



WATER SUPPLY AND SANITATION (WSS) MARKET ASSESSMENT REPORT

Through a WaterCredit Adoption Program for Financial Institutions in Tanzania



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@ July 2022

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ACRONYMS AND ABBREVIATIONS

| | |
|-----------|---|
| BOT | Bank of Tanzania |
| CBWSOs | Community Based Water Supply Organizations |
| CSOs | Civil Society Organizations |
| DEWATS | Decentralized Wastewater Treatment System |
| EWURA | Energy and Water Utilities Regulatory Authority |
| FGDs | Focus Group Discussions |
| FIs | Financial Institutions |
| GDP | Gross Domestic Product |
| IDIs | In- Depth Interviews |
| IPoA | Istanbul Programme of Action |
| LDCs | Less Developed Countries |
| MFIs | Microfinance Institutions |
| MoW | Ministry of Water |
| NGOs | Non- Governmental Organizations |
| O& M | Operations and Maintenance |
| RUWASA | Rural Water Supply and Sanitation Agency |
| RWSSAs | Regional Water Supply and Sanitation Authorities |
| SACCOS | Savings and Credit Cooperative Organizations |
| TAMFI | Tanzania Association of Microfinance Institutions |
| TAWASANET | Tanzania Water and Sanitation Network |
| TOR | Terms of Reference |
| WSS | Water Supply and Sanitation |
| WSSAs | Water Supply and Sanitation Authorities |
| ZEEF | Zanzibar Economic Empowerment Fund |

EXECUTIVE SUMMARY

This report presents key findings of Water Supply and Sanitation (WSS) market assessment that was conducted in the zones of Dar es Salaam, Northern East, Lake, Central and Southern Highland in Tanzania mainland and Zanzibar.

The assessment's overall objective was to collect and analyze data with the aim of understanding better the water supply and sanitation market in Tanzania and identify financing gaps in the supply, delivery, distribution for the service providers and end users in the market.

The assessment adopted a mixed-methods approach whereby both quantitative and qualitative methods were used to collect data from different stakeholders along WSS services chain.

The assessment started with desk research through which different publications and reports were thoroughly reviewed with the aim of understanding what has already been done as well as building a base for designing and approaching the assignment.

The following respondents participated in the assessment;

- 304 household interviews in Dar Es salaam, Dodoma, Mwanza, Arusha and Mbeya
- 23 Focus Group Discussions (FGDs) - 11 with males and 12 with females in the above regions plus Mufindi and Rukwa
- 21 In- Depth Interviews (IDIs) across the country including two from Zanzibar namely, Zanzibar Economic Empowerment Fund (ZEEF) and *Jumuiya ya Changamoto*

Key Findings and Conclusions

Based on 2021 Water Sector Status Report, 86% of population in urban areas and 74.3% in rural areas have access to safe and clean water. The National Development Vision 2025 is to attain 95% and 85% in urban and rural areas respectively.

The same report indicates that only 11 regional water authorities have sewerage systems which represents only 20% of urban population, against a target of 30% by 2019.

The interviews (both quantitative and qualitative) found out the following;

Piped water is the main source of water supply in the urban and semi – urban areas, however, house owned and public wells are also significant sources – Field visits and interviews indicate that over 60% of the households in urban and semi- urban areas depend on piped water while self-supply sources particularly wells account for over 25%

Majority of households spend between TZS 1,000 to 10,000 per month on water supply services – Over 60% of households spend between TZS 1,000 to 10,000 on water supplied by water authorities while over 30% spend between TZS 10,000 and above 20,000. The relative low

spending per household could be attributed to the assessment areas which were pre dominantly lower end and middle class.

Water Supply services are improving but consistent availability still a challenge – Despite continuous improvements on water supply coverage, the efforts are being impeded by lack of continuous supply services, in some areas water rationing is rampant.

The assessment further revealed that issues such as price of water and connection fees are not as important as water availability and continuous service of water supply.

Every household has a toilet, the challenge is the quality – All households visited had toilets; however majority were of poor quality in terms of look and structure.

Availability of WSS related materials not an issue, affordability is – The assessment found out that WSS related materials such as pipes, cement and water tanks are widely available in the market, the challenge is affordability especially for the lower end market.

In view of all this, the assessment identified a number of financing opportunities for Financial Institutions (FIs) along the entire WSS services chain.

Identified opportunities under water supply include but not limited to;

- i. Partnering with water authorities to improve sustainable access to water supply services through strengthening their financial capacity.
- ii. Support the development of water self- supply technology such as rain water harvesting, boreholes, hand and wind pumps drilling.
- iii. Support acquiring of water storage facilities.
- iv. Support water treatment technologies especially scaling up of water filters technology.
- v. Support Operations and Maintenance (O&M) technologies particularly installation of pre – paid meters which come with monitoring software. The software has proved to be useful to water authorities in terms of increasing efficiency and reducing O & M costs.

Under sanitation the opportunities are found under the entire chain from construction of toilets to waste products re – use. The assessment in particular identified enormous potential in development of sewerage systems and Decentralized Wastewater Treatment System (DEWATS) technology.

With regards to sewerage system, the assessment found out that only 20% of urban population is connected to the system. This presents huge opportunity for financial institutions to work with water authorities to expand the services.

Additionally, DEWATS has huge potential as what has been done so far is very minimal and remains at pilot stage.

The findings and recommendations of this assessment are envisaged to guide TAMFI through its members to develop financial products that meet identified demand along WSS value chain.

INTRODUCTION

Tanzania Association of Microfinance Institutions (TAMFI), is a not-for-profit membership-based umbrella organization for Micro finance Institutions in Tanzania. Its membership constituency includes Commercial, Community and Microfinance Banks, Public and Private MFIs, SACCOS, apex of Community Microfinance Groups (CMGs), and Business Service Providers.

The association seeks to develop capability of microfinance institutions and the microfinance sector in general through advocacy, research and development, responsible micro finance, and capacity building. TAMFI gathers relevant market information and disseminate to members and other stakeholders.

Water.org on the other hand is a nonprofit organization that supports efforts in the provision of access to quality (clean and safe) water and sanitation through strengthening partners to enable them provide sustainable water supply and sanitation facilities.

TAMFI and Water.org have partnered to further country and global goals on water and sanitation. As part of strengthening the partnership, PERFECT APPROACH was commissioned to conduct a Market Assessment along the water supply and sanitation value chain with the aim of using the findings to develop/refine the WSS product offerings and identify financing opportunities across various markets and TAMFI members. The assessment was conducted from early May and completed in mid-July 2022.

Overall and Specific Objectives of the Assessment

The overall objectives as underlined in the TOR was to undertake a market research study as a way to understand the WSS market in Tanzania better and identify financing gaps in the supply, delivery, distribution for the service providers and end users in Tanzanian market. Basically, the study was expected to identify the WSS market potential for financial institutions to develop products that match the needs.

Specifically, the study was expected to;

- Provide a better understanding of the market size, opportunities, challenges to reach WSS and financial services, client socio-economic activities and status, income trends, sources and seasons.
- Provide a better understanding of various segments of the market and players relevant to development and roll out of market-led sustainable financial services.
- Enable partners to understand WSS products and services, value chain actors and essential vessels to aid delivery of financial services. This includes understanding of existing and potential stakeholders such as micro and small enterprises, privately and publicly owned water service providers, pit emptying enterprise, Sanitation Enterprises, any other WSS-related business or business services that may require financing that addresses water needs.

- Explore available financing gaps, possible business models and more importantly develop conclusions and recommendations that will guide parties to the cooperation to come-up with appropriate financial products and services to serve WSS market segments and realize country and global overall WSS goals.

Approach and Methodology

The assessment used a mixed - methods approach where both quantitative and qualitative methods were used to meet the overall and specific objectives outlined in the assessment's terms of reference.

The assessment started with a thorough desk review of existing literature on WSS in Tanzania. This included past reports of similar assessment, workshop reports, annual reports, regulations on WSS and MFIs and various public and private reports.

The desk review guided the designing of the assessment, methodology and data collection tools. Through quantitative method, a sample of 304 household interviews were conducted via mWater App in the areas of Dar Es Salaam, Dodoma, Arusha, Mwanza, Mafinga, Rukwa and Mbeya (urban and semi - urban). Household interview questions centered on getting a deeper understanding of the following;

- a) The main sources of household income.
- b) The average number of people per household.
- c) The main sources of water supply for households and how long (time) it takes to collect water.
- d) The level of satisfaction of water supply services.
- e) Average cost of water supply per month and what needs to be improved (if any)
- f) Availability, reliability and affordability of WSS service providers in the community.
- g) Availability of toilets and the common type in the community.
- h) Resource allocation for WSS services.
- i) Willingness to incur cost for improving WSS services.
- j) Willingness to borrow from FIs for improving WSS services.

In addition to household interviews at the community level, 23 Focus Group Discussions (12 Females and 11 Males) were conducted in the same regions.

Focus Group Discussions sought to collect the following information from the community;

- a) The availability, reliability and affordability of water supply services.
- b) The availability and conditions of toilets.
- c) Availability, reliability and affordability of WSS service providers.
- d) Availability of WSS financial products.
- e) Willingness to borrow for improving WSS services.

And finally, 21 In-depth Interviews (IDIs) were conducted to different WSS stakeholders across the country; they included TAMFI members (11), Water.org partners (1), NGOs (3), Government Ministries (1) Local Government Authorities (1) and WSS service providers (4).

TANZANIA: COUNTRY OVERVIEW

The United Republic of Tanzania (URT) was founded on 26 April 1964 as a union between two sovereign states, the then Tanganyika (now Mainland Tanzania) and the People's Republic of Zanzibar. The country is located on the eastern coast of Africa and occupies a total area of 945,087 square kilometers (364,900 square miles).

According to the [UN data](#), Tanzania's population was estimated at 59 million people as of 2020, and according to the 2012 Population and Housing Census, the average life expectancy at birth was 61.8 years (males, 59.8 years; females, 63.8 years), but 2019 estimates indicate that it has increased to 65 years (males, 63 years; females, 67 years).

The country has two official languages, Swahili and English. Swahili is the national language which is widely spoken across the country, an official language of Government and the medium of instruction in primary school. English is the language of diplomacy and foreign trade, and the medium of instruction in secondary and higher education.

The country is home to several renowned tourist attractions including Mount Kilimanjaro, Africa's highest peak and the world's tallest free-standing mountain. Mount Kilimanjaro is one of the "Seven Summits" of the world, featuring a snowcapped peak all year round. Other famous tourist attractions include the Serengeti National Park, Ngorongoro Conservation Area, and Stone Town of Zanzibar, which is a United Nations Educational, Scientific and Cultural Organization (UNESCO) world heritage site.

Tanzania is among the Countries that adopted the Istanbul Programme of Action (IPoA) 2011-2020. By endorsing the IPoA, the country and other LDCs are committed to, for their own development and with the support of development partners, implementing a set of priority areas as approved by the 4th United Nations (UN) conference on LDCs. The commitment centres on eight priority areas for action by the LDCs and developed countries. Developed countries, consistent with their capabilities, are supposed to provide support for the effective implementation of the IPoA in mutually agreed areas of cooperation within the framework of South-South Cooperation.

In 2021 Tanzania's GDP grew by 4.9% from 4.8% in 2020 supported by the global economic recovery. Growth was driven by agriculture and services on the supply side and final consumption and investment on the demand side.

Monetary policy remained tight, which stabilized inflation at 3.3% in 2020 and 3.7% in 2021. The Tanzanian shilling remained stable in 2020–21, depreciating by only 0.2% against the US dollar.

The ratio of NPLs to gross loans fell to 9.4% in March 2021 from 11.0% in March 2020, but was still above the statutory requirement of 5%.

The fiscal deficit increased to 3.4% of GDP in 2021 from 0.8% in 2020 due to weak revenue performance and growing financing needs to address the impacts of COVID-19; it was financed by external and domestic borrowing.

The current account deficit widened from 1.5% of GDP in 2020 to 3.1% in 2021, partly due to subdued tourism receipts, and was mainly financed by external commercial debt because other financial inflows, including FDI and grants, declined.

International reserves increased to 6.6 months of import cover in 2021 from 5.6 months in 2020 due to increased external official inflows and the SDR allocation of \$543 million (0.8% of GDP).

Tanzania had previously reduced poverty, but about 1 million people are estimated to have fallen back into poverty in 2020 due to COVID-19.

Agriculture is still the largest and most important economic sector in Mainland Tanzania, and the source of livelihood for over 65 percent of the population. However, the key drivers of the country's economic expansion include the extractive sector, infrastructure, telecommunications, financial services, tourism and construction, which provides evidence that the economy is gradually transforming away from its over-dependence on agriculture.

The steady economic growth has resulted in increase in country's per capita income from GNI Per Capita of US\$ 770 in 2011 to US\$ 1,018 in 2019. As a result of this increase, in July 2020 the World Bank (WB) officially declared Tanzania as a lower middle-income country after surpassing the minimum threshold for lower middle-income classification (GNI Per Capita of US\$ 1,036). Over the past 10 years, Tanzania has successfully managed to reduce poverty among its population.

Access to basic services and productive assets, such as increased access to electricity, markets, water, health and education as well as improved road infrastructure, are behind progress made in human development. Despite progress in human development indicators, the 2017/18 Household Budget Survey (HBS) reveals an overall rise in consumption inequality from 0.34 in 2011/12 to 0.38. The rise was observed in Dar es Salaam (0.35 to 0.42), other urban areas (0.37 to 0.38) and in rural areas (0.29 to 0.32). The HBS also identifies a number of challenges around implementation capacity, low productive capacity, inadequate quality data, good governance, and volatility in the external environment.

Volatility in global commodity prices is an ongoing challenge that constrains progress towards attaining Tanzania's growth prospects. The Government has introduced several strategies to address these challenges. Notably, the continued transformation and diversification of the

economy will form an integral part of national efforts to contain the effects of volatility in global commodity prices.

Increased support from the international community, including the UN system, will be essential in assisting the country to overcome some of the challenges identified during the implementation of IPoA and enable the country to realize the objectives set in the 2030 Agenda for Sustainable Development (SDGs). To enhance capacity development of domestic institutions, partnerships with different stakeholders will be a priority. Since financing was a critical factor during IPoA implementation, the Government needs to ensure adequate resources - including innovative financing - are mobilized and allocated toward national priority areas.

WATER SUPPLY AND SANITATION PERFORMANCE OVERVIEW

This section presents as an overview of the Water Supply and Sanitation sector in Tanzania, its contents are largely based on the Water Sector Status Report of 2021.

The Government of Tanzania, through the Ministry of Water (MoW) is implementing the Water Sector Development Programme (WSDP), for the period 2006–2025. The development objective of the WSDP is to strengthen sector institutions for integrated water resources management and improve access to water supply and sanitation services. It is expected that by the end of the Programme, the Government will have met the National Development Vision of 2025, and according to WSDP II, access to safe water was set at 80% in rural areas and 98% in urban areas by 2029.

In the mid of WSDP implementation, the water sector targets were domesticated to Sustainable Development Goals' (SDGs) targets of SDG 6 on ensuring availability and sustainable management of water and sanitation for all in Tanzania by 2030. This is meant to provide a tremendous opportunity of leapfrogging progress towards attainment of the 2030 Agenda, given the water sector's central role in human rights, poverty reduction, inequality elimination, peace and justice, and the environment. This is in line with the national development vision of universal access to water.

The Ministry of Water is the national government authority responsible for national water policy and strategy formulation (and ensuring these are implemented), the formulation of guidelines and regulations, the coordination of integrated water resources management and the provision of water supply and sanitation services and for determining a mechanism for appeals from all levels of the institutional framework.

The Ministry has seven implementing agencies/bodies namely;

- i. National Water Board – Responsible for Water Resources Management.
- ii. Water Supply and Sanitation Authorities (WSSAs) – Responsible for provision of water supply and sanitation services in urban areas.

- iii. Rural Water Supply and Sanitation Agency (RUWASA) – Responsible for provision of water supply and sanitation services in rural areas.
- iv. Community Based Water Supply Organizations (CBWSOs – Operates under RUWASA to enhance sustainability of rural water supply).
- v. Water Institute (WI) – Supplies middle level technical workforce.
- vi. National Water Fund (NWF) – Responsible for addressing inadequate funding of water projects.
- vii. Energy and Water Utilities Regulatory Authority (EWURA) - Responsible for technical and economic regulations of electricity, petroleum, natural gas and water sectors.

With regards to sector's performance, according to Water Sector Status Report of 2021, water supply coverage in urban areas stood at 86% and 74.3% in rural areas.

On sanitation front, while the broad objectives of WSDP II is for UWSS to have sewerage systems as part of overall sanitation strategy for each town by increasing the services coverage from 17% by June 2007 to 30% by June 2019; as of December 2021, only 11 towns/cities of Dar Es Salaam, Arusha, Tanga, Dodoma, Mbeya, Morogoro, Mwanza, Tabora, Moshi, Songea and Iringa had sewerage connection services which is equivalent to 20% of total urban population.

Water authorities without sewerage systems normally use cesspit emptiers for collection and disposal to designated areas/improved sludge digesters. The authorities with improved sludge digesters include Lindi, Bukoba, Sumbawanga, Kigoma, Musoma, Shinyanga, Geita, Lamadi, Magu, Kahama, Misungwi and Nansio. Sanitation services for emptying and transportation is normally done in collaboration with private sector.

