented simplified sewer systems (SSS) in some pilot areas in Mwanza and intends to implement similar models in the selected ten (10) locations within Mwanza Municipality. The specific objective of the assignment is to prepare a technical feasibility study and preliminary designs for Simplified Sewer Systems in 10 areas of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika. The simplified sewer systems

will collect wastewater from the areas and feed into the main sewer line, which goes to the Sewer Treatment Plant in Butuja, Ilemela.

This report is limited to the Environmental and Social Management Plan for Simplified Sewer Systems in 10 areas of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika.

#### 1.5. APPROACH AND METHODOLOGY

#### 1.5.1. LITERATURE REVIEW

To gather current secondary data and information pertinent to the research field, documents, design reports, and other records were examined. The Simplified Sewerage System's previous ESMP report, which was for the pilot and scale-up phase, as well as reports on education, health, and community development, as well as district socioeconomic and investment profiles, were among the reports that were examined. To obtain the population data for the ten SSS areas, the National 2022 Population Census, Settlement Development Plans, and other pertinent papers were examined.

The environmental expert also gathered and examined the profiles of the districts of Ilemela and Nyamagana in order to extract and synthesize data on demographics, socioeconomic status, the availability of social services, including water, gender issues, and land use in each district.

#### 1.5.2. In-Depth Discussions With Key Informants

Comprehensive conversations were held with key informants, including representatives from the local community and ward-level officials.

## 1.5.3. Public Consultative Meetings

Public meetings were held with community members whereby issues related to the simplified sewerage system were presented through which respective local communities raised their concerns as indicated in the section for public consultation. The meetings were held in the areas of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo, and Bugarika.

#### 1.5.4. VISUAL OBSERVATION

Transect walks were used to make the observation in order to gather detailed information about the current natural environment. In order to study the nature of the locations, the method utilized in the construction of the SSS for scale up and pilot phase, as well as the existing onsite sanitation system in the areas, the consultant was able to visit all sites with the current Simplified Sewerage System and proposed SSS Sites. Additionally, the consultant was able to gather the lessons learnt through social study. The current residential and commercial on-site sanitation infrastructures, such

as septic tanks and toilets, settlement patterns, and other economic activities, as well as business infrastructure like public toilets at marketplaces and schools were observed during the site visit.

# 2. DESCRIPTION OF THE PROJECT

#### 2.1. Introduction

This chapter describes the location, area description, physical characteristics and demographics of the selected ten (10) project locations of Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika.

# 2.2. Project Location

The project area is located in Mwanza City (Nyamagana) and Ilemela Municipal areas on the southern shores of Lake Victoria in Northwest Tanzania. Mwanza City is made up of Nyamagana and Ilemela Districts. The target areas for the Simplified Sewer System are indicated in Figure 1 below.

Mwanza City Council is located on the southern shores of Lake Victoria (Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo and Bugarika) in northwest Tanzania. It is situated between the latitudes 2 015' and 2 031' South of Equator, Longitude 32 0 45' and 33 0 East. Mwanza City is characterised by an urban settlement with a commercial and industrial set up.

Ilemela Municipal Council lies on the southern shores of Lake Victoria within Mwanza Region between Latitude 2015" and 2031" South of the Equator and Longitude 320 45" and - 3302" East of Greenwich approximately 1,140 metres above sea level. The municipality is bordered by Lake Victoria on its Northern and Western parts with a distance of about 12 kilometres, whereas on its Eastern part it is bordered by Magu District and on its Southern part is bordered by Mwanza City Council. It is located 16 Kilometres West of Mwanza International Airport. This council has a total surface area of 1080.55 sq. kms out of which 828.45 sq.kms (77%) is covered by water body (Lake Victoria) and 252.10 (23%) sq. kms are land area.

The selected ten (10) project areas are located in thirteen (13) different wards of Pasiansi, Kawekamo, Ibungilo, Kitangiri, Kirumba, Nyamanoro, Nyasaka, Isamilo, Mbugani, Mabatini, Buzuruga, Igogo and Mkuyuni. All the selected areas are smaller than their respective wards, but some project areas overlap within more than one ward. Table 1 below and Figure 1 presents how the project locations are distributed within several wards.

Table 1 : Project Locations, Wards and Area Covered

| Sn | Project<br>Location | Location UTM Coordinates<br>(WGS 84) |             | Area Covered<br>(m²) | Name of Wards     |             |
|----|---------------------|--------------------------------------|-------------|----------------------|-------------------|-------------|
| 1  | Ibungilo            | 489413 m E                           | 9725552 m S | 361,107              | Pasiansi, Ibungil | 0           |
| 2  | Pasiansi            | 490259 m E                           | 9725280 m S | 240,958              | Ibungilo, Kaweka  | amo         |
| 3  | Kabuhoro            | 487520 m E                           | 9723673 m S | 336,206              | Kirumba           |             |
| 4  | Kitangiri           | 488286 m E                           | 9724173 m S | 800,898              | Kitangiri, Kirumb | а           |
|    |                     |                                      |             |                      | Nyamanoro,        | Nyasaka,    |
| 5  | Kilimahewa          | 490257 m E                           | 9723303 m S | 1,662,444            | Isamilo           |             |
| 6  | Isamilo             | 490547 m E                           | 9722316 m S | 391,331              | Isamilo           |             |
| 7  | Mabatini            | 490341 m E                           | 9721524 m S | 544,718              | Isamilo, Mbugan   | i, Mabatini |
|    |                     |                                      |             |                      | Mabatini,         | Mbugani,    |
| 8  | Ustawi              | 491883 m E                           | 9720940 m S | 187,987              | Buzuruga          |             |
| 9  | Igogo               | 489566 m E                           | 9719987 m S | 331,248              | Igogo             |             |
| 10 | Bugarika            | 489895 m E                           | 9718616 m S | 156,688              | Igogo, Mkuyuni    |             |

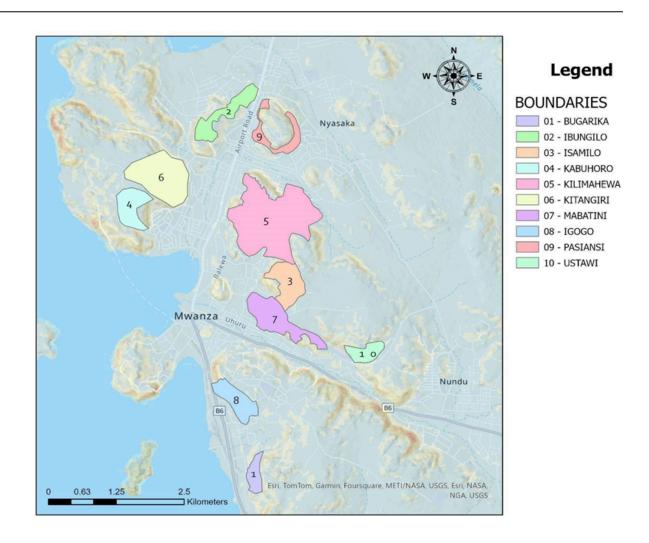


Figure 1 : Project Location Map(Google Map)

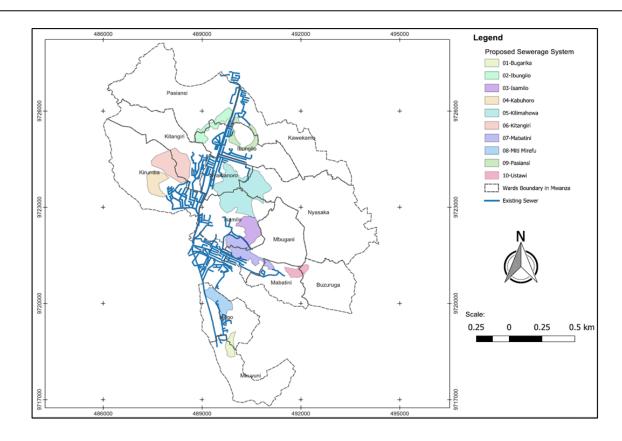


Figure 2 Map of the Project Area and Existing Public Sewerage System

# 2.3. Project Boundaries

Determining the boundaries within which the present study will be undertaken is an important step in the identification of impacts, since it will also determine the extent to which the impacts will be experienced.

**Spatial Boundary:** Spatial boundaries are difficult to determine but they are crucial for restricting the impact area. In this study, the area where the project is located, and which will bear the most impacts is considered as the Direct Impact Area(Ilemela and Nyamagana Municipal), whereas the surroundings of the direct influence area are considered as Indirect Impact Area, from where different services like labour, food, goods etc. would be obtained for the project.

**Temporal Boundary:** Temporal boundaries refer to the lifespan and reversibility of impacts. The impacts of construction work of the Simplified Sewerage System may be short-lived, but its presence in the area may have implications that stretch far into the future. The impacts on air, environment, ground water etc., would occur throughout the operation phase.

#### 2.4. PROJECT DESCRIPTION

Proposed Simplified sewer works to be implemented in the ten project areas within Mwanza comprises the following;

- 45.9km of PN10 OD160 HDPE collector Sewer Pipelines
- 132 km of PN10 OD110 HDPE house connections and collector sewer pipelines
- 18,143 House Connections Screens and Fittings
- 22,552 No. 450 x 450mm and 1,534 No. inspection and sewer concrete chambers
- 68,449m of 1.2m wide concrete slab and stairs along walkways protection for above ground sewers
- 74,024m of 0.4x0.4m concrete strip protection for above ground sewers
- 9,181m of OD160 and 26,437m of OD110mm pipe trenches with depth range of 0.4-06m including rock excavation.

The proposed simplified sewer works to be implemented comprises laying 178.1km of sewer pipes, 35.6km trench excavations, 24,086No. manholes, 142.5 km of concrete strips/slabs/stairs and 18,143 that would be constructed over a period of 12 months.

Due to the nature of the works, congested working spaces, steep slopes and inaccessible sites, it is not expected that these simple works would mainly be executed manually and would not attract large international contractors. In order to attract medium sized regional and local contractors with adequate capacity, it is proposed to implement the works under three separate contract packages, each covering 3-4 project areas that are adjacent to each other, as follows:

- Contract SS/A: Construction of Simplified Sewer Systems in Bugarika, Igogo and Ustawi Areas; This scope of work would cover the construction of the sewer pipes, trench excavations, manholes, concrete strips/slabs/stairs and house connection fittings/screens.
- Contract SS/B: Construction of Simplified Sewer Systems in Isamilo, Kilimahewa and Mabatini Areas; This scope of work would cover the construction of sewer pipes, trench excavations, manholes, concrete strips/slabs/stairs and house connection fittings/screens.
- Contract SS/C: Construction of Simplified Sewer Systems in Ibulingo, Kabuhoro,
   Kitangiri and Pasiansi Areas; This scope of work would cover the construction of sewer pipes, trench excavations, manholes, concrete strips/slabs/stairs and house connection fittings/screens.

The simplified sewer systems will collect wastewater from the areas and feed into the main sewer line, which goes to the Sewer Treatment Plant in Butuja, Ilemela. The Client provided the

Consultant with previous designs of the SSS that they have implemented in order that the Consultant can use it as a model. The Client also provided the relevant drawings and information on the existing sewer network in order for the Consultant to establish which sewers to connect the SSS to in each area.

All the project areas comprise unplanned settlements where there are no roads for vehicles access, due to undulating hilly terrain and considering how the people have constructed houses, it is not possible to incorporate future plans for roads. The houses are congested with the areas considered to have high population density compared to the lower lands.

#### 2.5. PROJECT ACTIVITIES

#### 2.5.1. MOBILIZATION ACTIVITIES

The project activities, once designs and tender documents are completed, tenders are advertised, procured by prospective contractors and finally contract(s) are awarded, will be assumed to follow project routines whereby there are mobilization activities, construction activities and finally construction completion, commissioning of the project, operations and maintenance activities.

The first stage will involve mobilization of the construction human resource, construction equipment and plant, construction materials and erection of worker's camp (if required). At this stage of environmental consideration there will be wastes (mainly solid and liquid) generated from construction of camps. The staff camps like any other domestic place will generate garbage, packaging, sacks, papers, cardboard boxes, plastic, wood crates, bottles, glass, metal cans and the like. Such wastes will need to be segregated for recycling or incinerating at designated project sites.

All project activities including construction of the manholes, Inspection Chambers, excavations for Simplified Sewerage System, collector Sewer Pipelines will be carried out in areas currently used for other activities or along the tracks or streets and access roads within the boundaries of the identified project sites without disturbing or obstructing the neighbours and businesses.

#### 2.5.2. Construction Phase

The main aspect of the construction activities of Simplified sewerage System is the transport of aggregate, sand, cement, steel, pipe sections and other equipment to the construction areas, dedicated storage areas and construction camps.

Practical temporary works: During the installation of Simplified sewer System ,suitable temporary work will be made so that proper dedicated area earmarked is made available for construction

purpose and also for ensuring the safety of workers, Laying of pipelines. The proposed simplified sewer works to be implemented comprises 178.1km of sewer pipes, 35.6km trench excavations, 24,086No. manholes, 142.5 km of concrete strips/slabs/stairs and 18,143 No. house connection fittings/screens.

#### 2.5.3. OPERATION PHASE

Major activities during the operation phase will be gravity flow of sewers as well as preventive maintenance of the network.

#### 2.5.4. DECOMMISSIONING PHASE

During this phase, the system will be replaced over the course of time and maintenance of the Simplified Sewerage System will be regularly done. In the event of the SSS or other components of its infrastructure to be decommissioned, a decommissioning plan will be prepared.

# 2.6. MATERIALS TO BE USED, WASTE GENERATION AND DISPOSAL METHODS

#### 2.6.1. Mobilization Phase Materials

**Site Preparation** - Preparation of the site for proposed Simplified Sewerage System will automatically result in disturbance around the site of works. The first stage will involve mobilization of the construction human resource, construction equipment and plant, construction materials and erection of worker's camp (if required). At this stage of environmental consideration there will be wastes (mainly solid and liquid) generated from construction of camps. The staff camps like any other domestic place will generate garbage, packaging, sacks, papers, cardboard boxes, plastic, wood crates, bottles, glass, metal cans and the like. Such wastes will need to be segregated for recycling or incinerating at designated project sites.

#### 2.6.2. Required Construction Materials

Common materials for sewer pipes include: unplasticized polyvinyl chloride (uPVC) pipes, high density polyethylene (HDPE) pipes, Double Walled Corrugated (DWC) pipes, precast concrete pipes, ductile iron (DI) pipes, glass reinforced plastic (GRP) pipes and steel pipes. Due to local availability HDPE which is manufactured within the country would be the most suitable for use in the simplified sewer system for the project areas but needs to be covered to avoid deterioration due to sunlight exposure. The stage of covering the SSS pipes will involve the use of concrete for covering the SSS, also the commonly used material for sewer manholes is concrete due to their durability and resistance to sewage aggressiveness. The main construction materials will be aggregates, cement, sand, and water for concrete for both SSS covering and Manhole

Construction. Borrow materials to be used for construction will be collected from the identified borrow areas such as those used for the previous SSS project construction in the area.

#### 2.6.3. WASTES

Food scraps, cardboard boxes, and paper wastes are examples of biodegradable materials that will be gathered and dumped in hygienic landfills with other solid wastes. Additional materials will be gathered and delivered to recycling facilities, including plastics, metal straps, pipes, and useless wood boxes. Excavation waste from building manholes and, if needed, sewer pipes will be used as filler for refilling the borrow pits.

#### 2.6.4. WASTEWATER MANAGEMENT

In specific project areas, there are currently Simplified Sewerage Systems in place, whereas in other areas there are none at all. In areas without SSS system, any waste water generated as a result of proposed work will be disposed of on-site, unless the site decides to use a different waste disposal system that has been approved. Otherwise, any waste water generated as a result of proposed work will be disposed of on-site at the same location. The SSS that now exists in the project regions will be connected to the waste water from the construction site for areas with SSS System.

# 2.6.5. Demobilization Material Wastes

All construction waste items, including plastics, residual HDPE pipe, and recyclable metal plates, will be collected and delivered to recycling centers once construction works are completed. The contractor will filter the unusable aggregates, which include concrete waste, chippings, and sand, and separate the good aggregates for use at other sites.

# 3. POLICY, ADMINISTRATIVE AND LEGAL FRAMEWORK

# 3.1. Introduction

The proposed project is governed by a number of laws. The national laws, rules, and regulations that are pertinent to the project are listed and addressed in this chapter. Understanding the objectives of the regulatory framework concerning the social and environmental implications of the project activities that are being proposed is the aim of this chapter. The preparation of this EMSP report will adhere to both relevant international standards and Tanzania's national legislative obligations. In addition, Tanzania's ratified treaties, protocols, and international organization directives will be taken into consideration.

### 3.2. Applicable National Laws and Policies

# 3.2.1. THE NATIONAL ENVIRONMENTAL POLICY, 1997

Ensuring sustainability, security, and equitable resource usage is the policy's primary goal. Specific goals include: preventing and controlling the degradation of land, water, vegetation, and air; conserving and enhancing the natural and man-made heritages; improving the state and productivity of degraded areas, including rural and urban settlements; increasing public awareness of the critical connections between environment and development; encouraging individual and community involvement in environmental action; fostering international cooperation on the environment agenda, including treaty implementation; protecting water sources and preventing environmental pollution through integrated planning and implementation of water resources and other development programs.

SPECIFIC REFERENCE IN THIS ESMP: The proposed project aims to improve the sanitation facilities in the project area which will further contribute to environmental protection. The goal of this policy is to guarantee that development initiatives are carried out in a way that is both socially and environmentally acceptable as well as economically feasible. The proposed SSS project activities have the potential to degrade land and water, and the generated effluent water may contaminate the marine ecosystem. In order to comply with this policy, suitable mitigation actions have been outlined in the ESMP to to prevent and/or reduce the impact as a compliance with this policy.

#### 3.2.2. NATIONAL WOMEN AND GENDER DEVELOPMENT POLICY, 2000

The objective of the policy is to provide guidelines that will ensure that gender sensitive plans and strategies in all sectors and institutions are developed. The policy advocates opportunities for both men and women in projects including construction works and related activities, and for involvement of women at all levels of the project-- from planning to implementation. It aims to eradicate poverty and emphasizes gender equality and equal opportunity for both men and women to participate in development undertakings.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The proposed project will encompass all aspects of gender-based issues specific to sanitation services. Improved sanitation facilities in the area will be made accessible to all, irrespective of gender. These will be accomplished by sensitising communities and other stakeholders on gender balance in environmental management, and provision of tools and facilities for the protection and conservation of environment.

#### 3.2.3. Construction Industry Policy, 2003

The goal of the Construction Industry Policy is to increase the sector's efficiency and capacity to fulfill the demand for buildings and other physical infrastructure facilities on a national scale. It aims to improve the capacity and performance of the public sector and private sector clients to ensure efficient, transparent, and effective implementation and management of construction projects and application of practices, technologies, and products which are not harmful to both the environment and human health. This increases the competitiveness and capacity of local construction enterprises.

SPECIFIC REFERENCE IN THIS ESMP: The project's implementation will be made efficient, transparent, and effective by employing methods, tools, and materials that are safe for the environment and people's health. By suggesting/recommending materials for construction, methods, and SSS technologies for the proposed project that are not harmful to the environment or public health, the policy is referred to and comply with.

#### 3.2.4. National Transport Policy, 2003

It provides efficient and cost-effective domestic and international transport services to all the population and sectors of the national economy with maximum safety and minimum environmental degradation. To ensure road transportation that is environment friendly and sustainable, the policy provides for an adequate drainage system during design, construction and maintenance of urban road infrastructure.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> In order to assure road traffic safety management, a traffic management plan will be prepared during the construction phase of the project. To guarantee that the objective of this policy is met, a traffic management plan has been proposed in the environmental and social management plan (ESMP) of the present study.

#### 3.2.5. National Policy on HIV/AIDS, 2001

The policy has the objective to create and sustain an increased awareness of HIV/AIDS through targeted advocacy, information, education, and communication. It aims to prevent further transmission of HIV/AIDS by making blood and blood products safe, promoting safer sex practices.

**SPECIFIC REFERENCE IN THIS ESMP:** In order to assure road traffic safety management, a traffic management plan will be prepared during the construction phase of the project. In order to accomplish the objective of this policy, the mitigating measures have been provided in the ESMP to guarantee that all significant project stakeholders are actively engaged in HIV/AIDS activities and to offer a framework for coordination and collaboration.

#### 3.2.6. Sustainable Industries Development Policy, 1996

The policy ensures that the industrial sector is focused on equitable development through structural reorientation and the advancement of sustainable technology, as well as human development, employment opportunities, external balance of payments, and economic transformation for achieving sustainable economic growth.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The project will guarantee that the local population is involved in its execution. In the ESMP, appropriate mitigation measures have been suggested at every stage of the project to guarantee the promotion of ecologically sustainable and environmentally friendly development.

# 3.2.7. National Human Settlements Development Policy, 2000

By improving the standard of social services and infrastructure for the establishment of sustainable human settlements, the policy encourages the creation of sustainable human settlements and makes it easier for Tanzania's income groups to afford decent housing. Furthermore, it eradicates poverty and generates job chances.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The project will improve sanitation services of the project area and create employment opportunities. The ESMP study will establish adequate mitigation to prevent air pollution, waste pollution, and other environmental or social issues that could negatively affect workers' lives generally and quality of settlement in particular.

#### 3.2.8. NATIONAL HEALTH POLICY, 2003

By providing appropriate and equitable maternity and child health services, the policy seeks to lower the burden of diseases, decrease maternal and newborn deaths, and lengthen life expectancy. It encourages the treatment of common ailments, proper diet, prevention of infectious diseases, and environmental health and cleanliness.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The project will improve environmental health and sanitation of the area. The proposed Simplified Sewerage System will improve the health status of the project area by avoiding major waterborne diseases.

# 3.2.9. National Employment Policy, 1997

In order to lower unemployment and underemployment rates and raise labor productivity, the policy guaranteed gainful and freely selected productive employment. For women, young people, and individuals with disabilities who are vulnerable, it advocates equitable access to resources and work possibilities. Through the protection of workers' fundamental rights and interests in compliance with international labor standards, it guarantees social inclusion and income stability. Encouraging equal access to resources and job opportunities for marginalized populations such as women, adolescents, and individuals with impairments.

**SPECIFIC REFERENCE IN THIS ESMP:** The project will improve the economic status of the project area by increasing the employment opportunities. It is also recommended to employ workers within the project area.

#### 3.3. National Legislation And Regulations

# 3.3.1. THE ENVIRONMENTAL MANAGEMENT ACT (EMA) 2004

It offers an institutional and legal foundation for environmentally sound management. It describes the fundamentals of management, risk and impact assessments, waste management, pollution prevention and control, environmental quality standards, public involvement, compliance, and enforcement. The Act establishes the framework for the National Environment Policy and international environmental instruments. It also ensures the National Environment Management Council (NEMC) will continue to exist, establishes the National Environmental Fund, and addresses other relevant issues. In order to develop policies for coastal and marine management, it also gives the NEMC the authority to collaborate with local government bodies.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> An overall guidance on the preparation of the ESMP is provided by this Act. The project involving sewer network construction must ensure sustainable environmental management and utilization of natural resources.

# 3.3.2. THE WATER SUPPLY AND SANITATION ACT, 2019

The Act makes it possible to establish organizations dedicated to community-owned water supply, sanitation authorities, and water supply. In addition, the Waterworks Act is repealed and service provider appointments are made possible. Its goals are to provide transparent regulations, adequate operations, and sustainable management of sanitation and water supply.

**SPECIFIC REFERENCE IN THIS ESMP:** The proposed project will improve sanitation services in the area. The proposed project will enable access to a sustainable, effective, and efficient sanitation service provider in accordance with the act's goal. This ensures that water sources are preserved and protected by preventing waste from being discharged into surface and underground water bodies.

# 3.3.3. THE ROAD ACT, 2007

The Road Act works on making provisions for road financing, development, maintenance, management and other related matters. The responsibilities of the ministry include formulating road policy, preparing and coordinating the implementation of roads investment and development programmes, preparing guidelines, standards and specifications for road works and monitoring the performance of the road network, to oversee and monitor road safety and environmental issues. The road authority is responsible for development, maintenance and management of public roads and related facilities.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The Simplified Sewerage System sewer network is proposed along the public roads. The proposed SSS Pipes will pass along the road's pathways. As per the design the provision of the concrete stairs in the area of upper hills with steep slope has been proposed and taken into consideration in this ESMP.

# 3.3.4. The Solid Waste Management Act, 2009.

The Act stipulates that solid waste must be managed in accordance with the best available environmental principles. It establishes rules and regulations for waste management, separation, and processing. It also specifies how different types of wastes should be handled, including disposal, for which there are options for reuse, recycling, or composting. Additionally, it specifies costs for the issuance of licenses, permits, inspections, and other waste management-related

services. It also defines the licensing and permitting system for the control of waste management facilities, equipment, and waste haulage.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> Waste from project operations will be generated during the project's construction and operating phases. These regulations will apply to the project since it will be essential to handle and properly dispose of the waste produced in compliance with them.

To achieve the goal of this act, a waste management plan detailing how to handle solid waste developed during the construction and operation phase has been proposed in the ESMP of this report.

# 3.3.5. THE EMPLOYMENT AND LABOUR RELATIONS ACT, 2004.

The Employment and Labour Relations Act makes provisions for core labour rights, establishes basic employment standards, provides a framework for collective bargaining, works to prevent and settle disputes and related matters.

SPECIFIC REFERENCE IN THIS ESMP: The project will offer employment that complies with the law to create equitable and productive work environments. When hiring workers to complete the proposed project's development and operation, the contractor shall abide by all Act requirements. Additionally, the contractor works to end discrimination in all employment practices and policies and guarantees equal employment opportunities.

# 3.3.6. THE OCCUPATIONAL HEALTH AND SAFETY ACT, 2003.

The Act repeals the Factories Ordinance. It makes provisions for the safety, health and welfare of workers in factories and other places.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> In the ESMP, it is recommended to ensure a safe working environment to all its workers, provide clean and safe water, as well as a sanitary and first aid facility to fulfill this act during the construction and operation phase of the project.

# 3.3.7. THE HIV AND AIDS (PREVENTION AND CONTROL) ACT, 2008.

The Act addresses HIV and AIDS prevention, treatment, care, support, and control. It advances public health about HIV and AIDS and offers persons living with or at risk of HIV and AIDS effective care, treatment, and support via the use of existing resources. The ministry is in charge of putting in place an extensive system of monitoring and assessment procedures to ascertain the scope and trajectory of HIV infections as well as other issues pertaining to HIV and AIDS.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> According to this ESMP, the contractor should raise employee knowledge of HIV and AIDS causes, routes of transmission, consequences, and prevention.

# 3.3.8. Workers Compensation Act, 2008.

The Act provides information on compensation to employees in case of death, disabilities, injuries or diseases sustained when in employment, and establishes a fund for administration and regulation of workers compensation. It provides rehabilitation and adequate compensation to employees who suffer occupational casualties.

**SPECIFIC REFERENCE IN THIS ESMP:** The project will guarantee that workers who sustain injuries at work receive proper rehabilitation and compensation. For the duration of the planned project, the contractor in charge of its implementation is required to comply with these acts on behalf of each of his employees.

# 3.3.9. THE PENAL LAW (THE PENAL CODE AS AMENDED BY THE SEXUAL OFFENCES SPECIAL PROVISIONS ACT 1998.)

The Act provides information about sexual offenses, its provisions and amendments.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The project will ensure safety of female employees. For the duration of the planned project, the contractor in charge of its implementation is required to comply with these acts on behalf of each of his employees.

# 3.3.10. THE ENVIRONMENTAL IMPACT ASSESSMENT AND AUDIT REGULATIONS, 2005.

The main objectives of environmental audit are to determine how far activities and processes of a project or undertaking conform with the approved environmental and social management plan of that specific project, environmental management practices and environmental quality standards. It provides regulatory bodies with a framework to check the performance of an Environmental and Social Management Plan and its compliance with the prescribed standards.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The regulations outline the EIA process from project registration to the issuance of EIA certificate. Environmental management plan and monitoring plan has been prepared complying with the prescribed standards as per these regulations.

# 3.3.11. THE ENVIRONMENTAL (REGISTRATION OF ENVIRONMENTAL EXPERTS) REGULATIONS, 2005.

A framework for environmental professionals to register is established under these regulations. To ensure that environmental impact assessments and audits are completed in an impartial, professional,

and independent manner, they offer a framework for professional conduct when conducting environmental impact studies and audits.

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> As per the regulation, registered experts with NEMC have been involved in the preparation of this ESMP Report.

# 3.4. PLANS

# 3.4.1. THE NATIONAL PLAN OF ACTION TO END VIOLENCE AGAINST WOMEN AND CHILDREN IN TANZANIA 2017/18 – 2021/22

To create a single comprehensive National Plan of Action to eradicate violence against women and children in the nation, eight separate action plans addressing the issue were combined to create the five-year National Plan of Action to End Violence Against Women and Children (NPAVAWC 2017/18 – 2021/22).

<u>SPECIFIC REFERENCE IN THIS ESMP:</u> The project's execution may result in violence against women and children. The project's contractor is required to abide by acts.

# 3.5. THE WORLD BANK ENVIRONMENTAL AND SOCIAL FRAMEWORK (ESF).

The World Bank Environmental and Social Framework sets out the World Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity. This Framework comprises:

- A Vision for Sustainable Development, which sets out the Bank's aspirations regarding environmental and social sustainability
- The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and
- The Environmental and Social Standards, together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects.

This team has reviewed the above framework's components' relevance to the Project as shown in the below sub sections;

#### 3.5.1. VISION FOR SUSTAINABLE DEVELOPMENT

The World Bank Group recognizes that, in a world with limited natural resources, environmental sustainability is crucial and is dedicated to promoting stronger global action to promote mitigation and adaptation of climate change. It acknowledges that projects' locations and characteristics are changing due to climate change and that projects sponsored by the World Bank ought to lessen their environmental effect by selecting alternatives with fewer carbon emissions.

In addition, ensuring sustainable development and social development are essential for all of the World Bank's development operations. These global goals are translated into better development possibilities for everybody, especially the impoverished and vulnerable, and encouraging the sustainable management of natural resources at the project level.

The design of the Simplified Sewerage System has observed the climate change adaptation strategies for sustainability of the Sewerage infrastructure.

#### 3.5.2. World Bank Environmental and Social Policy for Investment Project Financing

The Bank's mandatory conditions for projects it supports through Investment Project Financing are outlined in this Environmental and Social Policy for Investment Project Financing. In addition to strengthening the ability of Borrowers' environmental and social frameworks to assess and manage the environmental and social risks and impacts of projects, the Bank is dedicated to assisting the Tanzanian government in developing and implementing environmentally and socially sustainable projects. In compliance with this Environmental and Social Policy for Investment Project Financing (Policy), the Bank will help the Tanzanian government in applying the ESSs to projects backed by Investment Project Financing.

In order to prepare the Environmental and Social Management Plan (ESMP) and other supporting Environmental and Social Safeguard Instruments, such as the Labour Management Procedures (LMP), the Resettlement Policy Framework (RPF), and the Stakeholders Engagement Plan (SEP), the Simplified Sewerage System project involved a number of stakeholders. On the other hand, the suggested SSS Project ESMP Preparations have been made in accordance with the Environmental and Social Policy for Financing Investment Projects. As stated in chapter 5 of this ESIA, numerous stakeholders were involved in the study, ranging from Mtaa level to National Level, and their opinions were recorded and utilized to shape the suggested subprojects' designs.

Furthermore, project-specific SEPs, RPFs, and LMPs have been created to direct the execution and management of the suggested project.

#### 3.5.3. Environmental and Social Standards

# 3.5.3.1. Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts

In order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs), ESS1 lays out the Borrower's responsibilities for assessing, managing, and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing. In order to guarantee that projects are sustainable and sound from an environmental and social standpoint, borrowers will evaluate the projects' social and environmental aspects before submitting them for bank financing. The project's risks and effects will be taken into account when conducting the environmental and social evaluation. It will guide the project's design, help choose actions and mitigation strategies, and enhance decision-making.

**RELEVANCY WITH THIS PROJECT:** The proposed SSS project has been Prepared in accordance with this ESS 1 and has adequately undertaken stakeholders' engagement as required to create a sense of project's ownership by the communities and sustainability.

#### 3.5.3.2. ENVIRONMENTAL AND SOCIAL STANDARD 2: LABOR AND WORKING CONDITIONS;

In order to reduce poverty and promote equitable economic growth, ESS2 acknowledges the significance of creating jobs and income. By treating project workers properly, providing safe and healthy working conditions, acceptable working contracts, and required working hours, borrowers can further increase the development advantages of a project and foster positive worker-management relationships.

**RELEVANCY WITH THIS PROJECT:** MWAUWASA, OSHA, and the project supervising engineer will perform periodical audits to ensure the project contractor is adhering to the objectives. To address labor-related concerns throughout the proposed Simplified Sewerage System Project's development and operation, however, labor management procedures (LMPs) have been established specifically for this project.

# 3.5.3.3. Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management

ESS3 acknowledges that economic growth and urbanization frequently result in resource depletion and contamination of the air, water, and land, endangering human health, ecosystem services, and the environment on a local, regional, and global scale. The well-being of present and future generations is at risk due to the existing and anticipated levels of greenhouse gases (GHG) in the atmosphere.

Simultaneously, access to and attainability of pollution prevention and GHG emission avoidance, mitigation technologies and techniques, and more effective and efficient resource use have increased.

RELEVANCY WITH THIS PROJECT: The Simplified sewerage systems typically will require less energy for operation compared to conventional systems. It will often use gravity to move wastewater instead of relying on energy-intensive pumps. This reduction in energy consumption directly lowers greenhouse gas emissions associated with Pump running electricity generation. In summary, simplified sewerage systems contribute to greenhouse gas reduction by reducing energy consumption, minimizing methane production, lowering construction-related emissions, and supporting more sustainable urban development practices.

# 3.5.3.4. Environmental and Social Standard 4: Community Health and Safety;

ESS4 acknowledges that project operations, tools, and facilities may raise the risks and effects that communities are subject to. Furthermore, communities currently experiencing the effects of climate change may see an increase in intensity or acceleration of those effects as a result of project operations. ESS4 addresses the risks and implications to communities' health, safety, and security as well as the obligation of Borrowers to prevent or mitigate such risks and impacts, paying special emphasis to those who may be particularly susceptible due to their unique circumstances.

The Tanzanian government will take into account safety hazards to impacted people and other parties when designing, building, operating, and decommissioning the project's structural parts in compliance with national legislative requirements, the EHSGs, and other GIIP.

In cases where the project includes providing services to communities, the borrower shall set up and put into place suitable quality management systems in order to foresee and reduce risks and the potential negative effects that these services may have on the health and safety of the community. When technically and financially possible, the Borrower shall also implement the idea of universal access in these situations.

**RELEVANCY WITH THIS PROJECT:** In accordance with the guidelines in this ESMP Report, the project will, during each phase of the project, identify, assess, and monitor any possible hazards to workers, impacted communities, and users of existing road pathways related to traffic and road safety. As necessary, it will also develop strategies and actions to mitigate these risks. To prevent and reduce potential safety concerns, the Environmental Expert has included technically feasible safety measures regarding the community health and Safety into the Environmental and Social Management Plan of this project.

# 3.5.3.5. Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

As per Objective of this ESS 5, the Borrower shall consider feasible alternative project designs to avoid or minimize land acquisition or restrictions on land use, especially where this would result in physical or economic displacement, while balancing environmental, social, and financial costs and benefits, and paying particular attention to gender impacts and impacts on the poor and vulnerable and when land acquisition or restrictions on land use (whether permanent or temporary) cannot be avoided, the Borrower will offer affected persons compensation at replacement cost, and other assistance as may be necessary to help them improve or at least restore their standards of living or livelihoods.

RELEVANCY WITH THIS PROJECT: The consultant and the client have discussed workable alternative project designs to avoid the effects of physical and economic displacement of people while balancing the costs and benefits of the environment, society, and the economy. Alternative design approaches have been used in the design in order to minimise significant effects on houses and other structures. In order to avoid the impacts, the consultant and the client agreed the simplified Sewerage pipes to pass along the existing pathways and meandering around those houses when crossing them. For the pathways with steep slope the concrete stair may be constructed above the sewer line as this will help to minimize the effect of land use and also secure the system. For this project also, the RPF( Resettlement Policy Framework has been prepared for this Project to guide any unintentionally Land Acquisition that would occur during the implementation of the project.

# 3.5.3.6. Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

The essential biological roles of habitats, such as forests, and the biodiversity they sustain are acknowledged by ESS6. The sustainable management of primary production and the extraction of living natural resources are other topics covered by this ESS. The livelihood of project-affected parties, such as Indigenous Peoples, whose access to or use of biodiversity or living natural resources may be impacted by a project, must be taken into account, according to ESS6. The possible beneficial

contribution of project impacted parties, such as Indigenous Peoples, to the preservation of biodiversity and the sustainable use of live natural resources is also taken into account.

**RELEVANCY WITH THIS PROJECT:** Within Proposed Simplified Sewerage System areas there are no sensitive sites to be impacted by the proposed development during both construction and operation phases.

# 3.5.3.7. Environmental and Social Standard 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

By ensuring that projects funded by the Bank increase opportunities for Indigenous Peoples and Sub-Saharan African Historically Underserved Traditional Local Communities to engage in and benefit from the development process in ways that do not threaten their distinctive cultural identities and well-being, ESS7 helps to reduce poverty and promote sustainable development. Making sure that historically underserved traditional communities of Sub-Saharan Africa and Indigenous Peoples who are present in the project area or have a collective attachment to it are fully consulted about project design and have opportunities to actively participate in project implementation arrangements is one of the main goals of this ESS. The project planning and documentation procedures, along with the extent and magnitude of potential risks and impacts, will be commensurate with the potential effects on Indigenous Peoples and Sub-Saharan African Historically Underserved Traditional Local Communities.

RELEVANCY WITH THIS PROJECT: Within the project areas, there is no existence of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.

#### 3.5.3.8. Environmental and Social Standard 8: Cultural Heritage;

This ESS lays out broad guidelines on project-related hazards and effects on cultural heritage. Additional guidelines for cultural heritage in the context of Indigenous Peoples are outlined in ESS7. The social and cultural significance of biodiversity is acknowledged by ESS6. ESS10 contains provisions pertaining to information disclosure and stakeholder engagement. As outlined in ESS1, the environmental and social assessment will take into account project-specific risks and consequences on cultural assets that are direct, indirect, and cumulative. The Borrower will ascertain the possible risks and effects of the project's proposed activities on cultural assets through the environmental and social assessment. Cultural heritage will not be impacted by the borrower. In the event that avoiding impacts is not an option, the borrower shall determine and carry out mitigation strategies in compliance with the hierarchy of mitigation to address impacts on cultural assets.

**RELEVANCY WITH THIS PROJECT:** During impacts' assessment study and through communities and stakeholders' consultations, no heritage site was identified to be within or near the proposed Sites.

#### 3.5.3.9. Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure

This ESS acknowledges that open and honest communication between the borrower and project stakeholders is crucial to upholding best practices globally. Stakeholder acceptance may be increased, projects' environmental and social sustainability can be improved, and effective stakeholder involvement plays a key role in the successful planning and execution of projects.

Throughout the project life cycle, borrowers will interact with stakeholders. They will do so as early in the project development process as feasible and within a timeline that allows for fruitful stakeholder discussions on project design. The type, extent, and frequency of stakeholder involvement will be commensurate with the project's size, nature, possible risks, and effects. The borrowers will participate in fruitful dialogues with all parties involved. In addition to consulting with stakeholders in a way that is culturally acceptable and free from manipulation, interference, coercion, prejudice, and intimidation, borrowers will give them timely, relevant, clear, and accessible information.

**RELEVANCY WITH THIS PROJECT:** For the proposed Simplified Sewerage System, the SSS project developed a specialized Stakeholder participation Plan (SEP) that served as a roadmap for stakeholder participation in discussions. As stated in chapter 5 of this ESMP Report, the goal of the consultation was to hear stakeholders' opinions, remarks, and concerns about the existing and proposed simplified sewerage system.

# 3.6. International Obligations And Treaties

The international obligation and treaties in which Tanzania is a part is explained below

Table 2: International Obligations and Treaties

| S/N | International Obligations and Treaties  | Description  |
|-----|---|--|
| 01  | Working Environment (Air Pollution, Noise and Vibration) Convention (No. 148) | The convention establishes and states the criteria for determining the hazards of exposure to air pollution, noise and vibration in the working environment and specifies exposure limits based on these criteria. |
| 02  | The Convention on the Prevention of Marine Pollution by Dumping of Wastes     | The convention promotes the effective control of all sources of marine pollution and takes   |

| S/N | International Obligations and Treaties                      | Description  |
|-----|---|--|
|     | and other Matter (also known as the 1972 London Convention) | practicable steps to prevent pollution of the sea by the dumping of wastes and other matters.  |
| 03  | The 1991 Bamako Convention                                  | It is a convention for African nations that prohibits the import of all hazardous and radioactive wastes into Africa and controls the transboundary movements of hazardous wastes within the continent, prohibiting all ocean and inland water dumping.  |
| 04  | ILO Minimum Age Convention (C138), 1973.                    | The convention concerns with the minimum age for employment to ensure the abolition of child labour. In Tanzania, according to the Employment and Labour Relations Act, 2004, the minimum age for employment is 14 years, and they shall only be employed for light works which won't harm the child's health and development. |

# 3.7. ADMINISTRATIVE FRAMEWORK

#### 3.7.1. OVERALL MANAGEMENT RESPONSIBILITY

The Environmental Management Act (2004) provides a clear outline of Tanzania's institutional framework for environmental management. The act lists seven (7) entities, of which the Minister Responsible for the Environment is in general responsible for overseeing the management of all environmental affairs.

Part III, Section 13(1) of the EMA (2004) specifies that the environment minister will be in charge of all environmental matters overall and will be in charge of formulating the policy guidelines required for Tanzania's environment to be promoted, protected, and managed sustainably.

The legal institutions for environmental management in the country include;

- Minister responsible for Environment
- National Environmental Advisory Committee

- Department of Environment
- National Environment Management Council (NEMC)
- Sector Ministries
- Regional Secretariat
- Local Government Authorities (City, Municipal, District, Township, Ward, Village, sub-village "Kitongoji")

#### 3.7.2. MINISTER RESPONSIBLE FOR ENVIRONMENT

The Minister is in charge of all environmental issues, including establishing the policy guidelines required for Tanzania's environmental promotion, protection, and sustainable management. An EIA is approved by the Minister, who may also assign this authority to the DOE, Sector Ministries, or Local Government Authorities.

#### 3.7.3. National Environmental Advisory Committee

The National Advisory Environmental Committee is composed of members with experience in various fields of environmental management in the public and private sector and in civil society. The committee advises the Minister on any matter related to environmental management.

#### 3.7.4. DIVISION OF ENVIRONMENT

The Division of Environment (DoE), typically situated within the Vice-President's Office or a similar governmental structure, typically handles a range of functions related to environmental management and sustainability. Some common functions of such a division include:

- Environmental Policy Development: The DoE often plays a key role in formulating
  environmental policies and strategies at national or regional levels. This involves conducting
  research, gathering data, and consulting with stakeholders to develop policies that address
  environmental challenges such as climate change, pollution, and biodiversity loss
- Regulatory Oversight: The division may be responsible for implementing and enforcing
  environmental regulations and standards. This includes monitoring compliance with laws
  related to air and water quality, waste management, and environmental impact assessments
  for development projects.
- Environmental Planning and Management: The DoE typically engages in spatial planning and management activities to ensure sustainable use of natural resources. This can involve land use planning, watershed management, coastal zone management, and urban environmental planning to promote resilience and sustainability

- Environmental Monitoring and Reporting: Monitoring environmental indicators and reporting on trends and changes in environmental quality are crucial functions. The division may oversee monitoring programs for air and water quality, biodiversity, and ecosystem health to assess the effectiveness of policies and identify emerging issues.
- Promotion of Environmental Education and Awareness: Educating the public and raising
  awareness about environmental issues and sustainable practices is often a core function. This
  can include organizing campaigns, workshops, and educational programs to promote
  environmental stewardship and behavior change.
- International and Regional Environmental Cooperation: The division may engage in international and regional cooperation on environmental issues, including participating in negotiations, agreements, and partnerships aimed at addressing global environmental challenges.
- Emergency Response and Environmental Risk Management: The DoE may have responsibilities related to responding to environmental emergencies such as oil spills, natural disasters, or industrial accidents. This includes coordinating emergency response efforts and implementing measures to mitigate environmental risks.

# 3.7.5. NATIONAL ENVIRONMENT MANAGEMENT COUNCIL (NEMC)

The purpose and objectives of the National Environment Management Council (NEMC) typically include the following:

- Environmental Protection and Conservation: The primary goal of the NEMC is to protect
  and conserve the environment. This involves developing and implementing policies,
  regulations, and guidelines that ensure sustainable use of natural resources while minimizing
  environmental degradation
- Environmental Monitoring and Assessment: The NEMC is responsible for monitoring and
  assessing environmental quality across various sectors such as air, water, soil, and
  biodiversity. This includes conducting studies, gathering data, and analyzing trends to
  understand environmental health and identify emerging issues.
- Environmental Policy Development: The council plays a key role in formulating national
  environmental policies and strategies. This involves collaborating with government agencies,
  stakeholders, and the public to develop frameworks that address environmental challenges
  and promote sustainable development.
- Regulatory Oversight and Compliance: NEMC oversees the implementation and enforcement of environmental laws, regulations, and standards. This includes conducting inspections, issuing permits, and ensuring that industries, businesses, and individuals comply with environmental requirements.

- Environmental Education and Awareness: Promoting environmental education and raising
  public awareness about environmental issues are integral objectives. This includes developing
  educational programs, conducting outreach activities, and fostering community engagement in
  environmental stewardship.
- Capacity Building and Technical Assistance: The NEMC may provide technical assistance
  and capacity-building programs to government agencies, local communities, and private
  sectors to enhance their ability to manage and mitigate environmental impacts effectively.
- International and Regional Cooperation: The council may engage in international and regional cooperation on environmental issues. This includes participating in conferences, collaborations, and agreements aimed at addressing global environmental challenges and promoting best practices.

Overall, the NEMC's purpose is to ensure sustainable development by safeguarding the environment, promoting responsible resource management, and fostering a culture of environmental responsibility among stakeholders and the general public.

#### 3.7.6. SECTOR MINISTRIES

The environmental sections within sector ministries typically have several key functions and responsibilities related to integrating environmental considerations into sectoral policies, programs, and activities. Here are some common functions of environmental sections within sector ministries:

- Policy Development and Integration: Environmental sections collaborate with their respective sector ministries to develop policies that incorporate environmental considerations.
   This involves ensuring that sectoral plans and strategies align with national environmental goals and regulations.
- Environmental Impact Assessment (EIA): Environmental sections oversee the integration of
  environmental impact assessments into sectoral projects and activities. They ensure that EIAs
  are conducted to evaluate potential environmental impacts and propose mitigation measures
  to minimize adverse effects.
- Compliance and Enforcement: Environmental sections monitor compliance with environmental laws, regulations, and standards within their sectors. They may conduct inspections, issue permits, and enforce penalties for non-compliance to ensure that sectoral activities adhere to environmental requirements.
- Capacity Building and Training: Environmental sections may provide training and capacity-building programs to sectoral staff on environmental issues, regulations, and best practices. This helps to enhance awareness and competency in integrating environmental considerations into sectoral decision-making processes.

- Data Collection and Reporting: Environmental sections collect and analyze environmental data relevant to their sectors. This includes monitoring environmental indicators, assessing trends, and reporting on sectoral contributions to national environmental objectives and targets.
- Stakeholder Engagement: Environmental sections engage with stakeholders, including industry representatives, NGOs, local communities, and the public, to gather input, address concerns, and promote collaboration on environmental issues within their sectors.
- Research and Innovation: Collaborating on research initiatives and promoting innovation in sustainable practices within sectoral activities is another function. This includes supporting research projects, piloting new technologies, and identifying opportunities for improving environmental performance.
- Emergency Response and Contingency Planning: Environmental sections may develop
  contingency plans and respond to environmental emergencies within their sectors. This
  involves coordinating emergency response efforts, implementing measures to mitigate
  environmental risks, and facilitating recovery efforts.

Overall, the functions of environmental sections within sector ministries are crucial for mainstreaming environmental sustainability across various sectors of governance and ensuring that sectoral development aligns with environmental conservation and protection goals.

### 3.7.7. REGIONAL SECRETARIAT

The Regional Secretariat, which is headed by the Regional Administrative Secretary under which there is a Regional Environmental Management Expert, who is responsible for the co-ordination of all environmental management programmes in their respective regions. The Regional Environmental Expert thus:

- Advises local authorities on matters relating to the implementation of and enforcement of environmental laws and regulations;
- Creates a link between the region and the DOE and the Director General of the NEMC

# 3.7.8. LOCAL GOVERNMENT AUTHORITIES

Under the Local Government Act of 1982 (Urban and District Authorities), Local Government Authorities include the City Councils, Municipal Councils, District Councils, Town Councils, Township, Kitongoji, Ward, and Village.