The report further indicates that, while the national target was to increase access to household's improved sanitation to 75%, a recent review of WSDP II indicated that most of the regions across Tanzania recorded significant increases in the number of households using improved toilets. On average, the access rates to improved latrines at the household level increased from 42% in 2017 to 71.8% in 2021 with 7 regions namely, Dar es Salaam, Kilimanjaro, Iringa, Katavi, Mbeya, Songwe and Mwanza reported to surpass the national target.

FINDINGS AND CONCLUSIONS

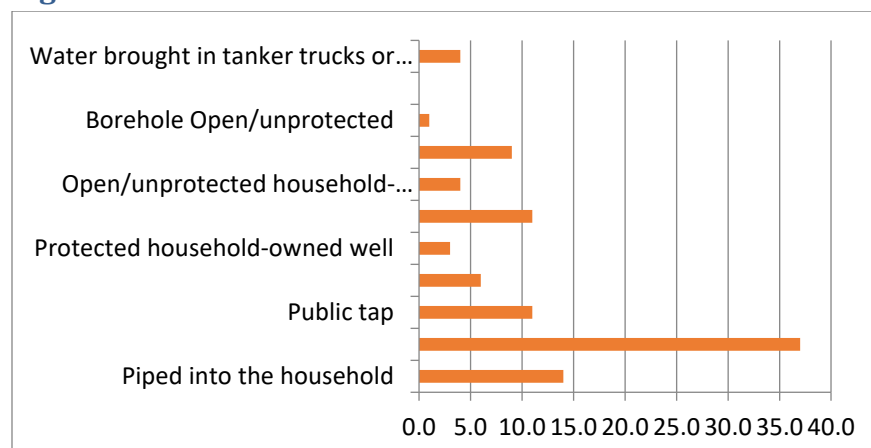
The status of water supply services in the community

This section presents the findings on water supply in the community in terms of the source, availability, reliability and affordability as indicated below;

Piped water is the main source of water supply in the urban and semi – urban areas, however, house owned and public wells are also significant sources.

As figure 1 below shows, over 60% of the households in the community depend on ¹ piped water as their main source of water supply. This includes water piped in the house, in the household's yard or at the public taps.

Figure 1: Main Sources of water in the household



The assessment also revealed that private and public owned wells, both protected and unprotected/open, accounted for over 25% of the community's sources of water supply.

“Water availability in this community I can say it's moderate, because not all community members can afford the connection fee, but even those who can don't get enough supply so wells are the alternative solution” (Male_FGD, Mwanza)

Another participant said... *“ There are some places where people do not have access to clean water from MUWASA, because the water authority doesn't have the capacity to provide water to everyone, thus people are forced to dig their own wells, those who can't afford the cost, depend on public wells” (IDI_TAMFI Member, Mbeya)*

Nonetheless, there is a concern over the quality of water from wells, especially the open/unprotected ones... *“ Some of the wells are in poor condition, you go there and collect water which is dirty, some are shallow and built near toilets, in that circumstances you can't expect to get clean and safe water from there” (Female_GGD, Dar Es Salaam)*

“When we talk about the quality of water, it means that water is clean and safe for human consumption, i have not seen any quality issue with piped water, the issue is with water from other sources for example wells where sometimes water has mud and sand” (Female_FGD, Mwanza)

The assessment did not establish if water from wells and boreholes was being regularly tested for conformity with drinking water standards as required.

¹ Tap water from the distribution lines of a piped – water supply station

A household spends between TZS 1,000 to 10,000 per month on water supply services

The Assessment sought to understand the cost of water supply services per household as a way to measure the ability of the community members to pay for the services, as table 1 below indicates; about 63% of households interviewed spend between TZS 1,000 to 10,000 on water supplied by water utilities, while about 21% spend between TZS 10,000 to 20,000 and 13% more than 20,000.

The overall low cost of water per household could be attributed to the fact that the majority of respondents were from lower end and middle class.

Table 1: Cost of water per household per month

| Background Characteristics | No cost | Less than 1000 | Between 1000 to 5000 | Between 5000 to 10,000 | Between 10,000 to 20,000 | More than 20,000 | Total |
|----------------------------|---------|----------------|----------------------|------------------------|--------------------------|------------------|-------|
| Age | | | | | | | |
| 18-20 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 2 |
| 20-34 | 1.9 | 0.5 | 12.5 | 8.2 | 4.8 | 1.9 | 62 |
| 35-49 | 0.5 | 0.0 | 11.1 | 15.9 | 5.8 | 6.3 | 82 |
| 50+ | 0.5 | 0.0 | 6.3 | 8.7 | 5.8 | 8.7 | 62 |
| Sex | | | | | | | |
| Male | 1.0 | 0.5 | 6.3 | 6.7 | 6.3 | 4.3 | 52 |
| Female | 1.9 | 0.0 | 23.6 | 26.0 | 11.1 | 12.5 | 156 |
| Region | | | | | | | |
| Arusha | 0.0 | 0.0 | 4.8 | 7.2 | 8.7 | 5.3 | 54 |
| Dar es Salaam | 0.0 | 0.5 | 2.4 | 1.4 | 5.3 | 3.8 | 28 |
| Dodoma | 0.5 | 0.0 | 4.8 | 7.7 | 0.5 | 0.0 | 28 |
| Mbeya | 2.4 | 0.0 | 9.1 | 11.1 | 5.3 | 0.0 | 58 |
| Mwanza | 0.0 | 0.0 | 8.7 | 5.3 | 1.0 | 4.3 | 40 |
| Total | 2.9 | 0.5 | 29.8 | 32.7 | 20.8 | 13.4 | 208 |

Water Supply services are improving but continuous availability is still a challenge

The assessment sought to understand the availability and reliability of piped water supply in the community. The respondents were asked whether water was available at the time of the interview, as table 2 below shows, about 38% of the respondents said there was no water, with Mbeya and Dodoma reporting highest cases respectively.

Table 2: If water was available at the time of interview

| Background characteristics | No | Yes | Total |
|----------------------------|-------------|-------------|------------|
| Age | | | |
| 18-20 | 0.0 | 1.0 | 2 |
| 20-34 | 11.1 | 18.8 | 62 |
| 35-49 | 17.8 | 21.6 | 82 |
| 50+ | 8.7 | 21.2 | 62 |
| Sex | | | |
| Male | 8.2 | 16.8 | 52 |
| Female | 29.3 | 45.7 | 156 |
| Region | | | |
| Arusha | 1.4 | 24.5 | 54 |
| Dar es Salaam | 2.4 | 11.1 | 28 |
| Dodoma | 10.1 | 3.4 | 28 |
| Mbeya | 15.4 | 12.5 | 58 |
| Mwanza | 8.2 | 11.1 | 40 |
| Total | 37.5 | 62.5 | 208 |

Water supply inconsistency in the community was further evident when household respondents were asked whether they were satisfied with the amount of water supply where 60% said there were not as indicated in table 3 below;

Table 3: If satisfied with amount of water supplied

| Background characteristics | No | Yes | Total |
|----------------------------|-----------|-----------|------------|
| Age | | | |
| 18-20 | 0.5 | 0.5 | 2 |
| 20-34 | 13.9 | 15.9 | 62 |
| 35-49 | 21.6 | 17.8 | 82 |
| 50+ | 11.5 | 18.3 | 62 |
| Sex | | | |
| Male | 14.4 | 10.6 | 52 |
| Female | 33.2 | 41.8 | 156 |
| Region | | | |
| Arusha | 19.2 | 6.7 | 54 |
| Dar es Salaam | 6.7 | 6.7 | 28 |
| Dodoma | 12.5 | 1.0 | 28 |
| Mbeya | 14.9 | 13.0 | 58 |
| Mwanza | 6.7 | 12.5 | 40 |
| Total | 60 | 40 | 208 |

Additionally, inconsistency of piped water supply availability came up quite strongly during Focus Group Discussions (FGDs) and In-Depth Interviews (IDIs) with different stakeholders. The assessment learnt that while there has been a significant improvement on water supply coverage in terms of new connections, the continuous supply remains a challenge as water rationing is still prevalent in many areas.

“Currently the situation is somehow better compared to the past, at least now we have access to water although the supply is somehow inadequate because not all people are connected with piped

water but even those who have been connected don't get it all the time, there are days they go without it due to rationing” (FGD Female participant, Dodoma)

“Water supplied is definitely not adequate because it is not available all the time, sometimes it may take up to a week without piped water” (FGD Female participant, Arusha)

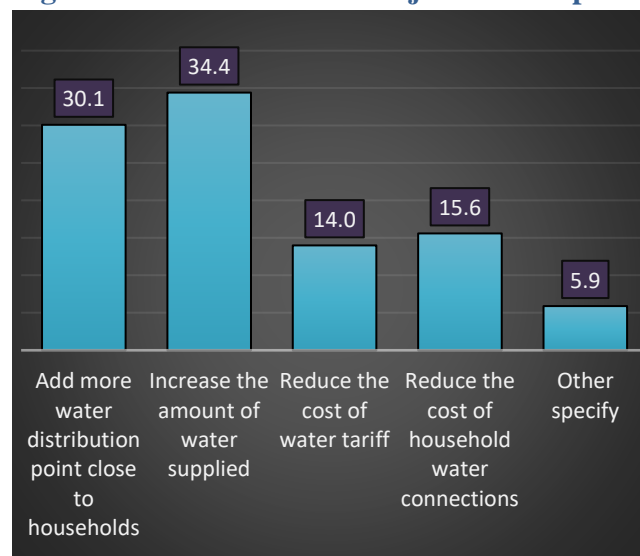
Another participant said... “For those living in the urban areas they somehow get enough water to meet their needs and the water is of good quality, but in the rural areas of Arusha water is still a big challenge as it is sourced from poor wells, springs and rivers with a lot of contamination, and you find that all these sources are very far from residences and are used by both humans and animals” (Male_FGD, Arusha)

“Despite efforts being taken by the Government, NGOs and Development Partners, the situation of water supply and sanitation is still below desired standard. The situation differs from one area to another and also from urban to rural because of unequal distribution of resources” (IDI_NGO, Arusha)

Cost of household water connection and tariffs are issues but not as availability

Although the community cited the cost of household connection and tariff as issues that need to be addressed, however, water availability through increasing the amount of water that is currently being supplied as well as adding more distribution points close to households were the most critical issues that need to be adjusted as shown in figure 2 below;

Figure 2: What need to be adjusted to improve WSS services



“Some people don't have the money for domestic connection, but there are also tenants who don't have the mandate for the connection in the house, to solve all this water utilities should install more public taps in the community. And another challenge is on meter reading by water utility officers, many people are complaining about receiving higher bills compared to the water they have used” (Female_FGD, Arusha)

“In general, the situation of water supply has improved, the problem is inconsistent availability which may be due to increased number of users following the government moving to Dodoma, sometimes water is available just for few hours, sometimes water is off for a week, even as of now there is no water at our office, this means there should be business opportunities on water storage facilities (IDI_TAMFI Member, Dodoma)

The status of Sanitation services in the community

Every household has a toilet, but quality remains a challenge

As table 4 below shows, in all areas where the assessment was conducted, every household had a toilet, albeit many being of poor quality, which is largely attributed to lack of financial capacity on one hand and lack of education on the importance of having better toilets on the other.

Table 4: Does your household have a toilet(s)?

| Background characteristics | Yes | Total |
|----------------------------|--------------|------------|
| Region | | |
| Arusha | 19.7 | 60 |
| Dar Es Salaam | 20.7 | 63 |
| Dodoma | 20.1 | 61 |
| Mbeya | 19.7 | 60 |
| Mwanza | 19.7 | 60 |
| Total | 100.0 | 304 |

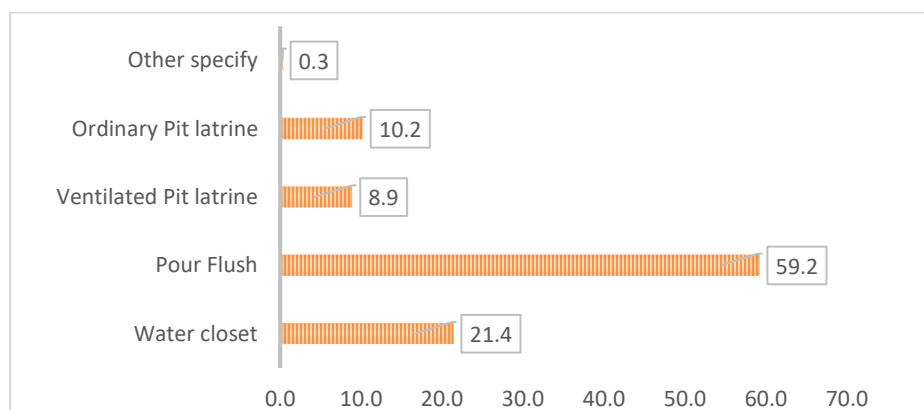
“Most households have toilets but still a large number of them are of a poor quality, this includes toilets with walls covered by broken iron sheets, others by tree leaves, and others by nylons” (Female_FGD, Arusha)

“All households in this area have a toilet but most of them are of poor quality, there are those we call passport size which are not covered at the top meaning the upper body of the user is left uncovered when standing, it is really shameful for adults especially women to use that kind of toilets” (Female_FGD, Mwanza)

“On Sanitation, the situation is improving but still most of the households in slums and rural areas people use unimproved toilets which include pit latrines covered with old iron sheets or even grasses, and in some areas such as Ruvu which is inhabited with pastoralists of Maasai community practice open defecation” (IDI_TAMFI Member, Same)

“In Zanzibar, although most of the households have toilets, however, there is still a need for education on the importance of having improved toilets and stopping open defecation practices along the sea shore” (IDI_TAMFI Member, Zanzibar)

Figure 3: Type of toilet used by household

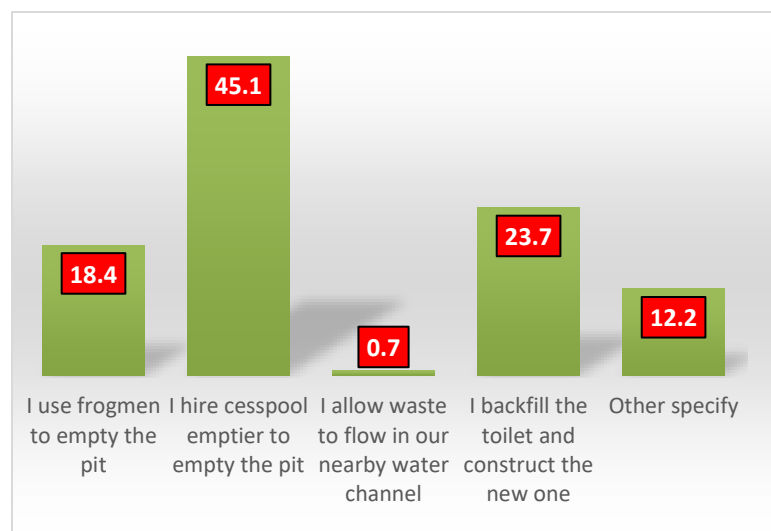


As table 4 and figure 3 above indicate, all interviewed households had toilets with pour flush type being commonly used. This type of toilet is preferred because it is relatively cheaper and perceived to be economical in terms of water usage. On the other hand, while over 20% of the respondents were using water closet toilets, almost same number are using pit latrines – ordinary and ventilated.

How do you empty and dispose the final products from your toilet?

The assessment sought to understand the means used by the households to empty and dispose toilet's final product. It was revealed that the majority (45%) hired a cesspool emptier, despite seemingly expensive as it costs between TZS 70,000 to 100,000 per trip. Figure 4 below presents different means through which the households empty and dispose toilet final products.

Figure 4: Means of emptying and disposing toilet final product



The 12.2% representing unspecified means are mostly those who said they had never emptied their toilets since constructed.

The community is indifferent about satisfaction of sanitation services provided

The assessment team wanted to measure the level of satisfaction with sanitation services in the community. As the table 5 below indicates, only 12.2% of household respondents were very satisfied, while over 60% were between just satisfied and somehow satisfied and 24.3% were not satisfied.

Table 5: Level of satisfaction with Sanitation services

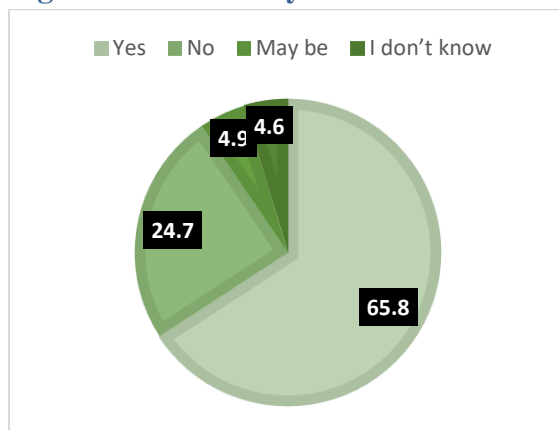
| Background characteristics | Very satisfactory | Satisfactory | Somehow | Not satisfactory | I don't know | Total |
|----------------------------|-------------------|--------------|-------------|------------------|--------------|------------|
| Age | | | | | | |
| 18-20 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 3 |
| 20-34 | 2.6 | 8.9 | 9.9 | 7.2 | 1.3 | 91 |
| 35-49 | 4.9 | 14.8 | 9.9 | 10.2 | 1.3 | 125 |
| 50+ | 4.3 | 6.9 | 9.2 | 6.9 | 0.7 | 85 |
| Sex | | | | | | |
| Male | 3.3 | 6.6 | 8.6 | 4.9 | 1.0 | 74 |
| Female | 8.9 | 24.3 | 20.7 | 19.4 | 2.3 | 230 |
| Region | | | | | | |
| Arusha | 6.3 | 5.6 | 3.3 | 3.6 | 1.0 | 60 |
| Dar es Salaam | 5.6 | 5.3 | 3.3 | 6.6 | 0.0 | 63 |
| Dodoma | 0.0 | 4.6 | 7.9 | 5.9 | 1.6 | 61 |
| Mbeya | 0.3 | 11.2 | 5.3 | 2.3 | 0.7 | 60 |
| Mwanza | 0.0 | 4.3 | 9.5 | 5.9 | 0.0 | 60 |
| Total | 12.2 | 30.9 | 29.3 | 24.3 | 3.3 | 304 |

The indifference was mainly attributed to “a by the way” general perception about sanitation services by the community.

Availability of WSS related materials not an issue, affordability is

The assessment wanted to establish if community members could get water and sanitation related materials such as pipes, storage facilities, toilet pans, water treatment materials, rain water harvest materials and toilet cleaning materials. While about 66% of the household respondents said they could get the materials they wanted, the issue seems to be on the affordability side due to limited cash flow.

Figure 5: Availability of WSS materials in the community



“Materials for water supply and sanitation are everywhere but some people can’t afford them (IDI_TAMFI Member, Zanzibar)

The community is willing to improve own WSS services but not able

The assessment found out that generally the community members consider WSS services important and were willing to incur costs to improve them, but they lacked enough resources to do so as exhibited in figure 6 and table 6 below. While 89% of the household respondents (figure 6) are willing to incur cost for improving WSS services, but only 17% consider WSS services very important and allocate enough resources for the services, over 40% consider the services important but don’t have enough resources to allocate for them (Table 6), this may imply that financing from FIs could be a solution.

Figure 6: Willingness to incur cost for WSS services

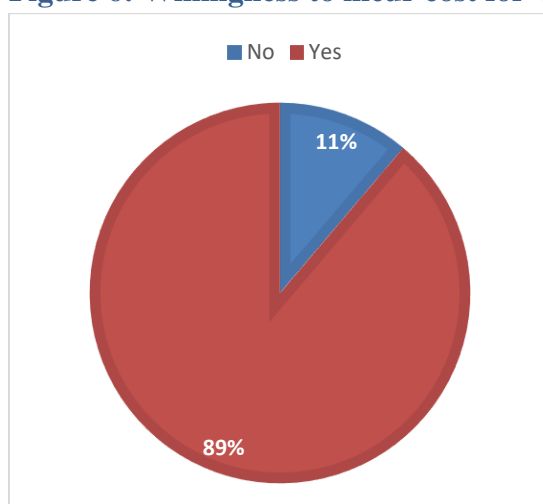


Table 6: Importance and Resource allocation for WSS services

| Background characteristics | Very important that we allocate enough resources for | Important that we allocate some resources for | Somehow important seldom we allocate resources for | Important but we don't have enough resources to allocate for | Not important to allocate resources for | I don't know | Total |
|----------------------------|--|---|--|--|---|--------------|------------|
| Age | | | | | | | |
| 18-20 | 0.0 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 3 |
| 20-34 | 7.6 | 6.6 | 4.9 | 10.2 | 0.3 | 0.3 | 91 |
| 35-49 | 13.2 | 9.9 | 6.9 | 10.9 | 0.3 | 0.0 | 125 |
| 50+ | 8.2 | 7.6 | 3.6 | 7.9 | 0.7 | 0.0 | 85 |
| Sex | | | | | | | |
| Male | 5.9 | 5.6 | 4.3 | 8.2 | 0.3 | 0.0 | 74 |
| Female | 23.0 | 18.8 | 11.5 | 21.1 | 1.0 | 0.3 | 230 |
| Region | | | | | | | |
| Arusha | 3.3 | 3.6 | 0.7 | 12.2 | 0.0 | 0.0 | 60 |
| Dar es Salaam | 3.9 | 8.9 | 2.3 | 5.3 | 0.0 | 0.3 | 63 |
| Dodoma | 4.9 | 3.6 | 3.9 | 6.6 | 1.0 | 0.0 | 61 |
| Mbeya | 2.6 | 4.3 | 0.7 | 12.2 | 0.0 | 0.0 | 60 |
| Mwanza | 2.3 | 7.9 | 4.6 | 4.6 | 0.3 | 0.0 | 60 |
| Total | 17.0 | 28.3 | 12.2 | 40.9 | 1.3 | 0.3 | 304 |

The community is willing to borrow for improving WSS services but sensitization is key

The assessment sought to gauge the level of community willingness to borrow for improving their access to WSS services.

As table 7 below indicates, about 57% of the respondents were straight away willing to borrow, while the remaining would need more details about the loan before making a decision. This may include 20% of the respondents who gave a “NO” answer.

Table 7: Can you take a loan to improve your household's access to WSS services?

| Background characteristics | Yes | No | May be | I don't know | Total |
|----------------------------|-------------|-------------|-------------|--------------|------------|
| Age | | | | | |
| 18-20 | 0.0 | 0.7 | 0.0 | 0.3 | 3 |
| 20-34 | 16.8 | 6.6 | 3.9 | 2.6 | 91 |
| 35-49 | 21.7 | 7.2 | 9.2 | 3.0 | 125 |
| 50+ | 18.1 | 5.3 | 4.6 | 0.0 | 85 |
| Sex | | | | | |
| Male | 14.1 | 4.3 | 4.9 | 1.0 | 74 |
| Female | 42.4 | 15.5 | 12.8 | 4.9 | 230 |
| Region | | | | | |
| Arusha | 9.5 | 2.3 | 6.9 | 1.0 | 60 |
| Dar es Salaam | 14.1 | 2.0 | 2.6 | 2.0 | 63 |
| Dodoma | 2.0 | 10.2 | 6.6 | 1.3 | 61 |
| Mbeya | 11.5 | 4.9 | 1.6 | 1.6 | 60 |
| Mwanza | 19.4 | 0.3 | 0.0 | 0.0 | 60 |
| Total | 56.6 | 19.7 | 17.8 | 5.9 | 304 |

“We are willing to borrow to improve access to WSS services as long as the terms and conditions are favorable” (Female_FGD, Dodoma)

“People need to be educated first on how WSS loans would help them since the majority believe that the role of providing them with water supply belongs to the government through water authorities” (IDI_TAMFI Member, Arusha)

With regards to the mode of loans, about 40% of respondents from Focus Group Discussions and individual interviews were of the opinion that the financial institutions should provide physical products or install the service instead of cash.

“The ideal mode would be for the financial institution to make an arrangement of providing products or installing the services instead of issuing cash which can tempt someone and end using it for something else” (Male_FGD, Mbeya)

IDENTIFIED OPPORTUNITIES

This section presents a summary of key findings on financing gaps for strengthening WSS sector in Tanzania.

Through desk review and interviews with different stakeholders along WSS service chain, the assessment identified quite a number of financing and collaboration opportunities, the assessment team analyzed each opportunity and came up with those that looked more viable and low hanging as presented below;

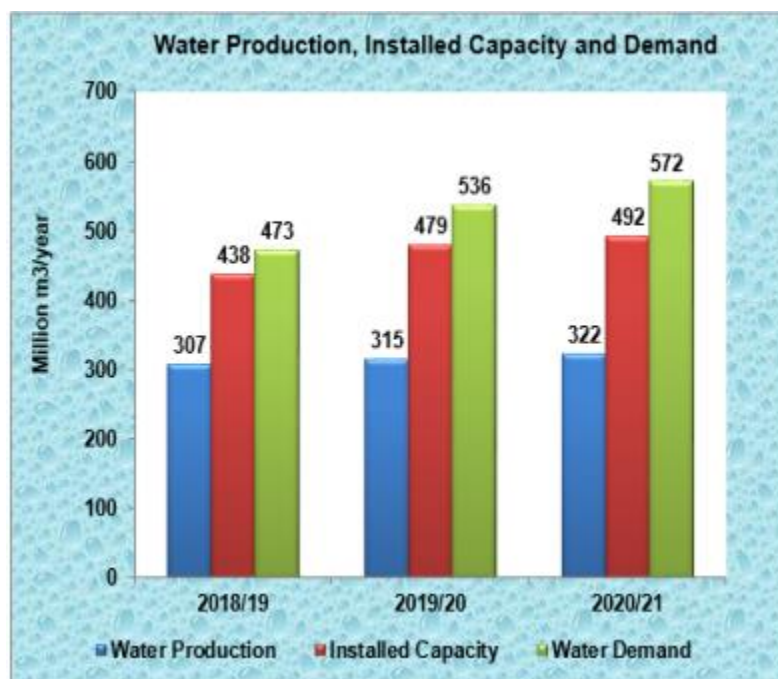
Financing opportunities for improving access to Water Supply Services

Despite government's commendable efforts to improve access to water supply, which according to Water Sector Status Report of 2021 stood at 86% and 74.3% in the urban and rural respectively, there is still a room for blending financing from financial institutions to complement the government's efforts to attain National Development 2025 and Sustainable Development Goals (SDG 6).

Numerically, water supply presents a market of over 23.4 million people (8.2 million in the urban and 15.1 million in the rural) comprising of first-time users (those without access to water supply).

Additionally, based on EWURA's Regional and National Water Utilities Performance Review Report for 2020/21, the total water production by all water authorities in Tanzania could only meet 56% of water demand during the period as indicated in figure 7 below.

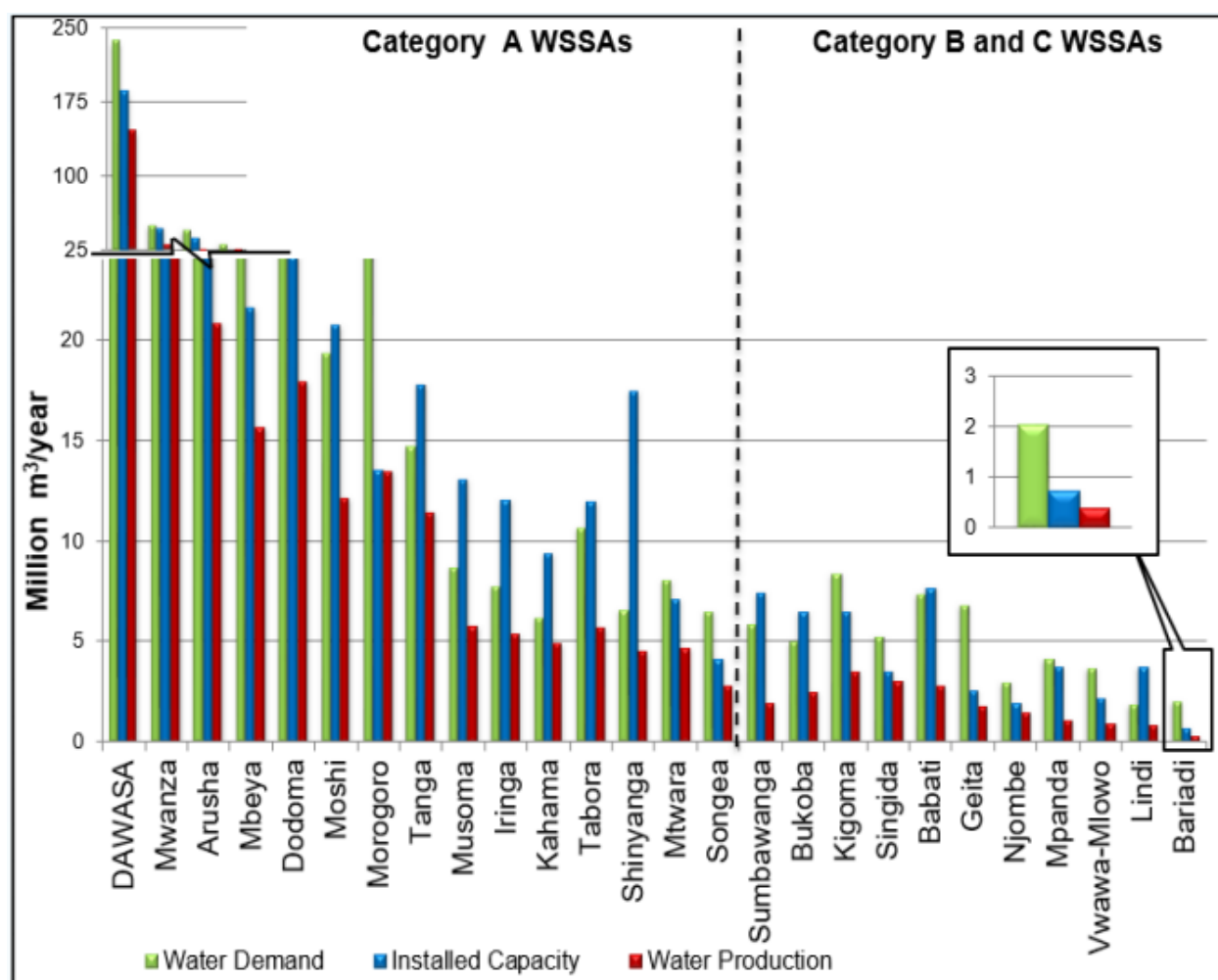
Figure 7: Water Production, Installed Capacity and Demand Comparison



The figure above further indicates that, while water demand increased by 21% between FY 2018/19 and 2020/21, water production and installed capacity increased by only 5% and 12% respectively, the report attributed the increase in water demand to population growth and expansion of service areas.

The overall performance comparison by WSSAs is presented in figure 8 below;

Figure 8: Water Production, Installed Capacity and Demand Comparison by WSSAs



The figures above which demonstrate the inability of WSSAs to meet water demand, present FIs with immense financing opportunity through developing products that can facilitate meeting of the unmet demand of water supply services.

The products can be tailor- made to meet financing needs for the expansion of capacity installation and water production on one hand and on the other, financing the expansion of self- supply technology such as wells, boreholes and rain water harvesting for households and institutions such as health facilities, schools/colleges, hotels as well as water vendors.

Specifically, financing opportunities for financial institutions on water supply services are found in the following market segments;

- Partnering with Rural and Urban water authorities to enhance their capacity on water supply coverage and reliable availability of water supply services.
- Support scale - up of self – supply technologies (rain water harvest, boreholes, wells, and hand and wind pumps.

c) Support acquiring of water storage facilities.

At institutional level, FIs can partner with WSSAs and provide them with financing for improving water production capacity, infrastructure installation expansion and rehabilitation. Other institutions that need high amount of water supply such as health facilities, schools, colleges and hotels can be financed to improve their water storage capacities and installation of self- supply technology.

As the household survey revealed, over 60% of households use piped water as their main water source, this could be low hanging fruits for FIs, however, self – supply technology which accounts for 20% in terms of household’s source of water supply also presents huge potential.

Further on self – supply technology, the assessment team particularly noted high demand for financing of boreholes in dry areas such as Dodoma and Same – where TAMFI member (Same Kaya Saccos) are in that business although at a small scale due to limited finance.

Furthermore, although rain water harvesting technology does not look popular in the community, yet the technology has high potential especially in rural and semi – urban areas as it is relatively cost effective - the only challenge is on initial costs of investment, after that the O & M is minimal.

Financing Water Treatment/Purification Technologies

Water treatment/purification technologies in particular water filters present huge financing potential for FIs in Tanzania.

According to the interview the assessment team had with Mr. Benami, Sales and Marketing Manager for Arusha based Gongali Model Co. Ltd, the manufacturers of Nano Water Filters (Probably the largest water filter manufacturers in the country) their product which is the invention of Prof. Askwar Hilonga of Arusha based at The Nelson Mandela African Institute of Science and Technology (NM- AIST), not only removes fluoride from water but also bacteria that cause waterborne diseases such as typhoid and cholera by 99% and generally makes water clean and safe for drinking.

The company has own water kiosks in Arusha, Manyara, Morogoro and Mwanza regions selling water at TZS 200 per liter compared to TZS 500 – TZS 1,000 for same amount of bottled water.

...” The demand is high but the challenge is the purchasing power as not many of targeted customers especially households can afford it, the other challenge is that the awareness on the benefits of water filters is low and the government is not helping innovators enough, for example we have installed 100 units of water filters to schools, out of those only one is a government school, and even that one got it from an individual sponsor”

Figure 9: Household Nano filter – Standard Model / uses normal water buckets



The company makes different sizes of water filters depending on user's need (e.g., households and institutions) with price per unit ranges from TZS 250,000 to 2,500,000. However, there are cheaper products in the market selling at around TZS 100,000. It appears the difference in price is a function of quality particularly the effectiveness in removing fluoride and bacteria.

Figure 10: Household Nano filter – Customized Model / uses square containers



Some NGOs, Water Aid Tanzania (WAT) and Catholic Relief Services (CRS) in particular, are keen to providing technical support necessary for scale up and both organizations have been working with some local manufacturers. WAT for example has been working very closely with [Gongali Model Company Ltd](#)

During the interviews with the assessment team both organizations showed interest in collaborating with other like – minded organizations for technical and financial support.