The Environmental Management Committee of each jurisdiction includes:

- Initiating inquiries and investigations regarding any allegation related to the environment and implementation of or violation of the provisions of the Environmental Management Act;
- Requesting any person to provide information or explanation about any matter related to the environment
- Resolving conflicts among individual persons, companies, agencies non-governmental organizations, government departments or institutions about their respective functions, duties, mandates, obligations or activities

#### 3.7.9. GOVERNMENT EXECUTIVE AGENCIES-MWAUWASA

Contract procurement and administration for "simplified sewerage system, design, maintenance, emergency repairs, spot improvements, rehabilitation, and upgrading of the Simplified Systems" are within the responsibility of MWAUWASA. In order to lessen the adverse effects of road projects on the environment and social issues, MWAUWASA works in collaboration with the Division of Safety and Environment at every stage of the project cycle. Other functions of MWAUWASA includes:

- Operation and Maintenance: Once sanitation infrastructure is operational, MWAUWASA is
  responsible for its maintenance and upkeep. This includes routine inspections, repairs, and
  ensuring that facilities operate efficiently to prevent disruptions in sanitation services.
- Monitoring and Evaluation: MWAUWASA conducts monitoring and evaluation of sanitation projects to assess their effectiveness and impact. This involves tracking key performance indicators, evaluating service delivery, and identifying areas for improvement.
- Community Engagement and Awareness: MWAUWASA engages with local communities to raise awareness about sanitation issues, promote good hygiene practices, and encourage community involvement in sanitation initiatives. This can include conducting workshops, public outreach campaigns, and involving community members in project planning and implementation.
- Capacity Building: MWAUWASA may provide training and capacity-building programs to staff
  and stakeholders involved in sanitation projects. This helps to enhance technical skills,
  promote best practices in sanitation management, and strengthen institutional capacity for
  sustainable sanitation service delivery.
- Financial Management: MWAUWASA manages financial resources allocated to sanitation projects, including budgeting, financial planning, and ensuring cost-effective project implementation. This involves securing funding from government sources, donors, and other financing mechanisms to support sanitation infrastructure development and maintenance.

# 4. ENVIRONMENTAL AND SOCIAL BASELINE

# 4.1. INTRODUCTION

This section presents an overview of the existing environmental and socio-economic conditions of the proposed project areas. The baseline information was collected from primary as well as secondary data sources. Primary information was collected through field surveys, focussed group discussions and consultations while secondary information was obtained from published journals, books, authorised websites and government reports.

#### 4.1.1. DIRECT AREA OF INFLUENCE

In the context of this report, the Direct Area of Influence includes the proposed SSS footprint as well as the receiving environment surrounding the project likely to be affected by the subproject activities during construction, operation, and decommissioning phases within a radius of 100m. This also includes areas that will be impacted by the construction of the Simplified Sewerage System, health and safety impacts (including disturbance from noise and dust during construction), and construction camps and in-migration of job opportunists into the local area.

#### 4.1.2. INDIRECT AREA OF INFLUENCE

The Indirect Area of Influence includes areas within Nyamagana and Ilemela Municipality which may be affected by the proposed SSS Project.

# 4.2. Administrative and Demographic Profile of the Project Areas

# 4.2.1. Administrative Set up

The project areas consist of two Councils (Mwanza City (Nyamagana) and Ilemela Municipalities) which are controlled and managed by the Councillors under the leadership of Lord Mayor. However, the Municipal Executive Directors who are assisted by heads of departments and sections execute the day-to-day administration of the district councils. At the Mtaa levels there are Mtaa Executive Officers, at Ward level there are Ward Executive Officers who are under the Municipal Executive Directors.

These Municipal Executive Directors offices consists of 12 departments: Engineer of Works, Fire and Rescue; Land Urban Planning and Environment and Natural Resources, Economic and Planning, Statistics and Monitoring; Finance and Trade; Community Development; Health and Social Welfare;

Human Resources and Administration; Agriculture and Cooperative, Livestock and Fisheries; Primary Education and Culture; Secondary Education.

Mwanza City Nyamagana council the selected project areas that will be beneficiaries of the Simplified Sewer System (SSS) are Kabuhoro, Isamilo, Mabatini, Ustawi, Igogo and Bugarika.

Ilemela Municipal council the selected project areas that will be beneficiaries of the Simplified Sewer System (SSS) are Ibungilo, Pasiansi, Kitangiri, Kilimahewa.

# 4.2.2. ADMINISTRATIVE AND DEMOGRAPHIC PROFILE

The table below indicates population data distribution based on the year 2022 census of selected wards in project areas of both Mwanza City and Ilemela Municipalities.

Table 3: 2022 Census Population in the selected Wards of the project areas

| S/N   | Districts | Wards      | Project<br>Areas         | P       | opulation |        | Sex<br>Ratio | Number<br>of HH | Average<br>HH size |
|-------|-----------|------------|--------------------------|---------|-----------|--------|--------------|-----------------|--------------------|
|       |           |            |                          | Total   | Male      | Female |              |                 |                    |
| 1     | Nyamagana | Igogo      | Igogo and<br>Bugarika    | 25,515  | 12,549    | 12,966 | 97           | 7,744           | 3.3                |
|       |           | Isamilo    | Isamilo                  | 27,881  | 13,601    | 14,280 | 95           | 7,593           | 3.7                |
|       |           | Mabatini   | Mabatini<br>and Ustawi   | 24,485  | 11,804    | 12,654 | 93           | 7,069           | 3.5                |
|       |           | Kirumba    | Kabuhoro                 | 32,364  | 15,693    | 16,671 | 94           | 8,688           | 3.7                |
| 2     | llemela   | Kilimahewa | Nyamanoro                | 24,624  | 11,751    | 12,873 | 91           | 7,357           | 3.3                |
|       |           | Kitangiri  | Kitangiri                | 23,642  | 11,172    | 12,470 | 90           | 6,547           | 3.6                |
|       |           | Pasiansi   | Pasiansi<br>and Ibungilo | 16,274  | 7,862     | 8,412  | 93           | 4,262           | 3.8                |
| Total |           |            |                          | 174,785 | 84,432    | 90,326 | 653          | 49,260          | 24.9               |

Source: NBS 2022

# 4.3. BIOPHYSICAL ENVIRONMENT

#### 4.3.1. CLIMATIC CONDITIONS

#### 4.3.1.1. RAINFALL

The areas experience bimodal rainfall seasons, i.e Long and short rains. The long rain season lasts between February and May with an annual average precipitation of 800mm; while the short rain season occurs between the months of October and December. The rains tend to fall in localised storms rather than generalised downpour and are therefore unevenly distributed in guite a small area.

#### 4.3.1.2. TEMPERATURE

The average temperature ranges between 25°C to 28°C with average maximum temperatures occurring from September to December. The cool dry season occurs in June to August which experiences low temperatures which range between 20°C- 11°C.

#### 4.3.1.3. **HUMIDITY**

Average relative humidity ranges between 50-70% and average monthly sun-hours ranges between 200-300 hours. Both including average temperature is considered as indicators of conducive weather.

#### 4.3.1.4. WIND

Based on a database of Freshwater Eco-regions of the World, the wind speed is generally low but increases to about 15 m/s in the dry season. The dominant wind direction for the region is from WNW according to windfinder.com. WNW cardinal directions sit in between degrees of 281.25 to 303.75.

#### 4.3.1.5. EARTHQUAKE

Historically, seismicity in the East African Rift is mainly concentrated along the branches of the rift system (i.e., at the edges of the Victoria microplate, and along the main rift running through Ethiopia in the north, and Malawi and Mozambique in the south). Over the preceding century, only one other earthquake has been recorded within 100 km of the September 10, 2016 earthquake – a M 4.3 event in Lake Victoria in December 2013.

Tanzania's largest historic earthquake over this time period was a M 7.2 event in July 1919, near Lake Tanganyika in the west of the country. A M 6.8 earthquake near the centre of Lake Tanganyika in December 2005 resulted in half a dozen or more fatalities. At the time of writing (10 hours after the earthquake), the September 10, 2016 earthquake has been reported to have caused over a dozen fatalities, and 200 or more injuries. Mwanza region is in Zone 1 with risk level of weak or not frequent and ground acceleration factor of 0.025.

#### **4.3.1.6.** Topography

Nyamagana and Ilemela Municipalities are covered by granites and granodiorites, and have a gently undulating level topography with isolated hill masses and rock inselbergs. Soil in Mwanza City in general can be classified into three major groups namely:

- Sandy soils derived from granite
- · Red loams derived from limestone
- Black clay soils

#### 4.3.2. DRAINAGE

Major water bodies surrounding Mwanza City and Ilemela Municipal are related to Lake Victoria and all the rivers that run through the city flow into the lake. There are four rivers in Mwanza City flowing into the lake, namely Mirongo, Nyaguganwa, Ndote and Nyashishi. The main river that runs through the city centre is Mirongo River. Nyashishi River at the southern part of the planning area is forming Luchelele wetland before flowing into Lake Victoria.

#### 4.3.3. GEOLOGY

Precambrian rocks occupy about 80% of the total land area of the Mwanza. The Precambrian rocks, mainly the plutonic rocks such as granite and granodiorite are commonly exposed in the area. Biological Environment.

#### 4.3.4. BIOLOGICAL ENVIRONMENT

# 4.3.4.1. FLORA AND FAUNA

Being in the townhood, the project sites have no either non-exotic plants or animals. There are no flora species of conservation significance identified within the subproject sites. Adjacent sites are covered by buildings and other commercial facilities. Few trees, grasses and shrubs were observed along the Ward roads, it is a settlement area and lacks floral diversity. The scarce vegetation cover indicates a poor habitat value. Therefore, animal diversity throughout the project area is low.

# 4.4. Social Economic Activities in the Project Areas

#### 4.4.1. SOCIAL ECONOMIC

The average Tanzania GDP at current prices reached around 64.4 billion U.S. dollars based on a 2020 survey. Dar es Salaam was the region in Tanzania with the highest Gross Domestic Product (GDP), which amounted to roughly 25.3 trillion Tanzanian shillings (TZS), approximately 10.9 billion U.S. dollars. To follow, the Mwanza region recorded a GDP at about 11 trillion TZS (4.7 billion U.S. dollars). However, currently there is no data on GDP distribution down to the Municipal and District level which includes Nyamagana and Ilemela Municipalities.

The past record of Economic Survey Report 2011, shows that Mwanza region's (Nyamagana and llemela together with other districts cumulatively share of the national GDP for the year 2016 was only 9.3 percent equivalent to TShs. 8,452,013 million while per capita income of regional residents was estimated to be TShs. 2,004,353, (equivalent to US\$ 911.1 at a rate of TZS 2,200 per USD). Most of the employed people work in the service sector, while those who are self-employed are involved in petty trade, tilling land, micro-fishing activities etc. The current figure of employment in the City (Employed and Self-employed) stands at about 50%. The average per capita income is about US\$21

per month. The regional GDP was TShs. 4,016,270 million in 2010 and Tshs. 6,654,600 million in 2013.

The 2012 Population and Housing Census Report shows that Mwanza City Council, like its neighbouring council of Ilemela Municipal, has vast economic opportunities due to the diversification of industries performed in the city. Commercial food crops and forestry was reported to be the main source of income in the council engaging 13.9 percent of residents. It was followed by the selling of raw food or uncooked food (13.6 percent), trade and commerce (12.9 percent of the population), manufacturing (11.7 percent), construction (7.2 percent), services for food hotels and lodges (5.5 percent), domestic services (5.0 percent), haulage and storages (4.7 percent), Administration and security services (3.3 percent), education services (3.1 percent) and fishing, hunting, livestock and other related (2.5 percent).

The 2012 population census shows that service workers, shop and stall sales workers were the main occupation in Mwanza city, employing 21.9 percent of residents aged 10 years and above. It was followed by crafts and related workers (16.1 percent), elementary occupation (12.6 percent), farmers (12.5 percent), street vendors and related workers (9.2 percent), technicians and associate professionals (5.7 percent). Plant machine operators and assemblers including drivers employed 4.7 percent of Mwanza residents, professionals (4 percent) and small business managers (3.6 percent) while other common occupations such as fishermen, livestock keepers, legislators, administrators and managers, and clerks have employed less than 2 percent each.

# 4.4.2. INDUSTRIAL AND COMMERCIAL ACTIVITIES

Industries all over the Mwanza region are known to play a major role in socio-economic development. This is also the case in Mwanza city and Ilemela Municipal councils, where industries, mostly small scale, contribute significantly to jobs creation, income generation and stimulation of growth in urban areas of the city council. At the end of 2015 there were 231 small scale industries employing 1,180 staff. More than thirty percent (i.e 32.9 percent) of the 76 industries were involved with carpentry.

Small scale industries involved with welding counted to have 76 industries (32.9 percent), service industries 32 (13.9 percent). Majority of staff (430 or 36.4 percent of the total staff) were working in the service industry - garage while very few of them (8 staff, 0.7 percent) were working in the freshwater industry. Trade is flourishing economic activity with employment of several people. The project areas residents engage in various retail and wholesale trade within the formal and informal sector. The sector is becoming popular to most of the residents; almost everybody has some sort of small retail shop. There are also bars, restaurants, lodgings, milling machines, Bakeries abattoirs and open markets.

#### 4.4.3. AGRICULTURE

Mwanza City Council is an urban area with a history of vast and intensive urban farming. However, a variety of people, including businesspeople, government employees, and the poorest slum residents, are urban farmers. Tanzanian urban areas are typically not built to support large-scale farming or livestock rearing. It is typical to zone out property inside metropolitan areas to make room for residential neighbourhoods, commercial buildings, industrial sites, building sites for roads and railroads, recreational activities, etc. In addition, the continuation of peasant culture has played a role in the establishment and survival of urban agriculture in Tanzania. This is a result of Tanzania's contemporary urban population, which includes the Mwanza City Council, still having traces of their rural heritage. The peasant culture's continued to exist.

# 4.5. SOCIAL SERVICES

# 4.5.1. HEALTH FACILITIES IN NYAMAGANA MUNICIPAL

Nyamagana Municipal consists of 2 public hospitals, 2 public health centres, and 14 public dispensaries. There is only 1 dispensary located in the project area in Igogo ward. The rest are located outside the project areas.

#### 4.5.2. HEALTH FACILITIES IN ILEMELA MUNICIPAL

Ilemela Municipal consists of 19 Hospitals, 4 Health Centres, 11 Dispensaries and 37 Clinics. In the project areas Kabuhoro consist of 2 clinics, Kitangiri 1 health centre, 1 Dispensary and 2 clinics. Kilimahewa consists of 1 Dispensary and 1 Clinic.

#### 4.5.3. TOP TEN DISEASE AT NYAMAGANA MUNICIPAL COUNCIL OUTPATIENTS 2023

| Rank | Diseases           | Diagnosed clients | Percentage (out of all diagnoses) |
|------|--------------------|-------------------|-----------------------------------|
| 1    | Malaria            | 72,367            | 54.2                              |
| 2    | Intestine worms    | 18,264            | 13.7                              |
| 3    | ARI                | 13,944            | 10.4                              |
| 4    | Skin Infections    | 6,024             | 10.4                              |
| 5    | Other diagnosis    | 5,975             | 4.5                               |
| 6    | Pneumonia          | 5,703             | 4.3                               |
| 7    | Diarrhoea          | 4,584             | 3.4                               |
| 8    | Eye condition      | 3,592             | 4.3                               |
| 9    | Emergency Surgical | 2,016             | 1.5                               |
| 10   | Anamea             | 1.161             | 0.9                               |

Source: Mwanza City Director's Office, City Medical Office Mwanza City Council 2023

# 4.5.4. TOP TEN MOST COMMONLY REPORTED CAUSES OF MORBIDITY IN NYAMAGANA MUNICIPAL COUNCIL INPATIENTS 2023

| RANK | DISEASES              | Number of cases | Percentage (out of all diagnoses) |  |  |  |  |
|------|-----------------------|-----------------|-----------------------------------|--|--|--|--|
| 1    | Other Diagnosis       | 5,305           | 34.7                              |  |  |  |  |
| 2    | Uncomplicated Malaria | 3,421           | 22.5                              |  |  |  |  |
| 3    | Severe Malaria        | 2,757           | 18.0                              |  |  |  |  |
| 4    | Pneumonia             | 1,261           | 8.2                               |  |  |  |  |
| 5    | Anaemia               | 1,160           | 7.6                               |  |  |  |  |
| 6    | Diarrhoea             | 881             | 5.8                               |  |  |  |  |
| 7    | ТВ                    | 320             | 2.1                               |  |  |  |  |
| 8    | Burn                  | 133             | 0.9                               |  |  |  |  |
| 9    | Poisons               | 32              | 0.2                               |  |  |  |  |
| 10   | ARI                   | 21              | 0.1                               |  |  |  |  |

# 4.5.5. TOP TEN DISEASES AT ILEMELA MUNICIPAL COUNCIL

# TABLE 4 Top Ten OPD 2023 Ilemela Municipal Council

| Rank | OPD                               | Diagnosed<br>clients | Percentage (out of all diagnoses) |
|------|-----------------------------------|----------------------|-----------------------------------|
| 1    | Upper Respiratory Infections      | 77,028               | 21.97                             |
| 2    | Urinary Tract Infections          | 62,053               | 17.7                              |
| 3    | Intestinal Worms                  | 20,220               | 5.77                              |
| 4    | Other Non-Infectious GIT Diseases | 18,064               | 5.15                              |
| 5    | Malaria (BS +Ve, mRDT +Ve )       | 17,117               | 4.88                              |
| 6    | Diarrhoea With No Dehydration     | 13,078               | 3.73                              |
| 7    | Peptic Ulcers                     | 11,522               | 3.29                              |
| 8    | Hypertension                      | 10,867               | 3.1                               |
| 9    | Pneumonia, Severe & Non-Severe    | 9,659                | 2.76                              |
| 10   | Anaemia, Severe & Mild/Moderate   | 9,395                | 2.68                              |

Source: Municipal Health Officer 2023

Table 5:Top Ten Inpatients 2023 Ilemela Municipal Council

| Rank | OPD                             | Diagnosed clients | Percentage (out of all diagnoses) |  |  |  |
|------|---------------------------------|-------------------|-----------------------------------|--|--|--|
| 1    | Malaria (BS +Ve, mRDT +Ve)      | 2,216             | 25.05                             |  |  |  |
| 2    | Urinary Tract Infections        | 1,250             | 14.13                             |  |  |  |
| 3    | Pneumonia, Severe & Non-Severe  | 1,029             | 11.63                             |  |  |  |
| 4    | Anaemia, Severe & Mild/Moderate | 740               | 8.37                              |  |  |  |
| 5    | Gynaecological Diseases         | 552               | 6.24                              |  |  |  |
| 6    | Acute Diarrhoea (<14 Days)      | 535               | 6.05                              |  |  |  |
| 7    | Peptic Ulcers                   | 453               | 5.12                              |  |  |  |
| 8    | Hypertension                    | 418               | 4.73                              |  |  |  |
| 9    | Upper Respiratory Infections    | 338               | 3.82                              |  |  |  |
| 10   | Typhoid                         | 194               | 2.19                              |  |  |  |

Source: Municipal Medical Officer 2023

# 4.5.6. MORTALITY RATE

The Infants' mortality rate deaths for 2023 were 22/1000 and under 5 mortality rates were 28/1000 under five deaths.

# 4.5.7. WATER RELATED DISEASES

In the year 2023 there were 8600 reported water borne cases among 334880 OPD attendees which is equal to 2.6% out of OPD attendance. Malnutrition rate was 2.9% for the year 2023.

# 4.5.8. EDUCATION FACILITIES IN MWANZA CITY

Mwanza City consists of 20 pre-primary and primary schools in the selected SSS project areas. All the schools in the project areas are connected to water supply from MWAUWASA. Out of 20 primary schools only 7 schools have a hand washing basin facility. 17 primary schools have flush toilets and 3 do have pit latrines as shown on table below:

Table 6 Primary schools in the selected SSS Project areas in Mwanza City

| S/N | Project<br>Area | Name Of<br>Schools | Boardin<br>g/Day | Total Nu | mber of բ | oupils | Teachers |        |       | Water<br>source | Sanitation facilities                                 |                                       |      |       |       |                 |                  | Total<br>défici | WASH<br>PROGRAMS   |
|-----|-----------------|--------------------|------------------|----------|-----------|--------|----------|--------|-------|-----------------|---|---------------------------------------|------|-------|-------|-----------------|------------------|-----------------|--------------------|
|     |                 |                    |                  | Boys     | Girls     | Total  | Male     | Female | Total |                 | Hand<br>washin<br>g basin<br>[Availa<br>ble<br>/none] | Type of<br>latrine<br>[Flash/<br>Pit] | Boys | Girls | Total | Deficit<br>Boys | Deficit<br>Girls |                 | Available/No<br>ne |
| 4   |                 |                    | Day              | 231      | 222       | 453    | 6        | 11     | 17    | Connect         | None  | Flash                                 | 4    | 5     | 9     | 5               | 6                | 11              | Existing           |
| 1   |                 |                    | Day              | 231      | 222       | 455    | 0        | ''     | 17    | ed<br>Connect   | None  | riasii                                | 4    | 5     | 9     | 5               | 0                | 11              | Laisting           |
| 2   |                 | Lake B             |                  | 253      | 264       | 517    | 4        | 14     | 18    | ed              | None  | Flash                                 | 5    | 8     | 13    | 5               | 5                | 10              | Existing           |
| 3   |                 | Maendeleo          | Day              | 268      | 232       | 500    | 4        | 12     | 16    | Connect<br>ed   | None  | Flash                                 | 5    | 6     | 11    | 5               | 7                | 12              | Existing           |
| 4   |                 | Kileleni           | Day              | 802      | 826       | 1628   | 12       | 11     | 23    | Connect<br>ed   | Availabl<br>e   | Flash                                 | 6    | 8     | 14    | 42              | 33               | 74              | Existing           |
| 5   |                 | Nyakabungo         | Day              | 254      | 250       | 504    | 5        | 9      | 14    | Connect         | Availabl<br>e   | Flash                                 | 1    | 2     | 3     | 12              | 8                | 20              | Existing           |
| 6   |                 | Nyakabungo<br>B    | Day              | 195      | 210       | 405    | 5        | 11     | 16    | Connect         | Availabl<br>e   | Flash                                 | 1    | 1     | 2     | 8               | 10               | 18              | Existing           |
| 7   |                 | Nyakabungo<br>C    | Day              | 187      | 190       | 377    | 6        | 13     | 19    | Connect         | Availabl  | Flash                                 | 1    | 1     | 2     | 8               | 10               | 18              | Existing           |
| 8   | Isamilo         | Makongoro          | Day              | 94       | 93        | 187    | 4        | 10     | 14    | Connect         | None  | Flash                                 | 2    | 3     | 5     | 2               | 2                | 4               | Existing           |
| 9   |                 | Pamba B            | Day              | 707      | 727       | 1434   | 9        | 19     | 28    | Connect         | None  | flash                                 | 6    | 6     | 12    | 19              | 23               | 42              | None               |
| 10  |                 | Pamba C            | Day              | 373      | 410       | 783    | 7        | 10     | 17    | Connect         | None  | flash                                 | 5    | 5     | 10    | 14              | 12               | 26              | None               |
| 11  |                 | Mabatini           | Day              | 271      | 322       | 593    | 7        | 13     | 20    | Connect         | None  | flash                                 | 5    | 5     | 10    | 6               | 12               | 18              | None               |

Mabatini

| S/N | Project<br>Area | Name Of<br>Schools | Boardin<br>g/Day | Total Nu | mber of p | oupils | Teachers |        |       | Water<br>source | Sanitation facilities                                 |                                       |      |       |       |                 | Total<br>défici  | WASH<br>PROGRAMS |                    |
|-----|-----------------|--------------------|------------------|----------|-----------|--------|----------|--------|-------|-----------------|---|---------------------------------------|------|-------|-------|-----------------|------------------|------------------|--------------------|
|     |                 |                    |                  | Boys     | Girls     | Total  | Male     | Female | Total |                 | Hand<br>washin<br>g basin<br>[Availa<br>ble<br>/none] | Type of<br>latrine<br>[Flash/<br>Pit] | Boys | Girls | Total | Deficit<br>Boys | Deficit<br>Girls | t                | Available/No<br>ne |
| 12  |                 | Mabatini B         | Day              | 451      | 649       | 1100   | 6        | 19     | 25    | Connect         | None  | Flash                                 | 8    | 9     | 17    | 23              | 10               | 33               | None               |
| 13  |                 | Pamba              | Day              | 346      | 410       | 756    | 3        | 13     | 16    | Connect         | None  | Flash                                 | 8    | 8     | 16    | 8               | 8                | 16               | None               |
| 14  | Bugarika        | Bugarika           | Day              | 268      | 302       | 570    | 5        | 19     | 24    | Connect ed      | Availabl<br>e   | Flash                                 | 3    | 5     | 8     | 7               | 15               | 22               | Existing           |
| 15  |                 | Azimio             | Day              | 435      | 501       | 936    | 4        | 18     | 22    | Connect<br>ed   | None  | Flash                                 | 6    | 7     | 13    | 11              | 18               | 29               | Existing           |
| 16  |                 | Azimio B           | Day              | 314      | 272       | 586    | 4        | 16     | 20    | Connect ed      | Availabl<br>e   | Flash                                 | 13   | 11    | 24    | 9               | 7                | 16               | Existing           |
| 17  |                 | Azimio C           | Day              | 349      | 349       | 698    | 3        | 14     | 17    | Connect<br>ed   | None  | Pit                                   | 4    | 4     | 8     | 9               | 9                | 18               | Existing           |
| 18  |                 | Igogo              | Day              | 305      | 308       | 613    | 8        | 7      | 15    | Connect         | None  | Flash                                 | 3    | 5     | 8     | 8               | 11               | 19               | Existing           |
| 19  |                 | Igogo B            | Day              | 323      | 327       | 650    | 8        | 8      | 16    | Connect         | None  | Pit                                   | 10   | 10    | 20    | 4               | 6                | 10               | Existing           |
| 20  | Igogo           | Malulu             | Day              | 289      | 316       | 605    | 7        | 8      | 15    | Connect         | Availabl<br>e   | FLASH<br>& Pit                        | 20   | 20    | 40    | -               | -                | -                | Existing           |

# 4.5.9. EDUCATION FACILITIES IN ILEMELA MUNICIPAL

In Ilemela Municipal consists of 26 pre-primary and primary schools in the selected SSS project areas. All the schools are connected to water supply from MWAUWASA. Out of 26 primary schools only 18 schools have a hand washing basin facility. 23 primary schools have flush toilets and 3 do have pit latrines as shown in the table below:

Table 7: Status of Primary schools in the selected SSS Project areas in Ilemela

| S/<br>N | Project<br>Area | Name of Schools | Day  | NUMB | ER OF P | PUPILS | Teachers/Staffs |        | Water<br>sources | Sanitation fa | acilities  |                                   |      |       |       |                 |
|---------|-----------------|-----------------|------|------|---------|--------|-----------------|--------|------------------|---------------|--|-----------------------------------|------|-------|-------|-----------------|
|         |                 |                 |      | Boys | Girls   | Total  | Male            | Female | Total            |               | Hand<br>washing<br>basin<br>[Available/<br>None] | Type of<br>Latrine<br>[Flash/Pit] | Boys | Girls | Total | Deficit<br>boys |
| 1       |                 | Hekima          | Day  | 404  | 356     | 760    | 1               | 16     | 17               | Connected     | Available  | Flash                             | 8    | 9     | 17    | 8               |
| 2       |                 | Ibungilo        | Day  | 424  | 399     | 823    | 4               | 14     | 18               | Connected     | None   | Pit                               | 5    | 6     | 11    | 11              |
| 3       |                 | Kiloleli        | Day  | 361  | 375     | 736    | 3               | 17     | 20               | Connected     | Available  | Flash                             | 3    | 5     | 8     | 11              |
| 4       |                 | Bondeni         | Day  | 286  | 285     | 571    | 5               | 9      | 14               | Connected     | Available  | Flash                             | 6    | 10    | 16    | 4               |
| 5       |                 | Kilimahewa      | D    | 431  | 365     | 796    | 2               | 15     | 17               | Connected     | Available  | Flash                             | 4    | 5     | 9     | 18              |
| 6       | Ibungilo        | Nyamanoro       | Day  | 468  | 535     | 1003   | 3               | 16     | 19               | Connected     | Available  | Pit                               | 13   | 13    | 26    | 6               |
| 7       |                 | Bwiru           | D    | 287  | 296     | 583    | 6               | 12     | 18               | Connected     | Available  | Flash                             | 6    | 6     | 12    | 5               |
| 8       |                 | Isenga C        | Day  | 373  | 391     | 764    | 2               | 13     | 15               | Connected     | Available  | Flash                             | 7    | 13    | 20    | 6               |
| 9       | Pasiansi        | Isenga D        | Davi | 481  | 458     | 939    | 2               | 17     | 19               | Connected     | Available  | Flash                             | 8    | 8     | 16    | 7               |
| 10      | Pasiansi        | Isenga          | Day  | 458  | 551     | 1009   | 4               | 14     | 18               | Connected     | Available  | Flash                             | 5    | 10    | 15    | 16              |
| 11      |                 | Jamhuri         | Day  | 291  | 321     | 612    | 3               | 13     | 16               | Connected     | Available  | Flash                             | 8    | 8     | 16    | 4               |

| S/<br>N | Project<br>Area | Name of Schools | Day  | NUMB | ER OF F | PUPILS | Teachers/Staffs |        | Water<br>sources | Sanitation f | acilities  |                                   |      |       |       |                 |
|---------|-----------------|-----------------|------|------|---------|--------|-----------------|--------|------------------|--------------|--|-----------------------------------|------|-------|-------|-----------------|
|         |                 |                 |      | Boys | Girls   | Total  | Male            | Female | Total            |              | Hand<br>washing<br>basin<br>[Available/<br>None] | Type of<br>Latrine<br>[Flash/Pit] | Boys | Girls | Total | Deficit<br>boys |
| 12      |                 | Mnarani         |      | 407  | 411     | 818    | 3               | 14     | 17               | Connected    | Available  | Pit                               | 4    | 6     | 10    | 11              |
| 13      |                 | Bugungumuki     | Day  | 598  | 722     | 1320   | 6               | 11     | 17               | Connected    | None   | Flash                             | 12   | 14    | 26    | 11              |
| 14      |                 | Kirumba         | Day  | 588  | 620     | 1208   | 4               | 20     | 24               | Connected    | None   | Flash                             | 8    | 11    | 19    | 16              |
| 15      | Kirumba         | Songambele      | Davi | 415  | 497     | 912    | 4               | 17     | 21               | Connected    | None   | Flash                             | 5    | 5     | 10    | 11              |
| 16      |                 | Tumaini         | Day  | 574  | 572     | 1146   | 8               | 11     | 19               | Connected    | Available  | Flash                             | 12   | 18    | 30    | 10              |
| 17      |                 | Ziwani          | 1    | 445  | 425     | 870    | 3               | 14     | 17               | Connected    | Available  | Flash                             | 7    | 11    | 18    | 10              |
| 18      |                 | Kitangiri B     | Day  | 363  | 395     | 758    | 3               | 12     | 15               | Connected    | None   | Flash                             | 6    | 9     | 15    | 9               |
| 19      | 129             | Kitangiri C     | 1    | 485  | 537     | 1022   | 6               | 8      | 14               | Connected    | Available  | Flash                             | 5    | 11    | 16    | 13              |
| 20      | Kitangiri       | Kitangiri       | Day  | 400  | 376     | 776    | 5               | 12     | 17               | Connected    | None   | Flash                             | 10   | 10    | 20    | 4               |
| 21      |                 | Mihama          |      | 373  | 417     | 790    | 4               | 9      | 13               | Connected    | Available  | Flash                             | 3    | 5     | 8     | 12              |
| 22      |                 | Ghana           | Day  | 331  | 403     | 734    | 7               | 7      | 14               | Connected    | Available  | Flash                             | 4    | 6     | 10    | 11              |
| 23      |                 | Karume          |      | 434  | 391     | 825    | 4               | 9      | 13               | Connected    | None   | Flash                             | 3    | 4     | 7     | 14              |
| 24      | Nyamanor<br>o   | Mjimwema        | Day  | 621  | 632     | 1253   | 2               | 11     | 13               | Connected    | Available  | Flash                             | 3    | 5     | 8     | 26              |
| 25      |                 | Mkudi           |      | 575  | 620     | 1195   | 4               | 8      | 12               | Connected    | Available  | Flash                             | 10   | 10    | 20    | 23              |
| 26      |                 | Mwenge          | Day  | 581  | 629     | 1210   | 6               | 18     | 24               | Connected    | Available  | Flash                             | 3    | 5     | 8     | 23              |

Source: Municipal Council Education Officer (Primary), ILemela 2024

# 4.6. WASTE AND SANITATION STATUS

Waste management services are divided into two major categories i.e solid waste management and liquid waste management services. Mwanza city council has the responsibility of managing solid waste and on-site liquid waste. The Mwanza urban water and sanitation Authority deals with sewerage services.

Mwanza City Council has a moderate standard of service in respect to collection and disposal of solid waste and liquid waste. Crude damping method of waste disposal is more controlled in the Town thus reducing environmental and health hazards like unpleasant Odour, breeding sites of vermin and contamination of surface and groundwater.

In the pilot Simplified Sewer System Project (pilot phase) a number of 415 households were connected to the system which comprise of 2,490 beneficiaries and the pipeline has a length of 7.06kms as shown on the table below:

Table 8: Simplified Sewer System Project (Pilot Phase)

| S/N | Area           | Number of households connected | Length of pipeline (km) |
|-----|----------------|--------------------------------|-------------------------|
| 1   | Kilimahewa     | 117                            | 1.7                     |
| 2   | Mabatini       | 178                            | 2.96                    |
| 3   | Igogo (Kwimba) | 120                            | 2.4                     |

In the scaled up simplified sewer system Project (Phase II) a number of 1,073 households were connected to the system which comprise of 6,438 beneficiaries and the pipeline has a length of 17.81km as shown on the table below:

Table 9: Scale Up Simplified Sewer System Project in the hills places Phase II

| S/N | Area         | Number of households connected | Length of pipeline (km) |
|-----|--------------|--------------------------------|-------------------------|
| 1   | Kabuhoro     | 194                            | 3.17                    |
| 2   | Isamilo      | 206                            | 3.93                    |
| 3   | Ibungilo     | 280                            | 4.94                    |
| 4   | Igogo-Sahara | 393                            | 5.77                    |

# 4.7. Social Infrastructure in the Project Areas

# 4.7.1. ROADS AND RAILWAYS

Road transport is the most used mode of transport in Mwanza city and Ilemela.

#### 4.7.2. AIR AND WATER TRANSPORT

Marine Transport and the existing airport is located in Ilemela District.

#### 4.7.3. ENERGY AND POWER SUPPLY

Both Municipality - Electricity is the power source for industries, commercial premises, service institutions and for domestic premises. The region is connected to the National Grid by TANESCO. All district headquarters are served by this grid.

#### 4.7.4. Tourism

Mwanza is one of the unique destinations in Tanzania that has yet to be discovered by many. Main tourist attractions in Mwanza are the Bujora Sukuma Museum and Sanane Island. There are a few high-class hotels such as JB Delamonte, Gold-Crest, Tilapia, Malaika and New Mwanza Hotel. There are also myriad other mediums/small size hotels. Day trips can be made to the famous Serengeti National Park and other nature reserves.

#### 4.7.5. COMMUNICATIONS

#### **Telecommunications**

All the Wards in the Project area are using the Tanzania Telecommunication Company Limited (TTCL) as the inland-based telephone and mobile provider for the Region. In addition, there are email services and several cellular telephone services provided by a few private and semi-private telecommunication companies. These include Vodacom, Airtel, Tigo, and Zantel. There are adequate telephone services in all urban centres in the Region and in some parts of the rural areas.

#### **News and Mass Media**

All these news and media services are available in the project areas where there are eleven Radio Stations. These are; - TBC1 FM, Radio Free Africa – RFA, Radio Maria, Living Water radio Kwa Neema radio and Radio One. Others include TBC Taifa, KISS FM, and Clouds FM, Capital radio, Afya radio, Mwanza City FM radio, Sengerema radio and East Africa radio. Television stations can be accessed via satellites by using antennas and boosters. Some of the local stations which can be accessed include TBC1, ITV, Star TV, Channel 10, Channel 5 and EATV, depending on the type of the

antenna used. Other international worldwide stations such as CNN, BBC, CFI, Al Jazeera, and others may be accessed.

# 4.8. GENDER ISSUES

Water collection was found to be the responsibility of women and children (particularly girls) and this is attributed to inherited traditions and customs, which are passed from generation to generation. It was found out that the cost incurred for obtaining water for home consumption is for both females and males and females for female headed households.

# 5. STAKEHOLDERS CONSULTATION AND PUBLIC INVOLVEMENT

# 5.1. INTRODUCTION

In essence, stakeholder consultation or public participation in environmental decision-making is a successful method of communication between the project team and the local population. Informing the locals about the development and assisting them in comprehending and accepting the impending developmental activity in the area is the goal of the stakeholder consultation process. An open discussion with the stakeholders minimizes the perceived potential environmental impacts. In return, public feedback becomes a useful input in improving the project design and environmental management.

In order to determine the best way to involve the public, the consultant first identified the stakeholders and analyzed their roles. Then, the consultant considered using public consultation meetings, notices and advertisements, surveys, interviews, and questionnaires, workshops, and/or advisory groups. To determine the greatest possibilities for public engagement, each technique was evaluated in comparison to the others. Ultimately, the majority of stakeholders in the project areas determined that public meetings and one-on-one consultation were the preferred solutions.

# 5.2. Purpose and Objective

In the context of a Simplified Sewerage System project, public participation and stakeholder engagement play crucial roles in ensuring the project's success and effectiveness. The specific purposes and objectives of the Stakeholder Engagement Processes in this project are:

- Understanding Community Needs and Concerns: Public participation allows residents and community members to voice their needs, concerns, and preferences related to the project.
   This input helps project planners and decision-makers understand the local context, including environmental, social, and economic considerations.
- Improving Project Design and Implementation: Stakeholder engagement enables the Project Team to gather valuable information that can improve the design, construction, and implementation phases of the project. Local knowledge about terrain, water tables, and other environmental factors can be crucial in optimizing the project's infrastructure and minimizing environmental impacts.
- Enhancing Project Acceptance and Support: Involving the public and stakeholders from the beginning fosters a sense of ownership and involvement in the project. When communities

feel heard and respected, they are more likely to support the project's goals and outcomes, reducing potential resistance or opposition.

- Ensuring Environmental and Social Sustainability: Public participation helps identify
  potential environmental impacts and social risks associated with the sewerage project. By
  engaging stakeholders, the project team can implement mitigation measures and ensure that
  the project aligns with environmental regulations and community values.
- Education and Awareness: Public participation serves as an opportunity to educate stakeholders about the importance of the project, its benefits, and the roles they can play in its success. It can also help raise awareness about environmental conservation and sustainable development practice.

Overall, public participation and stakeholder engagement in a project are essential for ensuring its effectiveness, sustainability, and acceptance by the community. By involving those who will be affected by the project, decision-makers can make more informed choices and enhance the overall quality of the project outcomes.

# 5.3. STAKEHOLDER IDENTIFICATION AND CONSULTATION

In order for a project to be successfully planned and managed, stakeholders are essential. Those who have the potential to impact or be impacted by the project are considered stakeholders. It may comprise members of the planning and regulatory agencies, and people with interests in the project in addition to the communities it affects. To guarantee that all of the aspirations and concerns of the stakeholders are taken into account during the decision-making process for the fair and sustainable development of the Simplified Sewerage System in Ilemela and Nyamagana, stakeholder identification and consultation are crucial. The following describes the stakeholder engagement methodology used.

• Identification of the stakeholders: This involves the process of identifying the people, groups, or organizations that could impact or be impacted by a decision, an activity, or an outcome of the project. It also involves analysing and documenting relevant information regarding their interests, involvement, interdependencies, influence, and their potential impacts on project success. The stakeholders identified include those who are likely to be affected by the project (Project Affected Persons), authorities and interested or concerned parties. The list of stakeholders identified for this project is as indicated in Table below

Table 10 Identified Stakeholders in the project area.

| Stakeholder Group | Members                 |
|-------------------|-------------------------|
| Ministries        | Vice-President's Office |
|                   | Ministry of Water       |

| Stakeholder Group      | Members  |  |
|------------------------|--|--|
|                        | Mwanza Water Supply and Sewerage Authority   |  |
| Mwanza Regional Office | Regional Secretariat   |  |
| Local Government       | Ilemela Municipal Mwanza City Council  |  |
| Institutions           | <ul> <li>National Environment Management Council</li> <li>Lake Victoria Basin Water Office (LVBWO)</li> <li>Lake Victoria Environmental Management Program (LVEMP)</li> <li>Lake Victoria Basin Commission (LVBC)</li> </ul> |  |
| Financer               | EIB     EFD  |  |
| Interested parties     | <ul><li>NGOs</li><li>CBOs</li><li>Individuals</li><li>Civil Society</li></ul>  |  |
| Local Communities      | Local communities in the respective project areas including Ibungilo, Pasiansi, Kabuhoro, Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo, Bugarika  |  |

- Plan Stakeholder Management: This is the process of developing appropriate management strategies to effectively engage stakeholders throughout the project life cycle, based on the analysis of their needs, interests, and potential impacts on project success. For this project a stakeholder engagement plan(SEP) report was prepared as the stand alone report for guidance of the Stakeholder Engagement.
- Manage Stakeholder Engagement: The process involves communicating and working with the stakeholders to meet their needs / expectations, address issues as they occur, and foster

appropriate stakeholder engagement in project activities throughout the project life cycle. For this project, the stakeholder engagement approach report contained the mechanism and approach of constant communicating with the stakeholder for sustainability of the project.

• **Control Stakeholder Engagement:** The process is of monitoring the overall project stakeholder relationships and adjusting strategies and plans for engaging the stakeholders.

#### 5.4. Consultation Plan

The Consultant team established the Consultation Plan for Public/Stakeholders' consultations so as to understand the different dimensions of their concerns, interests and advice pertaining to the project. The consultations Plan included personal interviews, one to one meeting, and focussed group discussions (FGDs), all of which will help in determining the issues of the participants and their appropriate possible solutions. The figure below shows the consultation established for this project.

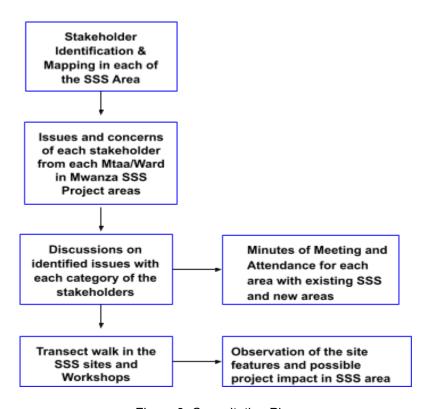


Figure 3: Consultation Plan

Increased ideas on the table, a variety of opinions about the simplified sewerage system, and a fair and just shared vision for the socioeconomic environment were all guaranteed by the stakeholder identification and consultation process.

According to the work scope, from May 22 to June 14, 2024, a number of one-on-one and public meetings were held in the project area to engage with the communities and government agencies. During the stakeholder consultation with wards and communities of Ibungilo, Pasiansi, Kabuhoro,

Kitangiri, Kilimahewa, Isamilo, Mabatini, Ustawi, Igogo, and Bugarika, MWAUWASA officials also collaborated with the consultant team to engage with the community.

# 5.5. Public Consultation and Engagement

#### 5.5.1. Public Meetings

Communities along the proposed project needed to be appropriately informed about what is planned in their area to the larger groups, and they later needed to be divided into groups for in-depth interviews based upon their characteristics. This was accomplished through MEOs, WEOs, and meetings later on in the public participation process.

The community consultations were conducted with the intention to;

- Provide clear and accurate information about the Project to the communities
- Inform communities about the Project
- Gathering from the population and their representatives about main environmental and social concerns and perceptions regarding the SSS Project.
- Gather opinions and suggestions directly from the communities on their preferred mitigation measures
- Gather opinions and concerns of the various minority groups of women, children, disabled and youth on the proposed Project.



Figure 4: Lifting hand as the sign of project acceptance in one of the project areas.

# 5.6. Concerns/ Issues raised by the Stakeholders

The community was given a presentation about the SSS project and what was planned for each ward. Equal emphasis was placed on the significance of the Simplified Sewerage System as well as its advantages for both communities and individuals. The project's benefits and drawbacks, as well as the appropriate mitigating actions, were all thoroughly explained. Lastly, the communities had a chance to voice their ideas, concerns, observations, and questions at the conclusion of the meeting. The following is a summary of the comments, perspectives, questions, warnings, and views that were raised by each individual. The third column below provides a summary of the answers provided by the ESIA consultants and the MWAUWASA representative to each of the issues addressed.

Table 11: Concerns/Issues raised by the Stakeholders.

| Institution | Issue/Concern raised                             | Response                         |
|-------------|--|----------------------------------|
| llemela     | Challenges in Schools:                           | Noted                            |
| Municipal   | This year they had a very high number of         |                                  |
| Council     | school enrolment with very few toilet facilities |                                  |
|             | in those schools which caused 250 pupils         |                                  |
| And         | using one pit latrine. Against the ratio of Boys |                                  |
| N           | 25:1 and Girls 20:1                              |                                  |
| Nyamagana   | Pre-primary school pupils (small pupils) are     |                                  |
| Municipal   | mixed with the older pupils and share the        | Noted                            |
|             | same toilets which is a risk for the small       |                                  |
|             | pupils. They are requesting the toilets for the  |                                  |
|             | small pupils.                                    |                                  |
|             | The flush toilets consume a lot of water and     |                                  |
|             | make schools pay a lot of money for the water    | Noted                            |
|             | bills. They are requesting the boreholes for     |                                  |
|             | schools  |                                  |
|             | Most of the schools' compounds are not           |                                  |
|             | fenced and thieves encroach in freely and        | Noted                            |
|             | steal the toilets and plumbing equipment.        |                                  |
|             | The project area is squatter therefore it will   | SSS is the best sanitation       |
|             | create a lot of challenges during the            | solution for squatter areas like |
|             | construction period. How are you going to do     | those areas along the hills.     |
|             | it?  | The construction of the SSS      |

| Institution | Issue/Concern raised                           | Response                         |
|-------------|--|----------------------------------|
|             |  | does not require a big space     |
|             |  | for working, pipes are PVC       |
|             |  | and small size (6" and 4")       |
|             |  | which will be buried between     |
|             |  | 1-1.5 ft below the ground        |
|             |  | level. Construction will be      |
|             |  | done using available space so    |
|             |  | the PVC pipes will be laid       |
|             |  | down in same narrow streets      |
|             |  | without disturbing movement      |
|             |  | of people or demolishing         |
|             |  | people's property                |
|             |  | consequently resettlement        |
|             | Will implementation of the project require any | This project does not require    |
|             | kind of compensation to project beneficiaries? | demolition of any structure or   |
|             |  | taking someone's land for        |
|             |  | putting in place SSS             |
|             |  | infrastructure. Therefore, there |
|             |  | will be no compensation of       |
|             |  | any kind because no              |
|             |  | compensation of any kind         |
|             |  | because no properties will be    |
|             |  | affected. Everyone's             |
|             |  | properties will remain as it is  |
|             |  | and will not be affected during  |
|             |  | implementation of the project    |
|             | Some households along the upper hills do not   | This is why the government is    |
|             | have toilets due to their topography and this  | introducing the SSS in those     |
|             | has been the cause of cholera in the city. For | areas                            |
|             | those with crude toilets are desludging out    |                                  |
|             | during the rain's seasons and cause            |                                  |
|             | nuisances and create conflicts to the          |                                  |
|             | neighbourhoods                                 |                                  |

| Institution | Issue/Concern raised   | Response   |
|-------------|--|--|
|             | The Dispersion does not have an except to list   | Some challenges are within                                 |
|             | The Dispensary does not have enough toilet facilities and the market does not have toilets | local government interventions                             |
|             | at all.  |  |
|             | Technical problem:   | Noted  |
|             | recinical problem.   | Noted  |
|             | Some of the Simplified Sewerage system is  |  |
|             | left without maintenance after construction and  |  |
|             | gets blocked during rain seasons as excess   |  |
|             | sediments, rugs etc enter into the system and  |  |
|             | cause floods in the households.  |  |
|             | The responsible authority should create  | Noted  |
|             | awareness to the community and capacity  |  |
|             | building to the extension officers on how to   |  |
|             | maintain the Simplified Sewerage system  |  |
|             | Stormwater is overloaded due to the rapid  | Noted  |
|             | population growth in the city and it happens all   |  |
|             | the manholes are dilapidated due to lack of  |  |
|             | maintenance.   |  |
|             |  |  |
|             | The project to consider rehabilitation of the  |  |
|             | stormwater system as well.   |  |
|             | How much will it cost to be connected to the   | There is no connection fee                                 |
|             | SSS  | during the beginning of the                                |
|             |  | project. The project has taken                             |
|             |  | care of the connection costs.                              |
|             |  | But after the project the new                              |
|             |  | connection will be charged with fees which will be decided |
|             |  | by MWAUWASA  |
|             | During the design the MWAUWASA to lease  | Noted  |
|             | with TANROADS and TARURA because most  | INOIGU   |
|             | of the pipes will be crossing or constructed   |  |
|             | alongside the roads.   |  |
|             |  |  |

| Institution | Issue/Concern raised                           | Response                       |
|-------------|--|--------------------------------|
|             | There is no return valve in some of SSS        | Wire mesh is installed in the  |
|             | systems which cause the wastewater             | chambers to reduce the         |
|             | sometimes to return the influences back to the | blockages                      |
|             | households and cause nuisances due to          |                                |
|             | blockage.                                      |                                |
|             | Benefits:                                      | Noted                          |
|             | The SSS will reduce the prevalence of          |                                |
|             | waterborne diseases.                           |                                |
|             |  |                                |
|             | Water table is high which causes people to     |                                |
|             | use a lot of money for desludging. One lorry   |                                |
|             | trip of lorry is 150,000/                      |                                |
|             | The project of SSS will bring up modernization |                                |
|             | in those households without proper toilet      |                                |
|             | facilities and raise the standards of living.  |                                |
|             | Opinions:                                      | Noted                          |
|             | The SSS to have a program of sensitizing the   |                                |
|             | extension officer, and local leaders of how to |                                |
|             | encourage the community to connect to the      |                                |
|             | SSS. Also they should impose bylaws that       |                                |
|             | each household must be connected to the        |                                |
|             | SSS and explain its benefits.                  |                                |
|             | Local government authority should be involved  |                                |
|             | from the project designing, construction and   |                                |
|             | implementation in order the project of SSS to  |                                |
|             | be sustainable                                 |                                |
| Community   | Is this project about construction of the new  | No. The project is about       |
| Meetings    | toilet's facilities to communities?            | constructing the simplified    |
|             |  | sewer system to those areas    |
|             |  | where they can not have        |
|             |  | proper pit latrines especially |
|             |  | upper hills                    |
|             | The existing chambers oozes during the rains   | Noted                          |
|             | seasons and cause filthy in the surroundings   |                                |
|             | ,  |                                |

| Lance Cons  | 10  |                                  |  |  |  |  |
|-------------|---|----------------------------------|--|--|--|--|
| Institution | Issue/Concern raised                            | Response                         |  |  |  |  |
|             | Most schools do not have hand washing           | Noted                            |  |  |  |  |
|             | basins. Some do not have one due to             |                                  |  |  |  |  |
|             | shortage of water for washing                   |                                  |  |  |  |  |
|             | Kitangiri Kati is hills and people have         | The contractor will know what    |  |  |  |  |
|             | constructed houses up to the top of the hill    | to do by using the pathway to    |  |  |  |  |
|             | where no car can reach the top. How this        | lay the pipes and refurbish the  |  |  |  |  |
|             | project will reach there to construct the SSS.  | better walkways.                 |  |  |  |  |
|             | Medical Research areas due to the hills         | Noted                            |  |  |  |  |
|             | people do not have toilets and are using the    |                                  |  |  |  |  |
|             | flying toilets or due to the rocky they are     |                                  |  |  |  |  |
|             | digging very shallow pit latrines after some    |                                  |  |  |  |  |
|             | time when they are full, they dislodge locally  |                                  |  |  |  |  |
|             | which is very dangerous to the surrounding      |                                  |  |  |  |  |
|             | and causes waterborne diseases and              |                                  |  |  |  |  |
|             | unhealthy situations in the surroundings        |                                  |  |  |  |  |
|             | Most households do not have clean and safe      | The project has a plan to do     |  |  |  |  |
|             | water, they are requesting the project to first | so. Since without running        |  |  |  |  |
|             | provide water supply then considering the       | water, they can not use SSS      |  |  |  |  |
|             | connection to the SSS                           |                                  |  |  |  |  |
|             | They were wondering on how the pipes will       | This will be done by leasing     |  |  |  |  |
|             | cross to people who are residing crossed to     | the TANROADS                     |  |  |  |  |
|             | the main road                                   |                                  |  |  |  |  |
|             | Suggestions                                     | Noted                            |  |  |  |  |
|             | The project should start as soon as possible in |                                  |  |  |  |  |
|             | order to avoid the incidence of cholera         |                                  |  |  |  |  |
|             | outbreak which claims life of people this year  |                                  |  |  |  |  |
|             | Concerns  | Yes, with very little percentage |  |  |  |  |
|             | The SSS will increase the water bills.          | as it will be arranged by the    |  |  |  |  |
|             |   | EWURA                            |  |  |  |  |
|             | Will people who will be affected by the project | Nobody will be affected by the   |  |  |  |  |
|             | be compensated?                                 | project; they will use the       |  |  |  |  |
|             |   | existing pathways in their       |  |  |  |  |
|             |   | streets.                         |  |  |  |  |

| Institution | Janua/Camanya waisad                             | Dannens                          |  |  |  |  |
|-------------|--|----------------------------------|--|--|--|--|
| Institution | Issue/Concern raised                             | Response                         |  |  |  |  |
|             | Due to the nature of some areas, there are       | The wastewater pipes will        |  |  |  |  |
|             | some areas where the houses are constructed      | pass on top of the stones and    |  |  |  |  |
|             | in the hills as wells the same to the septic     | then will be protected by        |  |  |  |  |
|             | tank, now will this project involve excavations  | concrete but if there a need of  |  |  |  |  |
|             | of the stones to allow passage of those pipes?   | excavating the project will      |  |  |  |  |
|             |  | excavate                         |  |  |  |  |
|             | The project will have the benefit to them        | Noted                            |  |  |  |  |
|             | Does this project involve population projection  | The project involves projection  |  |  |  |  |
|             | in the area since most of the areas the project  | of the population, the project   |  |  |  |  |
|             | fails due to being overloaded.                   | will not fail for being          |  |  |  |  |
|             |  | overloaded since there is a lot  |  |  |  |  |
|             |  | of WSP in the treatment area     |  |  |  |  |
|             | They wanted to know if the government will       | The government through MoW       |  |  |  |  |
|             | cover all the project or additional cost will be | covers all the implementation    |  |  |  |  |
|             | incurred from them?                              | costs of the project. During     |  |  |  |  |
|             |  | operation phase addition cost    |  |  |  |  |
|             |  | will be required from them       |  |  |  |  |
|             |  | since they will be the users     |  |  |  |  |
|             | Will the meter for unit reading of the waste     | The meter will be the same       |  |  |  |  |
|             | water bill be different from the current water   | but the unit of waste water will |  |  |  |  |
|             | meter?   | be included in the water bill.   |  |  |  |  |
|             | In case of waste water pipe leakage in the       | If any waste water leakage       |  |  |  |  |
|             | areas who should be contacted?                   |                                  |  |  |  |  |
|             | areas who should be contacted?                   | occurs in the area, they have    |  |  |  |  |
|             | 0  | to contact MWAUWASA              |  |  |  |  |
|             | Concerns   | Yes, with very little percentage |  |  |  |  |
|             | The SSS will increase the water bills.           | as it will be arranged by the    |  |  |  |  |
|             |  | EWURA                            |  |  |  |  |
|             | The residents of Nyamanoro Kaskazini have        | This was noted                   |  |  |  |  |
|             | no simplified sewerage system at all, they       |                                  |  |  |  |  |
|             | wish the prioirities should be given to them     |                                  |  |  |  |  |
|             | during the start of the project as some of the   |                                  |  |  |  |  |
|             | areas in the ward have the simplified            |                                  |  |  |  |  |
|             | sewerage system.                                 |                                  |  |  |  |  |

| Institution | Issue/Concern raised  | Response   |
|-------------|---|--|
|             | For the current users of the simplified sewerage system in the area have the problem of clogging of wastewater pipes, now they wanted to know what are plans in solving the problem of clogging of wastewater pipes.                              | The clogging of existing wastewater pipes in the area is caused by improper usage of the system as many users tend to discharge unwanted materials in the wastewater pipes. Education will be provided regarding the usage of this system to overcome the problem. |
|             | Some of the residents at Ibungilo were told that the upcoming Simplified Sewerage System in the area will take into account those who missed it in the first campaign of SSS, now they wanted to know if they will be considered in this project? | This project will cover the entire area  |
|             | The users of the existing SSS in the areas are disposing of the waste in the SSS.   | The community were given education on the usage of the SSS   |
|             | The existing SSS were constructed with the pipe of small diameter, they are advising now to increase the size of the pipe.  | The design will take into account the size of the pipes  |
|             | They are advising the service line to be included in this project   | Service line will be included  |
|             | The project should start as soon as possible  They wanted to know if they need to contribute to the project during the construction phase of the project.   | This was noted  The community is not allowed to contribute anything in the construction phase.   |
|             | How much is the connection fee for SSS?   | There is no connection fee for SSS. The connection is free of charge. The government has paid for its people   |

| Institution | Issue/Concern raised                           | Response                      |
|-------------|--|-------------------------------|
|             | What will happen to the houses that use septic | Once the connection is done,  |
|             | tanks?   | the septic tanks will have no |
|             |  | use. The wastewater from the  |
|             |  | house will be conveyed        |
|             |  | through SSS pipes to          |
|             |  | treatment plant               |

# 5.7. STAKEHOLDER ENGAGEMENT DURING IMPLEMENTATION

During project implementation, engagement activities will be conducted in line with project activities. During the implementation stage, the engagement process will start with the contractors' introduction. Village and community leaders will be made more aware of the ongoing construction after involvement at the district and regional levels. A range of methods, including focus groups, community events, one-on-one discussions, formal and structured meetings, and site visits, will be used to accomplish this. Various strategies will be employed, depending on the project activities, community needs, issues to be addressed, meeting attendees, etc., to guarantee that the engagement is successful and satisfies the needs of the stakeholders. In the same way, the meetings' purpose should be to discuss the project and raise awareness.

# 5.8. Conclusion

From the consultations, it can be concluded that people are positive towards the project as this project will improve the health and sanitation situation of the area. Also, they do not need to empty their septic tanks and will also solve the problems of mixing the septic tank with storm water during the rainy season. Moreover, the project will provide employment to the locals

# 6. ASSESSMENT OF THE IMPACT AND IDENTIFICATIONS OF ALTERNATIVE

# 6.1. Introduction

Numerous social and environmental elements that are present in the project area would be impacted by the activities involved in the proposed project. The numerous effects that the proposed project's activities are expected to have are outlined in this chapter, taking into account baseline social and environmental conditions. All project phases, including pre-construction, construction, operations and maintenance, and decommissioning, have their potential effects evaluated. This information makes it easier to identify how the environment interacts with planned construction and operation phases.

The Environmental assessment also requires that the assessor identifies alternatives for the proposed project. Therefore, under alternatives, it is required that a number of possible alternative proposals for accomplishing similar objectives be considered. In principle, these project alternatives should include an analysis of the location, timing, technology, delay of implementation and design alternatives as well as No Project Alternative.

# 6.2. IMPACT ASSESSMENT METHODOLOGY

The extent and duration of the anticipated change, the size of the impacted resource, and its sensitivity to the change all play a major role in determining the assessment of environmental impacts and their significance. Project impacts can be positive or negative, and both have been described and evaluated using the techniques outlined in this section.

The objective of impact identification is to make sure that every possible important influence is found and considered during the planning and execution phases of a project. There are numerous "tools" available to help in impact identification. Impact checklists are the most widely utilized, while matrices, network diagrams, and map overlays are all regularly utilized.

# 6.2.1. CHECKLISTS AND CRITERIA-BASED APPROACHES

Checklist and Criteria Based Approach Utilizes standardized checklists or criteria to systematically identify potential environmental impacts based on the nature and scope of the project. For this project the Specific criteria were established for different environmental components (e.g., air quality, water

resources, biodiversity) and project activities were evaluated against these criteria to identify potential impacts. These criteria included habitat disturbance, water consumption, etc.

# 6.2.2. **M**ATRIX

The Consultants team employed the matrix method (screening matrix) to identify environmental impacts. This method consists of identifying and qualifying Project actions by comparing them to natural and social environmental conditions. The result was a list of anthropomorphic actions that have an impact on the environment, including health and safety of the project's communities, which was done by using a cause-effect relationship matrix.

#### 6.2.3. EXPERTS KNOWLEDGE AND STAKEHOLDERS CONSULTATIONS

Experts in relevant fields provided insights based on their knowledge and experience. Stakeholder consultation ensured that local knowledge and community concerns are integrated into the impact identification process, improving the accuracy and comprehensiveness of impact assessments.

#### 6.2.4. LITERATURE REVIEW

Reviews of existing literature and data to identify known impacts of similar projects or activities were also used to identify the project impacts. Literature reviews gather information from scientific studies, reports, and databases to identify common environmental impacts associated with Simplified Sewerage System projects. This method helped to anticipate potential impacts based on empirical evidence and lessons learned from similar cases.

#### 6.2.5. SITE VISITS AND FIELD SURVEYS

Direct observation and data collection from the project site and surrounding environment was used also to gather information regarding the environmental impacts. Field surveys and site visits allowed the team to observe current environmental conditions, identify sensitive habitats or ecosystems, and evaluate potential impacts first-hand. This method provided empirical data to support impact identification and assessment.

Through employing these methodologies, the team systematically identified and evaluated potential environmental impacts associated with the proposed Simplified Sewerage System project.

# 6.3. Interactions On Project Activities With The Receptors

Receptors" refer to various elements of the environment that may be affected by project activities. These receptors can include natural resources (such as air, water, soil), ecological systems (habitats, biodiversity), human populations (communities, socio-economic conditions), and cultural or historical

resources. Understanding how project activities interact with these receptors is crucial for assessing potential environmental impacts.

The proposed project is divided into three phases, which are pre-construction, construction, and operation phase, as was previously discussed in Chapter 2. The Interaction Matrix is used to identify the potential impacts that are anticipated during the project. The assessment of interactions between project activities and environmental and social receptors reveals that the project has both beneficial and adverse impacts, which are highlighted in the Matrix.

Table 12: Interactions of the project activities and the receptor.

|  | Physic<br>Enviro | al<br>nment             | Land<br>Enviror | nment           | Water<br>Environm | nent            | Biologic<br>Environ | cal<br>ment |                 |                   |            | Socio Economi                       | c Environment       |     |                       |  |
|--|------------------|-------------------------|-----------------|-----------------|-------------------|-----------------|---------------------|-------------|-----------------|-------------------|------------|-------------------------------------|---------------------|-----|-----------------------|--|
| Project Activity                         | Air              | Noise and<br>Vibrations | Land<br>Use     | Soil<br>Quality | Surface<br>water  | Ground<br>water | Flora               | Fauna       | Job<br>creation | Community<br>area | Sanitation | Occupation<br>al Health<br>& Safety | Waste<br>Generation | GBV | Spread of<br>HIV/AIDS | Wastewater<br>Management<br>& Disposal |
| Pre Construction                         | Phase            |                         |                 |                 |                   |                 |                     |             |                 |                   |            |                                     |                     |     |                       |  |
| Vehicle<br>Movement                      | I                | _                       |                 |                 |                   |                 |                     |             | +               |                   |            | -                                   |                     |     |                       |  |
| Construction Pha                         | ase              |                         |                 |                 |                   |                 |                     |             |                 |                   |            |                                     |                     |     |                       |  |
| Worker's<br>Camp<br>Installation         | I                | -                       |                 |                 |                   |                 |                     |             | +               |                   |            | -                                   | _                   | -   | _                     | -                                      |
| Workers Influx                           |                  |                         |                 |                 |                   |                 |                     |             | +               |                   |            | _                                   | _                   | _   | _                     |  |
| Sanitation<br>Facilities in<br>Camps     |                  |                         |                 | -               |                   | -               |                     |             |                 |                   | -          |                                     | -                   |     |                       | -                                      |
| Vehicle<br>Movement.                     | -                | _                       |                 | -               |                   |                 |                     |             | +               | -                 |            | -                                   |                     |     |                       |  |
| Transportation of Construction Materials | -                | -                       |                 |                 |                   |                 |                     |             | +               | -                 |            | -                                   | -                   |     |                       |  |
| Storage of Construction                  | -                |                         |                 |                 |                   |                 |                     |             | +               | -                 |            |                                     |                     |     |                       |  |

|   |     |                         | Water<br>Environm | Water Biological Environment Environment |                  |                 | Socio Economic Environment |       |                 |                |            |                               |                     |     |                       |  |
|---|-----|-------------------------|-------------------|--|------------------|-----------------|----------------------------|-------|-----------------|----------------|------------|-------------------------------|---------------------|-----|-----------------------|--|
| Project Activity  | Air | Noise and<br>Vibrations | Land<br>Use       | Soil<br>Quality                          | Surface<br>water | Ground<br>water | Flora                      | Fauna | Job<br>creation | Community area | Sanitation | Occupation al Health & Safety | Waste<br>Generation | GBV | Spread of<br>HIV/AIDS | Wastewater<br>Management<br>& Disposal |
| Materials   |     |                         |                   |  |                  |                 |                            |       |                 |                |            |                               |                     |     |                       |  |
| Earthworks  | _   | _                       |                   | _  |                  |                 |                            |       | +               | _              |            | _                             | _                   | _   |                       | _                                      |
| HDPE Pipeline passing along the road pathway                    |     |                         | ı                 | -  |                  |                 |                            |       | +               | -              |            | -                             |                     |     |                       |  |
| Backfilling in some SSS areas                                   | _   |                         |                   | -  |                  |                 |                            |       | +               | -              |            | -                             | -                   |     |                       |  |
| Construction of<br>Manhole and<br>Inspection<br>Chambers        | -   | I                       | 1                 |  |                  |                 |                            |       | +               | -              |            | -                             | -                   | -   |                       | -                                      |
| Concreting for<br>Pipe Restraint,<br>Protection and<br>Chambers | _   | -                       |                   |  |                  |                 |                            |       |                 |                |            | -                             |                     |     |                       |  |
| Construction of concrete stairs for road users.                 | -   | -                       |                   |  |                  |                 |                            |       | +               | -              |            | -                             | -                   | -   |                       | _                                      |
| Worksite<br>Restoration   | -   | _                       | +                 |  |                  |                 |                            |       |                 | +              |            | +                             |                     |     |                       |  |

|   | Physic<br>Enviro |                         | Land<br>Enviror | ıment           | Water<br>Environm | nent            | Biologic<br>Environ | cal<br>iment |                 |                   |            | Socio Economi                 | c Environment       |     |                       |  |
|---|------------------|-------------------------|-----------------|-----------------|-------------------|-----------------|---------------------|--------------|-----------------|-------------------|------------|-------------------------------|---------------------|-----|-----------------------|--|
| Project Activity  | Air              | Noise and<br>Vibrations | Land<br>Use     | Soil<br>Quality | Surface<br>water  | Ground<br>water | Flora               | Fauna        | Job<br>creation | Community<br>area | Sanitation | Occupation al Health & Safety | Waste<br>Generation | GBV | Spread of<br>HIV/AIDS | Wastewater<br>Management<br>& Disposal |
| Operation Phas  | se               |                         |                 |                 |                   |                 |                     |              |                 |                   |            |                               |                     |     |                       |  |
| Wastewater<br>Collection                                |                  |                         |                 | +               |                   |                 |                     |              |                 | +                 | +          | +                             | +                   |     |                       | +                                      |
| Pipeline<br>Leakage                                     | _                |                         |                 | I               | 1                 | _               |                     |              |                 |                   | -          |                               |                     |     |                       | -                                      |
| Malfunction of<br>manhole and<br>collection<br>Stations | -                |                         |                 | -               |                   | -               |                     |              |                 |                   | -          |                               |                     |     |                       | -                                      |
| Maintenance<br>Activities                               |                  | -                       |                 | -               |                   |                 |                     |              | +               |                   | _          | _                             |                     |     |                       | -                                      |

#### 6.4. Description of Identified Potential Impacts

#### 6.4.1. PRE-CONSTRUCTION PHASE

#### 6.4.1.1. Positive IMPACTS.

#### A. Creation of employment opportunities

- The pre-construction/planning phase creates employment opportunities to various professionals directly or indirectly linked to the project. The proposed project during this phase will create employment to the consulting firms during the design phase. Also employment creation for waged labour, businesses (food, drinks, construction materials, lodging, etc).
- The project also will generate employment opportunities to drivers who will be driving the Design teams to observe the sites.

#### 6.4.1.2. NEGATIVE IMPACTS.

As the study is not involving Geotechnical Survey and Topographical Survey of the area due to meandering of pipes around the proposed site areas. No anticipated Negative Impact at this stage.

#### 6.4.2. Construction Phase

#### 6.4.2.1. Positive IMPACTS

#### A. Employment opportunity

There will be greater opportunities for employment in Nyamagana and Ilemela Municipalities throughout the construction phase. During construction, more people will be employed directly or indirectly as hired laborers. New business opportunities, such the sale of food, beverages, building supplies, and lodging, will also arise. An increase in these occupations is crucial from a financial viewpoint, as they would benefit the community's overall economy primarily through raising purchasing power among residents in the project area.

#### B. Capacity Building and Skills Transfer

During the Construction period the SSS Project will provide opportunities for skills development and capacity building among local workers. Training programs and technical assistance can equip local laborers with valuable skills, enhancing their employability beyond the project duration and contributing to long-term economic development.

#### 6.4.2.2. NEGATIVE IMPACTS.

#### A. Soil Erosion

Construction of the simplified sewer pipes, manholes and Inspection Chamber will require "cut and backfill in some areas where the stairs will be provided. Some erosion during construction is unavoidable and will occur temporarily as a result of runoff in areas of excavations.

#### **B.** Land Degradation

As the nature of the proposed area is located in the upper hills with rocky. Some of the areas may face land degradation that will be caused by material extraction activities (stone quarry sites) for SSS.

#### C. Health and Safety Risks

There will be an unavoidable increase in truck traffic during construction of the Simplified sewerage infrastructure. There is a potential safety issue associated with increase in traffic in the vicinity of residential areas. There are also risks associated with infrastructure construction like injuries and accidents.

#### D. Health and Sanitation Issues

Project activities may also lead to the creation of stagnant water in borrow pits that will result from extraction of stones in some areas. The resultant stagnant water bodies may favour breeding of mosquitoes, snails, and other disease vectors. During construction, much solid wastes will be produced at the campsites as well as at the construction sites. The type of waste to be produced includes scrapers, domestic waste, boxes and building materials. The construction workers will require proper services for sanitation.

E. Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential areas.

Trench excavation will be carried out in some areas where there are businesses. If the trench is dug in front of any business this cannot allow customers to gain access to respective business locations.

#### F. Waste Generation and Management

The construction phase will have the impact due to Construction activities that will generate large amounts of waste and debris. Improper disposal of construction waste can lead to visual pollution, land contamination, and illegal dumping. Effective waste management practices are essential to minimize environmental impacts and maintain aesthetic quality in the construction area.

G. Poor air quality from dust and emissions around the construction sites during excavations for Concrete stairs provisions though the impact will be minimal as the activity will

not involve the use of heavy machinery. Transportation of construction materials and equipment will also result in Poor air Quality and Dust. As these activities are residential places, the respective members of the community will be exposed to this nuisance. Dust generation will also results from

#### H. Increased safety risk to construction/project personnel

Occupational hazards as a result of poor instruction and/or awareness of safety regulations, ignorance and reckless personnel may result from construction works.

#### I. Flora and Fauna.

No direct impact is anticipated as the Simplified sewerage network is proposed along the pathway and meandering around the houses.

#### J. Traffic Movement and Public Utilities

The following effects on traffic movement can be envisaged during the construction phase: Road blockage and traffic congestion, Effect on transportation, Disturbance to vehicular and pedestrian movements as the SSS are passing around those areas, chances of accidents etc. Due to trenching in some areas, the general access to residential or commercial properties, markets etc. will be disrupted.

#### K. Occupational Health and Safety

Various occupational health and safety hazards can affect the work pool: Possibilities of occupational hazards (airborne contaminants, dust, noise, waterborne diseases, accidents, etc.), Sanitation and hygiene issues at workers' camps, Spread of sexually transmitted diseases.

#### L. Community Health and Safety

Air and noise pollution may impact the local communities and Sexually transmitted diseases may spread in local communities due to workers influx.

# M. Gender Based Violence in communities neighboring project

Gender Based Violence risk may be observed at the community level. Gender Based Violence risk at the community level can occur during the construction phases as the division of work may favor only one gender due to the nature of the works. Though must be mitigated by the contractor to implement provisions that ensure that gender- based violence at the community level is not triggered by the Project.

#### N. Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Prevention and Response

Sanitation facilities at the camp may result in Sexual Exploitation Abuse/Sexual Harassment.

#### O. Spread of diseases (HIV/AIDs, STIs or STDs)

Construction sites will be a place of work where job seekers and other service providers such as food vendors commonly known as "Mama Lishe" will gather for work and services. Such gatherings will

### P. Social Equity Issues:

From the lesson learnt in a previous SSS in the area during the pilot and scale up phase, There may be challenges in ensuring equitable access to sanitation services, particularly if the construction of the system disproportionately benefits certain socioeconomic groups or excludes marginalized communities. Inadequate access to sanitation can exacerbate existing inequalities and hinder social inclusion efforts.allow contacts that may spread the incidence of disease.

#### Q. Impact on other Public Utilities

During the site visit of the proposed areas, it was observed that some of the public utilities are in parallel with the existing Simplified Sewerage System. These public utilities include the uncovered spaghetti water pipes owned by MWAUWASA. The construction activities may lead to damage of those pipes leading to water problems in the area.

#### 6.4.3. OPERATION PHASE

#### 6.4.3.1. Positive IMPACTS

#### A. Surface waters

Collection of wastewater through operation of the simplified sewerage systems and connection of these to existing conventional systems and water treatment facilities will reduce the inflow of nutrients into Lake Victoria and help improve environmental conditions in the lakeshore.

#### B. Soil

The simplified sewerage systems will result in less pollution of the soil in the areas concerned.

#### C. Smell / eyesore

The simplified sewerage systems are expected to greatly improve the sanitation conditions in the proposed areas.

#### D. Community Health Benefits

Proper wastewater treatment in the area will reduce the risk of waterborne diseases and improve public health outcomes within communities served by simplified sewerage systems. This will lead to lower incidences of waterborne illnesses and associated healthcare costs, thereby enhancing community well-being.

#### E. Social and Economic Benefits

Improved sanitation infrastructure will enhance the quality of life and socio-economic conditions in the communities, contributing to overall sustainable development goals.

#### F. Improved Sanitation Coverage

Simplified sewerage systems will extend the sanitation services to areas that previously lacked access to proper sewage disposal. This will improve public health by reducing the spread of waterborne diseases associated with untreated sewage in the project area.

#### G. Increase of revenue collection for MWAUWASA

The SSS will increase the revenue to MWAUWASA as the SSS bills will be included in the water bills.

#### H. Improve aesthetic value of Ilemela and Nyamana Municipal

The SSS will improve the aestheic value of Ilemela and Nyamagana Municipal during operation phases through reduction of pollution associated with On site Sanitation.

#### 6.4.3.2. NEGATIVE IMPACTS

#### A. Maintenance Challenges

If the system is not properly maintained, The SSS system can become prone to clogging, leakage, or breakdowns, leading to operational inefficiencies and potential health risks.

#### B. Odor and Aesthetic Concern

Improperly managed simplified sewerage systems will emit odors due to blockage of the system during operations. This will lead to Aesthetic concerns as the proposed areas are particularly densely populated and will affect the quality of life for residents and businesses, impacting local perceptions and potentially discouraging economic activity.

#### C. Potential for Groundwater Contamination:

Improperly installed or maintained systems will pose risks of groundwater contamination. Leaks, seepage, or infiltration of untreated wastewater into groundwater sources will compromise water quality and pose health risks to nearby communities relying on groundwater for drinking.

#### D. Social Disruptions:

Repair, or maintenance activities associated with simplified sewerage systems in the area will cause temporary disruptions to daily activities, traffic flow, and local businesses as the system is proposed along the road users pathway. Noise, dust, and inconvenience during these activities may lead to community dissatisfaction and negative perceptions.

# 6.5. Assessment of positive and negative Impacts

Assessing the significance of project impacts, especially for the SSS Project, involves evaluating the extent and importance of both positive and negative effects on various aspects of the environment, society, economy, and operations. In Environmental Impact Assessment (EIA), the significance of project impacts is evaluated to determine the extent and importance of both positive and negative effects on the environment, society, and economy. By using significance rating, the decision maker can make fewer considerations while still receiving important information about the project's potential ramifications. The table below displays the assessment criteria that were utilized in the approach along with the ratings that correspond with them.

Table 13: First step assessment criteria for evaluation of impacts

| Assessment Criterion                  | Ratings  |
|---------------------------------------|--|
| Effect                                | Direct: effect comes directly from activities at the project site  Indirect: effect does not come directly from activities at the project site, but from another direct or indirect effect |
| Duration of Impact                    | Short Term (ST): 0-5 years; Medium Term (MT) 5-10 years;<br>Long Term (LT): 15+ years  |
| Reversibility                         | Irreversible: cannot recover from the impact over a reasonable amount of time  Reversible: can recover from the impact over a reasonable amount of time                                    |
| Extent or Spatial influence of Impact | Site Specific: Within the boundaries of the project site  Local: within the local project impact area  |

|  | Regional/National/International: Beyond   |
|--|---|
| Magnitude of Impact at the spatial scale | High: natural and/or social functions and/or processes are severely altered  Medium: natural and /or social functions and /or processes are notably altered  Low: natural and /or social functions and/or processes are negligibly or minimally altered |
|  | of Hillimiany altered   |

Using this methodology, a continuum of significance can be derived with the two end points of the continuum being

Table 14:Continuum of Significance

| Least Significant | Most Significant |
|-------------------|------------------|
| Indirect          | Direct           |
| Site Specific     | Regional         |
| Low Magnitude     | High Magnitude   |
| Short-term        | Long-term        |
| Reversible        | Irreversible     |

# 6.5.1. Assessment of Cumulative, Residual Impacts

Assessing cumulative and residual impacts is crucial in Environmental Impact Assessment (EIA) to understand the comprehensive effects of a project on the environment, society, and economy.

# 6.5.1.1. CUMULATIVE ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE SIMPLIFIED SEWERAGE PROJECT IN THE PROJECT AREA

Cumulative impacts refer to the combined effects of the project with other existing and reasonably foreseeable future projects, activities, or natural processes. These impacts can amplify or diminish the overall significance of the project. These cumulative impacts can also be further split down according to their nature, into positive and negative impacts, random and predictable impacts, local and widespread impacts, temporary and permanent impacts and also short -and long-term impacts as specified for direct and indirect impacts.

#### a. Increased Pressure on Waste Wastewater Treatment Capacity located at Butuja.

The simplified sewerage system will handle the localized wastewater from the proposed Domestic areas in Mwanza City and Ilemela. The available Treatment Plant also receives the wastewater from other areas as the result of the cumulative impact will be a coupled of rapid urban redevelopment and population growth, the system may experience increased wastewater loads beyond initial design capacity. Cumulative impacts may strain treatment units, potentially leading to operational inefficiencies and increased maintenance costs.

#### b. Stormwater Management Challenges

The SSS Project will involve the use of the concrete materials and other building materials for Manhole, Inspection Chamber and Stairs provision. If the project waste is not well maintained during the rainy season, the concrete materials and other construction waste will increase impermeable surfaces intensifying stormwater runoff. The cumulative Impact will result at the point where these storm water runoff from Impermeable surface of the SSS will Combine with runoff from roads and other developments, and stormwater will overwhelm the available local drainage systems.

#### c. Community Health and Safety Concerns

Improved sanitation from the project will reduce the health risks associated with inadequate wastewater disposal. However, increased urban density, traffic congestion from Other Development projects, and air pollution from industrial activities will continue to pose health challenges. The Cumulative impacts will include mixed outcomes for community health, with improved sanitation benefiting public health while ongoing urban pressures contribute to respiratory illnesses and traffic-related accidents.

#### d. Surface Water Quality Degradation

The proposed project in case of the System failure due to clogging or blockage, the untreated wastewater may enter into the local surface water bodies, such as streams or in the lake during the rainy season. Coupled with runoff from urban areas (e.g., road surfaces, parking lots) the project's discharge could increase nutrient loads and sedimentation in water bodies. Cumulative impacts will result in eutrophication, harmful algal blooms, and degradation of aquatic habitats, impacting aquatic biodiversity and recreational use of water resources.

# 6.5.1.2. Residual environmental impacts associated with the Simplified Sewerage project in the project area

Residual Environmental Impacts The residual impacts refer to those environmental effects predicted to remain after the application of mitigation actions outlined in the environmental assessment. The identified residual impacts are

#### a. Community Health and Safety

Poorly managed sewer systems during operation will emit odors and affect local air quality, impacting community well-being. Despite best efforts, occasional odor issues or air pollutants from treatment processes may also persist.

**Mitigation:** Implementing odor control technologies, regular maintenance of treatment facilities, and community outreach to address concerns can help manage these residual impacts effectively.

#### b. Water Quality Concerns

**Effluent Discharge:** Despite treatment at Butuja, residual pollutants (e.g., nutrients, suspended solids) may remain in the treated effluent. Discharge into receiving water bodies could affect water quality and aquatic ecosystems, potentially leading to eutrophication or habitat degradation.

**Mitigation:** Enhancing treatment processes, monitoring effluent quality, and implementing measures to reduce nutrient loads before discharge can help mitigate these impacts.

#### c. Visual Changes and Aesthetic Impact:

Temporary disruption to the visual landscape with excavation, trenching, and installation of sewer pipelines in some areas will take place. Due to the nature of the area, After completion, the presence of sewer infrastructure, such as manholes, inspection chambers and some SSS, may alter the visual aesthetics of the neighborhood.

**Mitigation:** Designing infrastructure to blend harmoniously with the urban environment and involving community input can help mitigate visual impacts.

# 6.5.2. ANALYSIS OF ENVIRONMENTAL AND SOCIAL IMPACTS

The table below provides an overview of the implications. They are separated into three categories: cumulative, indirect, and direct effects. Moreover, a declaration is provided on the impact's classification—light, moderate, or significant.

Table 15: Analysis of Environmental and Social Impacts - Soil Erosion

| Description of Impacts  | Ef       | fect     |               | Duration       |              | Reversibility |                  | Extent   |            | Significanc<br>e |
|---|----------|----------|---------------|----------------|--------------|---------------|------------------|----------|------------|------------------|
|   | Direct   | Indirect | Short<br>term | Medium<br>term | Long<br>term | Reversible    | Irreversibl<br>e | Local    | Regio<br>n |                  |
| construction phase  |          |          | -             | -              |              |               | -                | -        |            |                  |
| Soil Erosion  | <b>V</b> |          |               |                | V            | <b>V</b>      |                  | <b>V</b> |            | Medium           |
| Land Degradation  | V        |          | V             |                |              |               | V                | V        |            | Medium           |
| Health and Safety Risks   | <b>V</b> |          | V             |                |              | V             |                  | V        |            | Medium           |
| Health and Sanitation Issues  | V        |          | <b>V</b>      |                |              | <b>V</b>      |                  | V        |            | Low              |
| Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential areas | <b>V</b> |          | V             |                |              | <b>V</b>      |                  | <b>V</b> |            | Low              |
| Waste Generation and Management   | <b>V</b> |          | V             |                |              | V             |                  | V        |            | Low              |
| Poor air quality from dust and emissions around the construction site   | <b>V</b> |          | <b>V</b>      |                |              | <b>V</b>      |                  |          | V          | Low              |
| Increased safety risk to construction/project personnel   | V        |          | <b>V</b>      |                |              | <b>V</b>      |                  | <b>V</b> |            | Low              |

| Description of Impacts                                   | Ef       | fect     |               | Duration       |              | Rever      | sibility         | Extent   |            | Significanc<br>e |
|--|----------|----------|---------------|----------------|--------------|------------|------------------|----------|------------|------------------|
|  | Direct   | Indirect | Short<br>term | Medium<br>term | Long<br>term | Reversible | Irreversibl<br>e | Local    | Regio<br>n |                  |
| Traffic Movement and Public Utilities                    | V        |          | V             |                |              |            | V                | V        |            | Low              |
| Gender Based Violence in communities neighboring project | V        |          | <b>V</b>      |                |              | <b>V</b>   |                  | <b>V</b> |            | Medium           |
| Spread of diseases (HIV/AIDs, STIs or STDs)              | V        |          | V             |                |              | <b>V</b>   |                  |          | V          | Medium           |
| Social Equity Issues:                                    |          | <b>V</b> | <b>V</b>      |                |              | <b>V</b>   |                  | V        |            | Low              |
| Impact on other Public Utilities                         | V        |          | V             |                |              |            | V                | V        |            | Low              |
| Operation Phase  |          |          |               |                |              |            |                  |          |            |                  |
| Odor and Aesthetic Concern                               | <b>V</b> |          |               |                | V            | V          |                  | V        |            | Medium           |
| Social Disruptions                                       |          | <b>V</b> |               |                | <b>V</b>     | <b>V</b>   |                  | V        |            | Medium           |
| Maintenance Challenges due to clogs of pipes             | <b>V</b> |          |               |                | <b>V</b>     | V          |                  | <b>V</b> |            | Medium           |

# 6.6. PROJECT ALTERNATIVES

For this project, several project alternatives were considered based on local conditions, environmental factors, community needs, and feasibility. Here are some common project alternatives that were considered.

#### 6.6.1. No-Project Alternative

The No-Project Alternative means that the proposed project will not go ahead. Constructions and operations will not take place. The "No Project" is an economic alternative but is not worth considering as it does not have any benefits. As the objective of the proposed project is to provide adequate sanitation facilities to the people who are living in higher hills in Mwanza region, mainly to improve public health and reduce environmental pollution, 'no project' alternative can obliterate this opportunity.

Currently untreated sewage effluents flow directly into the lake, during the rainy season and it is a major cause of marine pollution. Construction of the proposed SSS works will restore the water quality and aquatic biodiversity of the sea as well as the surrounding coastal areas of the city. Similarly, construction of the sewerage network will provide better sanitation facilities to the people who at present mostly depend on the pit latrines.

# 6.6.2. Choosing Upvc Pipes and steel pipes instead of the HDPE

Common materials for sewer pipes include: unplasticized polyvinyl chloride (uPVC) pipes, high density polyethylene (HDPE) pipes, Double Walled Corrugated (DWC) pipes, precast concrete pipes, ductile iron (DI) pipes, glass reinforced plastic (GRP) pipes and steel pipes.

Due to the rocky and hilly site conditions, limited working space and depth of laying of pipes, uPVC, concrete, DI and steel pipes are not appropriate for the areas. The most appropriate sewer pipe materials for the areas are HDPE, DWC and GRP as they are not rigid, are flexible, can withstand external loads and do not require elaborate bedding protection. Furthermore, they are lightweight and can be manually carried and installed with limited susceptibility to vandalism. Also the use of steel pipes and Upvc Pipes can result in resettlement.

Due to local availability HDPE which is manufactured within the country would be the most suitable for use in the simplified sewer system for the project areas but needs to be covered to avoid deterioration due to sunlight exposure.

# 6.6.3. BUILDING A SOLIDS-FREE SEWERS INSTEAD OF SIMPLIFIED SEWERAGE SYSTEM

Referred to as settled, small-bore, variable-grade gravity, or septic tank effluent gravity sewers. Comparable medium capital investment cost. Preferable where an efficient primary treatment at the

household levels is applicable, requires enough space for construction of septic tanks. This is the second preferable option, however, the limited space for septic tanks and soak away pits may not favour this option.

# 6.6.4. BUILDING CONVENTIONAL GRAVITY SEWERS INSTEAD OF SIMPLIFIED SEWERAGE SYSTEM

Large networks of underground pipes that convey blackwater, grey water and, in many cases, storm water from individual households. Comparable high capital investment cost. Requires planned settlements with reliable access/ roads. The construction of conventional sewer systems in unplanned settlements is complicated and may not be applicable in the project areas. Hence this option is not feasible.

# 6.6.5. ALTERNATIVE DESIGN AND TECHNOLOGY

The proponent has already implemented the SSS technology during the pilot and scale up phase, hence no need to adopt alternative design as the ones proposed suffice for the project as it were.

# 7. MITIGATION MEASURES FOR THE IDENTIFIED IMPACTS

# 7.1. MITIGATION MEASURES FOR IDENTIFIED IMPACTS DURING CONSTRUCTION PHASES

| S/N | Impacts          | Mitigation actions   |
|-----|------------------|--|
| 01  | Soil Erosion     | <ul> <li>Sequence construction activities to minimize the duration and extent of exposed soil. Complete one section of work before moving to the next to limit soil disturbance.</li> <li>Conduct regular inspections of erosion control measures and promptly repair or reinforce any damaged or ineffective controls.</li> <li>Provide training to construction personnel on erosion control best practices</li> <li>Erect barriers along the perimeter of the manhole and other construction site to capture sediment and prevent it from entering nearby waterways or storm drains.</li> </ul> |
| 02  | Land Degradation | <ul> <li>Implement construction techniques that minimize soil disturbance and compaction.</li> <li>Engage with local communities to raise awareness about the importance of soil conservation and proper land management practices.</li> <li>Establish regular monitoring programs to assess the effectiveness of erosion control measures and soil management practices.</li> </ul>   |

| S/N | Impacts                      | Mitigation actions  |
|-----|------------------------------|---|
| 03  | Health and Safety Risks      | <ul> <li>Ensure all workers wear appropriate PPE such as hard hats, gloves, safety boots, and high-visibility clothing.</li> <li>Provide training on the proper use, maintenance, and disposal of PPE</li> <li>Conduct comprehensive safety inductions for all personnel involved in the project. Provide ongoing training on hazard identification, safe work practices, and emergency procedures.</li> <li>Implement traffic control measures, including signage, barriers, and designated pedestrian pathways, to ensure the safety of workers and the public near construction zones.</li> <li>Develop and communicate emergency response plans, including procedures for medical emergencies.</li> <li>Implement regular site inspections and audits to monitor compliance with safety procedures.</li> <li>Provide appropriate storage, handling, and disposal procedures in accordance with regulatory requirements.</li> <li>Ensure all construction equipment is operated by trained personnel only.</li> <li>Engage with the local community to communicate potential health and safety risks associated with the sewerage system. Address community concerns promptly and transparently</li> </ul> |
| 04  | Health and Sanitation Issues | <ul> <li>Provide adequate sanitation facilities, such as portable toilets and handwashing stations, for construction workers.</li> <li>Implement proper waste segregation, collection, and disposal practices on construction sites to prevent environmental contamination and public health risks.</li> </ul>  |

| S/N | Impacts  | Mitigation actions  |
|-----|--|---|
|     |  | <ul> <li>Implement measures to control pests and vectors (e.gmosquitoes, rodents) that may breed in stagnant water or construction debris.</li> <li>Use dust suppression techniques (e.g., water spraying, dust barriers) to control airborne particulates generated during construction activities.</li> <li>Promote good hygiene practices through training and awareness campaigns among workers.</li> <li>Provide designated areas for waste storage and ensure regular removal to prevent accumulation and potential health hazards.</li> <li>Monitor and respond promptly to any outbreaks or health concerns among workers or nearby residents.</li> <li>Establish communication channels for community feedback and concerns regarding health impacts.</li> </ul> |
| 05  | Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential areas. | <ul> <li>Establish clear communication channels with businesses and residents well in advance of construction activities. Provide information about project timelines, potential disruptions, and contact points for inquiries or concerns.</li> <li>Schedule construction activities to minimize impact on peak business hours or residential routines. Coordinate with local authorities and stakeholders to ensure alignment with community events or activities.</li> <li>Appoint dedicated community liaison officers or project ambassadors to act as points of contact for residents. These officers can address concerns, provide updates, and facilitate feedback throughout the project duration.</li> </ul>  |
| 06  | Waste Generation and   | Implement practices to reduce waste generation at   |

| S/N | Impacts  | Mitigation actions   |
|-----|--|--|
|     | Management   | the source, such as optimizing material use, reusing construction materials, and minimizing packaging waste.  • Establish onsite waste segregation stations for sorting construction waste into recyclable, reusable, and non-recyclable categories.  • Ensure proper handling, storage, and disposal of construction waste in accordance with local regulations and environmental standards.  • Include waste management requirements in contractor agreements and contracts, specifying responsibilities for waste handling, recycling, and disposal practices.  • Engage with the community through educational campaigns and outreach programs to promote waste reduction, recycling, and responsible disposal practices.  • Implement monitoring programs to track waste generation rates, recycling rates, and compliance with waste management protocols.  • Regularly review and update waste management practices based on lessons learned, technological advancements, and regulatory changes. |
| 07  | Poor air quality from dust and emissions around the construction sites | <ul> <li>Use water spraying systems to suppress dust emissions from construction activities, such as excavation, trenching, and material handling.</li> <li>Install temporary enclosures or barriers around dusty operations to contain airborne particles within the construction site.</li> <li>Maintain construction vehicles and equipment to ensure proper functioning of exhaust systems and minimize emissions of particulate matter.</li> <li>Implement traffic control measures, such as speed limits and designated haul routes, to reduce</li> </ul>  |

| S/N | Impacts                               | Mitigation actions   |
|-----|---------------------------------------|--|
|     |                                       | vehicle-generated dust on unpaved roads or construction access points.  • Communicate with the local community about air quality concerns, mitigation measures in place, and anticipated construction impacts.   |
| 08  | Flora and Fauna.                      | <ul> <li>No direct impact is anticipated as the Simplified<br/>sewerage network is proposed along the pathway<br/>and meandering around the houses.</li> </ul>   |
| 09  | Traffic Movement and Public Utilities | <ul> <li>Develop a comprehensive TMP that includes strategies for minimizing congestion, ensuring safe passage for vehicles and pedestrians, and maintaining traffic flow around construction zones.</li> <li>Create temporary access points to maintain accessibility for businesses and residences.</li> <li>Conduct thorough utility surveys to identify existing underground utilities (e.g., water lines along the construction route. Implement measures to protect utilities from damage during excavation.</li> <li>Temporarily relocate or protect vulnerable utilities that intersect with construction activities. Coordinate with utility providers to ensure uninterrupted service for residents.</li> <li>Develop and communicate emergency response plans specific to utility disruptions or accidents. Train project personnel and local stakeholders on procedures for rapid response and recovery.</li> <li>Engage with affected stakeholders, including residents, businesses, and utility providers, through regular meetings.</li> <li>Monitor environmental impacts associated with traffic movement and public utilities throughout the project lifecycle. Ensure compliance with environmental regulations and permit conditions.</li> </ul> |

| S/N | Impacts                                     | Mitigation actions  |
|-----|---|---|
| 10  | Spread of diseases (HIV/AIDs, STIs or STDs) | <ul> <li>Conduct targeted health promotion campaigns to raise awareness about safe hygiene practices, including handwashing, safe disposal of waste, and personal hygiene.</li> <li>Integrate sexual health education into community outreach programs, schools, and local health services. Provide information on safe sex practices, condom use, and regular STI screening.</li> <li>Train healthcare providers on the identification, diagnosis, and treatment of HIV/AIDS, STIs, and STDs. Ensure access to confidential and non-judgmental services for affected individuals.</li> <li>Address stigma associated with HIV/AIDS, STIs, and STDs through education and awareness campaigns. Promote a supportive environment for affected individuals to seek testing and treatment.</li> <li>Conduct regular health impact assessments to monitor the effectiveness of disease prevention measures and identify emerging health risks.</li> </ul> |
| 11  | Social Equity Issues:                       | <ul> <li>Ensure that all community members, regardless of socio-economic status or location, have equitable access to the benefits of the sewerage system</li> <li>Implement pricing and financing mechanisms that consider the affordability of sewerage services for low-income households.</li> <li>Engage local communities in the planning, design, and decision-making processes of the sewerage project. Foster inclusive participation through public consultations, workshops, and advisory committees.</li> <li>Prioritize local hiring and procurement practices to maximize employment opportunities and economic benefits for residents living in project-affected areas.</li> </ul>   |

| S/N | Impacts  | Mitigation actions   |
|-----|--|--|
|     |  | <ul> <li>Provide training programs and educational initiatives on sanitation hygiene, health awareness, and sustainable practices for local residents, particularly marginalized groups.</li> <li>Establish monitoring and evaluation frameworks to track the socio-economic impacts of the sewerage project over time. Regularly assess outcomes against social equity indicators.</li> </ul>   |
| 12  | Gender Based Violence in communities neighboring project | The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including:  • Effective and on-going community engagement and consultation, particularly with women and girls in the project area.  • Review and ensure that specific project components that are known to heighten GBV risk at the community level, e.g. employment schemes for women are managed and implemented in a manner that will safeguard against violence against women.  • Specific plan for mitigating these known risks, e.g. sensitization around gender- equitable approaches employment  • The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation. |

# 7.2. DURING IMPLEMENTATION PHASE

| S/N | Impacts                    | Mitigation Measures  |
|-----|----------------------------|--|
| 01  | Maintenance Challenges     | <ul> <li>Ensure the Simplified sewerage system is designed and constructed to withstand operational demands and environmental conditions. Use durable materials and construction techniques that minimize vulnerabilities.</li> <li>Implement a proactive maintenance schedule with regular inspections of simplified sewerage infrastructure, including pipelines, manhole and Inspection chambers</li> <li>Provide training and capacity building programs for maintenance staff on technical skills, safety practices, and operational procedures related to the SSS.</li> <li>Develop contingency plans and emergency response protocols to address unexpected events</li> </ul> |
|     |                            | such as equipment failures, severe weather impacts, or system malfunctions. Ensure access to emergency supplies and resources.  • Engage stakeholders, including local communities, businesses, and regulatory authorities, in maintenance planning and activities. Encourage community participation in reporting issues and monitoring system performance.  • Establish a comprehensive maintenance program to inspect, maintain, and repair sewerage infrastructure regularly. Monitor for signs of wear, corrosion, or potential leaks that could compromise groundwater integrity.  |
| 02  | Odor and Aesthetic Concern | Conduct routine inspections of sewer lines,<br>manholes, and treatment infrastructure to detect<br>and repair leaks, blockages, or other sources of  |

| S/N | Impacts   | Mitigation Measures  |
|-----|---|--|
|     |   | <ul> <li>Use odor neutralizing agents or masking agents in areas where complete elimination of odors is challenging, such as near ventilation outlets or public access points.</li> <li>Establish mechanisms for the public to report odor concerns promptly. Implement a responsive system to investigate complaints and implement corrective actions.</li> <li>Implement a regular maintenance schedule for around Simplified sewerage facilities. Keep facilities clean and well-maintained.</li> <li>Engage with local residents, businesses, and stakeholders to gather input on aesthetic preferences and concerns during project planning and design phases.</li> <li>Establish a comprehensive waste management plan for ongoing operation and maintenance activities, including regular waste collection and disposal schedules.</li> </ul> |
| 03  | Social Disruptions associated with maintenance activities | <ul> <li>Engage with local communities early in the planning phase to gather input, address concerns, and build consensus on project goals and benefits.</li> <li>Maintain open communication with affected stakeholders, including residents, businesses, and community organizations, regarding upcoming maintenance activities. Provide clear information on schedules, duration, and potential impacts.</li> <li>Notify residents in advance of planned maintenance. Provide updates as needed to keep stakeholders informed of any changes.</li> <li>Schedule maintenance activities during off-peak hours or times of lower community activity whenever possible. Coordinate with local authorities</li> </ul>   |

| S/N | Impacts   | Mitigation Measures   |
|-----|---|---|
|     |   | <ul> <li>to minimize impacts on traffic and daily routines.</li> <li>Establish mechanisms for collecting feedback from the community regarding the impacts of maintenance activities. Use feedback to improve future planning and address concerns proactively.</li> <li>Conduct thorough cleanup of work areas and restore affected areas to their original condition following completion of maintenance activities. Address any residual impacts promptly.</li> </ul>  |
| Cum | ulative Impacts   |   |
| 01  | Increased Pressure on Waste Wastewater Treatment Capacity located at Butuja | <ul> <li>Conduct regular assessments of wastewater treatment capacity at Butuja relative to projected demand. Plan for infrastructure upgrades or expansions based on growth projections and operational data.</li> <li>Optimize the operational efficiency of existing treatment facilities through process improvements, automation, and maintenance protocols. Enhance nutrient removal and sludge management processes.</li> <li>Implement measures to control excessive inflow and infiltration (I&amp;I) into the simplified sewerage system, such as repairing leaks, sealing manholes, and upgrading aging infrastructure.</li> <li>Develop and maintain emergency response plans to manage unexpected surges in wastewater flow or treatment disruptions. Ensure readiness to implement alternative treatment solutions if needed.</li> <li>Establish continuous monitoring of wastewater flow, quality parameters, and treatment performance. Use data-driven insights to adjust operational strategies and forecast future capacity needs.</li> <li>Maintain compliance with wastewater discharge</li> </ul> |

| S/N | Impacts                          | Mitigation Measures   |
|-----|----------------------------------|---|
|     |                                  | permits and regulatory requirements. Submit timely reports on treatment plant performance, effluent quality, and operational challenges.  |
| 02  | Stormwater Management Challenges | <ul> <li>Use permeable pavement and pervious surfaces in parking lots, sidewalks, and open spaces to allow infiltration of stormwater into the ground.</li> <li>Educate residents, businesses, and stakeholders on the importance of stormwater management practices, such as reducing impervious surfaces and implementing rainwater harvesting.</li> <li>Adhere to local stormwater management regulations and guidelines. Implement best management practices (BMPs) for construction and maintenance activities to minimize impacts on drainage systems.</li> <li>Establish regular monitoring programs to assess the effectiveness of stormwater management measures. Conduct routine maintenance of infrastructure to ensure proper functioning and longevity.</li> </ul> |
| 03  | Community health and Safety      | <ul> <li>Engage with local communities, stakeholders, and health professionals throughout the project lifecycle. Solicit feedback, address concerns, and incorporate community perspectives into mitigation strategies.</li> <li>Monitor the effectiveness of mitigation measures through ongoing evaluation and feedback mechanisms. Adjust strategies as needed based on monitoring data and community input.</li> </ul>  |

# 8. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

# 8.1. Introduction

An Environmental and Social Management Plan (ESMP) is a comprehensive framework designed to manage the potential environmental and social impacts of a project, ensuring sustainable practices and compliance with regulatory requirements. As such, ESMPs are crucial tools for guaranteeing that management decisions resulting from Environmental Impact Assessment (EIA) procedures are precisely stated and carried out during the whole project life cycle.