Existing Water.org partners are already offering water filter loans and here is what one partner said during the interview... ” *We recently introduced water filter loan product and it’s growing very fast, we believe in the coming quarter it’s going to have a significant contribution to the portfolio* ” (**IDI_Water.Org partner, Dar Es Salaam**)

This is another huge opportunity for TAMFI and Water.org on financing and collaboration fronts. On financing front, the opportunities are on financing the manufacturers for scale up as well as the buyers - both individuals and institutions. WAT cited schools (both public and private) as huge potential customers for water filters... ” *Just imagine if we come up with a national program or campaign for all schools to have water filters for providing children with clean and safe water through water filters, I am sure this idea can have a buy in of large organizations like UNICEF*” (**IDI_NGO, Dar Es Salaam**)

Financing Opportunities in Technology, particularly pre- paid meters and O&M

Tanzania is among the countries that are embracing pre – paid water meter technology for quality of water supply service through increasing efficiency by cutting down Non- Revenue Water (NRW) hence increase revenue collection, improving water systems monitoring and increasing transparency – among many other benefits.

Realizing the benefits of pre-paid meter technology, Tanzania is implementing a pilot project which is being assisted by the Global Partnership for Results-Based Approaches (GPRBA) and the [World Bank’s Global Water Security and Sanitation Partnership](#) (GWSP) seeks to expand the use and prevalence of solar-powered water pumps and prepaid water meters in existing water schemes powered by diesel generators. The programme includes a four-year service agreement to ensure sustainability. It covers 297 water taps in 72 villages in Singida and Dodoma regions.

The financial breakdown is as follows:

- The Dutch government and SIDA, through the World Bank’s Global Partnership for Results-Based Approaches (GPRBA), funds 60% of the project through a grant
- TIB Development Bank funds the remaining 40% through a four-year loan to participating communities.

It is expected that the rural communities can offset 40% of the investment without the need to increase the current water price.

The pilot project seems not to be Tanzania’s last attempt at installing prepaid water meters. In fact, the pilot project has led to an increased interest in the technology from the Rural Water Supply and Sanitation Agency (RUWASA), other decision-makers and rural communities.

RUWASA has recently requested the World Bank to carry out a scoping study to chart the best path forward on a project that aims to install as many as 35,000 prepaid water meters. Initial investigations indicate that prepaid water meters may have a payback time of less than 24 months. The main objective is to extend the four-year loan and 60% grant from the pilot project to a 15-year loan with a 0% grant.

The financial modeling in the study shows that this can be achieved with economies of scale, where hundreds of villages would voluntarily participate. The prepaid water meters would play a vital part in such a project because they would ensure payments for water are made and permit the remote surveillance of revenue collection and the whole water pumping operation.

Additionally, while launching the Water App and Unified Billing System (UBS) at the conclusion of the World Water Week in March, 2022, Tanzania's President H.E. Samia Suluhu Hassan urged the Ministry of Water to go for pre-paid water meter system across the country... *"I will be happy if the pre – paid meter system I saw during the exhibitions would be taken up and extended across the country"*

The move certainly presents immense blended financing needs from different stakeholders, depending on the implementation model that will be adopted.

Below we present a summary of anticipated stakeholders that will be involved in pre- paid meter business and potential financing options for FIs.

Table 8: Anticipated Demand for Pre- Paid Water Meters

| Stakeholder | Anticipated purpose of finance | Anticipated financing size that may be required | Possible financing source |
|-----------------|--|--|---|
| Water utilities | <ul style="list-style-type: none"> Procure and install pre-paid water meters (both public and domestic) | <ul style="list-style-type: none"> Medium to high | <ul style="list-style-type: none"> Commercial Banks/Donors for category A Commercial Banks/MFIs/Donors for category B MFIs/Donors for category C |
| CBWSOs | <ul style="list-style-type: none"> Procure and install pre- paid meters (both public and domestic) | <ul style="list-style-type: none"> Low | <ul style="list-style-type: none"> MFIs/Donors |
| Households | <ul style="list-style-type: none"> Pay for the meter and connection fee (If that will be the arrangement) | <ul style="list-style-type: none"> Low | <ul style="list-style-type: none"> MFIs/Commercial Banks |

| | | | |
|--------------|--|--|--|
| Institutions | <ul style="list-style-type: none"> • Pay for the meter and connection fee (If that will be the arrangement) | <ul style="list-style-type: none"> • Low to medium | <ul style="list-style-type: none"> • MFIs/Commercial Banks |
| Innovators | <ul style="list-style-type: none"> • Production, Distribution, Marketing, etc. | <ul style="list-style-type: none"> • Medium to high | <ul style="list-style-type: none"> • MFIs/Commercial Banks/Donors |

As with regards to Non- Revenue Water, according to EWURA's Regional and National Water Utilities Performance Review Report for FY 2020/21, overall Non- Revenue Water (NRW) for Regional WSSAs, was 36.8%. One of the major causes of NRW is poor operation and maintenance systems (particularly inability to timely detect leakages which can be addressed through smart meter's dashboard).

Figure 11: Non – Revenue Water for Regional WSSAs



Currently, there are a number of technology companies supplying the meters, some of them have been involved in various pilots, these include but not limited to;

- eWaterpay Services (UK)
- Maji Milele/Susteq (Kenya)
- Grundfos (Denmark)
- Lorentz (German)

Additionally, interviews with several stakeholders revealed that affordability remains a major constraint for scale. There have been efforts from different stakeholders - WAT in particular for supporting local innovators, with the hope that the intervention may bring down the costs, in addition to other benefits such as creating employment and building internal capacity.

One of the local innovators that benefited from WAT support is Dar Es Salaam based City Engineering (SAFI Technology), however, the cost remains relatively high as City Engineering meter costs between TZS 700,000 to 1,500,000 (around \$302 to 648) compared to TZS 150,000 (\$ 65) for a conventional meter.

It is however hoped that with economies of scale and as competition among suppliers increase, the cost will eventually come down significantly.

Financing Opportunities for improving access to Sanitation Services

Both desk review and field interviews indicate that Sanitation has huge potential as despite recent efforts at institutional level particularly by the government, NGOs and Development Partners to improve access to sanitation in Tanzania, the efforts are still far below what is being done on water supply as one respondent put it,

“Water supply receives a lion’s share in terms of government resources compared to sanitation, the government feels that it has the responsibility to provide water supply to the community, it doesn’t have same feelings on sanitation. Secondly, politically, sanitation is less visible compared to water supply and thirdly, water supply generates more revenue than sanitation and revenue generation is one of key performance indicators for water utilities” ... (IDI_NGO, Dar es Salaam)

The assessment further revealed that even at household level sanitation gets less attention as compared to water supply ... *“If you ask any community member to mention his top social needs he will mention water, education and health. Toilet is not on top of the mind, also when someone is looking for a house to rent, the interest is always on water supply and not the toilet status” ... (IDI_NGO, Dar es Salaam)*

Numerically, sanitation presents enormous financing options, these include but not limited to;

- a) Providing finance to WSSAs for the expansion of sewerage system as currently only 11 WSSAs have sewerage systems representing 20% of total urban population.
- b) Providing finance to households for improvement/construction of improved toilets/latrines as currently 28.2% of total households have no access to improved latrines.

Looking at the entire sanitation value chain (from construction, transportation, treatment) to re-use, the assessment revealed immense opportunities particularly in urban areas, albeit a lot needs to be done to enable scale as the services are currently fragmented and undeveloped.

Additionally, assessment observed high potential in **Decentralized Wastewater Treatment System** (DEWATS) in urban areas. The interview with *Uhai wa Mazingira na Watu* (UMAWA), a famous service provider based in Dar Es salaam indicated high potential in terms of collection, transportation and re – use. With limited financial and technical capacity, UMAWA has been able to set a system for collection, transportation, processing and production of by products such as bio gas and fertilizer, however, though relatively the largest in the country, the service provider remains small considering available potential.

As already indicated, sanitation generally is given less priority and focus at both institution and household level, a lot of work in terms of education need to be done to reverse the mentality. Apparently, the 2019 National Sanitation Campaign (NSC) dubbed “Nyumba ni Choo” was very

successful in terms of awareness as it was more focused on behavior change communication than infrastructure improvement and development.

It is worth noting that community sensitization should be an integral component for the success of sanitation financing. The assessment found out that partnership with WASH focused NGOs and CSOs for sensitization would be a great initiative. Tanzania Water and Sanitation Network (TAWASANET) can be a useful source of such organizations.

The table below presents identified potential products for FIs financing;

Table 9: Potential Products under Water Supply Services

| Unmet need/Market size | Potential Products | Potential Market | Amount willing to spend |
|--|---|--|---|
| 23.4 million people (8.2m in urban and 15.1m in rural) have no access to water supply | <ul style="list-style-type: none"> Water coverage expansion (Infrastructure) financing | <ul style="list-style-type: none"> WSSAs | <ul style="list-style-type: none"> Was not established |
| | <ul style="list-style-type: none"> New connection financing | <ul style="list-style-type: none"> Households | <ul style="list-style-type: none"> Differs from one water authority to another and the distance from the main pipe/line but ranges from TZS 200,000 – 600,000 |
| | <ul style="list-style-type: none"> Water storage facilities financing | <ul style="list-style-type: none"> Households Institutions Water vendors | <ul style="list-style-type: none"> Water storage tank costs between TZS 400,000 – 2.5m depending on size. Below is household's average spending on water supplied by water authorities per month; <ul style="list-style-type: none"> 63% TZS 1,000 to 10,000 21% TZS 10,000 to 20,000 13% above TZS 20,000 |
| | <ul style="list-style-type: none"> Self – supply technology financing | <ul style="list-style-type: none"> Households Institutions Water vendors | <ul style="list-style-type: none"> Borehole drilling costs between TZS 2m – 8m depending on quality and length |
| 36.8% of overall water production by RWSSAs is lost (NRW) mainly because of poor O & M systems | <ul style="list-style-type: none"> Pre – paid smart water meters (Domestic and Public) financing | <ul style="list-style-type: none"> WSSAs Households Manufacturers/ Distributors | <ul style="list-style-type: none"> One unit of pre – paid water meter costs between TZS 700,000 – 1,500,000 depending on type, quality and features |

| | | | |
|---|--|--|---|
| 23.4m people with no access to safe and clean water use water from unimproved water sources which cause waterborne diseases | <ul style="list-style-type: none"> Water Filter Financing | <ul style="list-style-type: none"> Households Institutions Manufactures | <ul style="list-style-type: none"> One unit of water filter costs between TZS 100,000 – 2.5m depending on size, quality and features |
|---|--|--|---|

Table 10: Potential Products under Sanitation Services

| Unmet need/Market size | Potential Products | Potential Market | Amount willing to spend |
|--|--|--|---|
| Only 11 out of 26 RWSSAs representing 20% of urban population have sewerage systems | <ul style="list-style-type: none"> Sewerage Systems Expansion Financing | <ul style="list-style-type: none"> RWSSAs | <ul style="list-style-type: none"> Was not established |
| | <ul style="list-style-type: none"> On- site Sanitation Financing | <ul style="list-style-type: none"> Households | <ul style="list-style-type: none"> Septic tank system costs between Tzs 1m – 2.5m depending size and quality |
| | <ul style="list-style-type: none"> Wastewater collection, transportation and disposal services financing | <ul style="list-style-type: none"> Service Providers | <ul style="list-style-type: none"> Was not established |
| 28.2% of population (16.6m people) have no access to improved toilets/latrines | <ul style="list-style-type: none"> Toilet/Latrine improvement financing | <ul style="list-style-type: none"> Households Institutions | <ul style="list-style-type: none"> Construction of one unit of improved toilet/latrine costs between TZS 600,000 – 1.5m depending on quality |
| | | <ul style="list-style-type: none"> Service and products vendors | <ul style="list-style-type: none"> Depends on type of service and product |
| <ul style="list-style-type: none"> Only 10 out of 26 RWSSAs have wastewater stabilization ponds Only 7 out of 26 RWSSAs have Sludge Digesters Only DAWASA has Decentralized Wastewater Treatment Systems (DEWATS) | <ul style="list-style-type: none"> Wastewater Treatment Financing Wastewater Treatment Financing | <ul style="list-style-type: none"> RWSSAs Service Providers RWSSAs Service Providers | <ul style="list-style-type: none"> Was not established Was not established |

ANNEX 1: LIST OF POTENTIAL CLIENTS AND PARTNERS

| S/N | NAME | POTENTIALITY | CONTACT |
|-----|---|---|---|
| 1. | Water Aid Tanzania | Partner in WASH | Gloria Kafuria +255 759 349 098, gloriakafuria@wateraid.org |
| 2. | Catholic Relief Services | Partner in WASH | Godfrey Mpangala +255 754 393 897, godfrey.mpangala@crs.org |
| 3. | Safi Engineering | Pre- paid water meters suppliers (potential client) | Festo Mwangungulu +255 784 296 203 |
| 4. | eWaterpay (pre – paid water meters) | Pre- paid water meters suppliers (potential client) | Awadh Masomo: +255 668 04 323 |
| 5. | Maji Milele (pre-paid water meters) | Pre- paid water meters suppliers (potential client) | Marcel Schreurs, +254 712 197 542/708 386 994, marcel@water-forver.com |
| 6. | Davis and Shirtilif (pre-paid water meters) | Pre- paid water meters suppliers (potential client) | Benjamin Mnyau +255 784 202 069. DarSales@dayliff.com |
| 7. | Gongali Model Co. Ltd (Water Filters) | Water Filters suppliers (potential client) | Mr Benami +255 767 482 300 |
| 8. | SNV Tanzania | Olivier Germain | Olivier Germain: ogermain@snv.org |
| 9. | UMAWA | Potential client (DEWATS) | Mathias Milinga; +255 754 801 597 |
| 10. | TAWASANET | Partner in WASH | Darius Mhawi; +255 715 866 243, dariusmhawi@tawasanet.or.tz |
| 11. | EWURA | Partner in WASH | +255 26 2329003/4, info@ewura.go.tz |
| 12. | Ministry of Water | Partner in Water supply | +255 26 2322602, ps@maji.go.tz |
| 13. | Ministry of Health | Partner in Sanitation | +255 26 2323267, ps@afya.go.tz |
| 14. | RUWASA | Partner in WASH (Rural) | dg@ruwasa.go.tz |
| 15. | National Water Fund (NAF) | Partner in Water supply | +255 26 296 2289, info@nwf.go.tz |
| 16. | Association of Tanzania Water Suppliers (ATAWAS) | Partner in Water supply | Costantino, +255 785506 554/738 253 766, info@atawas.or.tz |
| 17. | UNICEF | Partner in WASH | +255 22 319 6600, daressalaam@unicef.org |
| 18. | World Bank Tanzania | Partner in WASH | +255 22 216 3245, inabeta@worldbank.org |
| 19. | USAID Tanzania | Partner in WASH | Francis Mtitu, +255 229 4490, fmatitu@usaid.gov |
| 20. | UK Department For International Development (DFID) | Partner in WASH | +255 22 2110141, enquiry@dfid.gov.uk |
| 21. | Water Resources Integration Development Initiative (WARIDI) | Partner in Water supply | Francis Mtitu, +255 22 229 4490, fmtitu@usaid.gov |

| | | | |
|-----|-----------------------------|------------------------------------|---|
| 22. | Plasco Ltd | Supplier of water supply materials | +255 22 2199 820-23 |
| 23. | LIXIL SATO Toilets/Latrines | Partner in WASH | Justin Mbowe, Justin.mbowe@lixil.com , SATO@LIXIL.com |
| 24. | Kiboko Plastics Ltd | Supplier of KIBOKO water tanks | +255 22 277 2083, +255 22 277 2085 |
| 25. | Shahidi wa Maji Tanzania | Partner in water supply | Abel Dugange, +255 767 345 550, info@shahidiwamaji.org |

ANNEX 2: DATA COLLECTION TOOLS

HOUSEHOLD QUESTIONNAIRE

STUDY TITLE: Water Supply and Sanitation Market Assessment through a WaterCredit Adoption Program for Financial Institutions in Tanzania

DATE: ____/____/____ [DD/MM/YYYY]

ENUMERATORS' NAME: _____

INTERVIEW START TIME: ____ [HRS] ____ [MIN]

GEOGRAPHIC AND SITE INFORMATION

REGION NAME: _____ **DISTRICT NAME:** _____

WARD NAME: _____ **STREET:** _____

INFORMATION TO PARTICIPANTS (CONSENT FORM)

[Respondent must be head of household/ adult present during the data collection who has been at the respective household for at least 2 months. Interviewers should spend a few minutes building rapport with the respondent.]

My name is _____ and I am working on behalf of Perfect Approach. We are gathering information about Water sanitation and hygiene behavior in this household. The interview will take about 40 to 60 minutes. All the answers you give will be confidential and will not be shared with anyone other than members of our survey team. Your participation in the survey is not mandatory, but we hope you will agree to answer the questions since your contribution is very important to this assessment. The outcome of this survey will help in developing relevant interventions aiming at improving such services. If you agree to participate, you can ask me to explain anything you do not understand at any time during our conversation. If I ask you any question you do not want to answer, just let me know and I will go on to the next question. During the interview you are free to end the conversation at any time.