The primary objective of an Environmental and Social Management Plan (ESMP) is to manage and mitigate the potential environmental and social impacts associated with a project throughout its lifecycle. Some of the key objectives of implementing an ESMP:

- Environmental Protection: It ensures that the project activities do not harm the environment by identifying potential impacts and implementing measures to prevent, minimize, or mitigate them.
- Social Responsibility: It addresses social risks and impacts on communities and stakeholders affected by the project, including issues related to livelihoods, health, safety, and cultural heritage.
- Compliance: Ensures compliance with regulatory requirements, international standards (if applicable), and commitments made during project approval processes.
- 4. **Risk Management:** It identifies and assess environmental and social risks associated with the project and implement strategies to manage these risks effectively.

Overall, an ESMP aims to promote sustainable development by integrating environmental and social considerations into project planning, implementation, and monitoring processes, thereby minimizing negative impacts and maximizing positive outcomes for both the project and its stakeholders.

# 8.2. IMPLEMENTATION ARRANGEMENT OF THE PROJECT WORKS AND THE ESMP

The Ministry of Water, acting through MWAUWASA, is the "Promoter" and has final ownership of this project, even if the Ministry of Finance and Planning (MoFP) is the "borrower" of the loan. The Ministry

of Work (MoW) bears the responsibility for supervising work throughout the project and for monitoring work in addition to offering more advanced technical support.

Local execution is the responsibility of MWAUWASA, which also serves as the implementing agency and is tasked with fulfilling the promises within its geographic purview.

With assistance from project management and supervision specialists, the Project Management Unit (PMU) of MWAUWASA is in charge of daily operational control of this project.

MWAUWASA will make sure that the contractor and subcontractors that win the contracts to carry out the work follow the established protocols for building and commissioning the suggested development. The project will need the backing of numerous entities in the project region in order to reduce any potential detrimental effects on the environment and society.

# 8.3. REPORTING ARRANGEMENT OF THE ESMP.

MWAUWASA Environmental Representative or Consultant's appointee to deal with Environmental Management will cooperate with other experts Nyamagana and Ilemela Districts such as District Land Officers, District Valuer(s), Community Development Officers and District Environmental Management Officers to provide the Regional Environmental Management Expert with environmental reports of the project implementation as part of the progress reports and annual environmental monitoring reports. The Regional Management Expert is the link person between the region and the Director of Environment as well as the Director General of NEMC.

The Environmental and Social Management Plans for the SSS Project is shown in successive tables below.

Table 16: Enhancement plan for positive environmental and social impacts

| Impact                                      | Management Measures   | Responsible for mitigation | Time Frame                             | Target Level / standard                                       | Estimated Cost<br>(USD)              |  |  |  |
|---|---|----------------------------|--|---|--------------------------------------|--|--|--|
| Construction Phase                          |   |                            |  |   |                                      |  |  |  |
| A. Job Creations                            | Promote and give priority employment to local community and train individuals assigned to manage the different departments for improved performance | Contractor/MWAUW<br>ASA    | Construction period Operation period   | Achieve maximum employment targets in the area.               | Included in the cost of construction |  |  |  |
| B. Improvement of community health          | Sensitization of the community to use a simplified sewerage system rather than the ordinary pit latrines and septic tanks.                          | Contractor/MWAUW<br>ASA    | Construction<br>and Operation<br>Phase | Number of household connected with sewer                      | 3000                                 |  |  |  |
| Operation Phases                            |   |                            |  |   |                                      |  |  |  |
| Increase of revenue collection for MWAUWASA | <ul> <li>Improved Service delivery by<br/>MWAUWASA</li> <li>Encourage customers to use<br/>Simplified sewer system;</li> </ul>                      | MWAUWASA                   | Operation<br>Phase                     | Increase revenue<br>collected<br>Improved service<br>delivery | 1000                                 |  |  |  |

| Impact   | Management Measures  | Responsible for mitigation | Time Frame          | Target Level / standard   | Estimated Cost<br>(USD)              |
|--|--|----------------------------|---------------------|---|--------------------------------------|
|  | People willingness to pay for<br>sewerage services; and<br>Adequate flow of piped water<br>supply                    |                            |                     |   |                                      |
| Improved quality of surface and ground water resources     | <ul> <li>Regular monitoring and maintenance of the sewer system.</li> <li>Monitor surface and groundwater</li> </ul> | MWAUWASA                   | Operation<br>Phases | Low rate of disease incidences  | 5000                                 |
| Improve aesthetic value of Ilemela and Nyamagana Municipal | <ul> <li>Repair of any leaking<br/>sewerage pipes;</li> <li>Cleaning manholes and<br/>chambers</li> </ul>            | MWAUWASA                   | Operation<br>Phases | <ul> <li>Aesthetics of the<br/>surroundings</li> <li>Increased tourist<br/>and business<br/>people</li> </ul> | Included in the<br>Cost of Operation |

| Impact  | Management Measures  | Responsible for mitigation      | Time Frame         | Target Level / standard                                       | Estimated Cost<br>(USD) |
|---|--|---------------------------------|--------------------|---|-------------------------|
| Economical benefits accrued from reduction of costs of simplified sewerage system | Use of simplified sewer system to avoid high cost of hiring septic tanks empties | Ilemela and Nyamagana Residents | Operation<br>Phase | Increased serving<br>from cost of<br>emptying septic<br>tanks | 500                     |

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Table 17 Environmental and Social Management Plans for Negative Impacts

| Impact                    | Management Measures  | Responsible for mitigation      | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|---------------------------|--|---------------------------------|------------|-------------------------|-------------------------|
| During Construction Phase |  |                                 |            |                         |                         |
| C. Soil Erosion           | <ul> <li>Sequence construction activities to minimize the duration and extent of exposed soil. Complete one section of work before moving to the next to limit soil disturbance.</li> <li>Conduct regular inspections of erosion control measures and promptly repair or reinforce any damaged or ineffective controls.</li> <li>Provide training to construction personnel on erosion control best practices</li> <li>Erect barriers along the perimeter of the manhole and other construction site to</li> </ul> | Supervising Engineer/Contractor | Monthly    | Soil erosion controlled | 10000                   |

| Impact              | Management Measures  | Responsible for mitigation      | Time Frame | Target Level / standard        | Estimated Cost<br>(USD) |
|---------------------|--|---------------------------------|------------|--------------------------------|-------------------------|
|                     | capture sediment and prevent it from entering nearby waterways or storm drains.  |                                 |            |                                |                         |
| D. Land Degradation | <ul> <li>Implement construction techniques that minimize soil disturbance and compaction.</li> <li>Engage with local communities to raise awareness about the importance of soil conservation and proper land management practices.</li> <li>Establish regular monitoring programs to assess the effectiveness of erosion control measures and soil management practices.</li> </ul> | Supervising Engineer/Contractor | Monthly    | Land Degradation is controlled | 5000                    |

| Impact                     | Management Measures   | Responsible for mitigation               | Time Frame | Target Level / standard                 | Estimated Cost<br>(USD) |
|----------------------------|---|--|------------|---|-------------------------|
| E. Health and Safety Risks | <ul> <li>Ensure all workers wear appropriate PPE such as hard hats, gloves, safety boots, and high-visibility clothing.</li> <li>Provide training on the proper use, maintenance, and disposal of PPE</li> <li>Conduct comprehensive safety inductions for all personnel involved in the project. Provide ongoing training on hazard identification, safe work practices, and emergency procedures.</li> <li>Implement traffic control measures, including signage, barriers, and designated pedestrian pathways, to</li> </ul> | Supervising Engineer/ Project contractor | Daily      | PPE supplied and used at all work sites | 10000                   |

| Impact                   | Management Measures  | Responsible for mitigation | Time Frame     | Target Level / standard                   | Estimated Cost<br>(USD) |
|--------------------------|--|----------------------------|----------------|---|-------------------------|
|                          | ensure the safety of workers and the public near construction zones.  Develop and communicate emergency response plans, including procedures for medical emergencies.  Implement regular site inspections and audits to monitor compliance with safety procedures.  Provide appropriate storage, handling, and disposal procedures in accordance with regulatory requirements.  Ensure all construction equipment is operated by trained personnel only. |                            |                |   |                         |
| F. Health and Sanitation | Provide adequate sanitation  | MWAUWASA/Super             | Throughout the | Improved Health and Sanitation Condition. | 12000                   |

| Impact | Management Measures  | Responsible for mitigation | Time Frame          | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|---------------------|-------------------------|-------------------------|
| Issues | facilities, such as portable toilets and handwashing stations, for construction workers.  Implement proper waste segregation, collection, and disposal practices on construction sites to prevent environmental contamination and public health risks.  Implement measures to control pests and vectors (e.gmosquitoes, rodents) that may breed in stagnant water or construction debris.  Use dust suppression techniques (e.g., water spraying, dust barriers) to control airborne particulates generated during | vising Engineers.          | construction phase. |                         |                         |

| Impact   | Management Measures   | Responsible for mitigation              | Time Frame                         | Target Level / standard   | Estimated Cost<br>(USD) |
|--|---|---|------------------------------------|---|-------------------------|
|  | construction activities.  Promote good hygiene practices through training and awareness campaigns among workers.  Provide designated areas for waste storage and ensure regular removal to prevent accumulation and potential health hazards.  Monitor and respond promptly to any outbreaks or health concerns among workers or nearby residents |   |                                    |   |                         |
| G. Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential | Establish clear communication channels with businesses and residents well in advance of construction activities.  | Supervising Engineer/Project contractor | Before start of construction works | Sensitization of the business owners/Residential for the interference encountered | 7000                    |

| Impact | Management Measures           | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|-------------------------------|----------------------------|------------|-------------------------|-------------------------|
| areas. | Provide information about     |                            |            |                         |                         |
|        | project timelines, potential  |                            |            |                         |                         |
|        | disruptions, and contact      |                            |            |                         |                         |
|        | points for inquiries or       |                            |            |                         |                         |
|        | concerns.                     |                            |            |                         |                         |
|        | Schedule construction         |                            |            |                         |                         |
|        | activities to minimize impact |                            |            |                         |                         |
|        | on peak business hours or     |                            |            |                         |                         |
|        | residential routines.         |                            |            |                         |                         |
|        | Coordinate with local         |                            |            |                         |                         |
|        | authorities and stakeholders  |                            |            |                         |                         |
|        | to ensure alignment with      |                            |            |                         |                         |
|        | community events or           |                            |            |                         |                         |
|        | activities.                   |                            |            |                         |                         |
|        | Appoint dedicated community   |                            |            |                         |                         |
|        | liaison officers or project   |                            |            |                         |                         |
|        | ambassadors to act as points  |                            |            |                         |                         |
|        | of contact for residents.     |                            |            |                         |                         |
|        | These officers can address    |                            |            |                         |                         |
|        | concerns, provide updates,    |                            |            |                         |                         |

| Impact                             | Management Measures  | Responsible for mitigation                | Time Frame | Target Level / standard | Estimated Cost (USD) |
|------------------------------------|--|---|------------|-------------------------|----------------------|
|                                    | and facilitate feedback<br>throughout the project<br>duration  |   |            |                         |                      |
| H. Waste Generation and Management | <ul> <li>Implement practices to reduce waste generation at the source, such as optimizing material use, reusing construction materials, and minimizing packaging waste.</li> <li>Establish onsite waste segregation stations for sorting construction waste into recyclable, reusable, and non-recyclable categories.</li> <li>Ensure proper handling, storage, and disposal of construction waste in accordance with local</li> </ul> | Supervising<br>Engineer and<br>Contractor | Every day  | Good housekeeping       | 12000                |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|-------------------------|-------------------------|
|        | regulations and environmental standards.  Include waste management requirements in contractor agreements and contracts, specifying responsibilities for waste handling, recycling, and disposal practices.  Engage with the community through educational campaigns and outreach programs to promote waste reduction, recycling, and responsible disposal practices. | mitigation                 | Time Frame |                         |                         |
|        | Implement monitoring programs to track waste generation rates, recycling rates, and compliance with waste management   |                            |            |                         |                         |

| Impact   | Management Measures  | Responsible for mitigation          | Time Frame | Target Level / standard | Estimated Cost (USD) |
|--|--|-------------------------------------|------------|-------------------------|----------------------|
|  | protocols.  Regularly review and update waste management practices based on lessons learned, technological advancements, and regulatory changes.   |                                     |            |                         |                      |
| Poor air quality from dust and emissions around the construction sites | <ul> <li>Use water spraying systems to suppress dust emissions from construction activities, such as excavation, trenching, and material handling.</li> <li>Install temporary enclosures or barriers around dusty operations to contain airborne particles within the</li> </ul> | Supervising<br>Engineer/ contractor | Weekly     | Within limits           | 10000                |
|  | construction site.  • Maintain construction vehicles and equipment to  |                                     |            |                         |                      |

| Impact                                   | Management Measures   | Responsible for mitigation         | Time Frame                         | Target Level / standard                             | Estimated Cost<br>(USD) |
|--|---|------------------------------------|------------------------------------|---|-------------------------|
|  | ensure proper functioning of exhaust systems and minimize emissions of particulate matter.  Implement traffic control measures, such as speed limits and designated haul routes, to reduce vehicle-generated dust on unpaved roads or construction access points.  Communicate with the local community about air quality concerns, mitigation measures in place, and anticipated construction impacts. |                                    |                                    |   |                         |
| J. Traffic Movement and Public Utilities | Develop a comprehensive     TMP that includes strategies  | Supervising<br>Engineer/Contractor | Throughout the Construction Phase. | Disruption of public services and subsequent public | 10000                   |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard    | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|----------------------------|-------------------------|
|        | for minimizing congestion, ensuring safe pedestrians, and maintaining traffic flow around construction zones.  Create temporary access points to maintain accessibility for businesses and residences.  Conduct thorough utility surveys to identify existing underground utilities (e.g., water lines along the construction route. Implement measures to protect utilities from damage during excavation.  Temporarily relocate or protect vulnerable utilities that intersect with construction activities. |                            |            | inconvenience is minimized |                         |

| Coordinate with utility providers to ensure uninterrupted service for residents.  • Develop and communicate emergency response plans specific to utility disruptions or accidents. Train project   | Impact | Management Measures   | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--|--------|---|----------------------------|------------|-------------------------|-------------------------|
| personnel and local stakeholders on procedures for rapid response and recovery.  • Engage with affected stakeholders, including residents, businesses, and utility providers, through regular meetings.  • Monitor environmental impacts associated with traffic movement and public |        | providers to ensure uninterrupted service for residents.  Develop and communicate emergency response plans specific to utility disruptions or accidents. Train project personnel and local stakeholders on procedures for rapid response and recovery.  Engage with affected stakeholders, including residents, businesses, and utility providers, through regular meetings.  Monitor environmental impacts associated with |                            |            |                         |                         |

| Impact   | Management Measures   | Responsible for mitigation | Time Frame                        | Target Level / standard               | Estimated Cost<br>(USD) |
|--|---|----------------------------|-----------------------------------|---------------------------------------|-------------------------|
|  | utilities.  |                            |                                   |                                       |                         |
| K. Spread of diseases (HIV/AIDs, STIs or STDs) | <ul> <li>Conduct targeted health promotion campaigns to raise awareness about safe hygiene practices, including handwashing, safe disposal of waste, and personal hygiene.</li> <li>Integrate sexual health education into community outreach programs, and local health services. Provide information on safe sex practices, condom use, and regular STI screening.</li> <li>Train healthcare providers on the identification, diagnosis, and treatment of HIV/AIDS, STIs, and STDs. Ensure</li> </ul> | Contractor                 | Once every<br>week on<br>weekends | All employees Sensitized and examined | 10000                   |

| Impact                   | Management Measures  | Responsible for mitigation | Time Frame                         | Target Level / standard | Estimated Cost<br>(USD) |
|--------------------------|--|----------------------------|------------------------------------|-------------------------|-------------------------|
|                          | access to confidential and non-judgmental services for affected individuals.  Address stigma associated with HIV/AIDS, STIs, and STDs through education and awareness campaigns. Promote a supportive environment for affected individuals to seek testing and treatment.  Construction workers to undergo health screening according to the National HIV/AIDs Policy. |                            |                                    |                         |                         |
| L. Social Equity Issues: | Ensure that all community members, regardless of socio-economic status or location, have equitable   | MWAUWASA/Contr<br>actor    | Throughout the Construction Phases | No complaints           | 10000                   |

| Impact | Management Measures   | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|---|----------------------------|------------|-------------------------|-------------------------|
|        | access to the benefits of the sewerage system  Implement pricing and financing mechanisms that consider the affordability of sewerage services for low-income households.  Engage local communities in the planning, design, and decision-making processes of the SSS project. Foster inclusive participation through public consultations, workshops, and advisory committees.  Prioritize local hiring and procurement practices to maximize employment opportunities and economic benefits for residents living in |                            |            |                         |                         |
|        | <b>5</b>  |                            |            |                         |                         |

| Impact  | Management Measures  | Responsible for mitigation | Time Frame                   | Target Level / standard   | Estimated Cost<br>(USD) |
|---|--|----------------------------|------------------------------|---|-------------------------|
|   | project-affected areas.  |                            |                              |   |                         |
| M. Gender Based Violence in communities neighboring project | The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including:  • Effective and on-going community engagement and consultation, particularly with women and girls in the project area.  • Review and ensure that specific project components that are known to heighten GBV risk at the community level, e.g. employment schemes for women are managed and implemented in a manner that will | MWAUWASA/Contractor        | Throughout the project Cycle | No Gender discrimination during recruitment and wages, harassment of women and sexual exploitation. | 10000                   |

| Impact                    | Management Measures   | Responsible for mitigation | Time Frame                | Target Level / standard                                       | Estimated Cost<br>(USD) |
|---------------------------|---|----------------------------|---------------------------|---|-------------------------|
|                           | safeguard against violence against women.  • Specific plan for mitigating these known risks, e.g. sensitization around genderequitable approaches employment  • The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation. |                            |                           |   |                         |
| Operation Phase           |   |                            |                           |   |                         |
| N. Maintenance Challenges | Ensure the Simplified sewerage system is designed and constructed to withstand  | MWAUWASA                   | Monthly during operations | No complaints from surroundings/Users of the SSS in the area. | 10000                   |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|-------------------------|-------------------------|
|        | operational demands and environmental conditions.  Use durable materials and construction techniques that minimize vulnerabilities.  Implement a proactive maintenance schedule with regular inspections of simplified sewerage infrastructure, including pipelines, manhole and Inspection chambers |                            |            |                         |                         |
|        | Provide training and capacity building programs for maintenance staff on technical skills, safety practices, and operational procedures related to the SSS.  |                            |            |                         |                         |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost (USD) |
|--------|--|----------------------------|------------|-------------------------|----------------------|
|        | Develop contingency plans and emergency response protocols to address unexpected events such as equipment failures, severe weather impacts, or system malfunctions. Ensure access to emergency supplies and resources.   |                            |            |                         |                      |
|        | <ul> <li>Engage stakeholders, including local communities, businesses, and regulatory authorities, in maintenance planning and activities.</li> <li>Encourage community participation in reporting issues and monitoring system performance.</li> <li>Establish a comprehensive</li> </ul> |                            |            |                         |                      |

| Impact                        | Management Measures  | Responsible for mitigation | Time Frame                   | Target Level / standard           | Estimated Cost<br>(USD) |
|-------------------------------|--|----------------------------|------------------------------|-----------------------------------|-------------------------|
|                               | maintenance program to inspect, maintain, and repair sewerage infrastructure regularly. Monitor for signs of wear, corrosion, or potential leaks that could compromise groundwater integrity.  |                            |                              |                                   |                         |
| O. Odor and Aesthetic Concern | <ul> <li>Conduct routine inspections of sewer lines, manholes, and treatment infrastructure to detect and repair leaks, blockages, or other sources of odors promptly.</li> <li>Use odor neutralizing agents or masking agents in areas where complete elimination of odors is challenging, such as near ventilation outlets or</li> </ul> | MWAUWASA                   | Monthly during<br>Operations | No complaint from the surrounding | 12000                   |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|-------------------------|-------------------------|
|        | public access points.  • Establish mechanisms for the public to report odor concerns promptly.  Implement a responsive         |                            |            |                         |                         |
|        | system to investigate complaints and implement corrective actions.  • Implement a regular                                      |                            |            |                         |                         |
|        | maintenance schedule for around Simplified sewerage facilities. Keep facilities clean and well-maintained.                     |                            |            |                         |                         |
|        | Engage with local residents, businesses, and stakeholders to gather input on aesthetic preferences and concerns during project |                            |            |                         |                         |

| Impact  | Management Measures   | Responsible for mitigation | Time Frame                | Target Level / standard | Estimated Cost (USD) |
|---|---|----------------------------|---------------------------|-------------------------|----------------------|
|   | planning and design phases.  • Establish a comprehensive waste management plan for ongoing operation and maintenance activities including regular waste collection and disposal schedules.  |                            |                           |                         |                      |
| P. Social Disru associated maintenance activities | <ul> <li>Engage with local communities early in the planning phase to gather input, address concerns, and build consensus on project goals and benefits.</li> <li>Maintain open communication with affected stakeholders, including residents, businesses, and</li> </ul> |                            | Monthly during operations | No complaint            | 12000                |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|-------------------------|-------------------------|
|        | community organizations, regarding upcoming maintenance activities. Provide clear information on schedules, duration, and potential impacts.  Notify residents in advance of planned maintenance.Provide updates as needed to keep stakeholders informed of any changes. |                            |            |                         |                         |
|        | Schedule maintenance activities during off-peak hours or times of lower community activity whenever possible. Coordinate with local authorities to minimize impacts on traffic and daily   |                            |            |                         |                         |

| Impact | Management Measures  | Responsible for mitigation | Time Frame | Target Level / standard | Estimated Cost<br>(USD) |
|--------|--|----------------------------|------------|-------------------------|-------------------------|
|        | routines.  Establish mechanisms for collecting feedback from the community regarding the impacts of maintenance activities. Use feedback to improve future planning and address concerns proactively.  Conduct thorough cleanup of work areas and restore affected areas to their original condition following completion of maintenance activities. Address any residual impacts promptly |                            |            |                         |                         |
| TOTAL  | <u> </u>   |                            |            |                         | 149500                  |

# 9. ENVIRONMENTAL AND SOCIAL MONITORING PLAN

# 9.1. Introduction

Environmental and Social Monitoring Plan outlines the specific measures and strategies to address Environmental audits are also usually carried out some few years after completion of the project. Monitoring involves the continuous or periodic review of mitigation activities to determine their effectiveness. As a result, during the course of the planned development, patterns in environmental deterioration or recovery can be identified, and previously unanticipated effects can be recognised and addressed. The impact, effectiveness, and applicability of any mitigating measures implemented are evaluated by these audits. Such audit procedures may be started by MWAUWASA, the project sponsor, to cover all of the project's activities. In order to monitor the project during its mobilisation, construction, commissioning, and demobilisation phases, the SSS contractor must create an Environmental and Social Monitoring Plan. The following lists the tasks that need to be completed and observed for each phase environmental and social factors related to the project's execution and management.

#### 9.2. Monitoring During Pre-Construction Phase

- If appointment of the Health, Safety and Environment (HSE) Officer is carried out and carries out his/her responsibility.
- If maintenance and checking of construction equipment ready for work at site and during the actual works;
- If training and sensitization of the staff on safety aspects and environmental issues is carried out;
- If HIV/AIDS, COVID-19 sensitization campaign have been planned and will actually be carried out:

#### 9.3. Monitoring during Construction Phase

The construction phase the monitoring will focus on:

- Implementation of mitigation measures.
- HIV/AIDs sensitization campaigns implementation.

 Occupational health and safety measures (conditions at materials storage places, borrow sites, equipment, personal protective equipment (PPE) implemented.

#### 9.4. Environmental and Social Monitoring During Operation

MOW/MWAUWASA will be responsible for monitoring the environmental and social impacts after construction and handing over of the Simplified Sewerage System by the contractor. The District Environmental Specialist in Ilemela and Nyamagana Districts' can be in-charge of the environmental and social monitoring of issues related with the Simplified Sewerage project, that is if the project is meeting all the statutory requirements.

#### **Activities During Implementations of the Project:**

- Continuous monitoring of odor emissions and implementation of odor control measures
- Holding regular community meetings and consultations to discuss operational issues and receive feedback.
- Establishing a grievance mechanism for residents to report concerns or complaints.
- Assessing impacts on local employment opportunities and income levels.
- Conducting socio-economic surveys to understand community perceptions and needs.
- Assessing potential health impacts from exposure to effluent or emissions.
- Providing health education and awareness programs to residents on hygiene and sanitation practices.
- Respond promptly to inquiries and concerns raised by residents and stakeholders.
- Conduct public meetings or workshops to discuss findings, solicit feedback, and address community concerns.

The detailed Environmental and Social Monitoring Plan is given in the table below for all the proposed works.

Table 18 Environmental and Social Monitoring Plan

| Impact   | Project Phase                     | Frequency               | Target  | Responsibility | Monitoring cost<br>(US\$) |
|--|-----------------------------------|-------------------------|---|----------------|---------------------------|
| Soil Erosion   | Construction                      | Weekly                  | Area of land left bare  | MWAUWASA       | 2000                      |
|  | Demobilization                    | Rainy season            | Area of land left bare  | MWAUWASA       | 1000                      |
| Health and Safety Risks  | Construction                      | Quarterly Audits        | Compliance with ESMP Plan   | MWAUWASA       | 3000                      |
| Health and Sanitation<br>Issues  | Construction                      | Weekly                  | Sanitation waste generated and Management from workers' camps and Project areas         | MWAUWASA       | 2000                      |
| Interference on daily activities/businesses as most of the works will be carried out adjacent to the businesses/residential areas. | Before and During<br>Construction | Once during preparation | Sensitization of the business owners/Residential areas for the interference encountered | MWAUWASA       | 3000                      |
| Waste Generation and Management  | Construction<br>Phases            | Weekly                  | Nil   | MWAUWASA       | 2000                      |

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| Impact   | Project Phase          | Frequency                                   | Target   | Responsibility                                 | Monitoring cost<br>(US\$) |
|--|------------------------|---|--|--|---------------------------|
| Poor air quality from dust and emissions around the construction sites | Construction phase     | Monthly                                     | Emissions within the required standards. Refer to Environmental Management (Air Quality Standards) Regulations of 2007, G.N. 237, on first, second and fourth schedules for the limits and test methods. | MWAUWASA                                       | 3000                      |
| Traffic Movement and Public Utilities                                  | Construction<br>Phases | Once during initial préparations            | No social service interruption   | MWAUWASA                                       | 2000                      |
| Spread of diseases (HIV/AIDs, STIs or STDs)                            | Construction           | Once every 3 months along the project cycle | Frequency of HIV/AIDS<br>awareness programs, Number<br>of attendees, Topics covered<br>in program  | MWAUWASA  Nyamagana and Ilemela  Municipals    | 5000                      |
| Social Equity Issues   | Construction phases    | Monthly                                     | Achieve minimum of employment target for all Individuals regardless of their socio economic status   | MWAUWASA<br>Nyamagana and Ilemela<br>Municipal | 2000                      |

| Impact   | Project Phase    | Frequency | Target   | Responsibility                            | Monitoring cost<br>(US\$) |
|--|------------------|-----------|--|---|---------------------------|
|  | Operation Phases | Monthly   | Ensure that all community members, regardless of socio-economic status or location, have equitable access to the benefits of the sewerage system.  | MWAUWASA  Nyamgana and Ilemela  Municipal | 2000                      |
| Gender Based Violence in communities neighboring project | Construction     | Monthly   | Achieve maximum employment targets for women following Tanzania laws.  | District Community  Development Officer   | -                         |
| Maintenance Challenges                                   | Operation        | Monthly   | Ensure the Simplified sewerage system is designed and constructed to withstand operational demands and environmental conditions. Use durable materials and construction techniques that minimize vulnerabilities | MWAUWASA                                  | 5000                      |

| Impact                        | Project Phase | Frequency                        | Target                      | Responsibility | Monitoring cost<br>(US\$)  |
|-------------------------------|---------------|----------------------------------|-----------------------------|----------------|----------------------------|
| Odor and Aesthetic<br>Concern | Operation     | In case of registered complaints | No offensive odour detected | MWAUWASA       | Each incident of complaint |

## 10. DECOMMISSIONING

#### 10.1. Introduction

The last stage of a project's life cycle, including site selection, design, construction, commissioning, and operation for the duration of the design life, is decommissioning. Decommissioning is typically a procedure that includes tasks like managing the materials left over after a structure is removed and dismantling and demolishing it. The criteria for environmental health and safety for the general public, operating staff, and any consequences for the surrounding environment must be taken into account in all of these activities.

### 10.2. DECOMMISSIONING DURING CONSTRUCTION AND OPERATION PHASES

If construction activities and associated work cease prior to facility completion and commissioning (with no expectation of construction re-start) the constructions would need to be decommissioned in a manner. Mitigation measures will also be implemented where appropriate (e.g. to stabilization of exposed soils). The project, which involves constructing a simplified sewerage system, is not like a manufacturing facility or a mining operation, where decommissioning is applicable when minerals are diminished and modern technology or new processes gradually replace traditional methods of manufacturing some products. This streamlined sewerage project has a 30 to 40 year design life, depending on how the system is maintained. As a result, the primary focus of this project's decommissioning will be the dismantling of temporary buildings used throughout the construction stages. The primary task of decommissioning will be the site's cleanup in preparation for Mwauwasa's takeover. Therefore, the following steps will be involved in the decommissioning process.

### 10.2.1. WASTE MANAGEMENT AND DISPOSAL

There will probably be debris and waste generated during decommissioning, which needs to be handled, managed, and disposed of safely. The following wastes are anticipated to be produced: i) Material wastes, such as concrete wastes used in the construction of manholes and inspection chambers; ii) Containers and empty bottles; iii) Timber, plastics, and paper packaging; and iv) Used equipment parts. Instead of being disposed of, some of the materials would be better off being salvaged and recycled. Waste disposal will take into account the various types of waste generated

during decommissioning and strive for the secure handling of this waste. Techniques for recycling and reusing have the ability to lower the quantity of garbage that needs to be handled.

#### 10.2.2. SHAPING AND GRADING

Along the Simplfied sewer line, in all sand and borrow pits that will be used as a source of material for construction for the project, this will entail earthwork and top soil restorations. The following tasks will be completed: Site cleanup: The locations will be cleared of any trash and waste and properly disposed of. Site Stabilisation: Levelling, slope profiling, and proper compacting will be part of the actual job. Post-rehabilitation Care, Maintenance, and Monitoring: To guarantee successful site healing post-planning preventative maintenance works will be executed at the locations. In situations when the weather is unfavourable, this would entail replanting and watering; also, erosion control measures such stone pitching and gully formation management would be implemented.

#### 10.2.3. REINSTATEMENT OF BORROW PITS

Restoration of any property that has been utilised, occupied, damaged, or destroyed by the works to as near its original state as feasible. Keep in mind that the TakingOver Certificate cannot be issued until the borrow pits have been reshaped and replanted to the satisfaction of the engineer; The reinstatement process involves replacing and spreading topsoil in borrow pits and areas used for storing or disposing of excess material; equally distributing all available soft material; iv) scarification along borrow area contours to prevent undue erosion when there is not enough soft material to cover the entire borrow area; Steep quarry walls and fencing are used to keep people and animals out of the borrow pit.

## 11. SUMMARY AND CONCLUSION

This ESMP report is prepared in compliance with the Environmental Management Act of 2004 and the Environmental Impact Assessment and Audit Regulations of 2005. Understanding the environmental settings of the project area is important in order to develop appropriate mitigation measures for potential impacts. As a result, extensive baseline studies have been conducted as part of this ESMP, which was designed to focus on the project area. Additionally, to guarantee that the generated data, analysis, and suggestions satisfy the necessary criteria, specialised specialists from several disciplines were enlisted to undertake these investigations. In summary, the project as a whole will enhance the environmental and health conditions of the communities of Ilemela and Nyamaga and fortify MWAUWASA's environmental planning, management, and monitoring capabilities. Effective operation and maintenance are necessary to achieve the full benefits to the environment. The Simplified Sewerage System will enhance the quality Lake Victoria and lessen the pollution burden on surface water.

# **APPENDICES**

Appendix I: References

Appendix II: Community meeting attendees and Minutes

Appendix III: Picture of the Site Visits

Appendix IV: Drawings

# APPENDIX I: REFERENCES

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# APPENDIX II: COMMUNITY MEETING ATTENDEES AND MINUTES

### 1) Bugarika

|     | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, |                    |
|-----|----------------------------|--|------------------------|--------------------------|--------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu      | . Signature Sahihi |
| 1.  | CHATTEREK MEDE             | WED PAMBO  | WES                    | 0762720065               | Shular or          |
| 2   | Arros Stuffers             | Pration com Thur   | BUGARRING KARKTEN      | 0717905399               | it shi             |
| 3   | BATTHAZARY MAHENDERA       | MJUMBE WA SHRICALL   | MIEMBERT B'            | 0766-415316              | Humbica.           |
| 4   | DANIBU MATINDE             | MIKITI MLIMAN  | MIBMALI                | 0754-649161              | tonal a            |
| 5   | DISMAS DEUS                | B] KASKAZINT   | Mounice                | 0759730736               |                    |
| . 6 | KNEKA MANGO                | · BUPGALIKA KIP  | mrumbe                 |                          | (0) S              |
| 7   | UENERANDA SIMON            | BUGARINA ZETHANDE  | Munamanan              | 0764027635               | Amon               |
| 8   | HUSEIN MUS                 | MBEKI - BUGALIK  | a manac                | 0754040161               | Monnauto           |
| 5.  | PHILLIP S JOHN             | MIEMBEN B  | RESEMBLE               | 0767 228 967             | -Ch. P.            |
| Ю   | MARIAM GASPARY             | MIEMBEN A"   | MJUMBE                 | 0769779333               | m.c.               |
| rı  | Mes A Juma 220             | MIEMREN, A)  | MELMBE                 | 0745186215               | AMPERUM            |
| 12. | Shabari Abdalla            | Miembeni A   | Mjumbo                 | 0764585191               | S. A.              |
|     | LUSIA MKOME                | B/ZAHANAT  | Muse                   | 6784283689               | yerie              |
|     |                            | WIEWBERN BO  | warmet=                | 0674123517               | Hac                |
|     | ITASSALU SHABA             | 4 MIEMBERUBU   | mikin                  | 0682 K(39135             |                    |

| ST  | AKEHOLDER CONSULTATION | FORM FOR MWANZA SOUTH WA     | TER SUPPLY PROJECT -   | ADDENDUM NO. 2 CONDUCT | ING SOCIAL       |
|-----|------------------------|------------------------------|------------------------|------------------------|------------------|
| S/N |                        | LIMAHEWA, ISAMILO, MABATINI  | , USTAWI, IGOGO AND BL | GILO DACIANCI MARINORO | , KITANGIRI,     |
|     |                        | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu    | Signature Sahihi |
| 1   | PA Rich william        | BUGARLEA                     | 2 Att modifi           | 0753134404             | ARa De in        |
| 2   | HAPPY ISAKWE           | BUGARIKA                     | ZAHAMAT                | 1                      | Din              |
| 3   | ESTRYA                 | BUGARIKA                     | ZAHAHAT                |                        | EST              |
| 4   | EBENEZA MICHAEL        | KINYETTA RADS                | ICAM BALAGE            | 0759805657             | B                |
| 5   | JOSEPHINA PAUL         |                              | BUGENE                 |                        | de               |
| 6   | MARIAM TANZIBA         |                              | B. Kusini              | 0689598295             | 20-              |
| 1   | KEUBEN Musureck        | Bugnrike                     | TAHANATI               | 0755652441 -           | 1                |
| 5   | + ELISA FAMIGISHX      | Bugnaire                     | CASTANATI              | 0867118777             | <b>E</b>         |
| P   | SUT AND SACMON         |                              | B. Eusin               | 0759 49688V            |                  |
| 0   | BETHER PAUL            | BUENRUKA                     | PATHANA                |                        |                  |
| ( - | JERUNIA TOSIA          | BUGARIKA                     | B. KASIKAZINI          | 0754843711             |                  |
|     | MASILL DEED MAGINERY   | BUGKRIK                      |                        | 0784048930             |                  |
|     |                        | Brightein                    | B. KUSINI              | 07-65774370            |                  |
| 1   | Wartin Benson          |                              | Sucruis                | 06,89340565            |                  |
| 5   | Lucia Amuko            | BUGARIKA                     | CAMPHAS                | FEAM -NULL             |                  |

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| 5/N | Name/Jina  | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi                |
|-----|------------|------------------------------|------------------------|---------------------|---------------------------------|
| 1   | GELANDINAL | BLAULENT                     | 0                      | 0745859197          | GIL                             |
| 2   | RAMAYO     | SAMWELI                      | Car Ena                | 0769874813          |                                 |
| 3   | TEdely     | ZAKARIA                      |                        | 0746587430          | Manager Company Company Company |
| 9   | Suzana     | Nyamhans                     |                        | 076937340           |                                 |
| 5   | ISACK      | BOAZI                        |                        | 0759255160          | Buz                             |
| 2   | SELINA     | RUKAS                        |                        |                     |                                 |
| 7   | TAUS       | HABIBU                       |                        |                     | T.H.                            |
| 18  | PGIDO      | CLIAS                        |                        | 0769277270          | proLing                         |
| pg  | SOPHIA     | CELACASE TI                  |                        |                     | Stucks                          |
| 10  | SARMA      | ZAMATI                       |                        |                     | 8                               |
| 11  | REGINA     | 2 AMATI                      |                        |                     |                                 |
| 2   | BELLADETA  | TAHAHAS                      | M                      |                     |                                 |
| 3   | JUDIS!     | 2AHAMATI                     |                        |                     |                                 |
| 4   | M GESI     | 2                            |                        |                     | Manafuls'                       |
| 5   | REBECCA    | Z                            |                        | 0775 99 9215        | Q-Aginesi                       |
|     | Anynesi    | 2 . FEIA MIENDA              | H WA KEE               | 2                   | modes                           |
|     | Modesta    | Z VATA YA PA                 | the story              | ~//                 |                                 |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| S/N  | Name/Jina          | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|------|--------------------|------------------------------|------------------------|---------------------|------------------|
| p.   | Irine James        | B/Sami                       | Museraoln ;            | 0758624189          | I.James          |
| 17.  | Maria mgaya        | Blasoni                      | Muanandhi              | Q+64661524          | M. Magayan       |
| 18   | Laurensia Cravelly | Brokeni                      | Maesmandhi'            | 07-09261828         | 12 Cravelly      |
| 19   | Angelina Amosi     | B/Sokoni                     | Mwangnohd              | 0964776390          | A. Amosi         |
| 20   | Era Deovo          | B/ sokani                    | Mwanandni              | 0956880954          | F. Debwa         |
| 21   | Hizaboth Augustino |                              | Muananchi              | 0624643167          | EAugustino       |
| Ba   | Golddox John       | B/sokon!                     | Musnandr /             | 0 -                 | Gr. John         |
| 22'  | Andrea Mayor       | B/soloni                     | Muzeranole i           |                     | A. Mayor         |
| À.   | Magelareno Matila  | B/World                      | Musingnobi             | 0769969116          | M. Matra         |
| 251  | Laurensra Misagle  |                              | Muaganohi              | -                   | L. M. Baraba     |
| PG 1 | Pili EEDING!       | B/sbal                       | Museandri              | -                   | D. Ezokiel       |
| 24   | Braboth Manya      | B/sokoni                     | Musranchi              |                     | E. Magya.        |
| 28   | Enonat Antoni      | Blowni                       | Muaranda!              | 0726789499          | E. Antoni        |
| 29   | Karumo minumbe     | Blazoni                      | Mwananchi'             | 07\$1284907         | KM rumbe         |
| 30   | Nice Iddi          | B/abol                       | (Novananchi            | 06980638 26         | N. Tali          |

| Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplif | fied Sewer System in 10 areas |
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STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA. ISAMILO. MABATINI: USTAWI, ICOGO AND BUGABIKA)

| S/N  | Name/Jina           | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|------|---------------------|------------------------------|------------------------|---------------------|------------------|
| ł    | MAGERZ MARANTO      | MIGNISTAN B                  | MENSIRIBNA             | 0715509358          | Raw.             |
| Q ·  | FORFOR ROMADUAN     | MELLIBERI A                  | Marinement             | 0766342037          | Ediba            |
| 3.   | WINFRIOD PRULO      | MITANBENI B                  | -n-1-1=                | 0789687846          | 1 Reula          |
| 4    | diwith womeness     | MIDWELDY B                   | shelp                  | 0762 980646         | Manha            |
| 5.   | Flins NSAGE         | MAHMOTHI B                   | Braswen                | 0157941134          | tree             |
| 6.   | AWANDIDI ALLY       | MITTER B.                    | Brosword               | 957680778           | M-Alley          |
| 7.   | Justuai Amos        | MICHIBONI B                  | Broswang.              | 0669 279851         |                  |
| 8    | HERENA LOWE         | Bluswaren                    |                        | 962199899           | 7 AMOUS          |
| T.   | NOTA CHARLUPEWA     | BUNSUAZIN                    | MounisHI               | 07 56 28 3544       | C.c              |
| D    | Sout George         | Blusin                       | BINSHARA               | 0768786287          | Schoole.         |
| 1    | DORINA ATURNI       | & UDSUAZINI                  | muneras                | 6782983353          | WA .             |
| 2    | LAURENSIA SOMON     | B Kookuzi NI                 | Brosuma                | 0745078742          | <b>6</b>         |
| 3    | Salira Abdalah      | B/sokoni                     | Muzenanchi             | 0956 09658C4480     | S.Aladallah      |
| 4    | christophor Muirabi | B/soloni                     |                        | 0168504328          | 6. Munial:       |
| 51 6 | Primitive choward   | B/soloni                     | Mustingob!             | 00\$2107342         | P. Grivant       |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

| S/N  | Name/Jina         | Institution/stakeholder Mtaa | Position/Title Wadhlfa | Contacts/Phone Simu | . Signature Sahihi |
|------|-------------------|------------------------------|------------------------|---------------------|--------------------|
| 016- | Amostazio Strija  | Blasoni                      | Mugnaneh;              | 8753414371          | X. Shipa           |
| Das  | Estor charles     | Blaboi                       | Mwananohi              | 06887635 58         | E. charles         |
| 03.  | Rhodo Chacha      | B/sstoni                     | Muananohi              | 0743484938          | Ri Chacha.         |
| 04   | Agnoss Mturi      | & soun!                      | Muananchi              | 0757602014          | 4. Mtan'           |
| 05   | Aukria Bonipace   | B/sdconi                     | Mwananothi             | - 7                 | X. Booipace        |
| 06   | Donisia Renatices | B/sokoni                     | Muzganchi              | 0743160853          | D. Renatus         |
| 0+   | Zachalo Make      | B/soluni                     | Meurana nahi           | 045904 96 55.       | Z. Mabula          |
| 08   | Charles onyanya.  | B/solon)                     | Mwananehi              | 0758498444.         | C. Onyanya.        |
| O)   | Elizabeth Bonz    | . B/80kani                   | Mwana nahi             |                     | Fr Booz            |
| 10.  | Neeneg Jashua.    | B/ sovani                    | Muananoh!.             | 07451688 22         | N. Johna.          |
| Ħ.   | Dajabu Kasimu     | 8/25km)                      | Musiandai              | 0714069715.         | R. Koustrou        |
| 18   | Gradia lalus      | B/solon'                     | Musnarchi              | 0746643602.         | K. Kelwa.          |
| 13.  | Sophia Jasoph     | B/solon)                     | Muananchi              | 669217-1348         | SiJepph            |
| 14.  | Benadotha Mompla  | B/seson!                     | Mwanandhi'             | 0842294669          | B. Marmota         |
|      | Pauline muranapla | B/saloni                     | Muspandhica            | 0753965200          |                    |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

IJILA MWANZA

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL

| S/N | Name/Jina           | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | . Signature Sahihi |
|-----|---------------------|------------------------------|------------------------|---------------------|--------------------|
| (1) | PAULINA Sanoson     | 2 AHAWAT                     | В                      | 0767 913413         | the-               |
| (2) | SALOME MACHOHE      | B/mlimani                    | B                      | 0762682535          | Salome             |
| 131 | happynes wombura    | Mimni                        | B                      |                     | Condenseu - 2      |
| (4) | ELIZABETH Jonathat  | ZAHNAI                       | В                      | 0765-924065.        | EJonafhan          |
| (5) | MARTINA EMANUEL     | TAHAMATI                     |                        |                     | Bring.             |
| (G) | MERGENE ELEVER      | 2 MHMOLATI                   | B                      |                     | toslener           |
| (7) | TABU DAMPISHAN      | MIEMBENI A                   |                        | 0766933978          | Romada             |
| Z : | Julius M. Kierraman | B/ZAHANATI                   |                        | 0765123577          | those box,         |
| 9   | SEMENI Side         | 90,000                       |                        |                     | MA                 |
| 10  | Frank Minner        | mitmatil s                   | В                      | 0752309570          | fort               |
| lı  | SAMUEL C MANGE      | MIEMBENI B                   |                        | 0762052611          | 6                  |
| 12. | ABBACCAN SHABAN     | MIEMBENI B"                  |                        | 0743296742          | ASJ                |
| 13  | Johnasi magacaga    | KASIKAZIN                    | 0799504432             |                     | 5-                 |
| 4   | SALMA.              |                              | 74.                    | 0766 975337         |                    |
| IS  | ZACHARO A/mapula    | Zonnow oti                   | MTENDAUI WA KA E       | 6759677655          | Come.              |

KATA YA PAMBA HILLI A MWANZE

| SUF | RVEY, ESIA AND RAPID RAP F | FORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTE<br>ILIMAHEWA, ISAMILO, MABATINI, U | MS IN 10 AREAS (IBUN   | GILO, PASIANSI, KABUHORO, | NG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|------------------------|---------------------------|-------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu       | Şignature Sahihi        |
| 1   | JUMA NDEZI                 | MLIMANI  |                        | 0785-759020               | Jude                    |
| 2   | ELIAS PETER                | BUGARINA / SASKAZI   |                        | 0751742076                | F. Peta                 |
| 3   | FERUTA WILLIAM             | BUGARNA BASKAZINI  |                        | 0756416401                | fee                     |
| 4   | PERESIAG HIOHR             | BUGARIKA KIASKAYA  |                        | 0755 641767               | Ammey                   |
| 5   | MACIAM MAGAGGE             | BUGARITA LACKAZINI   |                        | 0745288892                | Navas                   |
| 6   | BENDLETH TOSOFH            | ZHAMARA  |                        | 0766377537                | R/T.                    |
| 7   | REHERMARIN                 | 2 HHANT  |                        | 0744425482                | R.A                     |
| 8   | GASPAD                     | BUGARICA-KASKAR  |                        | G48-624721                | En.                     |
| 9.  | Hora Mabula                | Zaharati   |                        | 49545609A                 | Frabula                 |
| 10  | Devota Jeshua              | B/soloni   |                        | 0762745864                | D. Joshua.              |
| 11. | Salma Goldelay             | B/saloni   |                        | 0698769949                | S. Goldeby.             |
| 12. | Serah Aorend               | B/60001  |                        | 0760584950                | S. Aerond               |
| 12  | Jona Malima                | Minga F  |                        | 07677289-114              | Ir Malina               |
| 14  | Francoust Marika           | 01 1 1   |                        |                           | - n                     |
|     | WILMON BURY                | B/ZAIAANST   |                        | 8 Shullan N               | Dozusto                 |

| SUR  | RVEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WA<br>DR THE SIMPLIFIED SEWER SYS<br>LIMAHEWA, ISAMILO, MABATINI | TEMS IN 10 AREAS (IBUN | GILO, PASIANSI, KABUHORO, | NG SOCIAL<br>KITANGIRI, |
|------|-----------------------------|--|------------------------|---------------------------|-------------------------|
| S/N  | Name/Jina                   | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahlhi        |
| 1    | IBRMHM MUHADU               | ZAHANATI   | A MIFUGO               | 0827208500                | Mwarden                 |
| 2    | BUNDALA JEREMIA             | MIÉMBEN, A'  |                        | 0747671948                | B-JERGMAHA              |
| 03   | WALEHLO                     | JOSEPH.  | MWANAU                 | CHI 07597884              | 45 WA                   |
| 04   | Emmiliano dalles            | Bugarika essoni  | Musinarch?             | AB0766842287              | Id:                     |
| as.  | Musajuma Joseph             | Bugalino 20 koni   | Mwananchi              | 0+69551043.               | M. Japph                |
| 26   | Kein pripames               |  | mevananch              | 0749224975                | inogai                  |
| 07   | Restuto Bornal +            | B/skoni  | Musaranchi             | 0757-112214               | R. Bernald              |
| 08   | Rhoda Mussa                 | B/soloni   | Mwaranchi              | 0753930895                | R. Musa.                |
| 09   | Estor Militar               | B/solon)   | Mirananch!             | 0747455975                | E Muita.                |
| 10   | Rogina Francit              | 12/60kon?  | Musnandhi              | 956442333                 | R. Emast                |
| 1/ . | Taituni Ally                | & Miemberi B"  | Muonandh!              | 0749765188                | ZAMY                    |
| 12   | Pendo Jesephath             | B7 Saloni  | M waranchi             | 126768805673              | P. Josephath            |
| 3    | Reida Nicasi                | B/sslon)   | Muziranchi             | 0+6306\$5A6               | R. NEas.                |
| 14   | Life Emmanuel               | B/sakoni   | Megnan chi             | 08 04 08 -                | 7. Emmarcel             |
| 5.   | through somen               | B/sotion!  | KATA YA PAM            | A                         | E. Samson               |

|     | IVEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>IMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, I |                  |
|-----|-----------------------------|---|------------------------|----------------------------|------------------|
| S/N | Name/Jina                   | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu        | Signature Sahihi |
| 1   | Visent                      | Sansoni   | B                      | 0746485108                 | as'              |
| 2.  | JAMES FABRAN                | 34ANATT   | В                      | 0755019362                 | Jameselh         |
| 3   | PILY H. WAWA                | PAHAMATI  | BUCARIKA               | 075583960                  | Agua.            |
| 4.  | EMANLELIMPH                 | ZAHATI  | В                      | 0753483530                 | BM -             |
| 6   | ELISIPHA RAMADON            | 784008F/  | BUGIOPEINA             | 0 1                        | 511              |
| 6   | SORDIA MOTIULB              | 28140WB11 .   | Buc                    | - ( ) -                    |                  |
| 7   | tester Asmocia              | - BUGORIKO -  | BUGBRIKA.              | 276625 4632                |                  |
| 8   | BAMINTO FURGES              | posimorieI/ -   | BUGAZIKA               | 0629440528                 |                  |
| 9.  | JOSI PION WILLIAM           | BUGALIKA  | BUGALIFIA              | 0747987188                 | Willows          |
| 10  | ESTA THAT SALA              | BUGAL, FLA  | BUGALITA               | 074462467                  | ESA              |
| 1)  | CHOTCHA STEFANO             | BUGALITA  | BUGALITIA              | 0763959784                 | CHA CHA          |
| 12  | CANET - KIMMEN              | BOOKUKA   | Buggeren               | 0690503995                 | the.             |
| 13  | FECICIANO ACON              | 100 B/ZAHAWAI   | BALOC                  | 1518 584840                | Jagon,           |
| 14  |                             | B) ZHEIANAZI  |                        | 0742602671°                | THE              |
| 15  |                             |   | ENDAJI WA KA F         | 07-5837-09/37              | 7.               |

# 2) Ibungilo

MUHTASARI WA MKUTANO WA HADHARA KATA TAREHE 28/7/2024. IBUNGILO AGENDA: KUNGUA KIKAO LITAMBULINHO MFUMO WA MAJI TAKA AWAMA PA PILI KUPUNGO MKUTANO AGENDY NO: 1: KALANGAY KIKYO Mwenye Kiti wa Mkutano Mh Diusani Husen Magera alq ngua mkutano Saa 9:15 Alasili Kwa Kuomka usikivo na Kachangia Agenda Retu Vizuri. ARENDA NO: 2: LITAMBILLEHO: Alfambulisho ulianza kuanzia mesa kuw waki itambulisha kwamajina kad Ulendaji wa kata Ibungilo, Mh. Diwani kungi Watendaji wa kutaa kata ka Ibungilo Ramoja na wenye viti kutika Maruwasa PMC. AGENDA NO 3: MFUMO NUX MAJI TAKA AWAMUY YA PILI Mtendaji wa Kada ka Ilangilo alaimama na Kuelezea Mradi kama ilrupo kuwalalrupo pokea karna kutoka (Mwanuasi Hielezea kuwa Mradi huu wa Mfuno wa maji taka uliorahishwa ku Maeneo ka laungilo. Alaba Maeneo Ka llangilo. Alielezea tena Vizuri Kuhusu 20ezi hit 19 Upembuzi kakinifu na Usanffu Kwenye maeneo ka mradi na Muutambulksha Kwa wanandi, husika. Managii wa kata Alimtamb Alimkaribisha Mh Diwani Kata ka Burgilo Diwani alieleza kuwa kufikia Malengo, ka Tanzania 2025 Kyrikia Utawala dora na Kupitra Kanwi za Cheria na Maendeleo Ka Uchumi Imara

Diwani Kata ka Ilangilo Alimbaribaha Muwakilishi kutoka kwen Kampuni ka PMC MWAYWASA. Bi Cecilio Ugele alieleza tena vizun Kulusu Karmadi hun kwamba likapo Mwaka 2030 Mradi hun Unatakrwa uwe umesha kamilika kataka kata hii ka laungila. Pia Aliomba Maoni Kutika kwa wananchi wote wa Mitao kote 7 Katika Kata Ka Ibungilo. Lakini pra aliomba/walrombo Kujua Changamoto wanadopata Katika mradi hun Kung wale water Kwisto Kupata Mradi huy. Lakini pra malieleza Kus Roezihili litapitishwa Mwezi wa 7/2024 hiupo 20ezi la upemb 2: Kakinifu litaansa Mwakani (2025).

Mananchi walielezea changamoto zao Kuhusu mradi husu kwambe Mfumo hayaji tasheleza Kwamba, Muundo pubinu sio mizuni Masa kwa Mara Makomba ku maji taka huziba hadi kutafuta mtu kuzibua: Lakipia waltomba awamu hii waboreshewe Daichi.

Bi Cecilia Aliwaeksea Ruhusu changamut 2010 Ruamba kuhusu durala sima la Matamba kusiba ni uchaqui treta na kutopana Pratoni hiveo basi Hualiambua kuwa wasafi lakini pia tuepuke Kutupa vitu vinaupo Sababisha kwaba kwa chemba hiso

AFENDA 4: RUFUNGA PYKUTANO

Mwenyekiti alifunga Mkutano Mnamo saa 11:5 jioni kwa Kuwaishukuru wananchi pamoja na mosa kuu kuendisha pikutan

> AFISA METURAJI KATA S. OBANGILD ILEVOLOS 200200

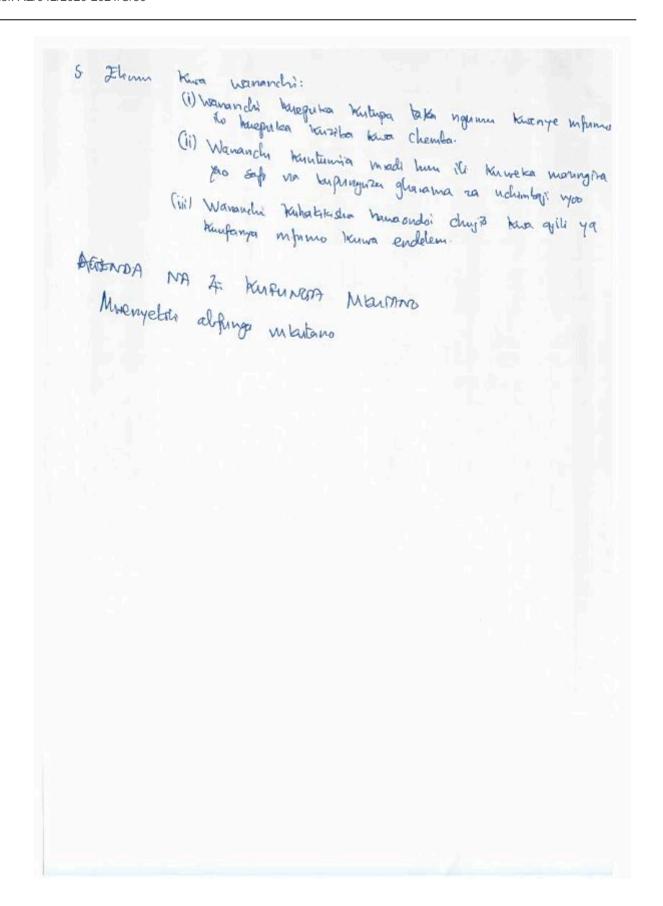
|     | KEHOLDER CONSULTATION F    |  |          |               |                  |
|-----|----------------------------|--|----------|---------------|------------------|
|     | VEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST    |          |               |                  |
| S/N |                            | LIMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa |          |               | Signature Sahihi |
| 16- | JULIUS BONNENTURA          | 184 HOPEND H"  | Munke    | 0755 364878   | BONG             |
| 17  | FEBRICK Mash               | IBUNGILO R   | Munar    | 0754801288    | \$65°            |
| 18  | VICTOR KIMERD              | IBUNGILO A   | MJUMBE   | 0684924021    | Kimano           |
| 19  | JUMANNE RAMABHANT          | (BUNGILO B   | MJumbe   | 0784-410310   | Hugme            |
| 20  | VALENTIMA GOURS            | 1 Burilino x   | mumbe    | 0465388543    | V. Colesart      |
| 21  | RETYATHA THEODORY          | IBUNGILO A   | MJUMBE   | 0753242178    | Rue_             |
| 2R  | MUDULIAM MALINGUM          | U IBUNATIO A   | MJUMBE   | 0655 813786   | Chamally         |
|     | MICHARD KAMAND             | L BUNGILO A  | Mumpro   | 0754774976    | nathan           |
| 134 | HALIMA HARUBU              | IBUNGILO B   | MUMBE    | 0747690786    | H. Harrelou      |
| 15  | Kalunde Rastia             | 16 ungelo B.   | mjumbe   | 0763 856675   | reastive         |
| 26  | Kasoga agaidi              | ibungita B.  | Minne    | 0787219563    | K. postudi       |
| 27. | SHURAN SHABANI             | Ibungilo B   | mJumbe   | 5766 - 317341 | Stagon6.         |
| 28  | SEDRICK ZUBFRI             | Iburgulo A   | NTUMBE   | 0764244150    | Brauben          |
| 29  | SHIDA RUETARU              | Ibungulo 13  | MJumbe   | 0765212760    | 15               |
| 38  | MILLER ABBER               | bramanoer  | Withuber | 0184014183    | 10               |

|     | VEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, I | MS IN 10 AREAS (IBUN   | GILO, PASIANSI, KABUHORO |                  |
|-----|----------------------------|---|------------------------|--------------------------|------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu      | Signature Sahihi |
| 1   | CHRISTOPHER MULETA         | IBUNGILO 'B'  | NW/KIT - MTAA          | 0784965847               | Sangella         |
| 2   | Jarochan I traccinca       | Manurico id'  | Myun - mikes           | 0752988172               | Tomorniga        |
| 3   | Amos w. mantiki            | NAMATRO - KASKATUN  | MILLIE - MIRA          | 6767988672               | A                |
| 4   | ANTHONY MENNY              | Myon n'es - levelen   | Minsi                  | A67858930                | - Fr             |
| 5.  | HUSSEIN MAGERA             | DIWANI- 1BURILD   |                        | 0754 931 781             | Story of         |
| 6.  | BERNADETA CHARLES          | WED - IBUNGILD  | WES                    | 0765945516               | CEQ.             |
| 7   | WINESS ELLEZA              | MED- IBUNGILO 'A'   | MED                    | 0653 935131              | History.         |
| 8   | NELSON SWA                 | 1.70.1  | BALOZI                 | 0762602720               | mosour           |
| 9.  | ALEX MAJURA                | IBUNGILO A"   | BALOZI                 | 0764 874327              | Storke           |
| 10  | ARATA IRRAHIM              | 1840 GILO A"  | MJUMBE                 | 0752-46629               | Allea            |
| 11  | Alsta MHXLL                | Banhilo X'  | MJUMBE                 | 0615388887               | Alica            |
| 12  | MERCY KATUARY              | IBUHGINO A  | MJUMBE                 | 0754035049               | (Dec             |
| 13. | MISSO JUMANUE              | BUNGILO A   | hos mose               | 0688889070=              | arm (            |
| 14  | JOSEPH MALOLE              | IBUNGILO A  | Mumbe                  | 0783026900               | mill:            |
| 15  | HENRY M. KISHERE           | BUNGILO B   | MED                    | 0759158626               | Donbler          |

|     | KI                | OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, | JSTAWI, IGOGO AND BL   | JGARIKA)            |                  |
|-----|-------------------|---|------------------------|---------------------|------------------|
| S/N | Name/Jina         | Institution/stakeholder Mtaa                                  | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
| 1   | Jones Kassiwa     | 1 Sund Enle &   | mound                  | 0684046857          | 1                |
| 2   | Juma Ramaphany    | 1BUNGILO A  | MALOZI                 | 0757 938018         | P P              |
| 3.  | FLAVIAN HARONGO   | IBUNGILO 'A'  | MJUMBE                 | 0765962859          | Almero           |
| 4   | AMON MINENE       | IBUNGILO A  | Mumbe                  | 0742782285          | - The P          |
| 5   | GASTERET-PETER    | IBUNGILD'A'   | BALOTI                 | 0673084539          | AP .             |
| 6   | BERNADETHA MATHYO | 1BINGILD A  | MjumBr                 | D7548952 <b>9</b> 6 | Ben              |
| 7   | MARIAM-A- KIDAKE  | HOUNGILO A  | tembosi.               | 0753346029          | Modern           |
| 8   | LEOCARDIUS MASTER | 1BUNGILO A  | mjumbe                 | 0754425008          | 38               |
| 7.  | BEATRICE MACHU    | M BUNGILO X   | BALOZI                 | 6765-831741         | Bu               |
| 0   | PRISCA JELAS      | IBUNGULO A  | Mumbe                  | 0749-250899         | OUB .            |
| 1   | MALEMBERO MSWAGA  | 1BUNG110 A  | Mounse                 | 0626292126          | #16              |
| 12  | EDWIN MALOUS      | IBUNGICO A  | MJUMBG                 | 0683551061          | #8D              |
| 13  | HELMELINDA KAZAN  | -11-  | BALOZI                 | 0754661731          | Wasi             |
| 14  | GILL BERT NEHISM  | IBUNGILO A  | mjunuse                | 0767635358          | mas              |
| 5   | BAYA MOHAMED      | IBUNGILD'A"   | MILLIME                | 0768 C24889         | B. Mohame D.     |

3) Igogo

MUKTASTEI WA MIGHTANO WA HADHARA WA MWAUWASA ALIENDA ZA MKUIANO 1. UTAMBULISHO busuntua MKUTANO LITAMBULISHO WA MRADI Action To 1: UTAMBULISHO Murenyeldti alinatumbuhisha viorgozi mbalunbali wa wa Serikali na kammuhu Afters naforst naturdaji na tata kunatampulisha nagens kutola Mamlaka ya Majo Saf na Usafi wa Marsongera (MWAUWASA). AGENDA NA 2: KUFUNGHA MKUTAND Mwenyekiti alifungua mkutano na tuwakarthisha walaalamu kutoka Muranwasa kua gilo pa utombulisho wa madi. ACTEMON NOT B: UTAMBULISHO WA MENON Mataalama (Mhandis: na Afisa Mahusano ya Janii) walita maelezo sun ja Mradi, amtapo mrade unafahamika tama MRADI alloRAHISISHI WA MPUMO WA MA 31 TAKA. Pamoja na utambulisho huo yapralayo Elstokum ujajanuri kuhusu mradi. i. Gharama ya kungambhana mi burre 2 Mradi utafika maeneo mbalimbali ya kata ya Koco kallingana na Uhrteji na jami tavenje macreo husika. 3. Mgero vya kuungamhua Kwenye wada ni: (i) Haya Casima we no cheo bora (Kulanne na rhundrave jun (ii) there no work huduma ja maji 4. Farda Za Mradi (i) Hupungussa gharama 2a udhibito wa maji taka (ii) Husandra Kujaweka manhgire saft (iii) Itasadia utennaji wa zune voctoria ambalo ndro chemo



| Provision of Consultancy Services for Mwanza South Water Supply Project - A | Addendum No. 2 Simplified Sewar System in 10 areas |
|---|--|
|---|--|

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA ISAMILO, MARATINI, USTAMILIBOAD AND BLOCALORY.)

| S/N | Name/Jina          | IMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|--------------------|---|------------------------|---------------------|------------------|
| 1   | JOVITH . JOSEPHATH | MALULU  | MNIAD AN CHI           | 0694600495          | Faith.           |
| 2   | BASH RUKHAMY       | MALULY  | muanicifi              | 0785506727          | Saim.            |
| 3   | PUDESIANAJONS      | MALULY  | MULTATATICH            | 0683599666          | Pudensia         |
| 4   | GEROLD - Jopheter  | Mouly.  | -4-                    | 06946045 94         | Juliano.         |
| 5   | Emmanuel - LAURENT | Moruly  | RAIA                   | 0625416021          | Eamo             |
| . 6 | GODFREY - HOSEA    | трици   | Rain                   | 0763932831          | <b>B</b> .       |
| 7   | Gande chale        | Malula  | -11-11-                | 0784 244131         | Quartes          |
| 8_  | ZAKAYU SYLVESTER   | MALULU  | -11-11-                | 0752053068          | <b>₹</b> .       |
| 9   | SIMON 4. GEWE      | MALULY  | ROIA                   | 0782926177          | Blowe.           |
| 0   | PETER WANTER HE    | MMILIU  | MJUMBE                 | 0752061157          | ma               |
| 1   | MALEMI NEO         | MAZULU  | MILMBE                 | - 11 -              | Source           |
| 2   | DENGE SYLVERE      | MALINE  | MJUMBE                 | -1:                 | 10               |
| 3   | THESO SENI         | MELSI   | MJIMBE                 | -11-                | Turen            |
| +   | ZURE DA SHARAN     | MALLILL   | RAI                    | - 11-               | 28               |
|     | ZERDA RUDOVIC      | MALLILU   | RAI                    | 0683981260          | 28               |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

| S/N | Name/Jina       | LIMAHEWA, ISAMILO, MABATINI, I<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|-----------------|--|------------------------|---------------------|------------------|
| 16  | A.B. nuccesiere | W20- (WW)  | cugo                   | 07567534 13         | Aspe             |
| 17  | HAM M. KAPATA   | MALULU   | Mso                    | 9683 Rto S4C        | But              |
| 18  | JUNDAN MASAN    | 5BUGALLO   | MINETI                 | 0756725,809         | Muye             |
| 14  | JARUFU NASORAO  | MALYLU   | MWANAPCH!              | 0753934119          | Daesoro          |
| 20  | MYASO RAMADHAN  | MALULL   | MUMPAPORI              | 069510369\$         | (Piamallani      |
| 林   | FATTING JARVEN  | MALULU   | MURHAPOHI              | 0743846131          | Daryer           |
| #   | Stufas SALum    | MALULLI  | unahanchi              | 078252939\$         | Solum            |
| 29  | RAKARI FIKRINI  | MALLLE   | MUNCHANNE              | 0744490156          | -18              |
| 24  | TEKLA PERRICK   | malula   | MWAMPHICH              | 6762822699          | The              |
| 25  | JOSEPH JOHN     | MALLY  | RAIA                   |                     | Hymlan.          |
| 26  | Juma Aurit      | MAHYLY   | RMIK                   | 0765090533          | Advotacoup       |
| 24  | MARIENES KAND   | Mahohe   | MK+21                  | 0786990006          | THE S            |
| 28  | 1004 HALOGEMBE  | MALULU   | Massavery              |                     | # Jugande        |
| 29  | ASHA LUKANYA    | MAZULU   | //11-                  | 675 637 25 22       | - A              |
| 200 | MITTHE KATANDA  | MARILLA  | MKAZI                  |                     |                  |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MABATINI, USTAWI, IGOGO AND BUGARIKA)

| s/N        | Name/Jina         | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|------------|-------------------|------------------------------|------------------------|---------------------|------------------|
| 1          | L. ABBARAH        | MALYLY                       | MKHAD                  |                     |                  |
| 2          | MRS Precama       | MACULE                       | Mkaozi                 |                     | Q                |
| 7          | Monica Charles    | Malulu                       | Makeri                 |                     | Acres            |
| 4          | MESTORY           | GODFERFY                     |                        | <b>-</b>            | Mary 3           |
| 5          | SICIJEJET         |                              |                        |                     |                  |
| .6         | LAUTENT KAMANGALA | MALULU                       | MJASILIAMALI           | _                   | 000              |
| 7          | SIMONI JUMA       | MALULY                       | FUNDI                  | and a land          | 7                |
| 8          | LAURENT           | MALNLU                       | MARS'RIAMA             | 0758966240          | Store            |
| 9.         | MAGRITH           | MALMIN                       | _                      | 2750 466240         | lige             |
| 10         | SOPHIA ANDW       | malu Lu                      |                        | ~                   | SANO             |
| <b>V</b> - | NEEMA FRANSSZO    | malulu                       |                        |                     | Niel             |
| 12         | N' RAMORTAN       | mozuly                       | 4                      |                     | ->               |
| 13         | A SHILANTIRA      | Mozuly                       | -1                     |                     | -2               |
| 4          | NTINA GESUNIE     | MALULY                       | MJUMBE                 | 0766553686          | - 29             |
| 5          | Ema muc           | malwhe                       | promba                 |                     | 100              |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

| S/N | Name/Jina     | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|---------------|------------------------------|------------------------|---------------------|------------------|
| 150 | MWAVITA       | moluky                       | Munte                  |                     | -                |
| (2  | F. DAYA1      | MALULY                       | netuna                 | 0769752976          |                  |
| 18  | A. DALU       | 1/                           | 11                     |                     |                  |
| 19  | M. DANJA      | t/                           | L/                     |                     | -                |
| 20  | L. KASIMBA    | M                            | 11                     | 0753326665          |                  |
| 24  | E. MICHAEL    | 1/                           | 11                     | 0762223077          |                  |
| 22  | N. MSTARHA    | 1/                           | 11                     | 07_                 | ~2               |
| 23  | KAZIMILI      | 1/                           |                        | 0747535/52          | -2               |
| 24  | JOSEPH MATU   | //                           | 11                     | 0742550325          | Smat             |
| 25  | 1. PATRICK    | 11                           | L                      | 0789429622          | patrick          |
| 26  | MARINSWA      | 11                           | N.                     | 0456 47273          | Più              |
| 77  | REHAN         | 11                           | 11                     |                     | <b>D</b>         |
| 25  | Homas Mus     | en Malun.                    | At-                    | 0765944566          | Alexano          |
| 29  | They M. YASIN | 71                           | 11                     | 0767233400          | Malat            |
| 0   | MARIAM. JOHN  |                              |                        | 0754941150          | mJohn            |

| SURI | VEY, ESIA AND RAPID RAP FOI | R THE SIMPLIFIED SEWER SYS                                  | TEMS IN 10 AREAS (IBUNG |                     |                  |
|------|-----------------------------|---|-------------------------|---------------------|------------------|
| s/N  | Name/Jina                   | IMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa | Position/Title Wadhifa  | Contacts/Phone Simu | Signature Sahihi |
| 01   | THOMAS L MASH               | MALULU  | MIKITI                  | 6759832913          | From Inv fax 16  |
| 2    | MOSHISAID                   | MALLECO   |                         | 0959018708          | Reagn            |
| 03   | Bertha D. Fredrick          | Malulu  | Baloz/Manet             | 0856 051060         | Bampan           |
| 04   | MARYA MACHAGE               | MALULU  | MWANANCH                |                     | N.               |
| 15   | Sephen Rowansin             | -1/ -   | mpunde                  | 0753881571          | 10               |
| 06   | Peter Mosaly                | MALLY   | mumbe                   | 0765498498          | Infoces          |
| 07   | KASIM Rashid                | malulu  | mtanzania               |                     | TR.              |
| 03   | NESTORIL                    | GODFREY   |                         |                     | Mose             |
| 09   | PASIKA LI MAGANGA           | Marien  | MURAPARAH I             | -                   | Anon             |
|      | Emmanuel TOHO               | MALULU  | MERNANZHI               | 07653491449         | Total            |
| 11   | THAMANTI NASHONI            | MALULU  | HUNANANCH               | 0745184972          | THE              |
| 2    | JOSEP KEIN                  | MALULU  | MWAARE                  | -                   | J.K              |
| 13   | WEGESAMA                    | MAULL   | MKULIMA                 | 0.7 6867 6032       | 077              |
| 14   | Zainabu A. Ally             | MALULU  | Baloz                   | 06 56 05/060        | Alle             |
| -    | Materia Mozon               | taemi B"  | Maril:                  | 0752919259          | SW .             |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA. ISAMILO. MABATINI. USTAWI. IGOGO AND BUGARIKA)

| S/N | Name/Jina         | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|-------------------|------------------------------|------------------------|---------------------|------------------|
| 27  | ZAINABU AMEI      | MAZILLI                      | BALOZI                 | 0656051060          |                  |
| 28  | Botto 11 June     | Melutu                       | V                      | 0768837720          | Bun              |
| 29  | FABIAN ANDREA     | MARULU                       |                        | 0687424158          | F Andre          |
| 30  | COSTURS-TOWNE     | MALULL                       |                        | 0783008347          | Minita           |
| 3)  | FINEL ANDREA      | MALULU                       | MSUMBE                 | 0758091434          | Few!             |
| 32  | CHERRY L'SAMUNO   | morney                       | maxance11              | - 1                 | (950             |
| 33  | SELEMANT. MANYAMA | prawing                      | MKAAZI                 | 06 89 98 89 43      | Foregas          |
| 34  | Albiens !         | on ADO                       | n p =-                 | 2262596,06          | An               |
| 25  | Elizayo Leduslaus | Kwimba                       | musasiti               | 0747464778          | Amhage.          |
| 36  | ADAM MADEL        | propules                     | menompricate;          | 0767133400          | A. medili        |
| )2  | PUKIA SEREMAN     | Morney                       | purphanet!             |                     | R. Ferenial      |
| B   | TATU MUSSA        | moraces                      | menan Anchi            |                     | Townspe Townspe  |
| 33  | JODCHIM PETER     | morney                       | meranancy              |                     | J. Refor         |
| 40. | Fully JOHN        | Ingeneir                     | merawater              | 5053235257          | 75               |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sower System in 10 areas

| S/N       | Name/Jina      | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----------|----------------|------------------------------|------------------------|---------------------|------------------|
| 41        | TENSON GROWN   | promis                       | MED                    | 0682946739          | Bery             |
| 42        | LEICIA MASANJA | MANNEY                       | RAIA                   | 66986962 \$4        | L'mosava         |
| 41        | DENIS UNGELE   | MALULU                       | POLIII WATA            | 0764273052          |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                |                              |                        |                     |                  |
|           |                | in the second second second  |                        |                     |                  |
| V 2004. 3 |                |                              |                        |                     |                  |

### 4) Ilemela

|     | KI                   | OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | USTAWI, IGOGO AND BU   | GARIKA)             |                  |
|-----|----------------------|--|------------------------|---------------------|------------------|
| S/N | Name/Jina            | Institution/stakeholder Mtaa                                 | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
| 01  | Eng. MISSA MAROBI    | ILEMELA MC   | MUNICIPAL ENGIN        | EEA 0717-094812     | £                |
| 02  | Heller A. John       | HEATELA MC   | AG-MPPEO               | 0754-970939         | <b>A</b>         |
| 03  | BHUD MIDNAI          | ILEMELO MC   | HEALTH SECRETAR        | 7 0764 177108       | <b>B</b>         |
| 04  | Dump munks           | ILEMENT MC   | ENGINEER               | 0715 434559         | <b>F</b> \$      |
| 05  | GAUDENSIA VENANCE    | WEU-KIRUMBA(IMC)   | WEG KIRUMBA            | 0762837216          | Person           |
| 66- | WEDMA . 1. PALLANDYS | AGINED-KITANURI  | AG/WED-KITANGERI       | 852112715           | 1                |
| 07. | PETRO Y. JOSEPH      | ILEMELA MC   | MWMSD                  | 0744670049          | China .          |
| 8.  | BERNADETA CHARLES    | HUED IBLINGTLU WARD  | WED-IBUNGILD           | 0765945516          | OBB.             |
| 9   | ALLY HASSAN          | PASIANES WARD  | AG. WED                | 962659860           | Alasan           |
|     |                      |  |                        |                     |                  |
|     |                      |  |                        |                     |                  |
|     |                      |  |                        |                     |                  |
|     |                      |  |                        |                     |                  |
|     |                      |  |                        |                     |                  |
|     |                      |  |                        |                     |                  |

### 5) Isamilo

M: CHACHA MAKUCIERA MTAA WA MAKABUNGO C - Mradi unahitaji Maji - Uchombaji use choo s. meuri shima la choo Inakka Fupi D. Juny MATOMBO Q3 Renahusi mezarubi - Changamoto Mpumo huu wa Majitaka Ukiziba nani wa Kuzibua? 04. Macho: - Kunafaida na changamoto · Wanatakiwa Kufewa Jernina wanainch luluwu madi we Majitake Mfano Watu wanaweka panpance Inwabalisha Mfumo hii Kerziba - Mradi hau ni mauri 05. Bertha Jeremia - Mradi Umetolea Lakini Kunachangamoto ya Maji Safi hine Mradi hanvest kuns OSSamuni water - Huu mradi ni mradi biashara na si Mradi · Klanskation Mara Mbili kwamba Majitaka wanakatadi na Maji Safi Wanakata billi Huya tha Atmom Alamba apanousiwe bili 07: acorge Murkuals - How mead ni Mouri Lakini Waleto na Wazibiqji ili Mitaro Thirty Wavepo Kusa Weariba Kuzubug ag. Ronatus, Petrol Madi ni mouri - Ukienda Kumba Marianumra Kuwa Nahitaji Maji Jagi Warukataa ha Silvez Kickiantina Mais Hurani ninamandrina Mais taka.

- 09. Francis
- Mesakuu Mraleta Mada x Kujaduli na hangasema tiini Made Utaletus Mtsani
- Kutambuliuha Mad na Matarajio
- \* Museulaji amejibu Jwali Kuwa hawajaja Kutambulisha Mradi bali wamekuja Kufanya Upembuzi kwamba Masini Kura walio na Mradi wa Maji taka najo? Wanapupaika na how Mradi?
  - \* Prz kwa waszakawa na Mrzol. hun Je! wanawhitaji wa Kufungiwa Maji taka? Hiyo Kama wanataka hun Mrzol Mondeles Kusa Mtaa wa Makabungo B na Mtaa wa Makabungo ( togangios madi hus au wisipingius klasems kewa lautitra Maoni yao.
- 10 Klambura Chani
  - Lakini Wapungo Maji taka na maji sapi
- 11 Richard Kibukiza Whour Mradi uneshakuja wangekuja na Tasimini
- 10. - Mgarama Zake baada ya Kuunganishiwa ni Tish
- 13. Agocho Hun mradi ni Mkopo Maana beadae Klandai fedha
- 14. bei ya Maji safi kufunga Maji da je kua wala bayar wapo Kwenye Myumo wa Majitaka ghara pake Makuwaje.
  - Gharama Mgi Safi \* Ili wule maji lazima kuwo na line ya bimba kubwa liwelimepiti Kama damba kulwa lipo karibu gharama Itakua Mogo na kuma bimba kubwa lipo mboli gharama Inakuwa kubwa.

# MADIBU

- of Meumo us Maji Capi Utajengualini?
  Maji yamekua hayatesherezi Gehem Nanyi Manufaika wa
  Maji taka Wantakiwa Uwandelee kuunta Julia Nuji kata
  uapikia.

   Mahawasa wanaduikua takwima Kua Wananufaika wa
  Maji taka Wanapata Maji Safi
  - 02 Hakum Mawies yanayokinzana Tukifanya Mazingira yeta Kuwa Safi
  - Piga Simu no: 0800110028. Piga Bure.
  - Marionupiika wa Mradi huu no Chanzo Cha Kurababisha Kuziba Nofumo huu ni Tando ka kike Lakini Isiweshida bali Elimu Hatolewa Kwa Wanufailar na mradi Uwa Mzuri hwinchukie:
  - 25: Ili Mradi hun Uno zazuri tunatakiwa tuwe no Maji Safi Endapo wewe Upona Mradi hun wa Maji taka kwenyo Ulipaji wa bili Han Tunakata kulingana na Matumizi ya Maji Safi Endapo Umetumia Maji kwa bili ya 40000 na Mfumo wa Maji taka Watakata Nusu
- O6 Charama za kuungoniishe Maji taka na Maji taka kwa watu watuunganishiwa buru.
- 07: Mi Lazima Muanwas a wakifunga maji tako na maji safi Yawapo.

| Mwenyekih aliahisih  | Mkutano Mramo Saa 12:00<br>Kuendeta na Majukumu  |
|--|--|
| Mengint.  Mengint.  Munyekiti  m. mathias  marine marinias | Retaria John Mezun  Home  Home |
|  |  |
|  |  |

|     |                            |  |   | PREMIUM NO 2 CONDUCTIO      | SC SOCIAL        |
|-----|----------------------------|--|---|-----------------------------|------------------|
| STA | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST | EMS IN 10 AREAS (IBUNG                          | ILO, PASIANSI, KABUHORO,    | KITANGIRI,       |
|     | KII                        | LIMAHEWA, ISAMILO, MABATINI,                             | USTAWI, IGOGO AND BUG<br>Position/Title Wadhifa | GARIKA) Contacts/Phone Simu | Signature Sahihi |
| S/N | Name/Jina                  | Institution/stakeholder Mtaa                             | Position/Title wadina                           | · ·                         |                  |
| 01  | JUSEPH GENOCATUS           | NYAKABIINGO B  | Mount   | 0763787336                  | tour             |
| 02. | BHOKE WELEKAP              | N YAHABUWGO B  | MUMBE   |                             | BOKE             |
| 05. | MATHAYO C. MASHAKA         | Maria San San San San San San San San San Sa             | MWALIW  | 0755079101                  | Allemang.        |
| 04. | Mussa J. KABOJA            |  | MIKETI - MTAA                                   | 0754566748                  | July             |
| 05. | THOMAS MARWA               | NYAKABUNGO C'  | Mount   | 0789065337                  | 1000             |
| 06  | MICHIBINI ALL              | MATIONAL   | MIES MARRY                                      | 0783111137                  | Mari             |
| 7   | SAMSON J. WABARE           |  | Mumbe   | 0752343139                  | Frabare          |
| 8   | GEORGE MEANIGE             |  | MIUMBE  | 0755919428                  | Hanga.           |
| 9   | JOSEPH MARKODI             | N-CAMABUNGO .C.  | MJumbe  | 0782576227                  | Morning          |
| 10  | Juma KEYA                  | MAKABUNGO "C"  | MIKIN MTOO                                      | 0784 5545 ba                | King             |
| 1h  | SAMWEL PETER               | NYAKAGUNGO B'  | MTHMBE  | 0783192211                  | Sin              |
| 12  | SHABANI- SWALCHE           |  | MILLIMIAN                                       | 07848-1081                  | Sund             |
| 13  | ADDLIKADIRI PAGAR          |  | MIKITI MIKA                                     | 0683108228                  | Aymyarg          |
|     | MERIUS GASPER              | LARE   | MIKITI MTAA                                     | 0763182783                  | County w         |

| SUF   | EVEY ESIA AND RAPID RAP FO   | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | GARIKA)             | KITANGIRI,       |
|-------|--|--|------------------------|---------------------|------------------|
| s/N   | Name/Ilna  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
| 01    | CELLIA R MICHGIN   | ISAMANLO KASS B  | MEO                    | 0613499802          | die              |
| 02    | ZAMARU MACHUM  | MSIKITI  | MED                    | 0710302805          | the b            |
| Q3    | The state of the s | NATIONAL   | MEO                    | 0748047809          |                  |
| 04    | STELLA LALIBRANT   | HJAKABUMGIO C'   | MILIMBE                | 0751331120          | S                |
| 05    | LILIANI JOSEPH   | CASPAR   | MILMBE                 | 0784814963          | 4.3.             |
| 06    | NAMBUL MW 194  | ISANIJO RAS B'   | MUTUMBE                | 6748445947          | NEITH            |
| OJ    | WIVINA IMILY   | N-JAKABUNGO C"   | MJUMBE                 | 0768 184172         | Dinicy           |
| CE CE | RETISIA - I MAZCIEL  | NYAKABUNIGO B'   | MEO/NYAKARUMI          | C 0784755221        | Semo .           |
| 9     | SYLICHERIA KASHWA  |  | Mambe                  | B\$6-856134         | Sylicheria       |
| lo    | PROTAS PETRO   | LIMBHER BURNESO C.   | Mountso                | U758333192          | Peter.           |
| 11    | LYDIA HOKOBOED   | LAKE   | MEO                    | 0663118707          | Has.             |
| 12    | RATSON-EDGAR   | MYATEABUNGO'C  | MJUMBE                 | 0788060413          | eur.             |
| 13    | SHABAN ALLY  | MOKABUNGO C  | WILLIAM BE.            | 0754711829          | 854              |
| Sp    | ELIZHBETH GREN   | NYALLIBUNGO B  | MILLARE                | 0765422227          | BR-              |
| 15    | Juma Joske ERH   |  | mīumae                 | 0765 8013 54        | Juma .           |

| Provision of Consultancy Services for Mwanza South Water Supply Project | Addendum No. 2 Simplified Sewer System in 10 areas |
|---|--|
|   |  |

| S/N | Name/Jina          | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|--------------------|------------------------------|------------------------|---------------------|------------------|
| 1   | BHOKE ALEX         | NYAKABUNGO "B"               | MJUMBE                 | 0767515184          | B-ALTER          |
| 2   | PAULINA JOHN       | MYAKABUNGO "B"               | MJUMBE                 | 0768094746          | ppa              |
| 3   | JOYCE WAMBURA      | NOTAKABUHGO "C"              | MJOMBE                 | CT 55 50 400 2      | Toisi            |
| 4   | SAMWEL MALIBA      | NYAKABUNAD "B"               | Mounge                 | 0675818382          | SALLE            |
| 5   | FROLENCE PETER     | NYMKABUNGO "B"               | Winner                 | 0699578663          | Spell            |
| 6   | Samueli            | RYOBA                        | morono                 | 0769607145          | Sur              |
| 7   | Jums odno          |                              | 12                     | 07\$3403127         | w.A.             |
| 8   | YXLE LIA SABASI    | N-MKABUNGO C                 | Moumer                 | 0765872749          | valelia          |
| 9.  | MOSHT MARRED       | NYAKABUNGO B                 | MJUNBE                 | 0763504929          | Como             |
| 10  | TANG CHANTA        | NYAKABUNGB                   | Sauce                  | 0784-376002         | Zum              |
| 10  |                    | NYXKABURUGO C                | Exargara               | 0744465749          | G kongoda        |
| 12  |                    | NYAKABUNGOC                  | N. wester              | 0744290140          | N. NE            |
| 13  |                    | MYAKABUNGO C                 | A. MJunge              | 0765867968          | A. Jerom-        |
| 14  |                    | MYAKABUNG'OC                 | m Sum BE               |                     | apr              |
| 15  | ANPISTAZIA GABRIEL |                              | MJUMBE                 | 0883 656329         | (Mariel)         |

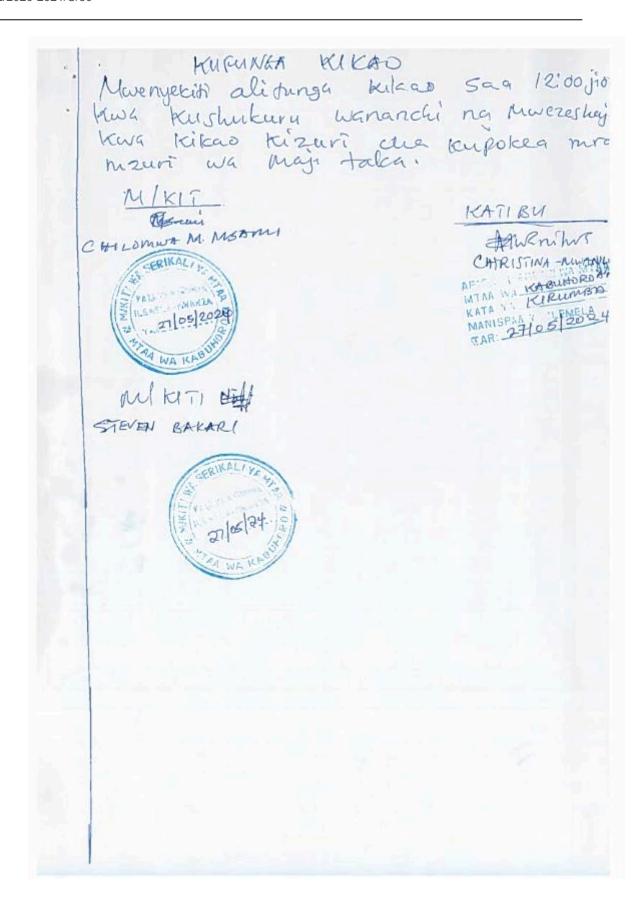
| 3WX                    | MTAA-          | KABHIFA | SIMN           | SAHIHI   |
|------------------------|----------------|---------|----------------|----------|
| Daoxofas Mwyzown       | KYACHAURO (C)  | BALOZI  | 0762383724     | Per      |
| VESTINA JOHN           | NYAKABUNGO C   | mjumbe  | 0763817663     | Yan      |
| Paulo Charles          | MYAKABUNGO C   |         | 06 \$605 \$445 | P        |
|                        | NYAICABUNGO C  | Mrampe  |                |          |
| SHIDA SUMA MATURA      | NYAKABUNGO B   | Mumbe   | 0715853717     |          |
| PARATA SAMUEL          | MYAICABUNETU C | Mumbe   | 0753266473     |          |
| JACKSON MAGANYA        | NYAKABUNGU L   | NIUMBE  | OB\$\$7732     |          |
| Joyce Park             | NYAKABUNTO B   | Mumbe   | 0682870930     |          |
| AGNES ALEX             | MAKABUNGO R    | MJUMOE  | 07\$7596919    |          |
| OLPHIA JOSIA           | NYAKABUNED C   | Mounge  | 0768626245     |          |
| AGNEZ CHACHA           | NYAKABUNGO C   | Mumbe   | 2767984640     |          |
| NCHAGWA MNIKO          | NYAKABUNGO'L'  | Mumbe   | 0753570459     | N        |
| CHAPLES MAGABE         | NYAKMBUNGO C   | m Jumbe | 0682-311857    | Edu      |
| MARIAM MARIYA MARIDADI | NYAKABUNGO C   | Mount   | 07             |          |
| MATONDO MALIMI MATIMBA | NYMLABUNGO C   |         | 0767629144     | natorila |
| ADVENTINA CLAUCET      | NTAKABUNGO C   | MJUMBE  | 0763529423     | at due   |
| ASHA EMMADHANI         | N-IAKABUNGO    |         | 0753330799     | orie     |
| TUMMINI MARRONGO       | N-INKABUNGOC   | 1       | DT 3000 12 .   | 7.5      |

| STA | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTE<br>LIMAHEWA, ISAMILO, MABATINI, U | MS IN 10 AREAS (IBUNG  | SILO, PASIANSI, KABUHORO, I | G SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|------------------------|-----------------------------|------------------------|
| s/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu         | Signature Sahihi       |
| 16. | STEWART OWESING            | NYAKABUNGO"C"  | MJUMBE                 | 254352540                   | of one may.            |
| 7   |                            | N-MAKONBUNGO (B)   | MICTINO MADO           | 0684172000                  | m. prodes              |
| 18  | LEONION LAURENT            |  | 77,300                 | 07-68 725747                | LLM                    |
| 19  |                            | NYAKABUNCTO E"   | MTUMBE                 | 0693421117                  | MARY                   |
| 26  | TEPHENO MAM                |  | 9                      | 0628560799                  | Magni                  |
| 21  | RAMECK RWENYA              | NYABUNGO C   |                        |                             |                        |
| 22  | SUZAN BAOKE                | NYABUNCO C   |                        | 0756 558205                 | SUZANA                 |
| 23  | LEONARD MAGERE             | NYAKABUNGO C   |                        | 0774 797955                 | MAGERE .               |
| 24  | ROBI SAMSON                | NYAKABUNGO C   |                        | 0765 152529                 | R                      |
| 25  | ROZI MALWA                 | NYAKABUNG: C   |                        | 0759 718186                 | Rozi                   |
| 26  | MATINDE NGULU              | NYAKABUNGO C   |                        | 0685 975153                 | MATINAE                |
| 27  | MANDIGE MWITH              |  |                        | 0714 984622                 | MANNGA                 |
| 18  | MAGESA SIONTO              | NYAKABUNGO C   |                        |                             |                        |
| 29  | Drusi suma                 | MARABUMBO C  |                        | 6763496956                  | Rankey                 |
| 30_ | CAFIFELINIMANIMA           | HYARABUMGO'B'  |                        |                             | ckm                    |

| GINA               | MTAX   | KADHIFA   | Names ya simu | SALLIHI-   |
|--------------------|--|---|---------------|------------|
| RAJABU MARESA      | MAKABUNGO C  | MINBE   | 0760648044    | The second |
| LYASEBA RYOBA      | -11-1-   | MJUMBE  |               | <b>***</b> |
| ABUPA SMD          | -(,()  | MJUNGE  | 0757849158    | A.5        |
| BERTHA JEREMIA     | NYAKABUNGOB  | Mounte  | 0759 21 26 55 | Bertus     |
| - RASIMUS METHOD   | NYAKABUNGO C   | MJUMBE  |               | E.M. rutha |
| REPHTUS PETRO      | MYAKABURGO B   | MJUMBE  | 0784243664    | RIP        |
| SCOLASTIKA GREGORY | MJAKABUNGO C   | NJUNBE  | 0762492957    | Gryley     |
| JENIFA AMLI        | NJALABUNGO C   | Minner  | 0766 424203   | Jenga      |
| ELIZABETI KAOMBWE  | NYAKABUNGO C   | MyMBE   | 0967631769    | C. taembe  |
| MAJIRA MKON CONE   | NYAKABUNGO 6   | MJUMBE  | 0755167455    | MKONGWE    |
|                    | NJAKABUNGOC  | MILLINE   | 0752752894    | SILAS      |
| QUESMO STEWART     | NYATCABLENGO E   | NoumBE  | 0710756429    | O.Stewart. |
| Erksmus Ishingoma  | Nyaleaburgo B"   | Mjumbe  | 0789 957878   | Delangs    |
| Emanuel Daniel     | Wakaburgo B'   |   | 0757 690910   | Elector:   |
| MWANAIIZI GEORGE   | The state of the s | mjumbe  | 0755 393071   | MUANANDI   |
| nerina Samueli     | -1   | Myumbe  |               |            |
| ZUHURA SHABANI     | Nyalcabungs?   | CONTRACTOR OF THE PARTY OF THE |               |            |