Do you have any questions?

May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ **DATE:** ____/____/____ [DD/MM/YYYY]

RESPONDENT AGREES TO BE INTERVIEWED.....1 **[GO TO PART 1]**

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 **[END THE INTERVIEW]**

[Mhojiwa lazima awe kiongozi/mjumbe kwenye ngazi ya uongozi].

Jina langu ni _____ na ninafanya kazi kwa niaba ya Perfect Approach. Tunakusanya taarifa kuhusu uhitaji na upatikanaji wa huduma na bidhaa za usambazaji wa Maji Safi na usafi wa mazingira katika taasisi yako. Mahojiano yatachukua kama dakika 40 hadi 60. Majibu yote utakayotoa yatatunzwa kwa usiri na hatashirikishwa mtu yeyote isipokuwa washiriki wa timu yetu ya utafiti. Ushiriki wako ni wa hiari, lakini tunatumaini utakubali kushiriki majadiliano haya kwa kua mchango wako ni muhimu sana katika tathmini hii. Matokeo ya utafiti huu yatasaidia katika kupanga na kuboresha huduma hizo. Ikiwa unakubali kushiriki, unaweza kuniambia nielezee chochote ambacho huelewi wakati wowote wa majadiliano yetu. Nikikuuliza swali lolote ambalo hutaki kujibu, nijulishe tu na nitaendelea na swali linalofuata. Wakati wa mahojiano uko huru kusitisha mahojiano wakati wowote.

Je, una swali lolote?

Ninaweza kuanza mahojiano sasa?

MHOJIWA AMEKUBALI KUHOJIWA.....1 [NENDA KWENYE SEHEMU YA 1]

MHOJIWA AMEKATAA KUHOJIWA.....2 [MALIZA MAHOJIANO]

RIDHAA YA KUREKODI: Wakati wa majadilino, nitakua nikichukua taarifa hizi kwa maandishi. Lakini, kwasababu siwezi kuandika kila kitu ninaomba kutumia tepu rekoda ili kunasa mahojiano kwa nia ya sauti pia. Tafadhali usijali kuhusu hili, majojiano yetu yataendelea kuwa siri na yatumika TU kwa utafiti huu.

Je, unakubali mahojiano kurekodiwa?

Sahihi ya Mhojaji: _____ TAREHE: ____ / ____ / ____ [DD / MM / YYYY]

PART 1 – RESPONDENT INFORMATION

| NO. | QUESTIONS& INSTRUCTIONS | RESPONSES | CODES | SKIPS |
|-----|--|---|---------------------------------------|-------|
| 1. | What is your age <i>Una miaka mingapi?</i> | Age in complete years..... <i>Andika umri kamili</i> | _ _ _ | |
| 2. | Respondent sex <i>Jinsia ya mhusika</i> [Don't ask] <i>Usiulize</i> | Male <i>Mwanaume</i> Female <i>Mwanamke</i> | 1 2 | |
| 3. | What is your <u>highest</u> level of education completed? <i>Kiwango gani cha juu cha elimu alichofikia?</i> [Please mark only 1 response] <i>Tafadhari weka jibu moja tu</i> | No formal education..... <i>Hajasoma</i> Some primary education..... <i>Hajamaliza elimu ya msingi</i> Completed primary education..... <i>Amemaliza elimu ya msingi</i> Secondary O-Level..... <i>Amemaliza kidato cha Nne</i> Secondary A-Level..... <i>Amemaliza kitado cha Sita</i> Post-secondary Level..... <i>Elimu baada ya Sekondari</i> University..... <i>Elimu ya chuo kikuu</i> Other (specify)..... <i>Nyingine taja</i> | 1 2 3 4 5 6 7 96 | |
| 4. | For how long have you been living in this area? <i>Ni kwa muda gani umeishi katika eneo hili?</i> [Please mark only 1 applicable response] | One year or more..... <i>Mwaka mmoja na Zaidi</i> Less than one year..... <i>Chini ya mwaka mmoja</i> Less than a month <i>Chini ya mwezi mmoja</i> | 1 2 3 4 | |

| | | | | |
|----|---|---|-----------------------------|--|
| | | I don't remember..... Sikumbuki | | |
| 5. | What is your main household income source? Je ni kipi chanzo kikuu cha kipato cha kaya yako? [Please mark only 1 response] | Farming..... Kilimo Animal keeping..... Ufugaji Full time employment..... Mwajiriwa wa kudumu Self-employed..... Ajira binafsi Part time employment..... Ajira ya muda Prefer not to say..... Hajajibu Other (specify)..... Nyingine taja | 1 2 3 4 5 96 | |
| 6. | How many people live in your household? Je ni wanakaya wangapi wanaishi katika kaya hii? | Exclude visitors Usihusishe wageni (wakuja na kuondoka) | _ _ _ | |

PART II – WATER SOURCE INFORMATION – TAARIFA ZA VYANZO VYA MAJI

| 1. | What is your main water source in the household? Ni kipi chanzo kikuu cha maji katika kaya yako? [circle all those that apply] | | Yes | No | |
|----|---|--|-----|----|--|
| | <u>Piped water (Maji ya bomba)</u> | | | | |
| | Piped into the household..... | | 1 | 0 | |
| | Bomba la maji ndani ya kaya | | 1 | 0 | |
| | Piped into household yard/plot..... | | 1 | 0 | |
| | Bomba la maji katika eneo la kaya | | | | |
| | Public tap..... | | 1 | 0 | |
| | Bomba la Umma (jumuiya) | | 1 | 0 | |
| | <u>Water from well (Maji ya Visima)</u> | | 1 | 0 | |
| | Open/unprotected household-owned well..... | | 1 | 0 | |
| | Kisima cha kaya kisichofunikwa (cha wazi) | | | | |
| | Open/unprotected public well..... | | 1 | 0 | |
| | Kisima cha umma kisichofunikwa (cha wazi) | | | | |
| | Protected household-owned well..... | | 1 | 0 | |
| | Kisima kilichofunikwa cha kaya | | 1 | 0 | |
| | Protected public well..... | | 1 | 0 | |
| | Kisima cha umma kilichofunikwa | | 1 | 0 | |
| | Borehole – Kisima kirefu (Kisima cha neli) | | 1 | 0 | |
| | Borehole Open/unprotected..... | | 1 | 0 | |
| | Kisima kirefu kisichofunikwa | | 1 | 0 | |
| | Surface water- maji ya wazi | | 96 | | |
| | River/stream..... | | | | |
| | Mito/Vijito | | | | |
| | Pond/lake..... | | | | |
| | Madimbwi/Ziwa | | | | |
| | Dam..... | | | | |
| | Bwawa | | | | |
| | Spring..... | | | | |

| | | | | | |
|----|--|--|--|--|--|
| | | Chemichemi Rainwater..... Maji ya mvua Water brought in tanker trucks or containers..... Kununua maji toka kwa wauza maji kwenye magari au No water source..... Hakuna chanzo cha maji Other (specify)..... Nyingine taja | | | |
| 2. | How long does it take for one to go at the source to fetch water and get back home? Kwa wastani inachukuwa muda gani kuchota maji (kwenda na kurudi) | Less than 10 minutes..... Chini ya dakika 10 More than 10 minutes but less than 30minutes..... Zaidi ya dakika 10 lakini azidi dakika 30 More than 30 minutes but less than 1 hour..... Zaidi ya dakika 30 ila chini ya saa 1 More than 1 hour..... Zaidi ya saa 1 | <u>1</u> <u>2</u> <u>3</u> <u>4</u> | | |
| 3. | How much does water cost per month per household? Je kaya yako inatumia kiasi gani cha fedha kwa mwezi kwa ajili ya huduma ya maji? | No cost..... Hakuna gharama Less than 1000..... Chini ya 1000 Between 1000 to 5000 Kati ya 1000 hadi 5000 Between 5000 to 10,000..... Kati ya 5000 hadi 10000 Between 10,000 to 20,000..... Kati ya 10000 hadi 20000 More than 20,000..... Zaidi ya 20000 | <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>6</u> | | |
| 4. | Do leaders in this area have arrangement for those who cannot afford the cost of water? Je kuna utaratibu wowote unaofanywa na viongozi wa eneo hili kwa watu wasio weza kumudu gharama za maji? | Yes..... Ndio No..... Hapana | 1 0 | | |
| 5. | Is water available at the source now? (During the visit) Maji yanapatika kwenye chanzo chako kwa sasa?(wakati umemtembelea mhusika) | Yes..... Ndio No..... Hapana | 1 0 | | |
| 6. | Are you comfortable with the amount of water supplied? Unaridhika na kiasi cha upatikanaji/usambazaji wa maji | Yes..... Ndio No..... Hapana | 1 0 | | |

| | | | | |
|----|--|--|------------------|--|
| 7. | Do you think there is a need for improvement of water supply? Unadhani kunahitajika maboresho katika upatikanaji/usambazaji wa maji? | Yes..... Ndio No..... Hapana I don't know..... Sijui | 1 2 96 | |
| 8. | What could be adjusted to improve water supply services in this area? Please tick all mentioned Je ni kipi kinahitajika kuongezwa ili kuboresha huduma za upatikanaji/usambazaji maji katika eneo hili? | Add more water distribution point close to households..... Kuongeza Zaidi usambazaji /upatikanaji maji karibu na kaya Increase the amount of water supplied..... Kuongeza usambazaji/upatikanaji maji Reduce the cost of water tariff..... Kupunguza gharama za kulipia maji Reduce the cost of household water connections Kupunguza gharama za kuunganisha maji katika kaya Other (specify)..... Nyingine taja | 1 2 3 4 | |

PART IV – SANITATION FACILITIES

| | | | | |
|-----|---|--|-----------------------------|--|
| 9. | Do you have toilet in this household? Kaya hii ina choo? | Yes..... Ndio No..... Hapana | 1 0 | |
| 10. | What type of toilet do you have in this household? Je kaya hii ina aina gani ya choo? | Water closet..... Choo cha kumwaga(kuflashi) maji mengi Pour Flush..... Choo cha kumwaga (kuflashi) maji kidogo Ventilated Pit latrine Choo cha shimo chenye bomba la hewa Ordinary Pit latrine..... Choo cha shimo kilichofunikwa Compost latrine..... Choo cha kuoza mbolea Other (specify)..... Nyingine taja | 1 2 3 4 5 96 | |
| 11. | How do you dispose final products from the toilet let say when the pit is full? Choo chako kikijaa unafanyaje? | I use frogmen to empty the pit..... Natumia wazibua vyoo I hire cesspool emptier to empty the pit..... Huwa naita magari ya maji taka. I allow waste to flow in our nearby water channel..... Kuyazibulia majitaka na kutirika kwenye mifereji ya maji iliyo karibu. I backfill the toilet and construct the new one..... Kufukia choo na kuchimba choo kipya Other (specify)..... Nyingine taja | 1 2 3 4 96 | |
| 12. | Are you satisfied with sanitation services available in this area? Unaridhika na huduma za usafi wa mazingira zinazopatikana katika eneo hili? (Magari ya maji taka, wazibua vyoo, mafundi ujenzi vyoo, | Very satisfactory..... Nalidhika sana Satisfactory..... Nalidhika Somehow Kwa kiasi Fulani Not satisfactory..... Silidhiki I don't know..... Sijui | 1 2 3 4 5 | |

| | | | | |
|--|--------------------------------------|--|--|--|
| | <i>vyoo, vifaa kama mabomba n.k)</i> | | | |
|--|--------------------------------------|--|--|--|

PART V – WATER SUPPLY AND SANITATION MARKETING

| | | | | |
|-----|--|---|--|--|
| 13. | <p>What type of Water Supply and Sanitation service is available in this area?</p> <p><i>Ni aina gani za huduma za usambazaji maji safi na usafi wa mazingira ambazo zinapatika katika eneo hili?</i></p> | <p>Water supply.....</p> <p><i>Wasambazaji maji safi</i></p> <p>All Materials for Water and sanitation infrastructures construction.....</p> <p><i>Vifaa vyote vya maji safi na usafi wa mazingira vitumikavyo katika ujenzi</i></p> <p>Some Materials for water sanitation infrastructures construction.....</p> <p><i>Baadhi ya vifaa vya ujenzi vya maji safi na usafi wa mazingira</i></p> <p>Pit emptier trucks.....</p> <p><i>Magari ya maji taka</i></p> <p>Frogmen.....</p> <p><i>Wapakua vyoo</i></p> <p>Other (specify)_____</p> <p><i>Nyingine taja</i></p> | <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>96</p> | |
| 14. | <p>Can you get Water Supply and Sanitation product anytime you need it in this area?</p> <p><i>Unaweza kupata bidhaa za maji safi na usafi wa mazingira muda wowote unapohitaji katika eneo hili?</i></p> | <p>Yes.....</p> <p><i>Ndio</i></p> <p>No.....</p> <p><i>Hapana</i></p> <p>May be.....</p> <p><i>labda</i></p> <p><u>I don't know.....</u></p> <p><i>Sijui</i></p> | <p>1</p> <p>2</p> <p>3</p> <p>5</p> | |
| 15. | <p>How do you measure the performance of the supply chain for Water Supply and Sanitation products/services in this area?</p> <p><i>Unapimaje utoaji huduma za upatikanaji wa maji safi na usafi wa mazingira katika eneo lako kuanzia uzalishaji, usambazaji, mpaka mtumiaji wa mwisho?</i></p> | <p>Very effective.....</p> <p>Somehow effective.....</p> <p>Not effective.....</p> <p>No supply in this area.....</p> <p><u>I don't know.....</u></p> | <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> | |
| 16. | <p>How does your household consider Water Supply and Sanitation services in terms of resource allocation for it?</p> <p><i>Ni kwa jinsi gani kaya yako inazingatia kutenga rasilimali katika huduma za maji na usafi wa mazingira?</i></p> | <p>Very important that we allocate enough resources for.....</p> <p><i>Kwa umuhimu mkubwa tunatenga rasilimali vya kutosha kwenye hili</i></p> <p>Important that we allocate some resources for</p> <p><i>Kwa uuhimu kutenga rasilimali katika hili</i></p> <p>Somehow important seldom we allocate resources for</p> <p><i>Kwa kiasi Fulani nimuhimu kuwekaza kidogo kwa hili</i></p> <p>Important but we don't have enough resources to allocate for</p> <p><i>Ni muhimu lakini hatuna rasilimali za kutosha kutenga kwa ajili ya hilo.</i></p> <p>Not important to allocate resources for</p> <p><i>Sio muhimu kuwekeza rasilimali kwenye hili</i></p> <p><u>I don't know.....</u></p> <p><i>Sijui</i></p> | <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> | |

| | | | | |
|-----|--|--|------------------|--|
| 17. | Are you willing to incur some costs for Water Supply Sanitation services? <i>Upotayari kuingia gharama kwa ajiri ya huduma ya maji safi na usafi wa mazingira?</i> | Yes..... Ndio No..... Hapana | 1 0 | |
| 18. | Can you take a loan to facilitate your household to get Water Supply and Sanitation services? <i>Unaweza chukua mkopo kwa ajiri ya kusaidi kaya yako kupata huduma ya maji safi na usafi wa mazingira</i> | Yes..... Ndio No..... Hapana May be..... Labda <u>I don't know.....</u> Sijui | 1 2 3 4 | |

Thank you for your time/Asante kwa muda wako

FOCUS GROUP DISCUSSION (FGD) GUIDE

STUDY TITLE: Water Supply and Sanitation Market Assessment through a WaterCredit Adoption Program for Financial Institutions in Tanzania

DATE OF FGD: _____/____/____ [DD/MM/YYYY]

FGD SUPERVISOR NAME: _____

DISCUSSION START TIME: _____ [HRS]_____ [MIN] END TIME: _____ [HRS]_____ [MIN]

INFORMATION TO PARTICIPANTS

[The participants of the Discussion must be adult household member of the area stayed for period of not less than 2 months.]

My name is _____ and I am working on behalf of Perfect Approach. We are gathering information about Water Supply and sanitation in this area. The discussion is expected not to go beyond 60 minutes. All the issues discussed will be confidential and will not be shared with anyone other than members of our survey team. Your participation in the survey is not mandatory, but we hope you will agree to take part since your contribution is very important to this assessment. The outcome of this survey will help in future planning and improvement of such services. If you agree to participate, you can ask me to explain anything you do not understand at any time during the discussion. You have the right to withdraw yourself from the discussion anytime.

Do you have any questions?

May I initiate the discussion now?

RESPONDENT AGREES TO PARTICIPATE.....1 [GO TO SECTION 1]

RESPONDENT DOES NOT AGREE TO PARTICIPATE.....2 [EXCUSE THE RESPONDENT]

TAPE RECORDING CONSENT: During the discussions, I will be taking notes to record the main ideas we discuss. However, so that I do not have to worry about getting every word down on paper I will also be tape recording the whole session. Please do not be concerned about this, our discussion will remain completely confidential and will ONLY be used for this study.

Do you agree to have the discussion tape-recorded?

SIGNATURE OF INTERVIEWER: _____ **DATE:** ____/____/____ [DD/MM/YYYY]

[Mhojiwa lazima awe kiongozi/mjumbe kwenye ngazi ya uongozi].

Jina langu ni _____ na ninafanya kazi kwa niaba ya PERFECT APPROACH. Tunakusanya taarifa kuhusu uhitaji na upatikanaji wa huduma na bidhaa za usambazaji wa Maji Safi na usafi wa mazingira katika taasisi yako. Mahojiano yatachukua kama dakika 40 hadi 60. Majibu yote utakayotoa yatatunzwa kwa usiri na hatashirikishwa mtu yeyote isipokuwa washiriki wa timu yetu ya utafiti. Ushiriki wako ni wa hiari, lakini tunatumaini utakubali kushiriki majadiliano haya kwa kua mchango wako ni muhimu sana katika tathmini hii. Matokeo ya utafiti huu yatasaidia katika kupanga na kuboresha huduma hizo. Ikiwa unakubali kushiriki, unaweza kuniambia nielezee chochote ambacho huelewi wakati wowote wa majadiliano yetu. Nikikuuliza swali lolote ambalo hutaki kujibu, nijulishe tu na nitaendelea na swali linalofuata. Wakati wa mahojiano uko huru kusitisha mahojiano wakati wowote.

Je, una swali lolote?

Ninaweza kuanza mahojiano sasa?

MHOJIWA AMEKUBALI KUHOJIWA.....1 [NENDA KWENYE SEHEMU YA 1]

MHOJIWA AMEKATAA KUHOJIWA.....2 [MALIZA MAHOJIANO]

RIDHAA YA KUREKODI: Wakati wa majadilino, nitakua nikichukua taarifa hizi kwa maandishi. Lakini, kwasababu siwezi kuandika kila kitu ninaomba kutumia tepu rekoda ili kunasa mahojiano kwa nia ya sauti pia. Tafadhali usijali kuhusu hili, majojiano yetu yataendelea kuwa siri na yatumika TU kwa utafiti huu.

Je, unakubali mahojiano kurekodiwa?

Sahihi ya Mhojaji: _____ **TAREHE:** ____ / ____ / ____ [DD / MM / YYYY]

SECTION 1: FGD participants' Demographic data

| NO. | QUESTIONS & INSTRUCTIONS | RESPONSES | CODES | SKIPS |
|-----|--|-----------|-------|-------|
| 1. | <p>Sn. Age / Umri</p> <p>Education / Elimu</p> <p>1 __ __ __ __ </p> <p>2 __ __ __ __ </p> <p>3 __ __ __ __ </p> <p>4 __ __ __ __ </p> <p>5 __ __ __ __ </p> <p>6 __ __ __ __ </p> <p>7 __ __ __ __ </p> <p>Responses for education</p> <p>No formal education / Hajasoma.....1</p> <p>Some primary education / Hakuhitimu elimu ya msingi.....2</p> <p>Completed primary education / Amehitimu elimu ya msingi.....3</p> <p>Secondary O-Level/ Amehitimu kidato cha nne.....4</p> <p>Secondary A-Level / Amehitimu kidato cha sita.....5</p> | | | |

| NO. | QUESTIONS & INSTRUCTIONS | RESPONSES | CODES | SKIPS |
|-----|---|-----------|-------|-------|
| | Post-secondary Level Elimu baada ya sekondari.....6 University / Chuo kikuu.....7 Other (specify) / Nyingine (Ezeza)..... | | | |

SECTION 2 – Water Supply and Sanitation Services: / Huduma za usambazaji wa maji safi safi na usafi wa mazingira

- What do you understand by water supply services?
Je unaelewa nini kuhusu huduma za usambazaji wa maji safi?
- What do you understand by sanitation services?
Je unalewa nini juu ya huduma za usafi wa mazingira?
- What is your opinion on water supply services in this community?
Una maoni gani juu ya huduma za usambazaji wa maji safi katika jamii hii?
 - Probe to know more about the availability(quantity)*
Dodosa kujua zaidi kuhusu upatikanaji (Kiasi)
 - Ask if they are comfortable with the perceived quality of water supplied,*
Uliza kama wanalidhishwa na ubora wa maji yanayosambazwa.
 - Ask what the challenges are facing them due to water services*
Uliza ni changamoto gani wanazokumbana nazo katika huduma za maji?
- What is your opinion on sanitation services in this area?
Una maoni gani juu ya huduma za usafi wa mazingira katika eneo hii?
 - Probe to know if every household has toilet facilities*
Dodosa kujua kama kila kaya ina choo.
 - Ask if the toilet facilities provide privacy needed*
Uliza kama vyoo vilivyopo vinamazingira yenye usiri kama inavyohitajika.
 - Probe if female feel comfortable to use those toilets even during their menstrual periods*
Dodosa kama wanawake wanajihisi huru kutumia vyoo hivyo hata wakati wa hedhi
 - Ask what are the challenges faced which are caused by sanitation services*
Uliza ni changamoto zipi wanakumbana nazo zinazosababishwa na huduma za usafi wa mazingira.
- What is your opinion on Water Supply and Sanitation products availability in this area?
Una maoni gani juu ya upatikanaji wa bidhaa za usambazaji wa maji safi na usafi wa mazingira katika eneo hii?
- Discuss about Water Supply and Sanitation supply chain? i.e. (production, supply and demand)
Unauzungumziaje mnyororo wa huduma za usambazaji wa maji safi usafi wa mazingira? Kuanzia (Uzalishaji, usambazaji, na uhitaji)
 - Probe the reliability and availability of key Water Supply and Sanitation services products*
Dodosa juu ya uhakika na upatikanaji wa bidhaa muhimu za huduma za usambazaji wa maji safi na usafi wa mazingira.
 - Probe their purchasing power and willingness to pay*
Dodosa juu ya uwezo wao wa kununua na utayari wa kulipia bidhaa hizo.
- Are you willing to take loan for improving Water Supply and Sanitation services?
Je upo tayari kuchukua mkopo kwa ajili ya uboreshaji wa huduma za usambazaji wa maji safi na usafi wa mazingira?
 - Probe to know their level of understanding on Water Supply Sanitation financial products*
Dodosa kujua kiwango chao cha uelewa juu ya mikopo ya huduma za usambazaji wa maji na usafi wa mazingira.
 - Probe to know if Water Supply and Sanitation services are among the priority item in their community*
Dodosa kujua kama huduma za usambazaji wa maji safi na usafi wa mazingira ni kati ya vitu vinavyopewa kipaombele katika jamii yao.

Thank the respondent for his/her time.

DISCUSSION END TIME: ____ [HRS] ____ [MIN]

IN- DEPTH INTERVIEW GUIDE_ SERVICE PROVIDERS

STUDY TITLE: – Water Supply and Sanitation Market Assessment through a WaterCredit Adoption Program for Financial Institutions in Tanzania

DATE OF INTERVIEW: ____/____/____ [DD/MM/YYYY]

(TAREHE YA MAHOJIANO)

ENUMERATORS' NAME: _____

(JINA LA MHOJAJI)

INTERVIEW START TIME: ____ [HRS] ____ [MIN]

(MUDA WA KUANZA MAHOJIANO)

GEOGRAPHIC AND SITE INFORMATION

PARTICIPANT ID NUMBER |__|__|__|__|

(NAMBA YA UTAMBULISHO YA MHOJIWA)

REGION NAME: _____

(JINA LA MKOA)

DISTRICT NAME: _____

(JINA LA WILAYA)

WARD NAME: _____

(JINA LA KATA)

VILLAGE: _____

(JINA LA KIJiji/MTAA)

INFORMATION TO PARTICIPANTS

[Respondent must be a leader/ member of management,].

My name is _____ and I am working on behalf of Perfect Approach. We are gathering information about the demand and supply of Water Supply and sanitation market in your institution. The interview will take about 40 to 60 minutes. All the answers you give will be confidential and will not be shared with anyone other than members of our survey team. Your participation in the survey is not mandatory, but we hope you will agree to answer the questions since your contribution is very important to this assessment. The outcome of this survey will help in planning and improvement of such services. If you agree to participate, you can ask me to explain anything you do not understand at any time during our conversation. If I ask you any question you do not want to answer, just let me know and I will go on to the next question. During the interview you are free to end the conversation at any time.

Do you have any questions?

May I begin the interview now?

RESPONDENT AGREES TO BE INTERVIEWED1 [GO TO SECTION 1]

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED2 [END THE INTERVIEW]

TAPE RECORDING CONSENT: During the discussions, I will be taking notes to record the main ideas we discuss. However, so that I do not have to worry about getting every word down on paper I will also do recording the whole session. Please do not be concerned about this, our discussion will remain completely confidential and will ONLY be used for this study.

Do you agree to have the discussion tape-recorded?

SIGNATURE OF INTERVIEWER: _____ DATE: ____/____/____ [DD/MM/YYYY]

[Mhojiwa lazima awe kiongozi/mjumbe kwenye ngazi ya uongozi).

Jina langu ni _____ na ninafanya kazi kwa niaba ya Perfect Approach. Tunakusanya taarifa kuhusu uhitaji na upatikanaji wa huduma na bidhaa za usambazaji wa Maji Safi na usafi wa mazingira katika taasisi yako. Mahojiano yatachukua kama dakika 40 hadi 60. Majibu yote utakayotoa yatatunzwa kwa usiri na hatashirikishwa mtu yeyote isipokuwa washiriki wa timu yetu ya utafiti. Ushiriki wako ni wa hiari, lakini tunatumaini utakubali kushiriki majadiliano haya kwa kua mchango wako ni muhimu sana katika tathmini hii. Matokeo ya utafiti huu yatasaidia katika kupanga na kuboresha huduma hizo. Ikiwa unakubali kushiriki, unaweza kuniambia nielezee chochote ambacho huelewi wakati wowote wa majadiliano yetu. Nikikuuliza swali lolote ambalo hutaki kujibu, nijulishe tu na nitaendelea na swali linalofuata. Wakati wa mahojiano uko huru kusitisha mahojiano wakati wowote.

Je, una swali lolote?

Ninaweza kuanza mahojiano sasa?

MHOJIWA AMEKUBALI KUHOJIWA1 [NENDA KWENYE SEHEMU YA 1]

MHOJIWA AMEKATAA KUHOJIWA2 [MALIZA MAHOJIANO]

RIDHAA YA KUREKODI: Wakati wa majadilino, nitakua nikichukua taarifa hizi kwa maandishi. Lakini, kwasababu siwezi kuandika kila kitu ninaomba kutumia tepu rekoda ili kunasa mahojiano kwa nia ya sauti pia. Tafadhali usijali kuhusu hili, majojiano yetu yataendelea kuwa siri na yatumika TU kwa utafiti huu.

Je, unakubali mahojiano kurekodiwa?

Sahihi ya Mhojaji: _____ TAREHE: ____ / ____ / ____ [DD / MM / YYYY]

SECTION 1: – General:

1. How could you describe the situation of water, sanitation services in this area? (Je unaweza kuelezea hali ya huduma ya maji safi na usafi wa mazingira katika eneo hili)
 - a. What type of the product/service do you provide in this area? (Ni aina gani ya bidhaa / huduma gani unazotoa katika eneo hili?)
 - b. What is your opinion on demand and / or the business of your products? (Una maoni gani kuhusu biashara na uhitaji wa huduma au bidhaa zako?)
 - c. Who are the main clients of your products/ service? (ni nani wateja wakuu wa bidhaa / huduma zako?)
 - d. Which products/ service of Water Supply Sanitation are most demanded in this area?(Ni bidhaa / huduma gani ya Usambazaji wa Maji safi na Usafi wa mazingira inayohitajika zaidi katika eneo hili?)
2. In your opinion do you think individual households or institutions in this area are willing to take a loan for improving Water Supply and Sanitation services

(Je, kwa maoni yako unadhani kaya au taasisi katika eneo hili ziko tayari kuchukua mkopo kwa ajili ya kuboresha huduma za Usambazaji Maji safi na Usafi wa Mazingira.)

SECTION 2: – WSS Product:

Which type of sanitation options and water sources are mostly used in this area? **(Ni aina zipi za vyanzo vya maji safi na aina za vyoo hutumika zaidi katika eneo hili?)**

- a. *Why do you think the community prefers the sanitation options and water source you mentioned? (Kwa nini unafikiri jamii anapendelea aina za vyoo ulizotaja?)*

- *Probe if cost was the factor for selection (Dodosa kama gharama ilikuwa sababu ya uchaguzi)*
- *Probe if the technology was the factor for selection (Dodosa ikiwa teknolojia ilikuwa sababu uchaguzi)*
- *Probe if the quality was the factor for selection (Dodosa kama ubora ulikuwa sababu ya uchaguzi)*
- *Probe if availability was the factor for selection (Dodosa kama upatikanaji ulikuwa sababu ya uchaguzi)*

In your opinion do you think strengthening Water Supply and Sanitation through financial products model along supply chain will sustain supply, delivery and create demand for Water and Supply and Sanitation services hence improve sanitation and reliable water supply services in this area?

Unadhani upatikanaji wa mikopo ya fedha utaimarisha upatikanaji, usambazaji na kuongeza uhitaji wa bidhaa za maji safi na usafi wa mazingira hivyo kupelekea kuboresha huduma za usafi wa mazingira na huduma ya uahakika ya upatikanaji wa maji safi katika eneo hili?.

3. As a service provider along the supply chain, speaking on your business **(Kama mtoa huduma kwenye mnyororo wa usambazaji, nikizungumza kuhusu biashara yako)**

- a. *What are the major challenges (Ni zipi changamoto kuu?)*
- b. *Given the population of this area do you think you can meet the demand of the market? (Ukizingatia wingi wa watu kwenye eneo hili unadhani unaweza kukidhi mahitaji yao?)*
- c. *Given a chance, are you willing to take a loan for the purpose of improving your business? (Kama ukipata nafasi, uko tayari kuchukua mkopo kwa lengo la kuboresha biashara au huduma yako?)*

8. What is your general comments regarding Water Supply and Sanitation market in this area?
Kwa ujumla nini maoni yako kuhusiana na soko/mahitaji ya bidhaa na huduma za usambazaji wa maji safi na usafi wa mazingira katika eneo hili?

Probe for:

Dadisi juu ya;

- a. *The financial capability*
Uwezo wa kifedha
- b. *Acceptability of the community*
Kukubalika katika jamii
- c. *Water Supply and Sanitation value chain*
Mnyororo wa thamani wa usambazaji wa maji safi na usafi wa mazingira
- d. *Sustainability and scalability*
Uendelevu na ukuajiji

Thank the respondent for his/her time.

INTERVIEW END TIME: _____ [HRS] _____ [MIN]

IN- DEPTH INTERVIEW GUIDE_ LGAs

STUDY TITLE: – Water Supply and Sanitation Market Assessment through a WaterCredit Adoption Program for Financial Institutions in Tanzania

GEOGRAPHIC AND SITE INFORMATION

PARTICIPANT ID NUMBER |__|__|__|__|

REGION NAME: _____

DISTRICT NAME: _____

WARD NAME: _____

VILLAGE: _____

INFORMATION TO PARTICIPANTS

[Respondent must be leader of Health or Water department at the LGA or member of the management at the department).

My name is _____ and I am working on behalf of Perfect Approach. We are gathering information about Water Supply and sanitation marketing in your institution. The interview will take about 40 to 60 minutes. All the answers you give will be confidential and will not be shared with anyone other than members of our survey team. Your participation in the survey is not mandatory, but we hope you will agree to answer the questions since your contribution is very important to this assessment. The outcome of this survey will help in planning and improvement of such services. If you agree to participate, you can ask me to explain anything you do not understand at any time during our conversation. If I ask you any question you do not want to answer, just let me know and I will go on to the next question. During the interview you are free to end the conversation at any time.

Do you have any questions?

May I begin the interview now?

RESPONDENT AGREES TO BE INTERVIEWED.....1 [GO TO SECTION 1]

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 [END THE INTERVIEW]

TAPE RECORDING CONSENT: During the discussions, I will be taking notes to record the main ideas we discuss. However, so that I do not have to worry about getting every word down on paper I will also do recording the whole session. Please do not be concerned about this, our discussion will remain completely confidential and will ONLY be used for this study.

Do you agree to have the discussion tape-recorded?

SIGNATURE OF INTERVIEWER: _____ DATE: ____/____/____ [DD/MM/YYYY]

[Mhojiwa lazima awe kiongozi/mjumbe kwenye ngazi ya uongozi].

Jina langu ni _____ na ninafanya kazi kwa niaba ya Perfect Approach. Tunakusanya taarifa kuhusu uhitaji na upatikanaji wa huduma na bidhaa za usambazaji wa Maji Safi na usafi wa mazingira katika taasisi yako. Mahojiano yatachukua kama dakika 40 hadi 60. Majibu yote utakayotoa yatatunzwa kwa usiri na hatashirikishwa mtu yeyote isipokuwa washiriki wa timu yetu ya utafiti. Ushiriki wako ni wa hiari, lakini tunatumaini utakubali kushiriki majadiliano haya kwa kua mchango wako ni muhimu sana katika tathmini hii. Matokeo ya utafiti huu yatasaidia katika kupanga na kuboresha huduma hizo. Ikiwa unakubali kushiriki, unaweza kuniambia nielezee chochote ambacho huelewi wakati wowote wa majadiliano yetu. Nikikuuliza swali lolote ambalo hutaki kujibu, nijulishe tu na nitaendelea na swali linalofuata. Wakati wa mahojiano uko huru kusitisha mahojiano wakati wowote.

Je, una swali lolote?

Ninaweza kuanza mahojiano sasa?