#### 6) Kabuhoro

MUHTANARI WA MKUTANO WA WANANCHI MTAA KABUHORO "A" NA KABUHORO "B" KA ILIRUMBA JUU TA UTEILELEZAJI WI HRADI WA MEYTIO WA MAJI TAKA. TAR 27/05/2024 ÁGENDA 2A MKUTANO 1. KYFUN GUA MKUTANO 2. UTAMBULISHO WA WAJUMBE 3. MUTAMBYLISHA MRADI 4. KUPOKEA CHANGAMOTO NA MAONI KUHLSU MRADI KUTOKA KWA WAPANCHI. 5. KUFUNGA KIKAO AGENDA DOI. MIFUNGYA MIKUTANO. Mueryekiti wa mtaa wa kabuhoro "A" aliputa naturi y a kustungua mkutano na kunskeribisha viongozi na wanand wote waliofika katika mradi. A GENDA NO 2. UTAMBULISHO. Mtendaji wa kata aliwatambulisha vertendej wote kutoka ofosi ya kat na viongozi dio imbatana nao. A GENDA NO 8. WITAMBUWSITA MRADI. Mwezeshaji kustoka katika shirika 14 seurea min Mradi wa maji taka Katiki mta Adha va gonjwa la kipindupindu Iliyokuwa inahad Kubwa na kwa hiyo Shirika kupitia banke y Dunia Ikaona ilete hum mradi ili kupungwa Magorijus ya milipuko 4. KUPDICEA CHANTAMOTO NA MAONI KUTOKA KWA MANANCHI KUHUSU MRADI WA MAJI TAKA
Mjumbe Mtaa, mbayefu ga kabuhoro Ar na B' Ina changam
to ya maeneo maeneo ga kuthimba Chod
hivyo amepongeza kuletwa kwa mradi kwenye histaa yetu utakuwa nikonbozi kwety l hivyo wenafamani uje mapenier ili kunusuri Afira XI 19 kinintsa - amepongeza kulutura Keva pirade hieu na kusema mitaa yeti Itakiwa a mepona na adha ya Magonjwa Kipindupindu, Kiagonjwa ya Kipindupindu, Kiagonjwa ya Magonjwa yatakuwa Magonjwa yatakuwa Magonjwa ya maelio pia yatakuwa yame isha keupitia mirade hiii Wajumbe wallo wergi warne pongeza San Mradi hun kuja na wznaomba uje haraka maana wanauhitaji sana. Mhe Diwani pia alipongesa mradi hum kuja kurenye mtaa, mitaa yetu ya Kabuhoro XI na Bi na akaulise je wange Waneupokea puradi wananethi woto woll My 00 che nyoosha mikono kwa kuonyesha wameuk
bali mradi na wakapiga vigeregere
vya furaha. Kwa pomoja niseme mradi
umepokelewa kwa furaha na wanench na viongozi ya mitag ya Kabuhoro x na % KUFUNGA KUKAO Mwenyekiti alitunga Kukao saa 12:00 jioni KWA KIKRO KIZUTI CHA KUMPOKRA Mradi



| SUR | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, | IG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|------------------------|--------------------------|-------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu      | Signature Sahihi        |
| ,   | CLGOPHACE MAKONGO          | KABUHORO A   | MURNANCHI              | 0687505450               | Lend                    |
| 2   | STEVEN NOIBUSA             |  | MWANANGH               | 0765310005               | Sta                     |
| 8   | LSTAMON THANKS             | 1cmsumono  | munnery                | 0746-723976              | 11Badam                 |
| 4   | HAMZA SAIDI                | KABUHOLOK  | MUANANCHI              | 0745395849               | Here                    |
| 5   | VEDASION-DAMIAN            | KABULIOLO A  | MWANTANCH!             | 0766980202               | Kerrin                  |
| 6   | BENISI JOHN                | KABUHORO A   | MUMANAMENT             | 07-5352017-7             | Jun                     |
| 7   | GEOFRE FRANSS              | 1KMBUHORTA   | MWANANCHI              | 0759027041               | 1 Phy                   |
| 8   | DAWS N TOMBEROULA          | KABUHORO A   | NWANA NCHI             | 0759 486358              | DarBon                  |
| 9.  | SHABIA CHACHA MAN          | Ke MATSUHORO A   | Mayorancy              | 0786 009490              | Sup.                    |
| 10  | WASHIDA MUSSA              | KABU HOLO . A  | BIWANTACHI             | 0755102737               | (Q=                     |
| 11  | A MIDUSHABAN,              | KABUHOLO A   | MWANTHOH!              | 9684 987552              | 200                     |
| 12  | ADELA MATAGILI             | MARNHOLO X   | MWANX NCHI             | 0785402859               | Miladopli               |
| 13  | JENESTA FKALOKOZA          | BABUHORO A   | Masananich             | 0762876414               | Thokok                  |
| 14  |                            | KABaHORO A   | MWANA NCHI             | 0768565962               | Funts                   |
| 15  | Philbert Lugaler           | ng KABILHOLO A   | MWANTANCH!             | 0767-406450              | They                    |

| STA | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE    | MS IN 10 AREAS (IBUNG  | SILO, PASIANSI, KABUHORO, I | IG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|------------------------------|------------------------|-----------------------------|-------------------------|
| 5/N | Name/Jina                  | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu         | Signature Sahihi        |
| V   | MATIKO                     | SONGA MBBLB (B)              | MEUMBE                 | 0098484579                  | Matika                  |
| 12  | JUMA JACOB                 |                              | MJUMBE                 | 0752678929                  | but.                    |
| 18  |                            | KABUHOLO (A)                 | MEUMBE                 | 0766936262                  | 5070                    |
| 19  | WASHIPH MUSSZ              |                              | ar nu-13 a             | 0755102737                  | -640                    |
| 20  | WILLIAM YAKOBO             | KABUHORO"B"                  | MJumbe                 | 0783606251                  | Hours                   |
| 20  | STEILARD E BAND            | KABUHORO B"                  |                        | 0764903676                  | Spenson                 |
| 27  | RAMADHAU I MUSS            |                              | BALOZI                 | 0757 53 8427                | Quina                   |
| 2)  | THOMAS SOSTHERES           |                              | Mount                  | 0756377416                  | Thelian .               |
| 26  | REUDENTUS NICE             |                              | Mounist                | 0678903667                  | Rysze                   |
| 25  | RACTEC HALLSED             | -11-                         | -11-                   | _                           | Relige                  |
| 26  | DOGO . V. RUCATA           | -11-                         |                        | 0768513822                  | Dukata                  |
| 27  | MELKIND MUGME              | -11- B.                      | MUMBERNER              | 0682463434                  | Agramen                 |
| 28  | TIELIUS KATILL             |                              | MUNKANCH               | B&183042                    | <b>W</b>                |
| 29  | MABARAKA JAMES             | -u -                         | -11-                   | 0784, 343.699               | Ams.                    |
| 30  | FRANK SELESTIN             | -11-                         | MWANANZCHT             | 0764361861                  | 7 gener                 |

| SUR | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>R THE SIMPLIFIED SEWER SYSTE<br>IMAHEWA, ISAMILO, MABATINI, U | MS IN 10 AREAS (IBUNG  | ILO, PASIANSI, KABUHORO, | IG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|------------------------|--------------------------|-------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu      | Signature Sahihi        |
| 3   | DOMICIAN MKAMA             | KABUHORO B   | MISIMEAR               | 0767817859               | Donte                   |
| 32  | UMI JUMA MACHELE           | KABUHORO B'  | MWANANCHI              | 0745494073               | HAWA                    |
| 33  | HAWA STIDI                 | MI KABUHOROB   | MAZANAMCHI             | 0753025195               | Hawa                    |
|     | GRACEKASABILA              | KABUHORO B   | MWAHALICHI             | 0767457591               | Operation .             |
| 35  | ZUBEDAHASAWI               | KABUHORO'B'  | MURDANCHI              | 0755 4245 65             | Z-WI                    |
| 36  | TABIAN M. MKAMA            | KABUHOROB  | MWAHANCH               | 0763\$3\$\$59            | Fm.                     |
| 37  | SAIDI LABONA               | KABUHORO B   | MUCAN AN CH            | 0653921247               | Don                     |
| 38  | DAVID SOLOMIN              | KABUITORO B'   | MWANANCHI              | 0762752972               | Date.                   |
| 39  | SILLITU JOHN               | KABUHOLO B   | MWATACH                | 0764/12219               | grif.                   |
| 40  | ALLY CEPHANA               | KABUMER E.B  | Alexandr Mage          | 0755-734643              | Juney 9                 |
| 41  | MECKTILDA MCHUL            | KABUHORO B'  | MWANANCHI              | 0742056733               | Mithula                 |
| 42  | ELIZABETH MUHUM            | 0 - //   | MWANANCHI              | 0753078174               | Muyunga                 |
| 47  | PETER MATHIAS              | KABUHURO "B"   | MWADIATUCHI            | 0762 404111              | P. Mathias              |
| 40  | IMELINA DAUDI              | KABUHORO 18"   | MHODUMO                | 0688030459               | Desidiga                |
| 45  | EVORINEMELINA              | KABUATORO B  | MUHADUMY               | 0467648532               | Eneline                 |

| SUF    | EVEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>THE SIMPLIFIED SEWER SYSTI<br>IMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | SILO, PASIANSI, KABUHORO, | KITANGIRI,       |
|--------|-----------------------------|--|------------------------|---------------------------|------------------|
| S/N    | Name/Jina                   | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahihi |
| 46     | MATIBO GWALYE               | LOABUHORO 18'  | wowse                  | 0746228735                | Buraye           |
| 42     | MARIETA ANTHONY             | KABUHERO B'  | MUNALHNCHI             | 0754256108                | malieta          |
| 48     | SHABAN WABUGA               | KABUHORO 5   | MUANTONEH              |                           |                  |
| 49     | SINOLA KASALA               | KABUHORO B.  | MWANARCHI              | 0764956587                | Stagalog.        |
| 00     | MZAKILII SAID               | KABUHORU B   | MWANAM (H)             | 0748682415                | M.S              |
| 81     | MAGNALENA MABELI            | KABUHORO B   | MWANANCHI              | 075299832                 | Sabh             |
| 52     | KMIDA JUMANNE               | WARUHORD B   | MWAD AD CHI            | 0152642564                | AJA              |
| 53     | PILI Juma                   | KABUHORO -B"   | MWANAWCH,              |                           | *                |
| Sp     | LOVENES STEPH               | ANO KABUHOLO B   | munnme                 | 10765324557               | , De             |
| 11     |                             | KABUHOLO B   | munning                | + '                       | E                |
| 56     | HAWA SUMANNE                |  | MURRARCHI              | 07\$2622150               | Home             |
| 57     | MANASC H. BAROSTA           | WABUHORD - B'  | MUMMARCHY              | 0742775001                | Alley            |
| 28     | MANASEN-BAROSTA             | KABUHORD A!  | MUTAPORO CAR           | 0765819127                | KOZ              |
| ) 1988 |                             |  |                        |                           |                  |
|        |                             |  |                        |                           |                  |

| STA | VEY, ESIA AND RAPID RAP FO | DRM FOR MWANZA SOUTH WA'<br>R THE SIMPLIFIED SEWER SYS<br>IMAHEWA, ISAMILO, MABATINI | TEMS IN 10 AREAS (IBUNG | SILO, PASIANSI, KABUHORO | NG SOCIAL<br>, KITANGIRI, |
|-----|----------------------------|--|-------------------------|--------------------------|---------------------------|
| s/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa  | Contacts/Phone Simu      | Signature Sahihi          |
| 5   | REVIEW MICHAL              | KABUHORO B   | MULTIRADA               | 0685042480               | Rusema                    |
| 0   | ADVENTING SELEMAN          | KABUHORO B   | ly .                    | 0763503764               | Scheman'                  |
|     | ROBERT KAZAKI              | RABUHORO 181   | 21                      | 67533378645              | e. Kalaki                 |
| -   | RAFAEL SATA                | KABUHORO B   | 1/                      | 0784026511               | R. Sala                   |
| 63  | DAMIAN LAULENCE            | KABUHORO (B)   | 1)                      | 6784116050               | D. laulena                |
|     | CHARLES ANTION             | KABUHORO B'  | MURHURCHI               | 0787331660               | carbony                   |
| 68  | MKAMA MINIA                | KABUHORO "B"   | 11                      | 0789065552               | Muse                      |
| 66  | GEOFFRES MUSTUR            | m KABUILO B  | 71                      | 0768944088               | Angs                      |
| 67  | MODESTACOSTHISTIAN         | KABUHOLO B   | 11                      | 0758402827               | moscasa                   |
| 68  | WINIFRAMA AUGUSTE          | KABUHORO B   | l(                      | 0764 171 806             | W.A                       |
| 69  | JOSEPH-MAKENGOAD           | KABUHORD B   | Ч                       | 0786013984               | Hark.                     |
| 90  | AMOS BONIPHACE             | KABUHORO B   | -11-                    | 0769747361               | 113                       |
| 71  | AGNES B. RUTHINGO          | KATSUHORO B.   | -11-                    | 0766474253               | A Bonghaz:                |
| 72  | ISMAILI ABDAR              | RABUHORO B   | -11                     | 0658977489               | Prodi                     |
| De  | FAUSTIN GARRIE             | KABUHORO - B   | -11 -                   | 0764355708               | April                     |

| SUF | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>R THE SIMPLIFIED SEWER SYST<br>IMAHEWA, ISAMILO, MABATINI, | TEMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, I | G SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|-------------------------|----------------------------|------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtsa   | Position/Title Wadhifa  | Contacts/Phone Simu        | Signature Sahihi       |
| 96  | FRIDA DAYLA                | KABOLHOLO B.   | MUNANHEHI               | 0767-410604                | FRIDE                  |
| 75  | TOHN mkumba                |  | MUHMANCH                | 0754240892                 | TOHN                   |
| 76  | MELESIANA PAUL             | KABUHOLO "B"   | MURPANCHI               | 0699519260                 | M. Paul                |
| 77  | MSAFIRI-MHENDA             | KABUHOLO B"  | MWANTANIC H 1           | 0747622707                 | M. Mahendeka           |
| 1   | KHASSANI- YUNUSI           | KABUHOZO B   | MYANAMICHI              | 0753350687                 | X- Yunusi              |
| PA  | BELIA - MATATA             | KABUHOLO B   | MYANIANICHI             | 0784559496                 | B. Matata              |
| 0   | Ren John                   | Kabuholo B   | MWANIANICH!             | 0759234213                 | R. John                |
| VI  | LOZI MWang                 | Kabuhoro B   | mulanand                | 0712709026                 | L021                   |
| 82  | PHRISTINA BONIPHE          | KABUHORO-B   | MUMAACH                 | 0758955228                 | CM                     |
| 42  | MONIKA KIBATI              | KABUHORD - B   | MULAN AN CHT            | 07\$5050473                | M-Kersi                |
| 840 | ALATHITA HABIBU            | WABUHORO-B-  | MURDAPCH                | 0764106393                 | Nadhto                 |
| 85  | ZAWAS, ASDAR               | KABUHORU B   | MWANZA                  | 0747792961                 | N                      |
| 86  | NEEMAGNANO                 | ELI KARLIKORO B  | MWANZA                  |                            | NEMANUEL               |
| 8   | SILLORA KABASA             | KABUHORO B   | MUMPANCH                | 0769741564                 | er                     |
| 80  | MARIA NGALIZI              | screentors B   | MUAD AW CH.             |                            | male                   |

| SUR | VEV ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTE<br>LIMAHEWA, ISAMILO, MABATINI, L | MS IN 10 AREAS (IBUNG  | ILO, PASIANSI, KABUHORO, P | G SOCIAL<br>KITANGIRI,                 |
|-----|---------------------------|--|------------------------|----------------------------|--|
| S/N | Name/Jina                 | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu        | Signature Sahlhi                       |
| 01  | WESSA JUMA                | KABOHORO AGB   | MH DIWANI              | 0453376899                 | - Han                                  |
| ~   |                           | WE- WEAMBALIMC   | WE- WRUMBA             | 0762837210                 | Services .                             |
|     | LANBANG PETER             | KABUHOTO   | H/mwenter songomes     | E 075468480                | attend !                               |
| 04  |                           | KAROHORO B   | MIKITI MINA            | 0754826916                 | ************************************** |
| 05  | RICHARD C: MUNTO          |  | MIKELTAWI OCA          |                            | Almyenda                               |
|     |                           | MIKITI RABUHOROA   | MIKITI KABUR           |                            | 0                                      |
| 01  | Lucion Person             | 1 FO - KIRUMBA   | 1 Fo - Kulumaa         | 5769059424                 | <b>DE</b>                              |
| 8.0 | Adelina J. Botholones     | Riyungi  | Mes                    | 0756354230                 | ·                                      |
|     | REVOCATUS C. MABARI       | MEDMANI B  | Meo                    | 0787958190                 | The Son                                |
| 10  | Natach Frank              | KIRUMBA WHED   | CDO                    | 0684 429436                | # Jafferman                            |
| 11  | Federick Gilbert          |  | MED                    | 0763923305                 | MINIMA                                 |
| 12. | Veronica Massaure         |  |                        |                            | AMassaw.                               |
| 13  | CHILDHWA MSARII           |  |                        | 0756045804                 | Mani                                   |
|     | ASIFA AHMADA              |  |                        | 0788686400                 | Alandy                                 |
| 15  | CHOITEIN HE FE ALL HOUSE  | & KABUKTORO XYNAB  |                        | 068870797909               |  |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA. ISAMILO. MABATINI. USTAWI. IGOGO AND BUGARIKA)

| S/N | Name/Jina            | IMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone 5lmu | Signature Sahihi |
|-----|----------------------|--|------------------------|---------------------|------------------|
| ŀ   | KILSON MAKEM         | KABUHORO NO  | Moundo                 | 0785-609080         | form             |
| 3.  | RAJABU THAS ALLUS    | The state of the s | Mounta                 | 0764565054          | les              |
| 3.  | 18RAHIM AMASA        |  | Munki                  | 0748-73417          | 16hdi            |
| 9.  | ASKARA AHAMATA       | KABOXORU   | MSUMBO                 | A8686400            | Made             |
| 5.  | DOUS TOBOLA          | - K  | MJOMBO                 | 0757498224          | Tonu             |
| 6.  | HUSHA ABBUKHRIM      | KATSOHOORS   | Wrimsa                 | 0269782513          | H De             |
| ч.  | Astra Xsipusisi      | KABAHTER   | Mumbe                  |                     | Dre'             |
| 8.  | MERIA GALIZA         | KABUTERO A   | Munuse                 |                     |                  |
| 9   | SI CLOTHAS TIMA JURA |  | -1-                    |                     | -                |
| 0   | Suguru Hamza         | KARUHORC A   | MJumbe                 |                     | Samo             |
| 1   | BURMBING JOTT        | KABUHORO AC  | MJumbe                 | 0787702222          |                  |
| 2   | FATURE June          | KABUHORO B.  | Moumbe                 | 0783571012          |                  |
| 3   | KARUHAL SAIN         | KABUHORO A   | m Jumbe                |                     |                  |
| 4   | SIKOLA KASALA        | KABUHORO B.  | MJUMBE                 | 0764956587          | Basala.          |
| 5   | MARIAM MZAKILI       | KABUHORO A   | MJUMBE                 | 074868.2415         |                  |

|      | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | TEMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, |                  |
|------|----------------------------|--|-------------------------|--------------------------|------------------|
| 5/88 | Name/Jina                  | Institution/stakeholder Mtsa   | Position/Title Wadhifa  | Contacts/Phone Simu      | Signature Sahihi |
| 16   | DUNIA BONIPHAGE            | KABUHORO B   | MWANANCH                | 0767965677               | de               |
| 12   | WENGTH SEBASIIAN           | KABUHORO B   | MWADLANCHY              | 0765679891               | SEBASTIN         |
| 18   | BERTHA-MAGERO              | KABUHORO-B   | MW AND ANCHO            | 076515650\$              | B. M             |
| 7    | MERY MUSUSA                | 4111   | -11-                    | 0782746721               | he mususas       |
| 20   | AHMEDI OMARI               | -11- B   | MUMANIA MCHI            | 0754526885               | A. omaei         |
| 29   | MATHAS CHAPA               | -11 - B  | MWANANCETT              | 0753479500               | Whaper -         |
| 27   | LETISIA MTALURA            | a 11 -11 B   | MWAND HOLE              | 0784 121662              | Kutakubya        |
| 27   | MBATHILU SACHE             | 11 - 11 3.   | mwanandu                | 0684849361               | M. Sadiki        |
| 26   | SiTela-Mataig              | 11 - 71 - 13.  | musanaudu               | 078-605714               | Siela            |
| y    | KiMAZYA MSOZOLO            | 11 - 11 B  | MURMOLARI               | 0765145408               | Sica-            |
| 26   | MAYENGIERAMAR              | 11 B   | DICO HABICH             | 0762009936               | Secre            |
| 72   | SITIVIHI AMIS              | 11 B.  | Mwana netti             | 0758 708972              | SHIMM            |
| 28   | ALSHA KINARO               | 71 A   | Mw.                     | 0753573990               | Alinaba          |
| 28,  | AISHA ABDALLAN             | B  | MUSHAHCHI               | 0752498226               | Ashabani         |
| 70   | MASUMBUKO KABATAKE         |  | MWANANEHL               | 0742088305               | MASumbuko        |

|     |                    | LIMAHEWA, ISAMILO, MABATINI,                       |                                 | GILO, PASIANSI, KABUHORO,<br>GARIKA)   | NG SOCIAL<br>KITANGIRI, |
|-----|--------------------|--|---------------------------------|--|-------------------------|
| S/N | Name/Jina          | Institution/stakeholder Mtaa                       | Position/Title Wadhifa          | Contacts/Phone Simu                    | Signature Sahihi        |
| 3)  | AISHA ABDALLAH     | KARUHORO A   | MWAHANCH!                       | 0752 498226                            | A stope                 |
| 32  | ASITERNA MAKON     | ORO KABCOHORDA                                     | MULANA CHY                      | -                                      | ASTITULA                |
| 3>  | BAHATI NINKO       | KABUHORO A   | MOURNIA NICHI                   | 0746861906                             | Ba                      |
| 30  | MARIAM IBRAHIM     | KABUHURO A   | MINIMUMNICHI                    | 0766698952                             | M. IBRAHIM              |
| 35  | KGA MUSCA          | KABUHORO A   | aumanhott                       | 0162992435                             | 1. Kluss                |
| X   | DOGES JACOBO       | KNBUHORO A   | MUSTARACH                       | 0757636064                             | M. Jacobs               |
| 37  | ABIJA ACEX         | KABUHOLO A   | MWANANCHI                       |  | Alexa                   |
| 38  | LOVENES STEPH      | NO KABUHOLD B                                      | muunchi                         | 0768324557                             | D                       |
| 35  |                    | WILLA KABUHORE A                                   | MULANLANCH.                     |  | RABe So                 |
| 40  | MAGHINGIONHASS     | HUS 12 ABULTOLO D                                  |                                 | 0756973524                             |                         |
| 41  | Johan Ramadhan     |  | mwananchi                       | 0784411595                             | J.R                     |
| 4   | COSTA NISIA GWANNE | a Kabutopo A                                       | Mwananchi                       | 0765605639 <                           | Goldon                  |
|     |                    |  |                                 | ·                                      |                         |
|     |                    |  |                                 |  |                         |
| 40  | WASHINGTON HASS    | LULLA KABUHORO A-<br>HUND HABUHOLO B<br>KABUHOLO A | MULANLANCH. RAY 26 21 MWANANCHI | 0758952548<br>0756973524<br>0784411595 | J-R                     |

|     | KIL                | R THE SIMPLIFIED SEWER SYST<br>IMAHEWA, ISAMILO, MABATINI, | USTAWI, IGOGO AND BU   | GARIKA)             |                  |
|-----|--------------------|--|------------------------|---------------------|------------------|
| 5/N | Name/Jina          | Institution/stakeholder Mtaa                               | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
| 9   | STARFORD A. KAKA   | LA KABUHORO'A.   |                        |                     | Auto             |
| 44  | MAHMOUS A. KANZO   | e KABUHORO"""  | Maranachi              | 0784214114          | Ago V.           |
| 45  | HAMADO HAMADA      | FARYHORO A   | Musmaneli'             | 0742663552          | 1404             |
| 46  | MAJURE ERES        | 1 Cabutoes   | nuranana               | 575672820           | 1                |
| 47  | SULEMAN! N. WEREHA | 41 -   | hwarmen                | 0788811286          | when             |
| 48  | Vuloux packs       | +t/ .  | -11:                   |                     |                  |
| 4   | ALPHONCI           | mukan(a Ro   |                        | 0753267144          | Accept           |
| N   | DAH SAM IND SUHOT  |  | MNANANCHI              | 0749616136          | y                |
|     |                    |  |                        |                     |                  |
|     |                    |  |                        |                     |                  |
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Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MABATINI, USTAWI, IGOGO AND BUGARIKA)

|                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa   | Contacts/Phone Simu  | Signature Sahihi  |
|------------------|--|--|--|---|
| JOHN G. BUNLIYA  | KABUHORO B.  | JAKULI MA  | 0762-720381  | Comis   |
| STANISMUS RObert | trabultodes 13   | Menling  |  | Stre  |
| SHAMBAZi-Stanson | realulono B  | Michael  | 0757472757   | guage.  |
| ELUCAS MBOYOGO   |  | MUMBE  | 0694200205   | L. MBoyo Oso  |
| JOSEPH MAKONS    | to KABUHORO B  | -11-   | 0786013984   | Hank.   |
|                  |  | MUMBROCH   | 07536475\$3  | P.L   |
| HAMEDI ATHUMAN   | KABUHOPOB'   | MURDROCH   | 0677600653   | Moto  |
|                  |  |  |  |   |
|                  |  |  | -  |   |
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|                  |  |  |  |   |
|                  | STANISLUS REBUT<br>SHANDAZI STANISLA<br>ELUCAS MBOYOGO<br>TOSEPH WAKONG<br>PILI BONIPHAS | STANISMUS Rebat 1 KABUHORO B<br>SHANBARI STANDA REALUTORO B<br>ELUCAS MBOYOGO KABUHORO B<br>TOSEPH WAKONGKO KABUHORO B | STANISMUS ROBERT INABULTOR B MENLING SHAMBARI SANISM RENEWOOD B MENLIN ELLICAS MBOYODO KABUHTORO B MJUMBE TOSEPH WAKONGKO KABUHTORO B MUMBERS CHI PILI BONT PTOS KABUHTORO B MUMBERS CHI | STANISCUS ROBOT TRATSCHOOLS B MEMBER 075\$472757 SHAMBARI STANDED REALLOND B MEMBER 0757472757 ENLUCAS MBOYOGO KABUHORO B MUMBER 0694200205 TOSCEPH MAKONGKO KABUHORO B -11- 0786013984 PILI BONIPTOS KABUHORO B MUMBANCH 07536475\$3 |

| SUF<br>S/N | RVEY, ESIA AND RAPID RAP FO | OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa   | TEMS IN 10 AREAS (IBUN |             | KITANGIRI,  |
|------------|-----------------------------|--|------------------------|-------------|-------------|
| 1          | NLIL CYADAJA BAULD          | KABUHORO 'A'   | MJHMBE                 | 0756354612  | ALIETYAGAGE |
| 2          | DORCHS F. KASIMBA           |  | -II                    | 0620752515  | A           |
| 7          | MINAMINI MNYAGA             |  |                        | 0784516402  | -           |
| 7,5        | LETISIAPELEKA               |  |                        | 0744 491434 | L.P         |
| 5          | POTUNATA FAUSITIA           | The state of the s |                        | 0753710149  | Head        |
| 6          |                             | KABUHURU A   |                        | 0755326004  | HUSSEMI     |
| 7          | HUSEIN HAMIS KINDA          | MA KABUHORO A  |                        | -11 -       | HUSSEIN     |
| 8          | MARIEN FALSILN              | LABUHUKU A   |                        | 0755808153  | MARIEN      |
| 9          | Sesilia                     | KABUHORO A   |                        | 0753734870  |             |
| 16         | SABIKI-KALOKOLA             | KABULTORD A  | Mambe                  | 0756772010  | 300         |
| 11         | SELLANA. PAULO              | KABU HORD A  | MJUMBE                 | 0683527450  | Au          |
|            |                             |  |                        |             |             |
|            |                             |  |                        |             |             |

|            | RVEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, I | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, K |                  |
|------------|-----------------------------|--|------------------------|----------------------------|------------------|
| S/N        | Name/Jina                   | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu        | Signature Sahihi |
| n          | STEPHEN M. KAMOS            | KABUHORO B"  | MUGASIANCH             | 0743275290                 | Sont             |
| 14         | SPECIOZA PASCHALI           | KABUHOBO B   | MASANSANS HI           | 0744959334                 | 500              |
| 15         | CHRISTOPHERI                | MBOYA KABUHORD   | & MJUMBE               | 0764774083                 | CIT. M           |
| 16         | NEEMA SEBAST                | IANI KABUHORO'B'   | MWANANCHI              | 0757320702                 | N. S.            |
| 12         | JUMAN NE SELE               | MMI KABUHOROB  | MWANANCHI              | 0753331380                 | I. S.            |
| V          | HEPINES PAULD               | KABUHORO"B"  | mwananchi              | 075960945                  | 1 H.P.           |
|            |                             |  |                        |                            |                  |
| <u>.</u> . |                             |  |                        |                            |                  |
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|     | RVEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO, |                  |
|-----|-----------------------------|--|------------------------|--------------------------|------------------|
| S/N | Name/Jina                   | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu      | Signature Sahihi |
| - 1 | SENUI JOHN                  | KABUHORAY  | MJUMBE                 | 0753520177               | Alex .           |
| 4   | PISONO LIAMANA              | KABUHOROA  | MUMBE                  | 0753645999               | ALCOHA .         |
| 3   | CLTOPINA CE BIHMO           | LABUHORO A.  | Noumbe                 | 0768850583               | Day.             |
| U   | MICHAEL WIMBI               | RABUHOROL.   | MJU MBE                | 0768 747269              | flerigh          |
| D   | SAULO N. PHILLIPS           | ICABY HORO A   | myumse                 | 0754-057315              | SALji            |
| 6   | DENIS Z. BALUKINA           | KABUHORO A   | Mumbe                  | 0756293014               | Dyogon           |
| 7   | AHMAD SAZO                  | KABUHORO   | -u-                    | 0789 456567              | A. Mallohi       |
| 8   | ISSA H. MSITA               | KABUHORD   | -11-11                 | 0753-33637               | Stomp            |
| 9   | STEPHEN M. KAMOGO           | KARNHORO B   | -16-                   | 6743 275290              | Amis             |
| 10  | ANTONIA PAULO               | KABUHORO A   | -11-                   | 0786914000               | Apaulo           |
| 11  | WINGRIDA · CHARLES          | KABUHURO A   | -11-                   | 0758-252762              | w. chal          |
| 12  | LEOCADIA DAGID              | KABIHORO A   | _ \ \ -                | 0753965513               | 2. Land          |
| 13  | ROBERI LAWREN               | KABUORO A  |                        | 0755882399               | Blu              |
| 14  | MOELA MOACIABULA            | KABWHORD A   | - 11 -                 | 0769194178               | Btr.             |
| 15  | REBEKAKSTATIN               |  | -11-                   |                          | R.               |

| SUF | AKEHOLDER CONSULTATON FOR | ORM FOR MWANZA SOUTH WAT<br>R THE SIMPLIFIED SEWER SYST<br>MAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUN  | GILO, PASIANSI, KABUHORO. | NG SOCIAL<br>KITANGIRI, |
|-----|---------------------------|---|------------------------|---------------------------|-------------------------|
| S/N | Name/Jina                 | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahih         |
| 15  | ADIVELA RICHAD            | KABUHORO A  | Manube                 | 0742665487                | ADILECA                 |
| 12  | IMERDA BONIFACE           | VABUHURO A  | NTUMBE                 | 0628107836                | Imelda                  |
| Ir  | SELIMIA JOSEPH            | KABUHORD A  | MUMBE                  | 0752068142                | A                       |
| 17  | REMITEDI JOSEPH           | KABILHORO A   | MUMBE                  | 8686378086                | R.M.                    |
| 20  | RAMASHANI                 | KARYHOROA   | Munisa                 | 0763838887                | popular                 |
| 24  | PETER MIRKAL              | KABUHORO A  | mumbe                  | 0752112958                | Regus                   |
| 22  | RICHARD SALAN             | * KARUHOLO A  | Monung                 | 0683808083                | do                      |
| 2)  | LEKADI A PAG              |   | MAUNEF                 | 0692133204                | de                      |
| 20  | STURAT-FIBELS             | KABUHORS  | arrum86                | 0768565962                | Store                   |
| 70  | KESSY -U MORNELL          | KARUHDRO  | Manuse                 | 5765 492483.              | 1 Geole                 |
| 26  | ALISTIDET - GERVA         | KABUHORO  | moumos                 |                           | A                       |
| 和   | EXPERANSIA - BISEKO       | KABUHORO  | MJUMBE                 | 07-55106354               | <b>B</b> 1              |
| 28  | HARUNA H BASHIKW          | KABUHORO  |                        | 077-2263390               | HBash.                  |
| N   | HUSSEIN H BASHIKA         | KABUHORO  | -                      | 0675 328 604              | Heen                    |
|     |                           |   |                        |                           |                         |

|  | Provision of Consultancy | Services for Mwanza South Water Supply Project | - Addendum No. 2 Simplified Sewer System in 10 areas |
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| S/N | Name/Jina          | IMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone 5lmu | Signature Sahihi |
|-----|--------------------|---|------------------------|---------------------|------------------|
| 80  | HUSSEIN BRAHM      | KABUHORO  | NATUMBE                | 0758497802          | JUSTINI          |
| 3/  | HYAMITONDO MARLE   | KABUHORO  | MTUMBE                 | 0755643816          | Na m             |
| 71  | FAUDHIA JUMA       | KABUHORO  | MUMBE                  | 0882836062          | B. M.            |
| 71  | BIRUMONAFUL        | KABURO  | MJUMBE                 |                     |                  |
| 34  | ISIMILATA ANDREA   | KABUHORO A  | MJUMBE                 | 0753864506          | Dandreg          |
| 75  | FRUZA BENARDO      | KABUHORO A  | MJUMBE                 | 0763317169          | f b              |
| 3   | JAWADU HABIRU      | KABUHORO 4  | Munec                  | 07-48029343         | <b>54</b>        |
| 37  | TUMAINI MUSSA      | KABUHORO A  | MJuna Be               |                     |                  |
|     | Kasimu Rashibi     | KABUHORO A  | MJUMBE                 |                     |                  |
| 19  | ASELLA PHILBER     | KABUHTORD A   | Mumbe                  | 0763 004635         | allbert.         |
|     | SIGLA PERO         | KABUHORD A  | moumbe                 |                     |                  |
| 4   | MOSES JA1080       | 1 CABUHORD X  | moumbe                 | 0753 525233         | moses            |
| 42  | SWITIBGET MUTICION | KABHADRO A  | noumbe                 |                     | 31.              |
| 41  | Shalo ani mul      | KAPALLETONO L   | - N -                  | D7:63 46185T        | Harmer           |
| 45  | Specioza Sousty    |   | Msunbe                 | 0754769299          | Shies            |
|     | CURESI. Ladistas   | ICABUHORO A   | Mumbe                  | 0756-307331         | ares             |

#### Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (BBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| S/N | Name/Jina             | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Slmu | Signature Sahihi |
|-----|-----------------------|------------------------------|------------------------|---------------------|------------------|
| 41  | JOSHUA S- MSHUA       | KABUHORO A                   | MWHNH NEHT - WINNE     | 0784 526 549        | 7:5              |
| 96  | STEWARD S. MAGONDE    | a KABUHORO N                 | Ezmulw                 | 0622046024          | 5.5              |
| 99  | HADIALKA F. KASHIAKAT | A WABUILORD A                | Maumise                | 0784354003          | Bes.             |
| 98  | DAWSO N ICHULANGU     |                              | MJUMBE                 | 0757 4863 58        | Busan.           |
| 49  | TOFURE FULACS         | KABUHORO A                   | MUMBE                  | 0759 027041         | town.            |
| 80  | MATEO                 | KABUHORO A                   | mTumbe                 | 783799873           | Kuf,             |
| 87  | RAMAZEUNI'            | (KPBUHORDA                   | MJUNDE                 | 076383588           |                  |
| 52  | DAMAS MJUNI           | KABUHORO (A)                 | MJUMBE                 | 0767669722          | Dams             |
| 53  | 140 DOL 0             | KASWHORD A                   | MIWMBE                 | 0757 \$13457        | حصر              |
| 34  | FAMOUD XAXOMILE       | KARNHORO A                   | MINNBE                 | 0755 71 2206        | -m               |
| 0   | KESI MATWELE          | KARUHORO A                   | WIMMET                 | 0765 4924\$3        | Joseph           |
| 1   | SOUDI ROSINDI         | KABUMORO A                   | Musungelly             | 0756-485551         | Alle             |
| 52  | ZAWADI JULIAS         | RABUHORO A                   | MJUMRE                 | 07693 98 98 45      | 8                |
| 58  | CHRISTOPHER DA        | WEL KABUHORD A               | MUMBE                  | 0755335138          | Bkryiha          |
| 8   | BASHIKWAHUSEY         |                              | MYMBE                  | 0693245424          | Bleshild         |

| -   | AKEHOLDER CONSULTATON F<br>RVEY, ESIA AND RAPID RAP FO<br>KI | ORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | ER SUPPLY PROJECT -<br>EMS IN 10 AREAS (IBUN | ADDENDUM NO. 2 CONDUCTI<br>GILO, PASIANSI, KABUHORO. | NG SOCIAL<br>KITANGIRI   |
|-----|--|--|--|--|--|
| S/N | Name/Jina  | IMAHEWA, ISAMILO, MABATINI,<br>Institution/stakeholder Mtaa                              | Position/Title Wadhifa                       | JGARIKA) Contacts/Phone Simu                         | Signature Sahihi   |
| 60  | AGNES KARENGA  |  | MJUMBE                                       | 0684827164   |  |
| 6)  | FATUMA DOBATI  | KABUHORD A   | MJUMBE                                       | 0767164859   | Makengala  |
| 61  | A NO RHA BAGWELD   | KABUHORO A   | MUMBE  | 0678783457   | t-hobert   |
| 43  | SITNINI MWARD  | CABUHORO A   | Withree                                      |  |  |
| 64  | 2 AWAST ABSELL   | KABUHORO A   | MUUMBE                                       |  | SM   |
| 65  | NYLITIN OBNOTINAPI   | MYL VEBULLOZOA   | MULMBE                                       | - 01   |  |
| 14  | SITELA PETRO   | KABU HOLD A  | MUMBE  | 0750915817   | NT   |
| 61  | MERY KOMBA   | KABUHORO A   |  | 07 55 69 39 34                                       | The state of the s |
| 48  | NAZIFA ABIBU   | KABUHORD A   | NZIUMB                                       | 101  | MK   |
| 61  | ANJERINA SWAKAL  | * BABULANA A   | NLUMBE                                       |  | NA   |
| 20  | JACKSONI MALULA  | KARSUGORA A  | MRIMBE                                       | 078454920  |  |
|     | WINIFEIDA CHAL   | ES 17 de 12 certa para a   | MICHAE                                       | 6759 969627  | JM   |
| 72  | ANTONIA PAULO  | VABU HOOSA   | MINME  | 0758262762   | W. Claro   |
| 3-1 | SOPHAKADULI  | KABUGOLO   | MUMBE  | 0786.914000  | AP   |
|     |  | W. SUGOLD  | WINNE  | 075057588  | S.K  |
|     |  |  | V 50   | 0730973600   | 2.1  |

| SU  | AKEHOLDER CONSULTATON FOR<br>RVEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTI<br>R THE SIMPLIFIED SEWER<br>IMAHEWA, ISAMILO, MAB | SYSTEMS IN 10 AF | EAS (IBUNGILO, PASIANSI, K.  | CONDUCTING SOCIAL<br>ABUHORO, KITANGIRI, |
|-----|--|---|------------------|--|--|
| S/N | Name/Jina  | Institution/stakeholder M   |                  |  | mu Signature Sahihi                      |
| 74  | TRUPHINA ANTONY  | WABUHOLO  | K FRANT          | Noumbe 075786  | 9628 T                                   |
| 95  | ASMY - RAMADAM   | 11 —  | A myun           | 20000000   |  |
| 76  | MATHEO, MARGARILA  | -11-  | A. M.            | The second secon |  |
| 30  | MANYAM ABBALLA   | 11  | a m-             | 07552897   | 91 M.A.                                  |
| 28  | 40 I CE MASHAKA  | H -   | k m_             | - 67562436   |  |
| 79  | Shinji Sclemani  | 11  | Am-              |  | 1  |
| 80  | INDL8 - KASORY   | 11-   | + Wum            |  | On II                                    |
| 87  | REGION NUM   | 11 1  | ni-              | 07691577   |  |
| 82  | HUSNA ABDUKERUM  | 1-1-1   | t moun           | BA 07697520  | ors the                                  |
| 81  | KATEGESHO MWAMET   | 11  | Am               | 6757677  | 978 K.T                                  |
| 64  | MADIATI ZMD  | 111   | A un             | - 67577298   |  |
| 13  | # CHA. SPILM   | ٠   | A                | 07480317   | 61 1                                     |
| 876 | MILEMBEZER   | ITVIA   | A                | 04868  |  |
| 1   | RISUCCATIN FOXUA   | 607 · (   | 9 -              | - 0V423H7  |  |
|     |  |   |                  |  |  |

| SUR | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WAT!<br>OR THE SIMPLIFIED SEWER SYST!<br>IMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | ILO, PASIANSI, KABUHORO.   | NG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|---|------------------------|--|-------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu  | Signature Sahih         |
| 31  | REMGIUSISALISA             | HABUHELS (A)  | MURNANCH               | 0768129710   | -wu                     |
| 32  | ANTHONY                    | GRATIAN   | MUTHNAHOH              | THE RESERVE OF THE PARTY OF THE | -AXIL                   |
| 33  | FRANK MAKAMBI              | KABUHOLO(A)   | MMANANCHI              | 0768-368894  | Anakangs                |
| 34  | SINDA KASIM                | KABUHORO (A)  | MUSANANCE              |  | The                     |
| 35  | SOSTHOWER                  | KABUHORO(A)   | MWAWZH                 |  | French                  |
| 36  | SOFIA MASIS                |   | MWANZA                 |  |                         |
| 37  | Thuam Mussa                | KABUHORO (4)  | MWAN 20                | 0742044041   | AUXOC                   |
| 38  | PAULO VEDASTO              | KABUHOPO (A)  | MWANZA                 | 078821523  | Aradon.                 |
| 39  | TTEPHANO                   | MABUHOLO  | MWNN 20                | 0782848751   |                         |
|     |                            |   |                        |  |                         |
|     |                            |   |                        |  |                         |
|     |                            |   |                        |  |                         |
|     |                            |   |                        |  |                         |
|     |                            |   |                        |  |                         |
|     |                            |   |                        |  |                         |

|     | RVEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WAT<br>OR THE SIMPLIFIED SEWER SYST<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUNG | SILO, PASIANSI, KABUHORO, |                  |
|-----|-----------------------------|---|------------------------|---------------------------|------------------|
| S/N | Name/Jina                   | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahihi |
| 16  | MARKO KILOMOTO              | KAbuholo (4)  | Musangreh              | 0743889503                | AUZ              |
| 17  |                             | KABUHOLO (A)  | MKITUMT                | 0762256515                | Rock             |
| 18. | BAHATI SI KUYI              | KABUHOLO A  | BALOZI                 | 0683539155                | Barnel.          |
| 19  | ABBALLH - SHABANI           | KABUHOLOA   | MKIANANCH.             | 0762375517                | AB               |
| 20  | AISHAKINABO                 | KABUHOLOA   | MWANANCH.              | 075-35-73990              | Alaba.           |
| 21  | ANA - KABURA                | KABU HOLO-A   | MUANANCH               | 0747428963                | AN               |
| 28  | HAMIS, BABILE               | KABUHOLO.A  | MYANANCH,              | 0754.089131               | an               |
| 23  | MARIXAM ONAR                | KABUHO LO-A   | MWANANCH               | 0754.400620               | mo               |
| 217 | MWAIDIAIDI TUMA             | KABUHOLO-A  | muzuranchi             | 0755167253                | MJ               |
| 25  | marko matas                 | KARCHOLO-A  | MONDANCH               | 0755652736                | Smy              |
| 25  |                             | ASI KABUHORO A  | MUBEMBE                | 075544488                 |                  |
| 27  | SEPHIA EMIR                 |   |                        | 075577817                 | Dany             |
| 28  |                             | AND KABLEHOLD A   | muennet                | 0765324557                | A.               |
| 29  | ANUSIA HA K                 | ombot KABUHDAD  | munnaned               | 07-12-189557              | DE .             |
| 36  | masymbu Kasarare            | KABUKTORO   | mwareh                 | 6742088305                | macumbuto        |

# 7) Kitangiri

MIAA WA MEDICAL RESEARCH, KILELENI NA
KITONGIRI KOTI JUU YA DIEKELEZWAJI WA
MRADI WA MEDIMO WA MATI TAKA. TAR 27/6/12

D A GENDA ZA MKUTANO

OI KUFUNGUA MKUTANO

00. UTAM BULLSTID

03. KOTAMBOLISHA MRADI

OY. KUPUNGA MEUTAND.

ACENDA NO1: KUFUNGUA MKUFANO

Mwenyekiti alifonguz mkutano moda wa raa 9:00 Mchana na kuwashukoru wote walioweec kufika Kwenye m kutano na kuomba ushinkianu ili kuwez Kufanikisha mkutano huo.

AGENDA NO 2: UTAMBULISHO.

Katibu aliong saa utambulisho Kwa Kutambulisho
Katibu aliong saa utambulisho Kwa Kutambulisho
meza Kuu ambapo ni Kamati ya maendeleo kati,
meza Kuu ambapo ni Kamati ya maendeleo kati,
meza Kuu ambapo ni Kamati ya maendeleo kati,
Senikali za mitaa Pamoja na wageni Kutoka Mukhuu
Senikali za mitaa Pamoja na wageni wukarax (suret
Pamoja na Kamponi ya Itan pamoja wukarax (suret

\*) · A GENDA NO 3 : KUTAM BULUHA MRADI Mwezeshaji alitambulisha mradi rasmi wa ngume wa maji taka ambao mradi huo unashirikiana Pameja na MWAWWATA Pameja na mashinka ambao ni SEUREKA NA NETWEKA ambao mra huo mpomo huo serikali imeona mradi huo uwere Kupita Kwenye mitaa Kutokana na mah Ya binadamo ni mazingira kuna salama huya mf wa maji taka ni moja ya hudoma amfayo inamera Kufenya mazingia Korofi kuwa mazor na hodoma hijo ambro ni mradi esa mojon wa meji taka itapitishwa kwa wananchi buz Wananchi wa Mac wa medical researd, Kuleleni pur na kitangin walikabali mradi wa mfomo wa maji taka kwa asilimiz 100%

AGENDA NO G! KUPOKER CHANGANOTO NA MAON KUHUJU MAJI TAKA.