MHOJIWA AMEKUBALI KUHOJIWA.....1 [NENDA KWENYE SEHEMU YA 1]

MHOJIWA AMEKATAA KUHOJIWA.....2 [MALIZA MAHOJIANO]

RIDHAA YA KUREKODI: Wakati wa majadilino, nitakua nikichukua taarifa hizi kwa maandishi. Lakini, kwasababu siwezi kuandika kila kitu ninaomba kutumia tepu rekoda ili kunasa mahojiano kwa nia ya sauti pia. Tafadhali usijali kuhusu hili, mahojiano yetu yataendelea kuwa siri na yatumika TU kwa utafiti huu.

Je, unakubali mahojiano kurekodiwa?

Sahihi ya Mhoji: _____ **TAREHE:** ____ / ____ / ____ [DD / MM / YYYY]

SECTION 1: – General:

SEHEMU YA 1: TAARIFA ZA UJUMLA

1. How could you describe the demand and supply of water supply and sanitation services in your district?

Unaweza kuelezea vipi hali ya uhitaji na upatikanaji wa huduma za maji safi na usafi wa mazingira katika wilaya yako?

a. Do you think the supply of Water and Sanitation products in your district is sufficient? Please elaborate (if yes how/ if not what could be the reasons) Probe along the chain (production, supply, demand and delivery).

Unafikiri usambazaji na upatikanaji wa bidhaa za maji safi na usafi wa mazingira zinatoshwa? Tafadhali Elezea (Kama ndio ni kwa namna gani na kama Hapana nini sababu). Dadisi kuhusu mnyororo wa thamani kuanzia (uzalishaji, usambazaji, uhitaji na upokeaji)

b. In your opinion do you think the community in this area is willing to pay for Water Supply and Sanitation services?

Kwa maoni yako, unafikiri jamii katika eneo hili iko tayari kulipia huduma za maji safi na usafi wa mazingira?

c. Which Water Supply and Sanitation products are most demanded in this area?

Ni bidhaa gani za usambazaji wa maji safi na usafi wa mazingira zinahitajika sana na katika eneo hili? (Kwa wasambazaji na wauzaji)

2. Who are the players of Water Supply and Sanitation products in the area?

Ni wadau wapi wa usambazaji wa bidhaa za maji safi na usafi wa mazingira katika eneo hili?

a. In your opinion are they sufficient? IF YES WHY/NO WHY?

Kwa maoni yako, je, zinakidhi mahitaji? Kama ndio kwanini/Hapana kwanini?

3. In your opinion do you think individual households or institutions in this area are willing to take loan for improving Water Supply and Sanitation services.

Kwa maoni yako, unafikiri wamiliki wa nyumba au taasisi katika eneo hili wapo tayari kuchukua mkopo kwa ajili ya kuboresha huduma za usambazaji wa maji safi na usafi wa mazingira?

SECTION 2: – Water Supply and Sanitation Service Providers:

SEHEMU YA 2: Wadau wa usambazaji wa maji safi na usafi wa mazingira

4. As LGA do you register Water Supply and Sanitation service providers?

Kama halmashauri, mnasajiri watoa huduma za usambazaji wa maji safi na usafi wa mazingira?

a. If yes, how do you rank it in terms of response?

Kama ndio, unazungumziaje muitikio wao?

5. Is there fees/levy which service providers entitled to pay regularly?

Je, kuna tozo/ada ambazo watoa huduma hao wanatakiwa kulipa kila baada ya kipindi fulani?

6. Is there laws/ regulations controlling marketing and financing of Water Supply and Sanitation service providers

Je kuna sheria/utaratibu unaoongoza soko na utoaji fedha kwa watoa huduma wa huduma za usambazaji wa maji safi na usafi wa mazingira?

7. Which type of Water sources and sanitation options are mostly available in this area

Ni aina gani za vyanzo vya maji safi na aina za vyoo zinazopatikana zaidi katika eneo hili?

8. In your opinion do you think strengthening Water Supply and Sanitation through financial products model along supply chain will sustain supply, delivery and create demand for Water and Supply and Sanitation services hence improve sanitation and reliable water supply services in this area?

Unadhani upatikanaji wa mikopo ya fedha utaimarisha upatikanaji, usambazaji na kuongeza uhitaji wa bidhaa za maji safi na usafi wa mazingira hivyo kupelekea kuboresha huduma za usafi wa mazingira na huduma ya uahakika ya upatikanaji wa maji safi katika eneo hili?

9. What are your general comments regarding Water Supply and Sanitation market in this area?

Kwa ujumla nini maoni yako kuhusiana na soko/mahitaji ya bidhaa na huduma za usambazaji wa maji safi na usafi wa mazingira katika eneo hili?

Probe for:

Dadisi juu ya;

a. The financial capability

Uwezo wa kifedha

b. Acceptability of the community

Kukubalika katika jamii

c. Water Supply and Sanitation value chain

Mnyororo wa thamani wa usambazaji wa maji safi na usafi wa mazingira

d. Sustainability and scalability

Uendeleu na ukuajiji

Thank the respondent for his/her time.

Ahsante kwa muda wako.

INTERVIEW END TIME: ____ [HRS]____[MIN]

IN-DEPTH INTERVIEW GUIDE_TAMFI MEMBER

| |
|---|
| STUDY TITLE: – Water Supply and Sanitation Market Assessment through a WaterCredit Adoption Program for Financial Institutions in Tanzania |
|---|

DATE OF INTERVIEW: _____/____/____ [DD/MM/YYYY]

ENUMERATOR'S NAME: _____

INTERVIEW START TIME: ____ [HRS] ____ [MIN]

INFORMATION TO PARTICIPANTS

[Respondent must be leader or member of the management].

My name is _____ and I am working on behalf of Perfect Approach. We are gathering information about Water Supply and sanitation marketing in your institution. The interview will take about 40 to 60 minutes. All the answers you give will be confidential and will not be shared with anyone other than members of our survey team. Your participation in the survey is not mandatory, but we hope you will agree to answer the questions since your contribution is very important to this assessment. The outcome of this survey will help in planning and improvement of such services. If you agree to participate, you can ask me to explain anything you do not understand at any time during our conversation. If I ask you any question you do not want to answer, just let me know and I will go on to the next question. During the interview you are free to end the conversation at any time.

Do you have any questions?

May I begin the interview now?

RESPONDENT AGREES TO BE INTERVIEWED.....1 [GO TO SECTION 1]

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 [END THE INTERVIEW]

TAPE RECORDING CONSENT: During the discussions, I will be taking notes to record the main ideas we discuss. However, so that I do not have to worry about getting every word down on paper I will also do recording the whole session. Please do not be concerned about this, our discussion will remain completely confidential and will ONLY be used for this study.

Do you agree to have the discussion tape-recorded?

SIGNATURE OF INTERVIEWER: _____ DATE: ____/____/____ [DD/MM/YYYY]

[Mhojiwa lazima awe kiongozi/mjumbe kwenye ngazi ya uongozi].

Jina langu ni _____ na ninafanya kazi kwa niaba ya Perfect Approach. Tunakusanya taarifa kuhusu uhitaji na upatikanaji wa huduma na bidhaa za usambazaji wa Maji Safi na usafi wa mazingira katika taasisi yako. Mahojiano yatachukua kama dakika 40 hadi 60. Majibu yote utakayotoa yatatunzwa kwa usiri na hatashirikishwa mtu yeyote isipokuwa washiriki wa timu yetu ya utafiti. Ushiriki wako ni wa hiari, lakini tunatumaini utakubali kushiriki majadiliano haya kwa kua mchango wako ni muhimu sana katika tathmini hii. Matokeo ya utafiti huu yatasaidia katika kupanga na kuboresha huduma hizo. Ikiwa unakubali kushiriki, unaweza kuniambia nielezee chochote ambacho huelewi wakati wowote wa majadiliano yetu. Nikikuuliza swali lolote ambalo hutaki kujibu, nijulishe tu na nitaendelea na swali linalofuata. Wakati wa mahojiano uko huru kusitisha mahojiano wakati wowote.

Je, una swali lolote?

Ninaweza kuanza mahojiano sasa?

MHOJIWA AMEKUBALI KUHOJIWA.....1 [NENDA KWENYE SEHEMU YA 1]

MHOJIWA AMEKATAA KUHOJIWA.....2 [MALIZA MAHOJIANO]

RIDHAA YA KUREKODI: Wakati wa majadilino, nitakua nikichukua taarifa hizi kwa maandishi. Lakini, kwasababu siwezi kuandika kila kitu ninaomba kutumia tepu rekoda ili kunasa mahojiano kwa nia ya sauti pia. Tafadhali usijali kuhusu hili, majojiano yetu yataendelea kuwa siri na yatumika TU kwa utafiti huu.

Je, unakubali mahojiano kurekodiwa?

Sahihi ya Mhojaji: _____ TAREHE: ____ / ____ / ____ [DD / MM / YYYY]

SECTION 1: – General:

1. How could you describe the situation of Water Supply and Sanitation services in this area?

Je unaweza kuelezea hali ya usambazaji wa maji safi na usafi wa mazingira katika eneo hili?

Probe

a. What are your opinions regarding the Water Supply and Sanitation services in this area?

Nini mtazamo wako kuhusu huduma za usambazaji wa maji safi na usafi wa mazingira kwenye eneo hili?

b. In your opinion do you think the community in this area is ready to pay for Water Supply and Sanitation?

Kwa mtazamo wako unafikiri watu kwenye jamii hii watakua tayari kulipia usambazaji wa maji safi na usafi wa mazingira?

c. What Water Supply and Sanitation services are most preferred/needed by the end users in this area?

Je ni huduma gani za usambazaji wa maji safi na usafi wa mazingira hupendelewa/huitajika zaidi na watumiaji wa mwisho kwenye eneo hili?

2. How do you consider providing financial products for strengthening of Water Supply and Sanitation services along the supply chain

Nini maoni yako kuhusiana na utoaji wa mikopo katika kuimarisha utoaji huduma za usambazaji wa maji safi na usafi wa mazingira kuanzia uzalishaji, usambazaji, mpaka mtumiaji/mlaji wa mwisho.

Probe

a. In your opinion do you think individual households or institutions are willing to take a loan for accessing Water Supply and Sanitation products?

Kwa mtazamo wako unafikiri kaya ya mtu binafsi au taasisi watakua tayari kuchukua mkopo kwa ajili ya fursa ya kupata maji safi na usafi wa mazingira?

b. Entrepreneurship opportunities along supply chain

Fursa za kibiashara katika mnyororo wa faida (kuanzia uzalishaji, usambazaji, mpaka mtumiaji/mlaji wa mwisho).

SECTION 2: – Water Supply and Sanitation Products:

3. Does your institution currently offer Water Supply and Sanitation financial products?

Je taasisi yako kwa sasa inatoa bidhaa ya huduma za kifedha kwaajili ya maji safi na usafi wa mazingira?

Probe

(a) Other players providing Water Supply and Sanitation financial products

Wadau wengine wanaotoa bidhaa za huduma ya kifedha ya maji safi na usafi wa mazingira

(b) Viability of providing Water Supply and Sanitation products (IF YES WHY/NO WHY?)

Uwezekano wa kutoa bidhaa za maji safi na usafi wa mazingira (Ndio kwanini/hapana kwanini)

4. In your opinion do you think strengthening Water Supply and Sanitation through financial products model along supply chain will sustain supply, delivery and create demand for Water and Supply and Sanitation services hence improve sanitation and reliable water supply services in this area?

Kwa mtazamo wako unadhani kuimarisha usambazaji wa maji safi na usafi wa mazingira kupitia mikopo kwenye mnyororo wa faida utaimarisha usambazaji, utoaji na kujenga uhitaji wa huduma za usambazaji wa maji safi na usafi wa mazingira hivyo kuboresha usafi wa mazingira na usambazaji wa maji wa kuaminika katika eneo hili?

SECTION 3: – Water Supply and Sanitation Market:

5. As an expert from Financial Institution, how do you rate the willingness and capacity of the community around borrowing and repaying loans

Ukiwa kama mtaalam kwenye taasisi ya kifedha, kwa ujumla unazungumziaje kuhusu utayari na uwezo wa jamii kwenye kuchukua na kulipa mikopo?

7. Do you think there is financial gap which hinder the community to access Water Supply and Sanitation services or conduct business around it?

Je unadhani hali ya uchumi/kifedha katika jamii hii ni kikwazo katika upatikanaji wa huduma za maji safi na usafi wa mazingira au kufanya biashara kwenye eneo hilo?

Probe:

- Hindering factors such as culture, perception, believes, financial capability

Vikwazo kama vile tamaduni, mitazamo, imani, uwezo wa kifedha

7. Do you see business opportunities in Water Supply and Sanitation?

Je unaona fursa ya biashara kwenye usambazaji wa maji safi na usafi wa mazingira

8. What is your general comments regarding Water Supply and Sanitation market in this area?

Je ni nini mawazo yako kiu jumla kuhusu usambazaji wa maji safi na usafi wa mazingira kwenye eneo hili?

Probe:

- The financial capability
- Uwezo wa kifedha
- Acceptability of the community
- Kukubalika katika jamii
- Water Supply and Sanitation value chain
- Mnyororo wa faida wa usambazaji wa maji safi na usafi wa mazingira (kuanzia uzalishaji, usambazaji, mpaka mtumiaji/mlaji wa mwisho)
- Sustainability and scalability
- Uendelevu na ukuaji

Thank the respondent for his/her time.

INTERVIEW END TIME: ____ [HRS] ____ [MIN]

ANNEX 3: LIST OF IN- DEPTH INTERVIEWS CONDUCTED

IN-DEPTH INTERVIEWS (IDIs) CONDUCTED

| S/N | Respondent | Category | Location |
|-----|-------------|--------------|----------|
| 1 | Vision Fund | TAMFI Member | Arusha |
| 2 | SELF MF | TAMFI Member | Dodoma |

| | | | |
|----|------------------------------------|-----------------------------|---------------|
| 3 | Ministry of Health | Government Ministry | Dodoma |
| 4 | Yetu Microfinance | Water.org Partner | Dar Es Salaam |
| 5 | WaterAid Tanzania | NGO | Dar Es Salaam |
| 6 | Victoria Microfinance | TAMFI Member (Potential) | Dar Es Salaam |
| 7 | City Engineering (Safi Technology) | Service Provider | Dar Es Salaam |
| 8 | Gongali Model Co. Ltd | Service Provider | Arusha |
| 9 | Regional Water Engineer | LGA | Dodoma |
| 10 | Same Kaya SACCOS | TAMFI Member | Same |
| 11 | SELF MF | TAMFI Member | Mwanza |
| 12 | HP Microfinance | TAMFI Member | Dar Es Salaam |
| 13 | MUWASA | Service Provider | Mbeya |
| 14 | UMAWA (DEWATS) | Service Provider | Dar Es Salaam |
| 15 | FANIKIWA Microfinance | TAMFI Member | Kondoa |
| 16 | Catholic Relief Services (CRS) | NGO | Dar Es Salaam |
| 17 | SNV Tanzania | NGO | Arusha |
| 18 | MUCOBA | TAMFI Member | Mufindi |
| 19 | Zanzibar Economic Empowerment Fund | TAMFI Member | Zanzibar |
| 20 | Jumuiya ya Changamoto | TAMFI Member | Zanzibar |
| 21 | Rukwa Farmers Microfinance | TAMFI Member | Rukwa |

ANNEX 4: HOUSEHOLD SURVEY FINDINGS

SECTION ONE: RESPONDENT'S INFORMATION

Respondents age

| Background characteristics | 18-20 | 20-34 | 35-49 | 50+ | Total |
|----------------------------|------------|-------------|-------------|-------------|------------|
| Region | | | | | |
| Arusha | 0.3 | 3.0 | 7.2 | 9.2 | 60 |
| Dar es Salaam | 0.0 | 5.6 | 10.9 | 4.3 | 63 |
| Dodoma | 0.3 | 7.6 | 9.5 | 2.6 | 61 |
| Mbeya | 0.3 | 7.6 | 7.6 | 4.3 | 60 |
| Mwanza | 0.0 | 6.3 | 5.9 | 7.6 | 60 |
| District | | | | | |
| Arusha | 0.3 | 3.0 | 7.2 | 9.2 | 60 |
| Dodoma City | 0.3 | 7.6 | 9.5 | 2.6 | 61 |
| Ilemela | 0.0 | 1.6 | 1.3 | 2.0 | 15 |
| Kinondoni | 0.0 | 0.7 | 1.6 | 0.7 | 9 |
| Mbeya Mjini | 0.3 | 7.6 | 7.6 | 4.3 | 60 |
| Nyamagana | 0.0 | 4.6 | 4.6 | 5.6 | 45 |
| Temeke | 0.0 | 4.3 | 4.3 | 0.7 | 28 |
| Ubungo | 0.0 | 0.7 | 4.9 | 3.0 | 26 |
| Total | 1.0 | 29.9 | 41.1 | 28.0 | 304 |

What is your highest level of education completed?