# · CHANGAMORD.

- O Miondombino miburo hayo wanandi. wa mta. WA Kitangini kati uzmeomba Kuweza Kutongonez minuko. Pia mtea wa Kleleni miondonbin La barabara ni mibouro.
  - (i) Uyumba vingi ntani hawziinganisha kwenye m wa maji safi kusaiyo mjumbo ameomba wanané

. Wawera Kunganishwa Kwenye mfom. Wa mgisaf. Ili we raisi kwa mwauwara Kuwera Kusimamia mrab hou wa mfomo wa maji take.

(ii) Maoni ja mjumbe ameomba mradi hu u umeze kujika kusa nrakati maana kuomeukubali mradi umeze kufika mapema.

Altender NOT: KUFUNGA MKUTANO.

Mwenyekti wa mkutano alilaunshe mkutano moda
wa Saa 10:00 jioni Kwa Kuwashokuno wajombe
woote naliwera kofike Kwenyo mkutano huu na
Kuweza Kushriki Vema kwenyo mkutano huu
wa Kutangeza mradi wa mfumo wa maji tako
na Kuhanisha rasmi mkotano



| STA | VEY, ESIA AND RAPID RAP FO   | ORM FOR MWANZA SOUTH WATE                                     | MS IN 10 AREAS (IBUNG  | SILO, PASIANSI, KABUHURU, I | G SOCIAL<br>KITANGIRI, |
|-----|--|---|------------------------|-----------------------------|------------------------|
| S/N | Name/Jina Kii  | IMAHEWA, ISAMILO, MABATINI, I<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu         | Signature Sahihi       |
| 11  | HANDIRA SIM MOTTAKE  | MEDICAL REALANCE  | + MEO                  | 0621636684                  | mammatal Coly          |
| 2   | Patroba Maginga  |   | millati                | 0752398446                  | A Market               |
| 3   | The state of the s | timber RI - ICATI   | H/KITI                 | 0786 259727                 | 2 Maryla               |
| 4.  |  | MENICOL RECENCE   | MEUMBE                 | 0782425900                  | mil                    |
| 3   | MSUNGO MOLAND  |   |                        | 0743498259                  | 41mm2                  |
| 6   | MSINFA-A. LUTTONE  |   | MJUMBE                 | 0758741267                  | Attaursi               |
| 7   | TWADU  | RAMAZAN   | TWADO                  | 0769601934                  | The                    |
| 8   | SAIKI  | Rosfa   | BM                     | 0710993550                  | of m.                  |
| 9   | Elisha John  | Kilangili   | Mule                   | 0755466615 =                | Shirt                  |
| 10  | GHARIE ABDU  | Killarili Kali  | ngube                  | 07843A4763                  | Julou                  |
| 11. | WILLIAM GEANCIS  | KILELENI  | KIMIKAI                | 07-53 809332                | 1 kg                   |
| 12  | HAMIS MASSAKA  | KILELENI  | Musnaveli              | 0754-302407                 | Jana huseaff           |
| 13  | OLIVER ALBINYS   | Komercia - Kari   | MJUMBE                 | 0754 - 533697               | THE MUNEY              |
| 14  | DICHSON NYEW   | KITA/A  | Markhan                | -0742990894                 | 03                     |
| 15  | MKAMA-BO   | MEDIKO  | Atoto .                | 0753575670                  | Dels+                  |

| STA | VEY, ESIA AND RAPID RAP FO | ORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTE<br>LIMAHEWA, ISAMILO, MABATINI, I | EMS IN 10 AREAS (IBUNG | SILO, PASIANSI, KABUHORO, | IG SOCIAL<br>KITANGIRI, |
|-----|----------------------------|--|------------------------|---------------------------|-------------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa   | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahihi        |
| 16  | SOUTHIN                    | Medicks  | Mante                  | 6682972313                | Dayong 9                |
| 17  | Frenk evanges              | Medito   | Munde                  |                           | ELASTO                  |
| 18  | TUTO ATH WAR               | medical  | Mumbo                  | 5                         | 10-3                    |
| 19  | HASSAN STEELO              | MEDIEOL  | muuse                  | 0744288756                | 114-                    |
| 20  | TUMAINI MACHA              | EHO  | AFISA AFFA             | 0717-3714494.             | Washan!                 |
| 21  | MARY FRANCIS               | makee  | MUMBE                  | 0784871994                | m-freeds                |
| 22  | DAMES bowle                | Boniedical   | moumbe                 | 0768938915                | boy                     |
| 23  | MAGRELL VARGING            | KATOCLELE Medika   |                        | 0743717418                | De.                     |
| 24  | Elizabelli Mushi           | Proustainedical  | Mumbe                  | 0755953146                | Allsu                   |
| 25  | JUNETUNE KAHEMA            | MEDICAL  | Mumbo                  | 0954095190                | Ju Ju                   |
| 24  | Kalolo Wagung              | Kitapiri Kata  | _11-                   | 0765327266 -              | Aug 1                   |
| 27  | MARIA MUILAW               | MEDICAL  | MJUMBE                 | 0747293799                | MACHINARON              |
| 28  | ASHURA KHLENI              | MEDICAL  | MJUMBE                 | 0786 757474               | K                       |
| 29. | EANA EMMANUEL              | MEDICAL RESEABLE   | MJUMBE                 | 0788 976 840              | E teader                |
| 29  | Anothe Samon               | Nedical  | Munibe                 | 6767842463                | 1000                    |

| S/N  | Name/Jina Kili    | R THE SIMPLIFIED SEWER SYSTE<br>IMAHEWA, ISAMILO, MABATINI, U<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|------|-------------------|---|------------------------|---------------------|------------------|
| 31   |                   |   | mJum36                 | 0763231703          | H Raulian        |
|      | HAMUST RALLIAN    | MENICAL   |                        | 0758 859963         | R. Daudi         |
| 32   | Roseman N. Biyang |   | Myumba                 |                     | DOW.             |
| 33.  | JOYCE AUGUINE     | MEDICAL   | Mumpe<br>Mumpe         | 11-11-14            | 5 Tuns           |
| 34.  | MOURICE G. SOK    | MODICAL   | SMIAA                  | 0763021551          | s from           |
| 35-  | BAINA SAMANE      | KITANGIRI -KATI   | KeJumas                | 07597820081         | R.S.             |
| 36   | SAKINAMICHAEL     | KITANGIRI - KATI  | noamas                 | 07-68200238         | Sokena           |
| 37   | VENANCIA JERELIIA | MEDICAL   | Muntot                 | 0769413192          | Varian           |
| 38   | /Upsersence       | KKT   | MJ UNIDE               | 0769031037          | Dung.            |
| 39   | SALMA ALLY        | MSDICAL   |                        | 0756656366          |                  |
| 40   | NOSCORO OTTUM     |   |                        | 0756656720          |                  |
| \$1  | MOSEL ZARRA       |   | hazund                 | 089597969           | A Dec            |
| Ba   | AMEN P JOB        | wasten.   | Engi                   | 07 29-2006(         | Aoy              |
| 1400 | CHRISTING TIMO    | MEDICAL   | niumbe                 | 0689772567          | CAR!             |
|      | masf. Kapyel      |   | Mumbe                  | 074649079           | 4 Ekapyon        |
|      | 1011121. Kalade   | at. Reser   | 1                      |                     | 9                |

### 8) Mabatini

|      | KEHOLDER CONSULTATION FORM   |                  |                         |                  |               |
|------|--|------------------|-------------------------|------------------|---------------|
| KIT. | CIAL SURVEY, ESIA AND RAPID R<br>ANGIRI, KILIMAHEWA, ISAMILO, MAI<br>NAME (JINA) | Stakeholder/Mtaa | Position/Tittle Wadhifa | Contact/Phone    | Ì             |
|      | 1  | MABA TINI KUSINI | MWANANCH/               | 0785927271       | The for       |
| 01   | JUMA SIMON NGELEJA   | MABATINIKUSINI   | MULANAMETTI             | 0752298489       | JAMA JON      |
| 02   | JAMATONI MASONGA   | MADARAY MENAN    | MWANAMCHI               | 0754618346       | Hun           |
| 04   | WILSON M. YANGO  |                  | BACOZI                  | 0756278301       | Harang        |
| 05   |  | MARRINI KUSINI   | NWANDACHI               | 67.56852.085     | Moto          |
| 4    | MASYMBUKO ANWENDER   |                  | KIWADA:                 |                  |               |
| 07   | 1  | CLARITA MARIN    | MARIANCHI               | 0766277342       | -             |
| 58   | COSMAS MKAMA   | UNGUTA MAGH      | Mumanich                | 0765279187       | THA MIT       |
| 64   | FROLENSIA R MARWA  | UARUGA (A)       | MULANGAMCHI             | OC 92 MINO OF AN | en to marrell |

Provision of consultancy Service for Mwanza South Water Supply Project-Addendum No.2 Simplified sewer System in 10 areas

STAKEHOLDER CONSULTATION FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO 2, CONDUCTIONG
SOCIAL SURVEY, ESIA AND RAPID RAP FOR SIMPLIFIED SEWER SYSTEM IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO,

| S/N  | NAME (JINA)    | Stakeholder/Mtaa | Position/Tittle Wadhifa | Contact/Phone              | (SAHIHI)    |
|------|----------------|------------------|-------------------------|----------------------------|-------------|
| p    | ANTONY MEATIN  | m ( wow.         | Balozi                  | 0711856122                 | TAIL        |
| 11 1 | LEHEMA RASHINI | cinquis          | MWANANCH                | 0754517796                 | PRashie     |
| 12:  | FARING ERETIN  | un Kersiwi       |                         | 076 4364541                | * Releasing |
| 5    | LETISIA MOBULO | ~                |                         | 0748431961                 | En-         |
| φ    | George Skay    | -                |                         |                            | Guron       |
| 5    | DMIND SHIRINDE | UNGUID           | ~                       | 0759.524455                | AMINA       |
| 16   | TATU REFER     |                  |                         | 8762296614                 | Th. masu    |
|      | Rulia Hours,   |                  | -10                     | 0752563455<br>075866917821 | RHOEMER RI  |
| ~    | JUMA MOHAMED   | UNGUSA           |                         | 07.58 66 2 17 Par          | J'M change  |

| SO  | AKEHOLDER CONSULTATION FOR<br>CIAL SURVEY, ESIA AND RAPID I<br>TANGIRI, KILIMAHEWA, ISAMILO, MA | RAP FOR SIMPLIFIED SE | WER SYSTEM IN 10 AREA   |                        |                       |
|-----|---|-----------------------|-------------------------|------------------------|-----------------------|
| S/N | NAME (JINA)   | Stakeholder/Mtaa      | Position/Tittle Wadhifa | Contact/Phone          | SIGNATURE<br>(SAHIHI) |
| n   | ELIZABBITH EZIFS  | MUHUM                 | Mwananeh.               | 6752312300             | B · B                 |
| 12  | THEREZA JOSEPH<br>DAMIEL MACKEMO  | UNGUI                 | Nwarandh<br>mwarandh    | 0689900676             | J.J.                  |
| 21  | PILLY WILLIAM   | up cru TA             | Musananchi              | 0748162637             | PILLE                 |
| کہ  | SHIDA MACAGA MILEMO DTAIGO  | UNGUTA                | MWANNOH!                | 0693151612             | SPA                   |
| 2)  | JUMP MAKERE   | しいないろ                 | MWHHAMCHI               | 6767979027             |                       |
| 14  | MARIAMU PERE  | CONGRETA              | MWAND MCH!              | 074909454              | H                     |
| 3   | ALLY HUSSENI  | UNG JA                | MUANANCH                | 0754-75638             | Ben                   |
| 20  | SELINA MADUKA   | UNGUZA                | MWANANCHI               | 0782977896             | SMeduka               |
| 25  | ROBERT B-SHMBA  | MABATINI              | MWANANCHT               | DASTY AND SINA MARATUM |                       |

| JUSTA - 1500RY                         | WATA<br>UNGUIR       | MWANANCHI<br>MWANANCHI | 0744530842   | - solony   |
|--|----------------------|------------------------|--------------|--|
| DESKA - EDIMUNI                        | unewith              | MULANANCH              | 0747872477   | -pa  |
| BUNDESIA _ EVARISTA GALDESIA _ MAGENGE | - ยกเการค<br>นกเการค | MANANCH                | 0759640003   | - Ch   |
| ZULFA - ATTHOMAD,<br>GAUDESIA - GERETA | BATIN                | W manage och           | 0768189613   | <b>*</b> -   |
|  | MABATINI             | MUZHANCH               | 06 85 649039 | GAUD   |
| KHADJA - MBILIZI                       | MABATIN              | MUZENZANCH,            | 0759017285   | AUUX   |
| TAHAJA - RAMABAAD                      | UNGUIN               | MWANANCHI              | 0763-553896  | Missilo  |
| Edhia - Kiloingel                      | MABATINET            | MUZHANCH               |              |  |
| Saling - Athumani                      | Malsalini            | Mwananeh               | 0693004477   | Alderga  |
| Siona Musks                            | Malsaturi            | Mwananehi              | 6767721003   | 2010   |
| SWAUMU IDRUSA                          | Noboloni             | Mwananchi              | 0684584263   | anna   |
| VERONICA ELIAS                         |                      | Mwananchi              | 0769927707   | S. Idnsa   |
| CALMA                                  | ACUPUN               | Mwanandhi              | 0752286704   | Hias   |
| JESIA BAKARI                           | UNGUTA<br>MABATIONI  | Mwanandi<br>HWANCHI    | 0745245935   | SINGMIAA   |
| AKHA TOFIKI                            | MARZETONI            | Mundrane,              | 075856312    | Maria Salar In   |
| CHRISTIAN CHALES                       | MABATINI             | MWANNICH               | 0765660765   | The state of the s |
| ZPINCCI MSENGI                         | MARSOTINI            |                        | 0768385767   | MATO TO STATE  |
| Selina baulo                           | MARIATA              | MUXXNCH.               | 0764813146   |  |
| GOGE JUNGANT                           | untou04              | MWANCIH                | 07034549752  |  |
| 125TRO MANETU                          | UNGUSTA              | MANUANA CHI            | U756072888   |  |
| 1 - 1 111 14 640                       | UNGUJA               | MWANTARICH             | 0746749645   | 1. 0 1. 10/1-1   |
| E LIZEBELLIH MUSURI                    | UNGUJA               | Mwandri                | 10644065808  | Betta  |
| Poter Mieta                            | UNGUJA               | MWANANCHI              | 0085360909   |  |
| MEEMA NEUTORY                          | 1 014 40 30          | (SI WITT               | 0000001      | N. Par.  |

| SO  | AKEHOLDER CONSULTATION FORI<br>CIAL SURVEY, ESIA AND RAPID R<br>FANGIRI, KILIMAHEWA, ISAMILO, MA | RAP FOR SIMPLIFIED SEW | ER SYSTEM IN 10 AREA    |               |                       |
|-----|--|------------------------|-------------------------|---------------|-----------------------|
| S/N |  | Stakeholder/Mtaa       | Position/Tittle Wadhifa | Contact/Phone | SIGNATURE<br>(SAHIHI) |
| 28  | OMARY-MAINTH   | MABATINI               | MJUMBE                  |               | O. Man                |
| 29  | SAID M. NZIGE  | MARATIN                | MUMANARICH I            | 0774283648    | Alal                  |
| 30  | YOHANA SAMSON  | MABATIN                | MWANANCHI               | 0763483666    | ten                   |
| 31  | AYUBU HOMAKI   | UNGUJA                 | MWA WANEHI              | 0783334154    | 100                   |
| 32  | Emmansiel B. BONIPHACE   | MARATINI WUSINI        | MWANANCHI               | 06\$7336947   | Matala                |
| 33  | LAURENT C. KASOMBE   | MABATINI WUSINI        | MUDANANCHI              | 0747/02782    | Like                  |
| 34  | STANLY PIUS EUCHIBA  | MARATINI KUSIN         | MWANANEHI               | 0765982359    | Pus.                  |
| 35  | JOHN MWITA MAHEUSE   | NUABATINE CLUSING      | MWANANCHI               | 0752519209    | J WANTER              |
| 31  | CHACHA JAMES   | MARATINI KUSING        | MW4NANCHI               | 0768902798    | Aller                 |

| JIPA  | MOAA                          | WATANTA                | JIMA   | S4747 H7            |
|---|-------------------------------|------------------------|--|---------------------|
| Teleza Livezama                                     | MABATIOI KUSIDI               | Mwananchi<br>Mwananchi | 0763027037   | DIALOX<br>The wesam |
| Sikujua nzirenta<br>GEOLGE EZEKIEC<br>Mwanne Lajaby | MARAJA<br>MARAJINI<br>NIBAJOT | mwananah,<br>mwananah, | 0759251353<br>07531&2412<br>0756742784               | ne                  |
| AVELINA GABRIEL<br>PROUK HAMAD<br>ERILL JONADY      | ungujo                        | BALOZI                 | 0757242362   | Hereline.           |
| Khadig mzalali<br>GEORRE-KOSTANTINE-<br>ADAM ISSA   | UNGUJA  UNGUJA  UNGUJA        | Mwananchi              | 0753335486<br>0764828760<br>0748468433<br>0786554388 | Khadis<br>Encetesa- |
| EYALINI -JOASH                                      | MABATINI                      | musava neth            | 0786782489   |                     |
| HAWA JAPHARY<br>HENRY MUSSA                         | MABATIN KUS                   | -11-                   | 0759530951   | TYA MIAA            |
| DANIEL KILAZA                                       | MABATIN RUS                   | _(1-                   | (*/v   | MARY WARE WALL      |
| CHRISTINA MUSSA                                     | :-11-                         | -11-                   | -  | NYAHAGRE            |
| SAMSEN Mhin.  | UN GUS X                      | -11-                   | 0695446843   | Buch                |

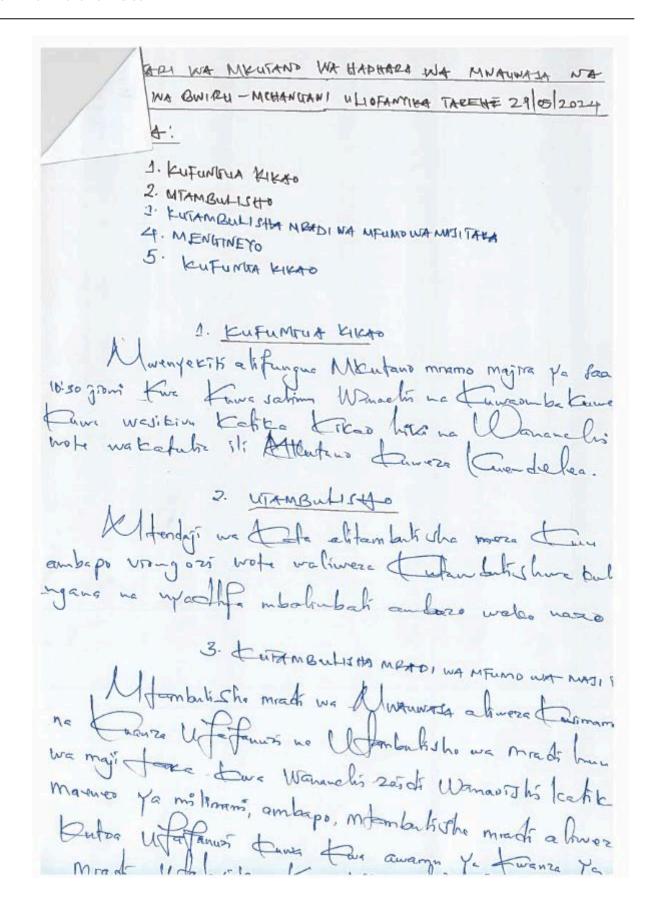
| so  | AKEHOLDER CONSULTATION FORI<br>CIAL SURVEY, ESIA AND RAPID R | AP FOR SIMPLIFIED S | EWER SYSTEM IN 10 AREA  |                  |                       |
|-----|--|---------------------|-------------------------|------------------|-----------------------|
| S/N | ANGIRI, KILIMAHEWA, ISAMILO, MA<br>NAME (JINA)               | Stakeholder/Mtaa    | Position/Tittle Wadhifa | Contact/Phone    | SIGNATURE<br>(SAHIHI) |
| 37  | ASHURA RAJABUMASON   | UNGTIS              | NW ANANCH               | 07567723G        | Dejaby                |
| 38  | SARAH ERNESTI  | ENTUEST             | Mwananichi              |                  | 5.E                   |
| 34  | VERONIKA ROPOSLI   | mabatini            | MwaneNCH                | 0782538941       | Veronika              |
| 40  | Pamela lameki  | Mabalini            | mwanamdii               | 0784641967       | pamele                |
| 4   | CHRISTIMA KALIMANDILA  | Unavia              | Mwaparahi               | 0744791925       | Malimani              |
| 42  | Magesa Bligela   | un Theusin          | Mwaranchi               | 0685748626       | Missex estal          |
| 41  | JANETH JOHN  | Unquija             | Mwananchi               | 0752939510       | #hon                  |
| 40  | HAWA IBRAHIM   | Voque               | Mworanchi               | 07475888         | poffernz              |
| 8   | KHAMIS LIBO  | Unquia              | Mwanandhi               | FO MARATHU PURAN | MAN .                 |

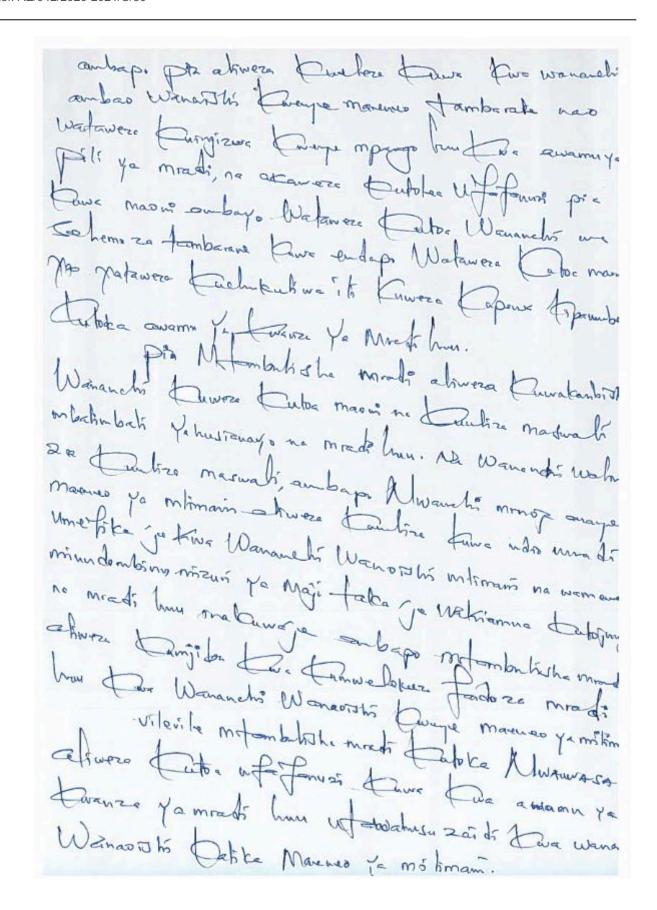
| JULA _   | Morara                                  | asistita               | Sum.  | Smark            |
|--|---|------------------------|---|------------------|
| SALUM R. ISMAIL<br>Richard Maduha                                    | UNGUJA<br>Ungujs                        | MWANANCHI<br>Mwananchi | 0743786288  | C)               |
| ANDREA KISTHWA<br>WEREMA JOSEPH<br>BATULI SHABAN<br>ROSCHORY LAWTECO | UNGUJA<br>UNGUJA<br>UNGUJA<br>UNGUJA    | 11-11-                 | 0749607738<br>0763754302<br>0763754302<br>0753601267  | Booken:          |
| ROSET-MAKWATA<br>DURISTH ISSX<br>JOHN L. MBOYA<br>JULKS Meets        | M/ KUSIMI<br>W/ KUSIMI -<br>W/ KUSIMI - | -11 - 11               | 0758005226<br>0742-74412<br>0754-449540<br>0757602220 | N.I.             |
| PHMED AMIN   | UNWNIA                                  | - 110                  | 075763886   | Marian State   E |
| MAKRIHA BATIWA<br>ASIMWA ANTHONY<br>SHABAN SATA                      | UNGW 3A                                 | -1/-                   | 0693937365  | A shows and      |
| FREDY PAULO  | UNTUJA                                  | - (1-                  | 0752622558  |                  |
| VERBUILD (homes<br>makedi Homisi<br>SELECHANI HABUCHE                | UNGUJA                                  | -11-                   | 0784829296  | Mosul            |
| RAMADHAY KIBLA<br>SMOOD MAKASHIUTA                                   | ABUPUDA<br>AWYUNI                       | -11-                   | 0764323238  | ATTHE !          |

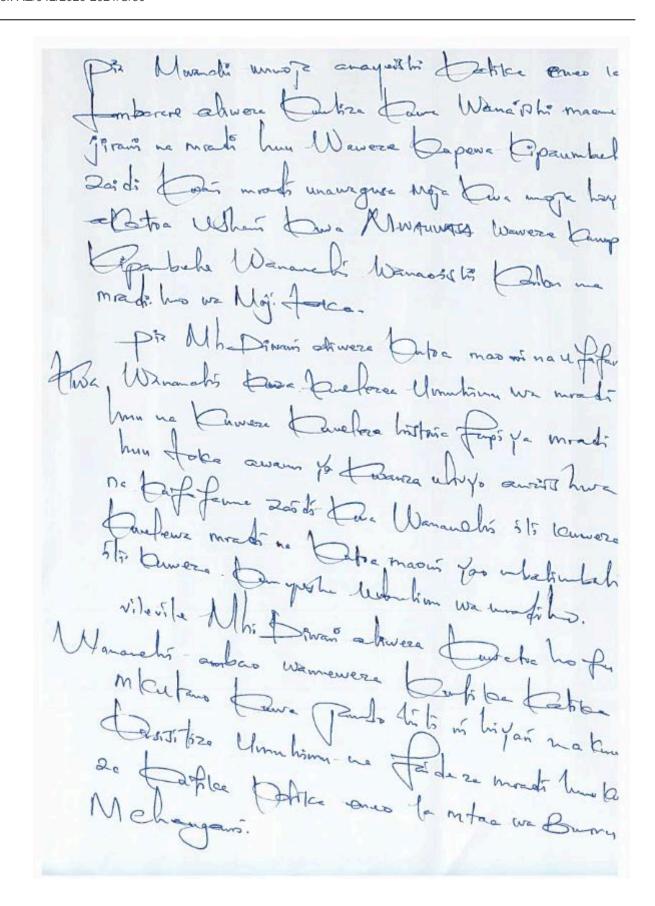
### 9) Nyamagana

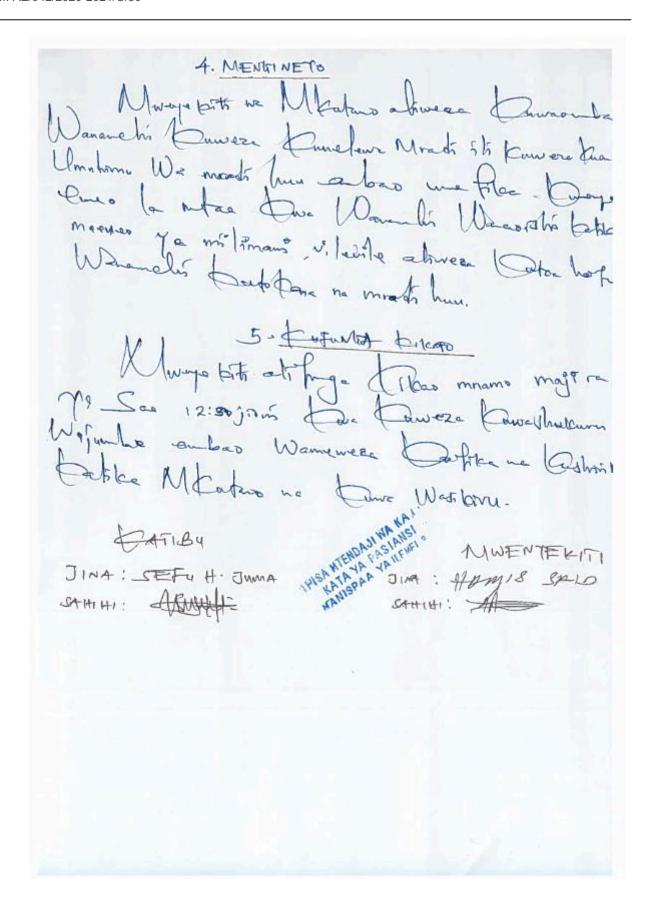
| STA  | KEHOLDER CONSULTATON FO<br>VEY, ESIA AND RAPID RAP FOR | RM FOR MWANZA SOUTH WA'<br>R THE SIMPLIFIED SEWER SYS'<br>MAHEWA, ISAMILO, MABATINI | TEMS IN 10 AREAS (IBUNG | SILO, PASIANSI, KABUHUKO, I | IG SOCIAL<br>KITANGIRI, |
|------|--|---|-------------------------|-----------------------------|-------------------------|
| S/N  | Name/Jina KiLi   | Institution/stakeholder Mtaa  | Position/Title Wadhifa  | Contacts/Phone Simu         | Signature Sahihi        |
| T    | ELLAN MAJUESIE   | MLLANDER City   | Aa. CD                  | 0255-516235                 | allellara               |
| 7    | Amos SAMUEL  | mcc   | As CECO                 | 754072509                   | -                       |
| 3.   | DAMON - 4. SONGOY                                      | Mcc   | Ag. CEPO                | 0459 296 318                | 8                       |
| 4    | ZAKIN R. AHMED   | Mcc   | AG CPPEO                | 0787736333                  | 1                       |
| 7    | Ruth Kanika  | MAGS  | DHMIS                   | 0769 909020                 | P                       |
| 0    | Truck Tracking   | 340   |                         |                             |                         |
|      |  |   |                         |                             |                         |
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| 5.77 |  |   |                         |                             |                         |
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|      |  |   |                         |                             |                         |

### 10) Pasiansi









| SUR  | VEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTI<br>LIMAHEWA, ISAMILO, MABATINI, I | EMS IN 10 AREAS (IBUN  | GILO, PASIANSI, KABUHORO, |                  |
|------|----------------------------|---|------------------------|---------------------------|------------------|
| S/N  | Name/Jina                  | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahihi |
| 1    | MH ROSEMARY MA             | TUHGA PASIAKI   | DIWAN                  | 0754 593371               | Bringay          |
| ·9 . | HAMIS SHID                 | M /1017, B/Mylanson   |                        | 0782187833                | A                |
| 3.   | ALLY H. RATINGED           | PARTONSI WERD   | hoto                   | 0762654860                | Alesan           |
| 04   |                            | BWIRY ZIWANI  | MEO                    | 0952282925                | gena S           |
| 05   | JOYCE MALYA                | MEO-PASIONSI CHIM   | 4180                   | 0454 453604               | æ.               |
| C    | FLAVIA XI. MINDA           | MIKETI SIMTIMAL PICHWI  | MENTERITI              | 0754 379506 -             | Grammy           |
| 75   | Jovies Musyanal            | PASIANSI CHINI  | Mumbe                  | 0916962216                | 1000             |
| 8    | LABANI KATONDO             | PASING BWIRM  | WEUMBE                 | 0785172103                | Higher .         |
| 7    | MARANDA THOMA              | 0   | -71-                   | 0755-329001               | 180-             |
| Ö    | MALEMBO                    | -s>-  | -11 -                  |                           |                  |
| 11   | ACKON M. LUGESHA           | ASTONES CHINI   |                        | 0785719112                | mase             |
| 2    | YUSUPIL. R. JEMUMA         | Buile nethal GANI   | BALOZI                 | 0636619995                | 125              |
| 3    |                            | Na BWIRL Muchangar  | 11                     |                           | AUS MA NS IN     |
| e.   | . /                        | BUNCE you cetangen  |                        | 0765617768                | WAND STON        |

#### Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MABATINI, USTAWI, IGOGO AND BUGARIKA) 5/N Name/Jina Institution/stakeholder Mtaa Position/Title Wadhifa Contacts/Phone Simu Signature Signature Sahihi Mrs willian BWIRD MCHAGAR MIUMBE 0742967541 Mu JOSEPH. JOSIAH BATA 0782614754 Chasa Makalo 0766323000 /USBO 33 Mjounte 34 0745 499873 KHADIJA HAMISI BONIRU MCHANGANI Roia Khower 0764 286964 KASIMU BYLIRU MCHANCTANI 7- Kasmus 0753225916 chadija WIGHNBE CHASTOR BILLIA BWIRL MCHANGANI 37 XPSIN PPHO 8010 BUILD MCGPAGOD 0418614816 (92-38 Bymleha ATHUMAN NYAMLEHA BWIRY PAIR 0784758563 m CHAN GAN 39 100 F RUGAMBULA PRELANSO CHINI 5A13 902484 Mrimbo 30 0759132291 BWIRD 31 0748250351 SEFU H JUMA - MCHAMIAN MED

|     | VEY, ESIA AND RAPID RAP FO | FORM FOR MWANZA SOUTH WATE<br>OR THE SIMPLIFIED SEWER SYSTE<br>LIMAHEWA, ISAMILO, MABATINI, | EMS IN 10 AREAS (IBUN  | GILO, PASIANSI, KABUHORO, |                   |
|-----|----------------------------|---|------------------------|---------------------------|-------------------|
| S/N | Name/Jina                  | Institution/stakeholder Mtaa  | Position/Title Wadhifa | Contacts/Phone Simu       | Signature Sahihii |
| 06  | Pashou                     | Bussa Muchangan   | m funde                | 0465642460                | Dur               |
| t]  | MEENA MARGON               | PERU Mchangan   | Mondre                 | 0784418294                | talleur           |
| 18  | GAUDENSIA                  | P. March  | Muche                  |                           |                   |
| 19  | CHMY MALLID                | BW MCHANGANI  | MJUMBE                 | 0743046086                | the               |
| 20  | ASTERIX TONGARY            | BW. MCHANGANT   | MJUMBE                 | 0762698071                | A Tomerlaure.     |
| 21  | ZHEDA KUHATMUSI            | P. Cotines  | MJUMBE                 | 0752 59 59 27             | 兼                 |
| 22  | HELENA KIGUS               | P. CHIHI  | MJUMBE                 | 0768497385                | - Haring          |
| 23  | MARRO SUMA                 | 7 CHINI   | MSUMBE                 | 0764029706                | And .             |
| 24  | TIMOTHY LWOCA              | BWIRD MCHANGAM  | MEUMBE                 | 0767 222 456              | Tegr              |
| 25  | SAID KAPAMA                | BURN PLOHAHGANI   | MJUMBE                 | 0655028318                | SterPana,         |
| 26  | T 1.5 -                    | BALLIRU MOUTHINGON  | hasumer                | 6755367145                | * T-              |
| 27  | Mary Grang Mahandela       | Buine Mchangari   | (/                     | 1752713799                | Nesy              |
| 28  | Nyonyi uz Nyony            | ·   | 1.                     | 0585704742                |                   |
| 29  | SHINSE ELIKS               | - n -   | 1-01/-                 | 07.5679447-1              | 10 - 10 PM        |
| 30. | Master Muse                | Burn Welangun   | Lyun B &               | 0985539255                | thout it is       |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| S/N | Name/Jina         | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|-------------------|------------------------------|------------------------|---------------------|------------------|
| 91  | PAIRICK SIKANDA   | PASIANSI JULY                | -1) -                  | 0754830755          | SECTO:           |
| 92  | MERUS ENOS        | P. JU                        | -1,-                   | 0762805695          | Mocy             |
| 93  | MAGRETA LENATUS   | P-MAGARIBI                   | -11-                   | 8                   |                  |
| 74  | BET BULEMO        | r- MAGARIBI                  | -11-                   | 0764575431          |                  |
| 95  | ANASTANZIA JOHN   | 10- MAGRIBI                  | -11-                   | 0789254454          | Achi             |
| 7-6 | MAGRETH GERSON    | 1- MAGARIBI                  |                        | 0756633561          |                  |
| 9)  | KIDAWA LASHIBI    | P- 594                       | -//-                   | 0763019095          |                  |
| 9,5 | JUDITH MARO.      | R JUU                        | -21-                   | 6756835378          | الدي ساني        |
| 99  | STADISAZAUS LUBUR | AP-Juu                       | -11                    | 0765970591          |                  |
| 100 | TEODULA KAKWIS    | A P. MAGARIO                 |                        |                     |                  |
| 101 | MAPIA HAMIS       |                              |                        |                     |                  |
| 102 | MWIFA CHAZHA      |                              |                        |                     |                  |
| 103 | AZHA MYZGA        |                              |                        |                     |                  |
| 104 | HIND U HAMIS      |                              |                        |                     |                  |
| 101 | 1                 |                              |                        |                     |                  |

Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| S/N | Name/Jina           | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|---------------------|------------------------------|------------------------|---------------------|------------------|
| 1   | MH-ROSEMARY MATURER | PASIANSI                     | BIWAHI KATA            | 6784 59387          | Bormy and        |
| 3.  | XLLY H. RAMLENT     | PASIANSI WARD                | LOGO                   | 0762669860          | Atasan           |
| 3   | 1 SAYA. H. LIMBE    | PASIMUS JUY                  | MKITHUMMINE            | 0769095520          | the party of     |
| 4   | AJUATE CHAPLES      | BWIRY BIMA                   | MINI WA MIAA           | 076558653           | *                |
| 2.  | PAHATI ANTHOU       | PASIANS, MAGHARIES           | MEO                    | 0468-530898         | 75               |
| 6   | Jumaf. Buma         | PASIANE ELL                  | Mzymes                 | 076-7963189         | Herro            |
| 7   | ISACK E-CHMBI       | PASIASI JUL                  | mjum60                 | 0282006657          | abrs-            |
| 8   | JOSEPH NDIBALIM     | PASIAS JUNY                  | nusumber               | 0768329229          | oneto            |
| 9   | ATTICEMENT - JOHN   | present our                  | mudumbe                | 0753-260756         | Bradonel         |
| 00. | RASHIDY KNAM        | SASIANSI JUL                 | MyumBe                 | 5/69 8900 83        | Roton            |
| 11  | MUSA OMARI          | PASTASI Juy                  | MJUMBE                 | 0783246463          | Morel            |
| 12  | AUDAX RIHADED       | PASIASI JULY                 | MUUMBE                 | 0769672236          | ACOS.            |
| 13  | lbe Lathouse        | PASMEI Jua                   | Mujumbe                | 0753277481          | Tusto            |
| 14  | J.MW MAG            | -11-                         | -11-                   | 07548411            | Duba             |
| 15  | JE. MLN TOA         | -11-                         |                        | 0754 427116         | ET E MAJIN       |

Pasiansi 02

MHU IASAKI WA MKUTANO WA WANHNUHI MITAA YA PASIANSI JUU, PASIANSI MAGHARI NA BWIRU BIMA JUU YA LITEKELEZAJI WA MRARI WA MFUMO WA MAJI TAK TRH 29/05/2024 KATA YA PASIANSI

### AGENDA

- 1. KUFUNGUA KIKAO
- 2. UTAHBULISHO
- 3. KUTAMBULISHA MRADI
- 4. KNDOKEU CHANGUMOLO
- 5. KUFUNGA KIKAO

# 1. KUFUNGUA KIKAO

Mwenyekiti wa Maa wa pasiansi Juu alifungua Kikao mnamo saa 8:25 mchana Kwa kuwaomba wananchi waove wankivu kuchangia na Kutoa he kwenye Kikao.

2: UTAMBULISHO
Mwenyekiti alitoa utambulisho no whongozi na watalamu mbalimbali
waliofika kwenye kikad kilicho ambatona na viongozi wa MWAUWASA
Diwani wa kata ya pasiansi, Mtendaji wa kata ya pasiansi, watendaji wa
Mitaa Nitatu (3) na wenye viti wa Mitae yote Mitabu (3) na viongozi wate
wa Mitaa hiyo mbalimbali.

3. KUTAMBULISHA MRADI
Mtendaji wa Kata ya pasiansi alimkanbisha Diwani na Kutoa ufafanuz Kuhusu Madi wa Maji taka (Mwauwasa) na kumkanbisha mtadamu wa mra na kuanza Kutoa ufafanuzi juu ya mradi huo. Engeneer wa Mwauwasa alitoa ufafanuzi juu ya mradi Kuwa mradi utakuwa shirikishi na kunganishiwa na huduma hiyo itakuwa bure. Pia mradi utakapopita haf kuwa na fidia mahali mabomba ya Maji taka yatakapopita. Pia bei ya Kulipi bili itakuwa 50% ya bili ya maji ya bomba utakayotumia nyumbani kwako wadi utanza mwezi wa sita (6) mwaka huu 2004 kwa kufadhiliwa na wahisani Kutoka Ufaransa

# 4: KUPOKEA CHANGAMOTO

Musinanchi mmoja alisema changamoto yake ni mahali anapoishi ni mbali hivyo gari la maji taka haliwezifika hivyo basi aliomba mabomba yafike hadu maeneo ya milimaji na kuweko miundombinu ya maji safi. Mwan andu mwingi kuwa kunatatizo la maji kukatika sana hasa meeneo ya milimani yatakayoweza kulita athan kwa watumiaji wa wadi wa Maji taka. Changamoto kubwa kutu kwa wananchi ni kuiomba Ewura wapunguze ghasama ya 50% kwa ajiri ya maji taka kwasababu ghasama ni kubwa sana kuwa baadhi ya wananch watashindwa kulipia bili za maji taka.

# 5: KUFUNGA KIKAO

Mwenyekiti alifunga kikao mnamo saa 10: 10 Jioni kwa kuwaomba wananchi kutoa ushinkiano wa kutaha pindi utukelezaji utakapoanza na kuwashukru wananchi na kuwatakia kudumisha amani na umoja wa mitaa yote.

Mwenyekiti.
15aya H. LIMBE

Katibu STEPHEN'A·ANIKAZI

- Thomas

| Provision of Consultancy Services for Mwanza South Water Supply Project | - Addendum No. 2 Simplified Sewer System in 10 areas |
|---|--|
|---|--|

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MABATINI, USTAWI, IGOGO AND BUGARIKA)

| -/  | 1 10           | LIMAHEWA, ISAMILO, MABATINI, |                        |                     |                  |
|-----|----------------|------------------------------|------------------------|---------------------|------------------|
| 5/N | Name/Jina      | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
| Ы   | ALLY H. RAIMUM | WED-PASIANE!                 | WED                    | 0762659860          | Atlasan          |
| _   |                |                              |                        |                     |                  |
|     |                |                              |                        |                     |                  |
|     |                |                              |                        |                     |                  |
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Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

| s/N | Name/Jina        | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|------------------|------------------------------|------------------------|---------------------|------------------|
| 16  | 3HOMAS MAGINGA   | ASSIANS) JUL                 | MHUMBE                 | 0784 800776         | 7                |
| 17  | TITU F. KIDILO   | PASIANCE JULE                | -11-                   | 0767-601248         | #                |
| 18  | ANTHONY NEWSTE   | PASIANSITUU                  | MJUMB &                | 0784840606          | KAGONE.          |
| 19  | ELIYA CHAMHENYA  | Plony                        | HJUMBO                 | 0756-16525A         | - Way            |
| 20  | BENDAMIN MANYAR  | Plan.                        | Munst                  | 0756-824121         | 1                |
| 21  | STANISLACIS      | P/ June                      | Musike                 | 0765970891          | dee_             |
| 22  | Evansty Menge    | Pyjin                        | Myinke                 | 0784 4007g          | Don              |
| 23  | Emmonus MATADI   | P. maczali Bi                | an Jum 131:            | 0765323888          | . Cenç           |
| 24  | IAJI KAZAGA      | P/JULE                       | IYTUMBE                | 0782619601          | <del>T+</del>    |
| 25  | DISMAS KAMAGA    | PIJUU                        | MJUMBE                 | 0765-874055         | 1 hou            |
| 26- | VEDAJIUS MAICA   | PLJUU                        | MJUMBE                 | 0767-155566         | MARSA            |
| 27. | STEVEN J. MARTE  | PJun                         | MJumbE                 | 0692320621          | 9                |
| 28  | AROKO SARUNGI    | Planu                        | Moumbe                 | 0755770782          |                  |
| 29  | EMMANUEL SARUNGI | Plau                         | -11-                   | 0756320269          | OX PROPERTY      |
| 30  | HASAN SHABAN     | DIMAGHARIRA                  | MJUMBE                 | 0787214776          | THE WATER        |

| Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. | 2 Simplified Sewer System in 10 areas |
|--|---------------------------------------|
|--|---------------------------------------|

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT -- ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MABATINI, USTAWI, IGOGO AND BUGARIKA)

| S/N  | Name/Jina         | LIMAHEWA, ISAMILO, MABATINI, L<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|------|-------------------|--|------------------------|---------------------|------------------|
| 31   | MARIAM KISAD      | A PASIANS, MAGIL   | MUCRISERI              | 0767641560          | 14879S           |
| 32   | SARA SARUNGI      | P/July   | MJUMBE                 | 0782769678          | A Property       |
| 33   | CHIRISTING SAMWA  | PASIANSI MAGHARIBI   | MJUMBE                 | 0746305011          | CH5              |
| 34   | PELUSI YASON      | PASIANS MACHA PUBL   | -                      | 07\$2305\$51        | ful              |
| 35   | MELINDA CLAVEL    | Plua   | MJambe                 | 0752317181          | cee              |
| 36   | PODIA CHILEMETI   | plym   | 1=-                    | 0769588009          | FODIA            |
| 37_  | RATULI CHABAN     | plyuu  | -11-                   | 0765861401          | Sec.             |
| 38   | Juma omary        | _ 11 -   | _11_                   | 0765228183          | Entra Juno       |
| 39   | LILIAH MICHAEL    | -11-   | -11-                   | 0755565070          | 1- Modale        |
| 10   | IBRAHIM NETTO     | -1 -   | -11-                   |                     | tilian           |
| 1    | RSTHER THOUSA     | - 11-  | -11-                   |                     | Ester            |
| 12   | LOUSE HIMNOA      | - 1 -  | -11-                   |                     | LOSE             |
| 13   | Kalostina Frans   | PIJU   |                        | 076299853           | MERIN            |
| py · | DSEPH KIBENDER    | PASIANSI JUS   |                        | 0787359849          | Joseph.          |
| 15.  | MYHATAIHI HASSANI | 9 300  | Wilmpo                 | 0756939116          | Musayata A       |

Provision of Consultancy Services for Miwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT – ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI, KILIMAHEWA, ISAMILO, MARATINI, USTAWI, ISOGO AND BUGARIKA)

| S/N | Name/Jina        | LIMAHEWA, ISAMILO, MABATINI, I<br>Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahihi |
|-----|------------------|--|------------------------|---------------------|------------------|
| 46- | Goddina wange    | P-Jun  | - 11-2                 | 0752954735          | GBru.            |
| 47  | Kolethe chases   | Passasi magaxibi   | - 11 =                 | 6764476669          | corella          |
| 48  | WELL HAULE       | Pasiansi Juu   | - 11 -                 | 0755563813          | N-prostate       |
| 49  | ZUBESA KING      | P. Juy   | = 11 -                 | 0746132750          | Sin              |
| 50  | ZABIBY HATIBU    | P. J44   | = 11 =                 | 0769942606          | 2.               |
| 51  | meresiana malo   | P-due  | = 10                   | 0744239212          | MAA              |
| 52  | ELISIAZAHARIA    | PASINASIMONGO  | -= 11                  | 0743485692          | ELISIA           |
| 53  | ESMETH-WINSTON   | Pasians jun  |                        | 0764896429          | E- spinston      |
| 54  | SALA -SAMSON     | pasians jun  |                        |                     | Sisamson         |
| 55  | LUCIA WILLIAM    | pasians juu  | = 11=                  | 0745553941          | 1. withe         |
| 56  | NESTLY EDUSTRA   | PASIANSI MAGHARIBI   | -11-                   | 0764922325          | N. ocherod       |
| 57  | CHRISTINX Shimay | PASIXASI JUU   | - 11 -                 | 0759359211          | Csamon           |
| 58  | CHAUSIKU HOHI    | PASIANS JULY   | -11-                   | 0762345313          | chausky          |
| 59  | ANSERINA         | KWICHSTUM  | -11-                   |                     | Anjeling         |
| bo  | MADIA-CHORETHY.  | PASIASIJUU   | - 11-                  | 0762309124          | ManagorateNDA    |

| Provision of Consultancy Services for Mwanza South Water Supply Project - | Addendum No. 2 Simplified Sewer System in 10 areas |
|---|--|
|---|--|

STAKEHOLDER CONSULTATON FORM FOR MWANZA SOUTH WATER SUPPLY PROJECT - ADDENDUM NO. 2 CONDUCTING SOCIAL SURVEY, ESIA AND RAPID RAP FOR THE SIMPLIFIED SEWER SYSTEMS IN 10 AREAS (IBUNGILO, PASIANSI, KABUHORO, KITANGIRI,

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|-----|--------------------|------------------------------|------------------------|---------------------|------------------|
| 1   | MBARAKA BAGOKA     | PASIAS JUL                   | -11 -                  | 0754962350          | M·B              |
| 2   |                    | PASIAS POLISI                | - (( -                 | 0687431100          | RAS              |
| 3   | PAULIUNA JI MINITA | PASINSI TUU                  | -11-11                 |                     |                  |
| 4   | Tumaini Jumanny    | PASIANS, Jun                 | - 11 - 11              | 0762 368454         | Jumanne          |
| ,5  | AGNES KAZIKA       | PASIANS JUU                  | -1-11                  | 0756732518          | Kasuna           |
| ,6  | RETISTAS DMARY     | PASIANS JULY                 | -u-u-                  |                     | B-               |
| 54  | YASON MADONDA      | PIPOLIST                     | -u                     | D762421021          | Hapud            |
| 38  | MARIA HAMIS        | Plous                        | -x-x                   |                     | S)               |
| 88  | MACE MI NOTES      | PIMAGH                       | - + - 1 -              | 0752863443          | Nake.            |
| FO  | ASHA MNYACLE       | P1504                        | -11                    |                     | 和。               |
| 71  | LUCY ROBERT        | PIMADHARIBI                  | -11-                   | 0744814825          | L.Robert         |
| 72  | MENGS SAID         | PIMPGHARY BI                 | -11-                   | 0746235969          | Misaid           |
| 73  | CATHELINE JOHN     | PIMAGHARIBI                  | - u-                   | 0742032322          | C. John          |
| 74  | SEBASTIAN WANKELE  | P. Guu                       | -u-                    | 97645206HG          | Stewnloole       |
| 25  | MD43CHAIA ALUG     | PINAGH                       | a                      | 0756 820096         | Adamber Das      |

#### Provision of Consultancy Services for Mwanza South Water Supply Project - Addendum No. 2 Simplified Sewer System in 10 areas

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| S/N | Name/Jina            | Institution/stakeholder Mtaa | Position/Title Wadhifa | Contacts/Phone Simu | Signature Sahlhi |
|-----|----------------------|------------------------------|------------------------|---------------------|------------------|
| 76  | 1 RESA IMOR ABOUR    | P/ Dur                       | _ t_                   | 0759-425585         | Imary            |
| 77  | BOTANMAKAMA          | AAIMA.                       | -11-                   | 0695120070          | BANKLING         |
| 78- | FATUMA PASTOS        | P. Machaeles                 | <del></del>            | 0755-533838         |                  |
| 19. | HADJA Homis          | P. MacHoribi                 |                        |                     | Diage            |
| 80  | JUNIAS. SWEBY        | P. Juu                       |                        | 0686038587          | Friedy.          |
| 81  | LEUNARD MUENDWA      | P. JULY                      | -11-                   | 0754065418          | Alley 1          |
| \$2 | MGUBBY MAKKUND       | & MAHGAMER                   | - (1                   | 0.68379986          | MECUEL           |
| 83  | MLIBURD SOEL         | P. Jun                       | - 11-                  | 0761227040          | as o             |
| 5P. | RAY - ZABRON         | P MAGABEUD                   | < pu                   | 0408406477L         | State            |
| र्  | DR JOSEPH JAMES MAGO | E PANSHANSI-JUU              |                        | 0754080B8 =         | Top-             |
| 36  | FANUEL BULD          | Pour.                        | -11-                   | 0754-044717         | Hamoly           |
| 7   | ABDALLA ATHUMAN      | PIJUU                        | -11-                   | 0752373433          | Milm             |
| 88  | CLEOPHASE ERMS       |                              |                        | <b>9</b> 752834855  |                  |
| 39  | LAXAROKKYERI         | PASIANEI TUY                 | BAROZI                 | 0785970205          | Allenoo,         |
| 10  | LODIRIKI JOSEPH      | P-MAGARIBI                   | MIUMBE                 | 0767573062          | LIOSOPHRAJI      |

# APPENDIX III: PHOTOS OF THE SITE VISITS



Existing simplified sewer system from connected pit latrines



Un-connected pit latrines in some of the project areas



Butuja treatment ponds for connected pit latrines on the project area



Sewage truck discharging wastewater collected from unconnected pit latrines at Butuja treatment ponds



Solid waste collection point in one of the project areas



Public meetings in one of the project areas



Lifting hands marks Public positive response to the SSS project

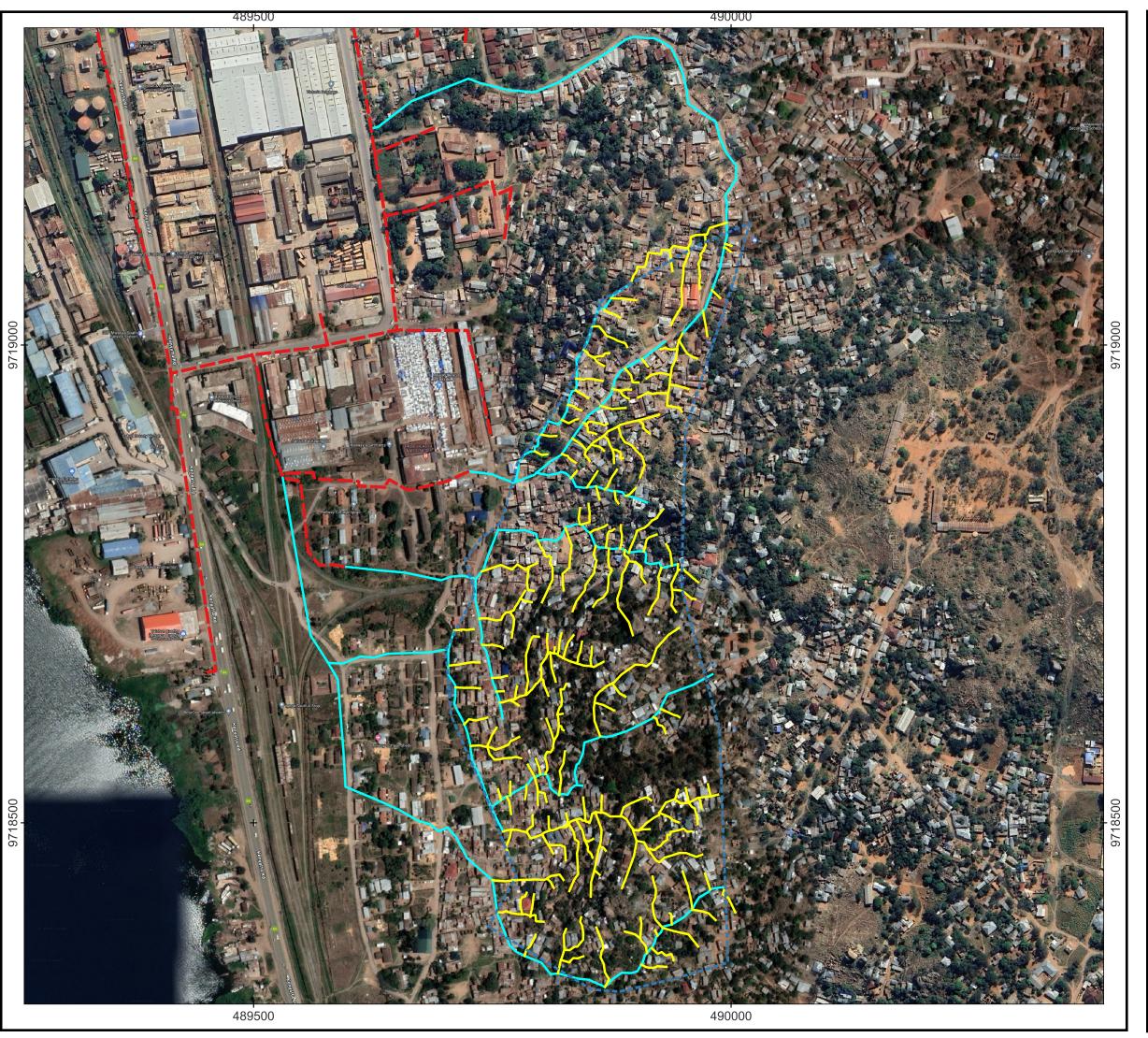


Distribution point for clean water in one of the project areas



Some of the household chambers are used as solid waste collection point and not well maintained

# **APPENDIX IV: DRAWINGS**



- Existing Public Sewer



Proposed Simplified Sewer



OD160



Zone Boundary





MWANZA URBAN WATER SUPPLY &
SANITATION AUTHORITY (MWAUWASA)
MAJI HOUSE - BALEWA RD
P.O BOX 317, MWANZA
TEL: +255 282500547
FAX: NO: +255 282503231
EMAIL: info@mwouwoso.go.tz



FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

SEURECA VEOLIA



SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O.BOX 95843, DAR ES SALAAM-TANZANIA

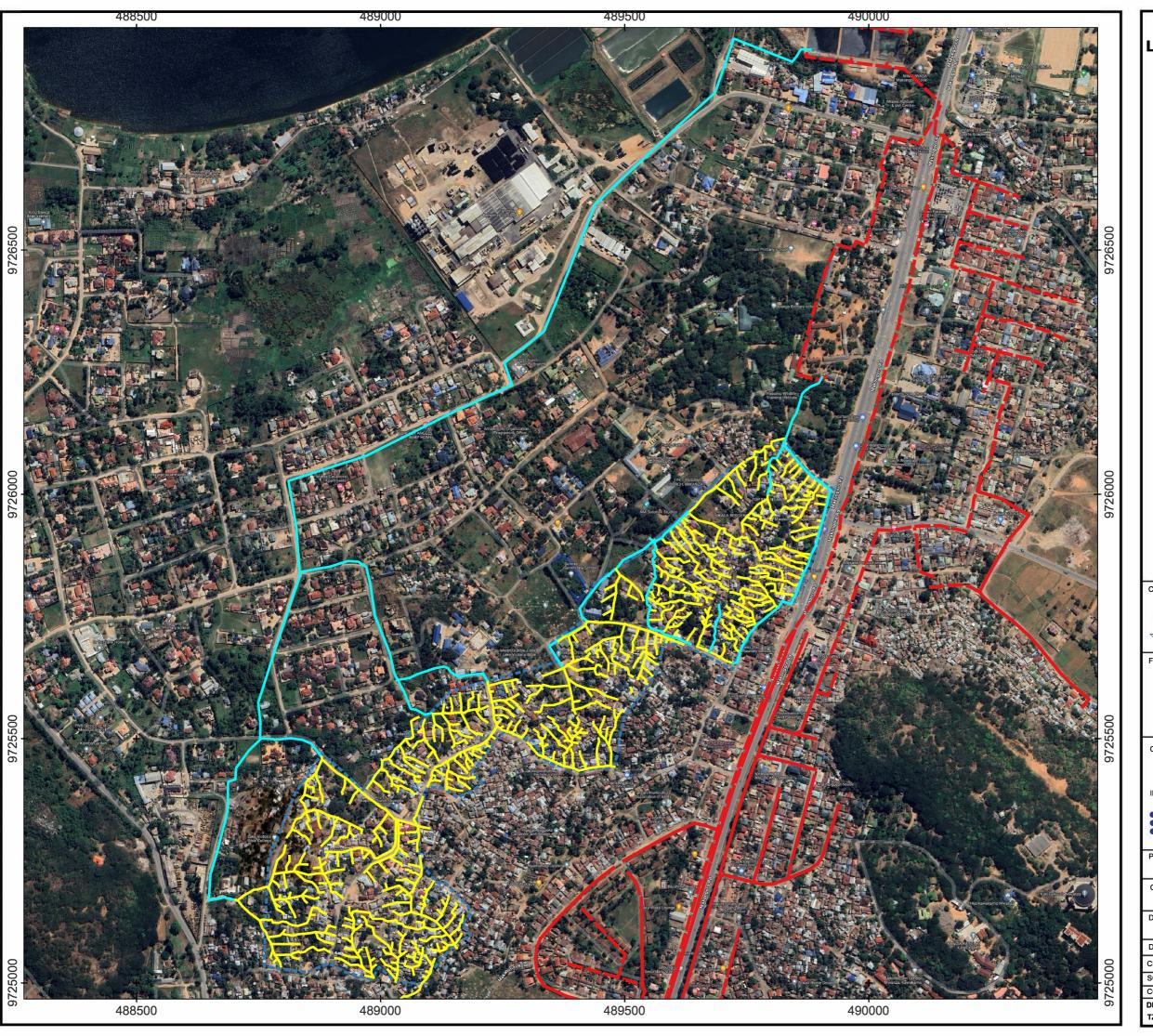
PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: BUGARIKA SIMPLIFIED SEWER NETWORK

|  | DESIGN BY:  | T. Temba  | DRAWN BY:    | B. Mahenge |
|--|-------------|-----------|--------------|------------|
|  | CHECKED BY: | P. Gateru | APPROVED BY: | P. Gateru  |
|  | SCALE:      | 1:3,700   | DATE:        | June 2024  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |             |           |              | 24         |
|  |             |           | Davidadas    |            |

DRAWING NO. TZ/MWA/TP/477



- Existing Public Sewer

[\_\_\_] Ward Boundary

Proposed Simplified Sewer

OD100

OD160

Zone Boundary





MWANZA URBAN WATER SUPPLY &
SANITATION AUTHORITY (MWAUWASA)
MAJI HOUSE - BALEWA RD
P.O BOX 317, MWANZA
TEL: +255 282500547
FAX: NO: +255 282503231
EMAIL: info@mwouwoso.go.tz



FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

CONSULTANTS:

SEURECA VEOLIA

SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O.BOX 95843, DAR ES SALAAM-TANZANIA

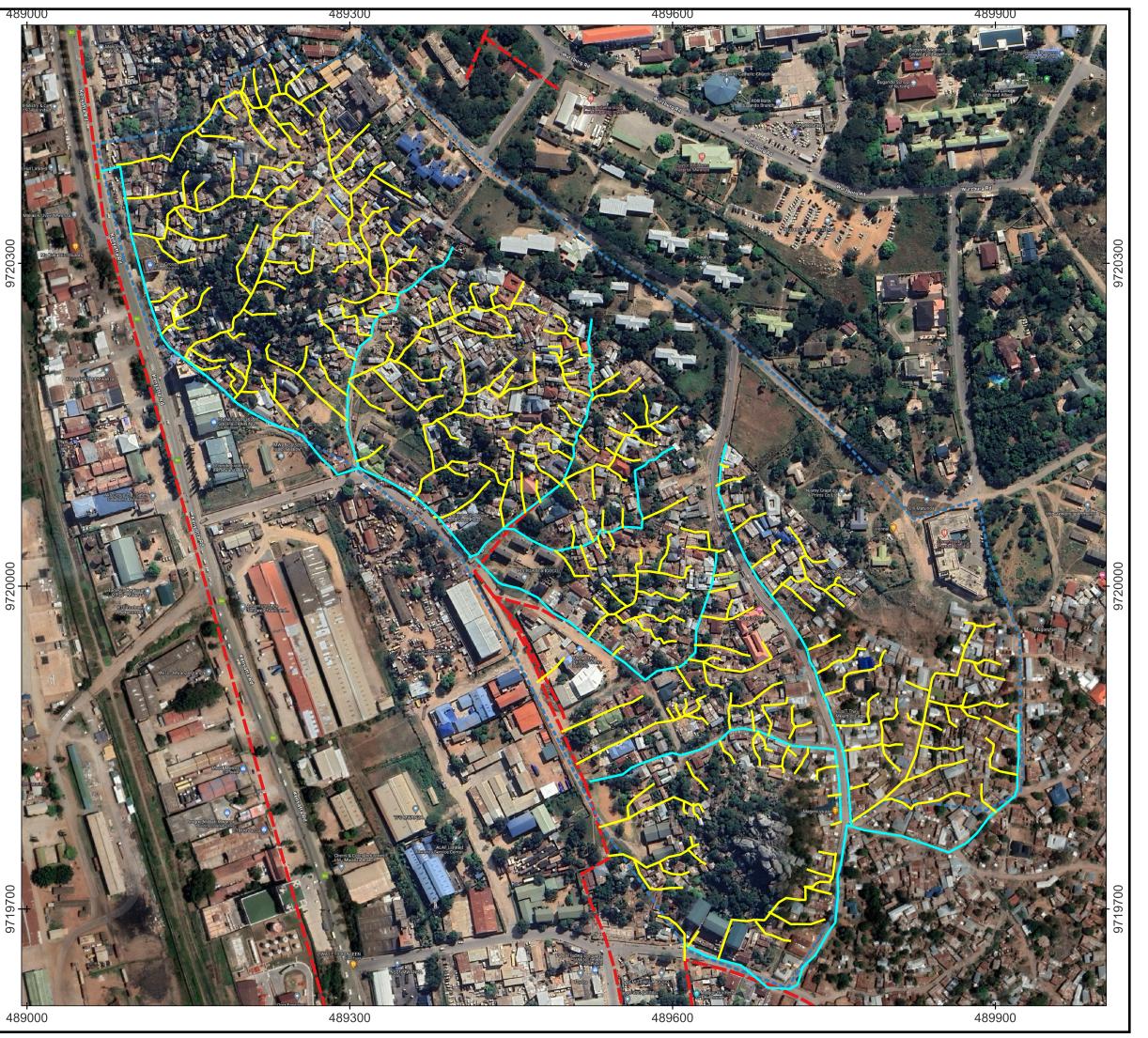
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: IBUNGILO SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |  |
|--|-----------|--------------|------------|--|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |  |
| SCALE:   | 1:7,200   | DATE:        | June 2024  |  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |  |

TZ/MWA/TP/477



- Existing Public Sewer



**Proposed Simplified Sewer** 

OD110

OD160

Zone Boundary





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TEL: +255 282500547
FAX: NO: +255 282503231
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FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

SEURECA VEOLIA

SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



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PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

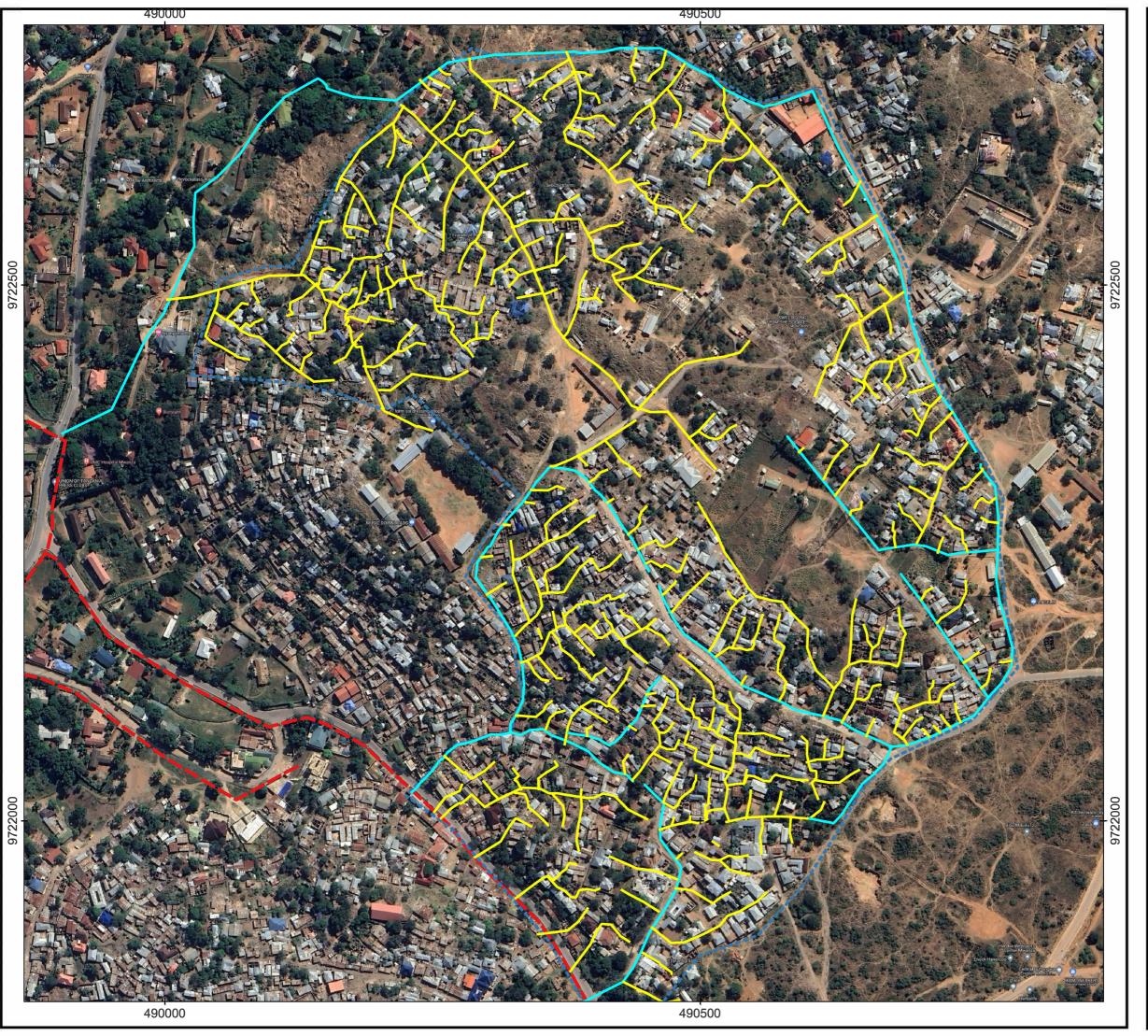
CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: IGOGO SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |
|--|-----------|--------------|------------|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |
| SCALE:   | 1:3,300   | DATE:        | June 2024  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |

DRAWING NO.

TZ/MWA/TP/477



- Existing Public Sewer

[\_\_\_] Ward Boundary

Proposed Simplified Sewer

OD100

OD160

Zone Boundary





MWANZA URBAN WATER SUPPLY &
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MAJI HOUSE - BALEWA RD
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TEL: +255 282500547
FAX: NO: +255 282503231
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FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

CONSULTANTS:

SEURECA VEOLIA

SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



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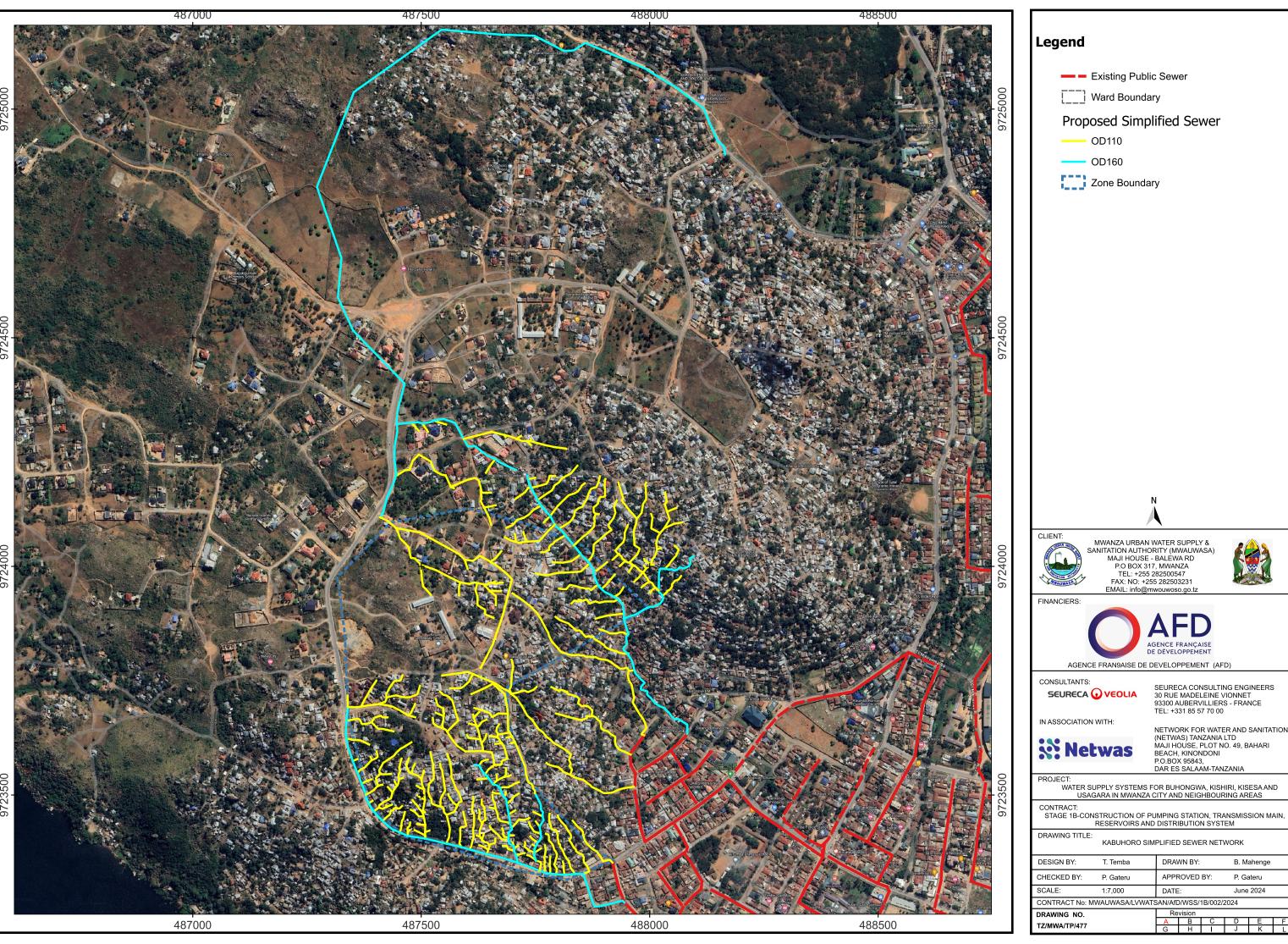
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND USAGARA IN MWANZA CITY AND NEIGHBOURINGAREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: ISAMILO SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |
|--|-----------|--------------|------------|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |
| SCALE:   | 1:3,300   | DATE:        | June 2024  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |

DRAWING NO. TZ/MWA/TP/477





Proposed Simplified Sewer

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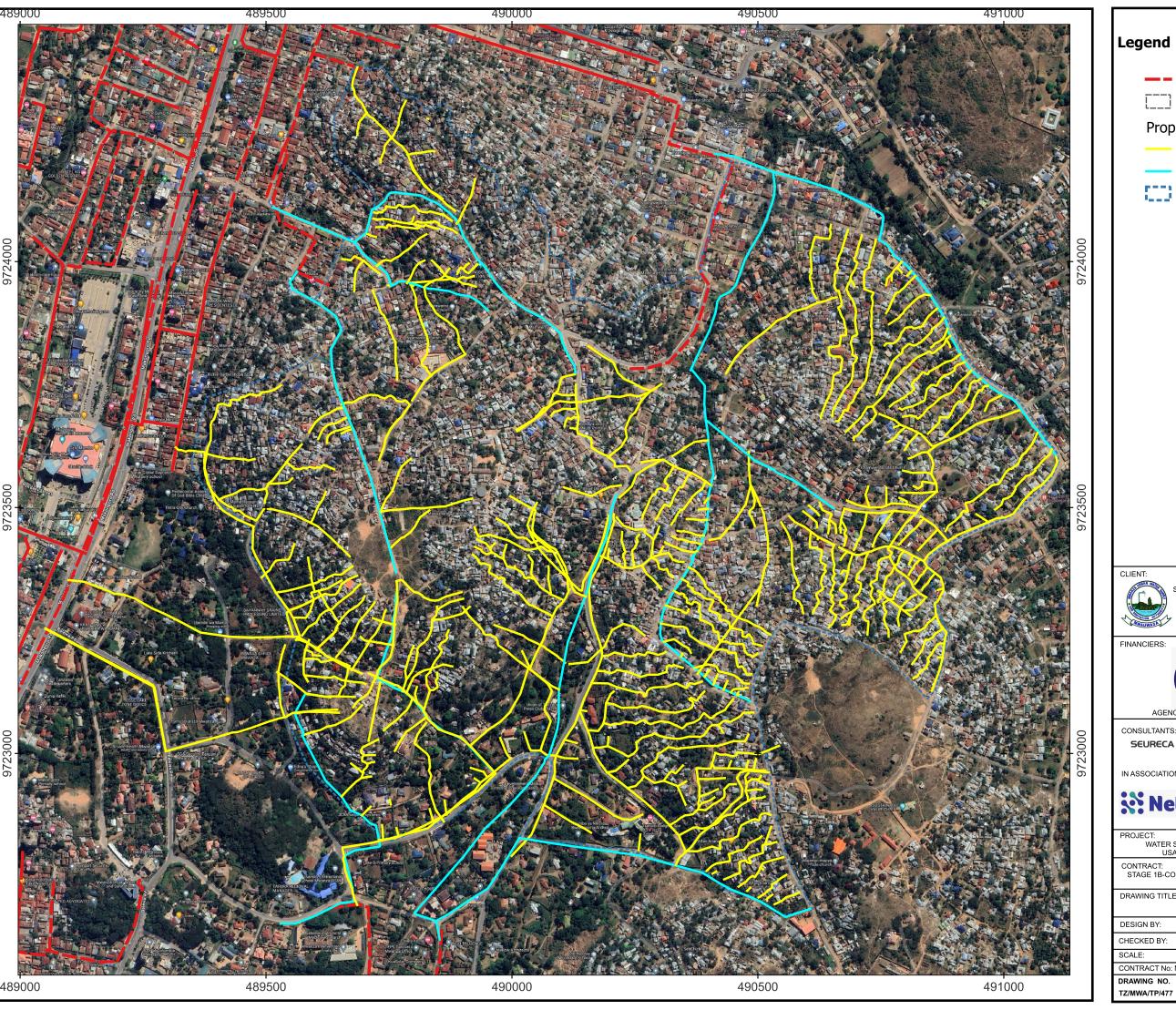


NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O. BOX 95843, DAR ES SALAAM-TANZANIA

PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

KABUHORO SIMPLIFIED SEWER NETWORK

|  | DD 414/11/0 1/0 |           | Dovision     |            |
|--|-----------------|-----------|--------------|------------|
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |                 |           |              | 24         |
|  | SCALE:          | 1:7,000   | DATE:        | June 2024  |
|  | CHECKED BY:     | P. Gateru | APPROVED BY: | P. Gateru  |
|  | DESIGN BY:      | T. Temba  | DRAWN BY:    | B. Mahenge |





Proposed Simplified Sewer

OD110

OD160

Zone Boundary





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EMAIL: info@mwouwoso.go.tz





AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

SEURECA VEOLIA

SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



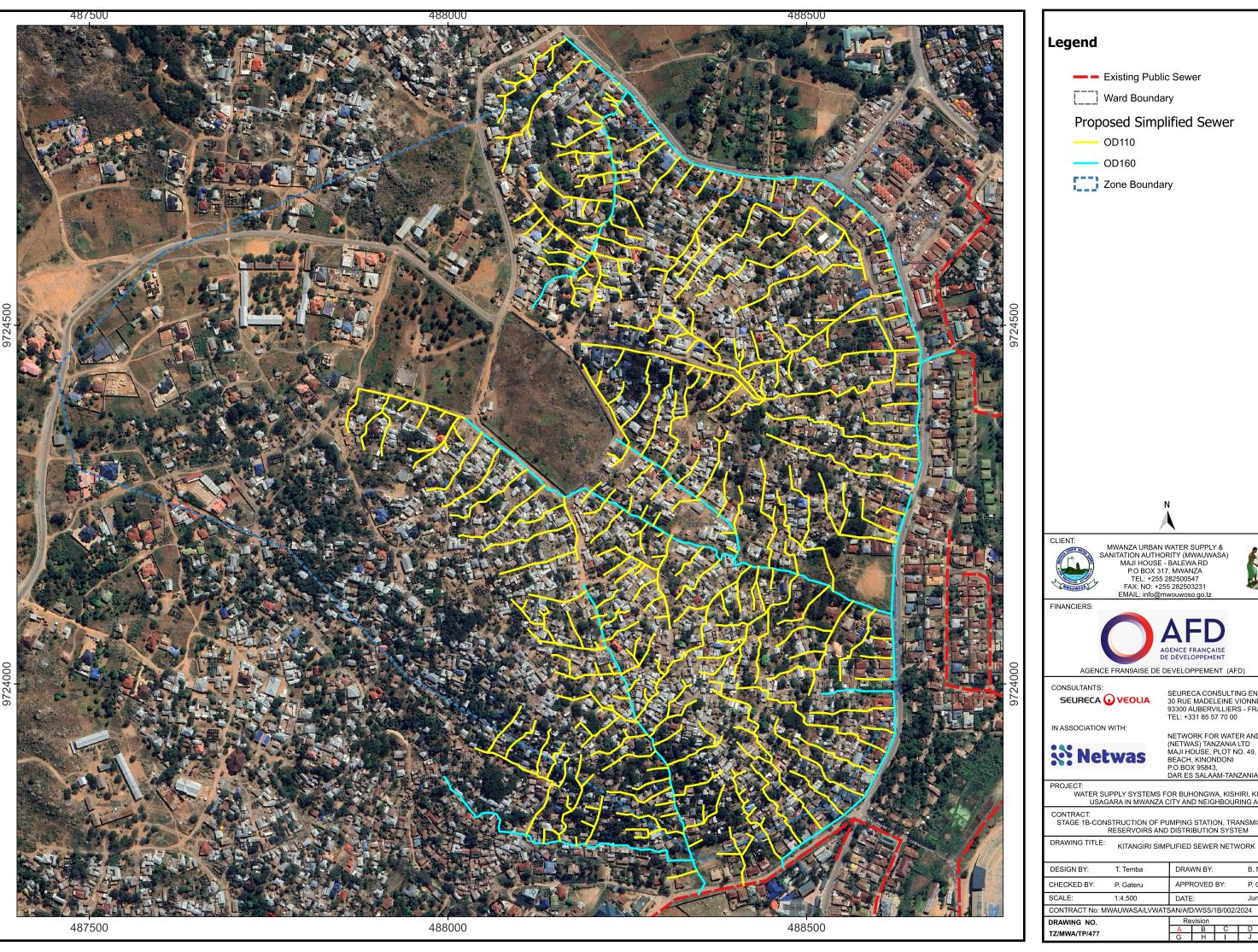
NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O. BOX 95843, DAR ES SALAAM-TANZANIA

PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: KILIMAHEWA SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |
|--|-----------|--------------|------------|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |
| SCALE:   | 1:7,000   | DATE:        | June 2024  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |





Proposed Simplified Sewer

OD110



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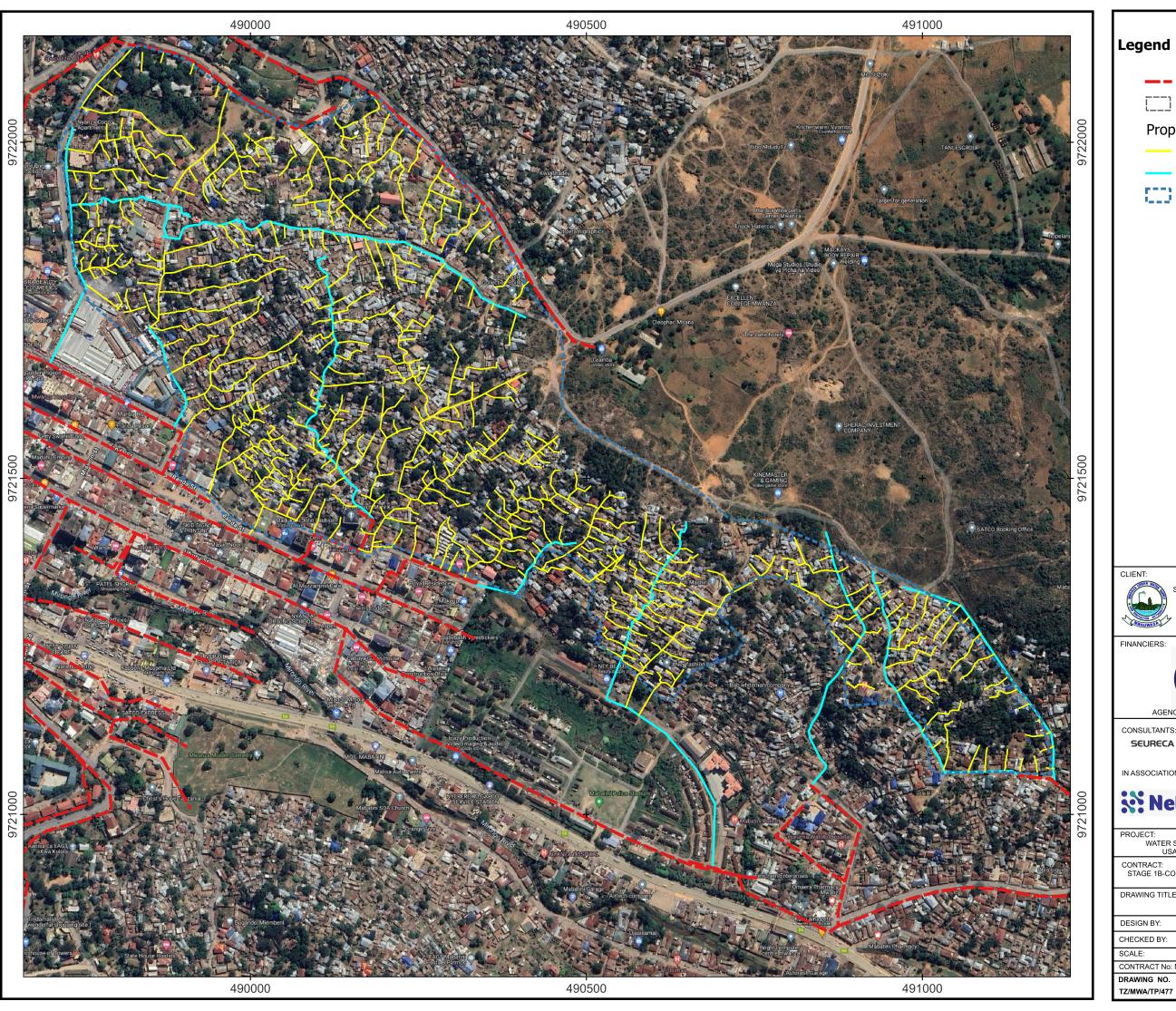


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| DD 4148110 110                                     |           | Povision     |            |  |
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| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |  |
| SCALE:   | 1:4,500   | DATE:        | June 2024  |  |
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |  |
| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |  |



- Existing Public Sewer



Proposed Simplified Sewer

OD110

OD160

Zone Boundary





MWANZA URBAN WATER SUPPLY &
SANITATION AUTHORITY (MWAUWASA)
MAJI HOUSE - BALEWA RD
P.O BOX 317, MWANZA
TEL: +255 282500547
FAX: NO: +255 282503231
EMAIL: info@mwouwoso.go.tz



FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

SEURECA VEOLIA

SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O.BOX 95843, DAR ES SALAAM-TANZANIA

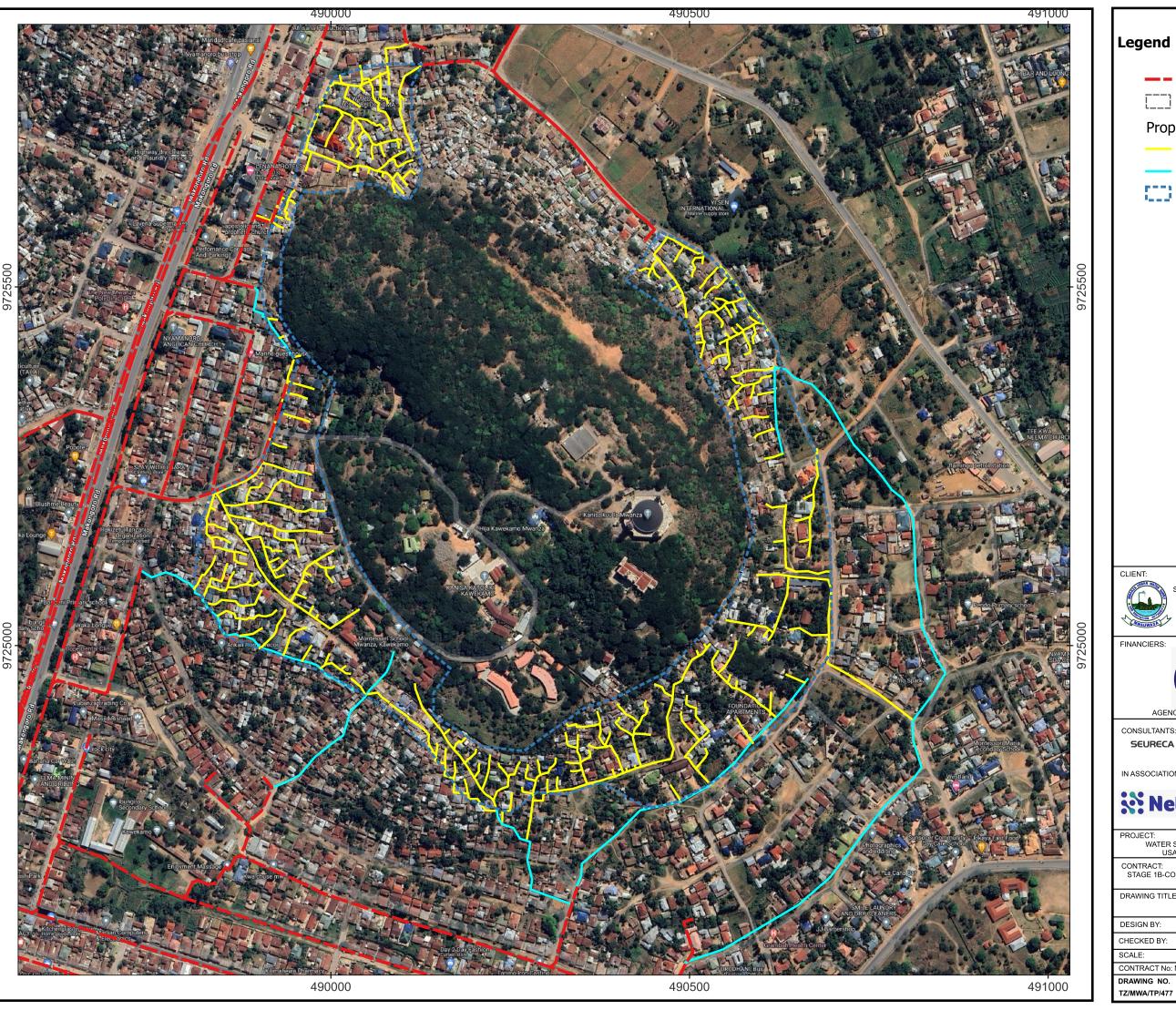
PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: MABATINI SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge                            |  |
|--|-----------|--------------|---------------------------------------|--|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru                             |  |
| SCALE:   | 1:5,100   | DATE:        | June 2024                             |  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |                                       |  |
|  |           |              | · · · · · · · · · · · · · · · · · · · |  |

DRAWING NO.



[\_\_\_] Ward Boundary

Proposed Simplified Sewer

OD110

OD160

Zone Boundary





MWANZA URBAN WATER SUPPLY &
SANITATION AUTHORITY (MWAUWASA)
MAJI HOUSE - BALEWA RD
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FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)

SEURECA VEOLIA

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IN ASSOCIATION WITH:



NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O.BOX 95843, DAR ES SALAAM-TANZANIA

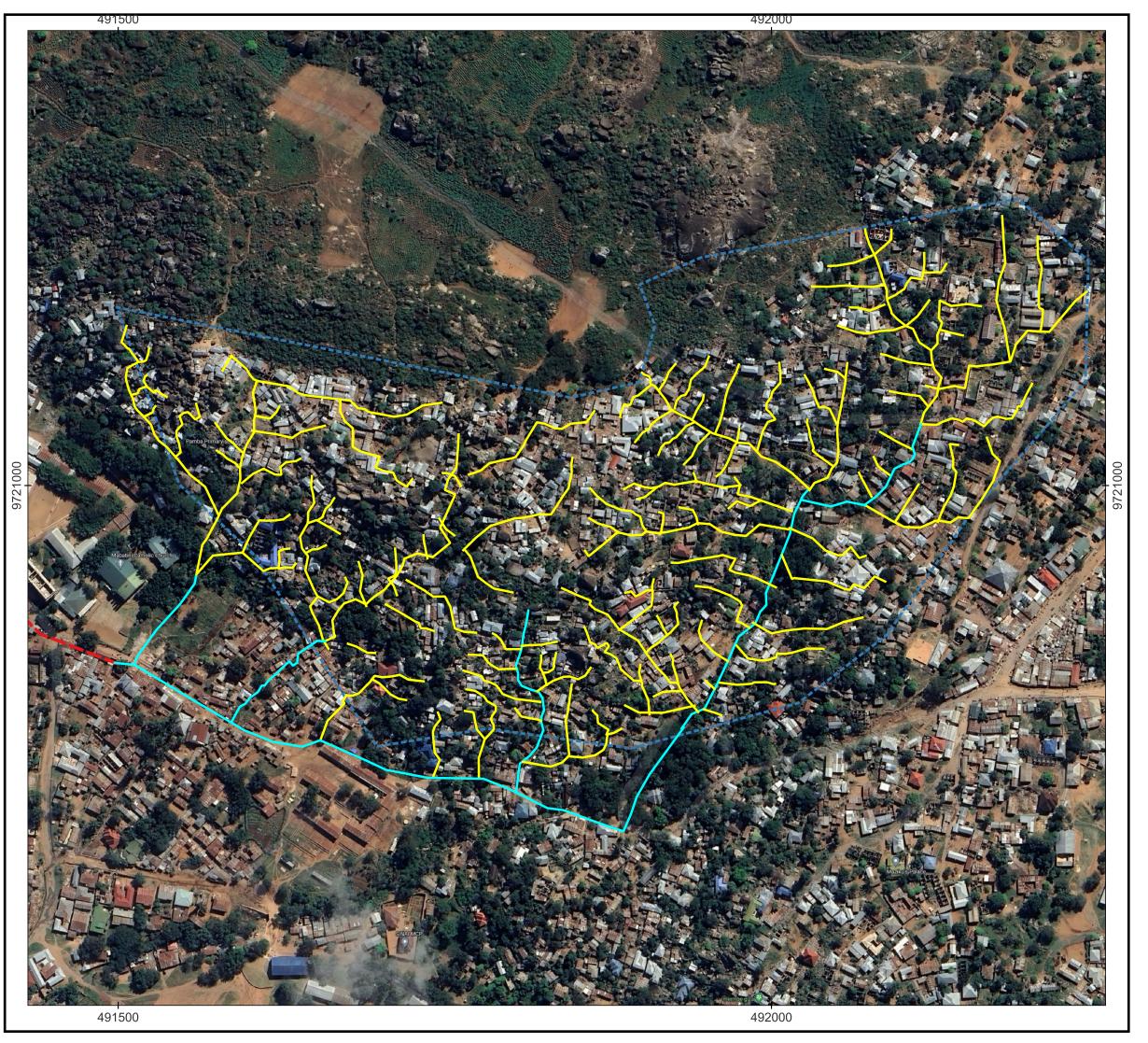
PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE: PASIANSI SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |  |  |
|--|-----------|--------------|------------|--|--|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |  |  |
| SCALE: 1:4,800 DATE: June 2024                     |           |              |            |  |  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |  |  |

DRAWING NO.



- Existing Public Sewer



Proposed Simplified Sewer



OD160



Zone Boundary





MWANZA URBAN WATER SUPPLY &
SANITATION AUTHORITY (MWAUWASA)
MAJI HOUSE - BALEWA RD
P.O BOX 317, MWANZA
TEL: +255 282500547
FAX: NO: +255 282503231
EMAIL: info@mwouwoso.go.tz



FINANCIERS:



AGENCE FRAN9AISE DE DEVELOPPEMENT (AFD)



SEURECA CONSULTING ENGINEERS 30 RUE MADELEINE VIONNET 93300 AUBERVILLIERS - FRANCE TEL: +331 85 57 70 00

IN ASSOCIATION WITH:



NETWORK FOR WATER AND SANITATION (NETWAS) TANZANIA LTD MAJI HOUSE, PLOT NO. 49, BAHARI BEACH, KINONDONI P.O.BOX 95843, DAR ES SALAAM-TANZANIA

PROJECT:
WATER SUPPLY SYSTEMS FOR BUHONGWA, KISHIRI, KISESA AND
USAGARA IN MWANZA CITY AND NEIGHBOURING AREAS

CONTRACT: STAGE 1B-CONSTRUCTION OF PUMPING STATION, TRANSMISSION MAIN, RESERVOIRS AND DISTRIBUTION SYSTEM

DRAWING TITLE:

USTAWI SIMPLIFIED SEWER NETWORK

| DESIGN BY:   | T. Temba  | DRAWN BY:    | B. Mahenge |  |
|--|-----------|--------------|------------|--|
| CHECKED BY:  | P. Gateru | APPROVED BY: | P. Gateru  |  |
| SCALE:   | 1:2,700   | DATE:        | June 2024  |  |
| CONTRACT No: MWAUWASA/LVWATSAN/AfD/WSS/1B/002/2024 |           |              |            |  |

DRAWING NO. TZ/MWA/TP/477

### **SEURECA**

Mailing address

30 rue Madeleine Vionnet • 93300 Aubervilliers, France

seureca.veolia.com