| Background characteristics | No formal education | Didn't complete primary education | Completed primary education | Secondary O-Level | Secondary A-Level | Post-secondary Level | University | Other specify | Total |
|----------------------------|---------------------|-----------------------------------|-----------------------------|-------------------|-------------------|----------------------|------------|---------------|------------|
| Age | | | | | | | | | |
| 18-20 | 0.0 | 0.0 | 0.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 3 |
| 20-34 | 1.0 | 1.0 | 15.1 | 9.9 | 0.0 | 0.3 | 2.6 | 0.0 | 91 |
| 35-49 | 1.0 | 4.6 | 25.3 | 7.2 | 0.7 | 0.7 | 1.6 | 0.0 | 125 |
| 50+ | 3.6 | 2.6 | 17.8 | 2.6 | 0.3 | 0.3 | 0.0 | 0.7 | 85 |
| Sex | | | | | | | | | |
| Male | 0.3 | 2.3 | 13.2 | 5.6 | 0.7 | 0.3 | 1.3 | 0.7 | 74 |
| Female | 5.3 | 5.9 | 45.4 | 14.8 | 0.3 | 1.0 | 3.0 | 0.0 | 230 |
| Region | | | | | | | | | |
| Arusha | 0.7 | 2.3 | 10.5 | 4.9 | 0.3 | 0.3 | 0.3 | 0.3 | 60 |
| Dar es Salaam | 2.0 | 0.7 | 12.2 | 4.3 | 0.0 | 0.3 | 1.3 | 0.0 | 63 |
| Dodoma | 1.3 | 2.6 | 8.6 | 5.3 | 0.3 | 0.3 | 1.6 | 0.0 | 61 |
| Mbeya | 0.3 | 2.0 | 11.5 | 4.3 | 0.3 | 0.3 | 0.7 | 0.3 | 60 |
| Mwanza | 1.3 | 0.7 | 15.8 | 1.6 | 0.0 | 0.0 | 0.3 | 0.0 | 60 |
| Total | 5.6 | 8.2 | 58.6 | 20.4 | 1.0 | 1.3 | 4.3 | 0.7 | 304 |

Percentage Distribution of Household Population by Age and Sex

| Sex | Male | Female | Total |
|-----------------------------------|-------------|-------------|------------|
| Background characteristics | | | |
| Age | | | |
| 18-20 | 0.3 | 1.0 | 4 |
| 20-34 | 6.2 | 23.6 | 91 |
| 35-49 | 7.9 | 33.1 | 125 |
| 50+ | 9.8 | 18.0 | 85 |
| Region | | | |
| Arusha | 4.3 | 15.5 | 60 |
| Dar es Salaam | 6.6 | 14.1 | 63 |
| Dodoma | 4.9 | 15.1 | 61 |
| Mbeya | 5.9 | 13.8 | 60 |
| Mwanza | 2.6 | 17.1 | 60 |
| Total | 24.3 | 75.7 | 304 |

For how long have you been living in this area?

| Background characteristics | One year or more | Less than one year | I don't remember | Total |
|----------------------------|------------------|--------------------|------------------|------------|
| Age | | | | |
| 18-20 | 1.0 | 0.0 | 0.0 | 3 |
| 20-34 | 25.7 | 4.3 | 0.0 | 91 |
| 35-49 | 35.2 | 5.3 | 0.7 | 125 |
| 50+ | 26.3 | 0.0 | 1.6 | 85 |
| Sex | | | | |
| Male | 22.7 | 1.0 | 0.7 | 74 |
| Female | 65.5 | 8.6 | 1.6 | 230 |
| Region | | | | |
| Arusha | 19.7 | 0.0 | 0.0 | 60 |
| Dar es Salaam | 20.4 | 0.3 | 0.0 | 63 |
| Dodoma | 10.2 | 7.6 | 2.3 | 61 |
| Mbeya | 18.1 | 1.6 | 0.0 | 60 |
| Mwanza | 19.7 | 0.0 | 0.0 | 60 |
| Total | 88.2 | 9.5 | 2.3 | 304 |

What is your main household income source?

| Background characteristics | Farming | Animal keeping | Full time employment | Self-employed | Part time employment | Other specify | Total |
|----------------------------|-------------|----------------|----------------------|---------------|----------------------|---------------|------------|
| Age | | | | | | | |
| 18-20 | 0.0 | 0.3 | 0.0 | 0.7 | 0.0 | 0.0 | 3 |
| 20-34 | 6.6 | 1.0 | 2.3 | 17.8 | 1.6 | 0.7 | 91 |
| 35-49 | 7.6 | 1.0 | 3.9 | 26.0 | 2.0 | 0.7 | 125 |
| 50+ | 6.9 | 1.3 | 0.0 | 15.1 | 0.7 | 3.9 | 85 |
| Sex | | | | | | | |
| Male | 5.6 | 1.0 | 1.6 | 13.2 | 2.0 | 1.0 | 74 |
| Female | 15.5 | 2.6 | 4.6 | 46.4 | 2.3 | 4.3 | 230 |
| Region | | | | | | | |
| Arusha | 0.3 | 0.7 | 0.7 | 17.8 | 0.0 | 0.3 | 60 |
| Dar es Salaam | 0.7 | 0.0 | 1.6 | 16.4 | 1.6 | 0.3 | 63 |
| Dodoma | 9.2 | 2.3 | 2.6 | 3.3 | 1.6 | 1.0 | 61 |
| Mbeya | 8.9 | 0.7 | 1.3 | 8.2 | 0.7 | 0.0 | 60 |
| Mwanza | 2.0 | 0.0 | 0.0 | 13.8 | 0.3 | 3.6 | 60 |
| Total | 21.1 | 3.6 | 6.3 | 59.5 | 4.3 | 5.3 | 304 |

SECTION TWO: INFORMATION ABOUT SOURCE WATER

What is your main water source in the household?

| Background characteristics | Arusha | Dar es Salaam | Dodoma | Mbeya | Mwanza | Total % |
|--|-----------|---------------|-----------|-----------|-----------|------------|
| Type of water sources | | | | | | |
| Protected government sources | | | | | | |
| Piped into the household | 3.9 | 3.6 | 2.3 | 3.3 | 1.3 | 14 |
| Piped into household yard/plot | 10.2 | 3.3 | 2.3 | 15.8 | 5.6 | 37 |
| Public tap | 3.6 | 2.3 | 4.6 | 0.0 | 0.3 | 11 |
| Other specify | 0.0 | 0.0 | 0.0 | 0.0 | 5.9 | 6 |
| Protected water sources | | | | | | 0.0 |
| Protected household-owned well | 0.0 | 0.0 | 2.3 | 0.0 | 0.3 | 3 |
| Protected public well | 0.3 | 1.6 | 2.3 | 0.0 | 6.3 | 11 |
| Unprotected water sources | | | | | | 0.0 |
| Open/unprotected household-owned well | 0.7 | 1.6 | 1.6 | 0.0 | 0.0 | 4 |
| Open/unprotected public well | 0.3 | 4.3 | 4.6 | 0.0 | 0.0 | 9 |
| Borehole Open/unprotected | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 1 |
| Rainwater | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0 |
| Water brought in tanker trucks or containers | 0.3 | 3.6 | 0.0 | 0.0 | 0.0 | 4 |
| TOTAL | 60 | 63 | 61 | 60 | 60 | 304 |

How long does it take for one to go at the source to fetch water and get back home?

| Background characteristics | It doesn't take time, water is available here | Less than 10 minutes | More than 10 minutes but less than 30 minutes | More than 30 minutes but less than 1 hour | More than 1 hour | Total |
|----------------------------|---|----------------------|---|---|------------------|------------|
| Age | | | | | | |
| 18-20 | 0.3 | 0.3 | 0.0 | 0.3 | 0.0 | 3 |
| 20-34 | 5.9 | 11.5 | 8.6 | 3.6 | 0.3 | 91 |
| 35-49 | 13.2 | 13.5 | 10.2 | 3.9 | 0.3 | 125 |
| 50+ | 9.5 | 11.5 | 4.6 | 2.3 | 0.0 | 85 |
| Sex | | | | | | 304 |
| Male | 9.9 | 7.6 | 4.6 | 2.3 | 0.0 | 74 |
| Female | 19.1 | 29.3 | 18.8 | 7.9 | 0.7 | 230 |
| Region | | | | | | |
| Arusha | 10.9 | 5.9 | 3.0 | 0.0 | 0.0 | 60 |
| Dar es Salaam | 9.2 | 6.6 | 3.9 | 0.3 | 0.7 | 63 |
| Dodoma | 5.9 | 2.3 | 5.6 | 6.3 | 0.0 | 61 |
| Mbeya | 2.0 | 15.8 | 1.6 | 0.3 | 0.0 | 60 |
| Mwanza | 1.0 | 6.3 | 9.2 | 3.3 | 0.0 | 60 |
| Total | 28.9 | 36.8 | 23.4 | 10.2 | 0.7 | 304 |

How much does water cost per month per household?

| Background characteristics | No cost | Less than 1000 | Between 1000 to 5000 | Between 5000 to 10,000 | Between 10,000 to 20,000 | More than 20,000 | Total |
|----------------------------|------------|----------------|----------------------|------------------------|--------------------------|------------------|------------|
| Age | | | | | | | |
| 18-20 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 2 |
| 20-34 | 1.9 | 0.5 | 12.5 | 8.2 | 4.8 | 1.9 | 62 |
| 35-49 | 0.5 | 0.0 | 11.1 | 15.9 | 5.8 | 6.3 | 82 |
| 50+ | 0.5 | 0.0 | 6.3 | 8.7 | 5.8 | 8.7 | 62 |
| Sex | | | | | | | |
| Male | 1.0 | 0.5 | 6.3 | 6.7 | 6.3 | 4.3 | 52 |
| Female | 1.9 | 0.0 | 23.6 | 26.0 | 11.1 | 12.5 | 156 |
| Region | | | | | | | |
| Arusha | 0.0 | 0.0 | 4.8 | 7.2 | 8.7 | 5.3 | 54 |
| Dar es Salaam | 0.0 | 0.5 | 2.4 | 1.4 | 5.3 | 3.8 | 28 |
| Dodoma | 0.5 | 0.0 | 4.8 | 7.7 | 0.5 | 0.0 | 28 |
| Mbeya | 2.4 | 0.0 | 9.1 | 11.1 | 5.3 | 0.0 | 58 |
| Mwanza | 0.0 | 0.0 | 8.7 | 5.3 | 1.0 | 4.3 | 40 |
| Total | 2.9 | 0.5 | 29.8 | 32.7 | 20.8 | 13.4 | 208 |

Is water available at the source now? (During the visit)

| Background characteristics | No | Yes | Total |
|-----------------------------------|-------------|-------------|--------------|
| Age | | | |
| 18-20 | 0.0 | 1.0 | 2 |
| 20-34 | 11.1 | 18.8 | 62 |
| 35-49 | 17.8 | 21.6 | 82 |
| 50+ | 8.7 | 21.2 | 62 |
| Sex | | | |
| Male | 8.2 | 16.8 | 52 |
| Female | 29.3 | 45.7 | 156 |
| Region | | | |
| Arusha | 1.4 | 24.5 | 54 |
| Dar es Salaam | 2.4 | 11.1 | 28 |
| Dodoma | 10.1 | 3.4 | 28 |
| Mbeya | 15.4 | 12.5 | 58 |
| Mwanza | 8.2 | 11.1 | 40 |
| Total | 37.5 | 62.5 | 208 |

Are you satisfied with the amount of water supplied?

| Background characteristics | No | Yes | Total |
|-----------------------------------|-----------|------------|--------------|
| Age | | | |
| 18-20 | 0.5 | 0.5 | 2 |
| 20-34 | 13.9 | 15.9 | 62 |
| 35-49 | 21.6 | 17.8 | 82 |
| 50+ | 11.5 | 18.3 | 62 |
| Sex | | | |
| Male | 14.4 | 10.6 | 52 |
| Female | 33.2 | 41.8 | 156 |
| Region | | | |
| Arusha | 19.2 | 6.7 | 54 |
| Dar es Salaam | 6.7 | 6.7 | 28 |
| Dodoma | 12.5 | 1.0 | 28 |
| Mbeya | 14.9 | 13.0 | 58 |
| Mwanza | 6.7 | 12.5 | 40 |
| Total | 60 | 40 | 208 |

Do you think there is a need for improvement of water supply?

| Background characteristics | No | Yes | I don't know | Total |
|----------------------------|------------|-------------|--------------|------------|
| Age | | | | |
| 18-20 | 0.0 | 1.0 | 0.0 | 2 |
| 20-34 | 1.0 | 28.8 | 0.0 | 62 |
| 35-49 | 4.3 | 35.1 | 0.0 | 82 |
| 50+ | 4.3 | 24.5 | 1.0 | 62 |
| Sex | | | | |
| Male | 1.4 | 23.1 | 0.5 | 52 |
| Female | 8.2 | 66.3 | 0.5 | 156 |
| Region | | | | |
| Arusha | 7.2 | 17.8 | 1.0 | 54 |
| Dar es Salaam | 1.0 | 12.5 | 0.0 | 28 |
| Dodoma | 1.0 | 12.5 | 0.0 | 28 |
| Mbeya | 0.5 | 27.4 | 0.0 | 58 |
| Mwanza | 0.0 | 19.2 | 0.0 | 40 |
| Total | 9.6 | 89.4 | 1.0 | 208 |

What could be adjusted to improve water supply services in this area?

| Background characteristics | Add more water distribution point close to households | Increase the amount of water supplied | Reduce the cost of water tariff | Reduce the cost of household water connections | Other specify | Total |
|----------------------------|---|---------------------------------------|---------------------------------|--|---------------|--------------|
| Age | | | | | | |
| 18-20 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 2 |
| 20-34 | 11.8 | 8.6 | 7.5 | 3.2 | 1.1 | 60 |
| 35-49 | 14.0 | 12.4 | 9.1 | 1.1 | 2.7 | 73 |
| 50+ | 8.6 | 8.6 | 6.5 | 1.6 | 2.2 | 51 |
| Sex | | | | | | |
| Male | 9.1 | 8.1 | 2.7 | 2.7 | 3.2 | 48 |
| Female | 25.3 | 22.0 | 21.0 | 3.2 | 2.7 | 138 |
| Region | | | | | | |
| Arusha | 3.1 | 4.8 | 5.9 | 1.6 | 4.3 | 19.7 |
| Dar es Salaam | 11.8 | 2.2 | 0.0 | 0.0 | 0.0 | 14.0 |
| Dodoma | 3.8 | 5.9 | 2.7 | 1.6 | 0.0 | 14.0 |
| Mbeya | 4.3 | 12.9 | 1.1 | 10.8 | 1.6 | 30.7 |
| Mwanza | 7.1 | 8.6 | 4.3 | 1.6 | 0.0 | 21.6 |
| Total | 30.1 | 34.4 | 14.0 | 15.6 | 5.9 | 100.0 |

SECTION THREE: SANITATION FACILITIES

Do you have toilet in this household?

| Background characteristics | Yes | Total |
|----------------------------|--------------|------------|
| Region | | |
| Arusha | 19.7 | 60 |
| Dar es Salaam | 20.7 | 63 |
| Dodoma | 20.1 | 61 |
| Mbeya | 19.7 | 60 |
| Mwanza | 19.7 | 60 |
| Total | 100.0 | 304 |

What type of toilet do you have in this household?

| Background characteristics | Water closet | Pour Flush | Ventilated Pit latrine | Ordinary Pit latrine | Other specify | Total |
|----------------------------|--------------|-------------|------------------------|----------------------|---------------|------------|
| District | | | | | | |
| Arusha | 2.3 | 15.8 | 1.0 | 0.7 | 0.0 | 60 |
| Dar es Salaam | 3.3 | 15.1 | 0.3 | 1.6 | 0.3 | 63 |
| Dodoma | 1.0 | 6.3 | 7.2 | 5.6 | 0.0 | 61 |
| Mbeya | 14.8 | 3.6 | 0.3 | 1.0 | 0.0 | 60 |
| Mwanza | 0.0 | 18.4 | 0.0 | 1.3 | 0.0 | 60 |
| Total | 21.4 | 59.2 | 8.9 | 10.2 | 0.3 | 304 |

How do you dispose final products from the toilet let say when it's full or blocked?

| Background characteristics | I use frogmen to empty the pit | I hire cesspool emptier to empty the pit | I allow waste to flow in our nearby water channel | I backfill the toilet and construct the new one | Other specify | Total |
|----------------------------|--------------------------------|--|---|---|---------------|-------|
| Age | | | | | | |
| 18-20 | 0.3 | 0.3 | 0.0 | 0.3 | 0.0 | 3 |
| 20-34 | 6.6 | 11.2 | 0.0 | 7.6 | 4.6 | 91 |
| 35-49 | 8.2 | 19.7 | 0.3 | 8.6 | 4.3 | 125 |
| 50+ | 3.3 | 13.8 | 0.3 | 7.2 | 3.3 | 85 |
| Sex | | | | | | |
| Male | 4.9 | 12.2 | 0.3 | 4.9 | 2.0 | 74 |
| Female | 13.5 | 32.9 | 0.3 | 18.8 | 10.2 | 230 |
| Region | | | | | | |
| Arusha | 1.3 | 11.5 | 0.0 | 0.3 | 6.6 | 60 |
| Dar es Salaam | 1.0 | 13.8 | 0.7 | 2.3 | 3.0 | 63 |
| Dodoma | 8.9 | 3.9 | 0.0 | 5.3 | 2.0 | 61 |
| Mbeya | 0.7 | 12.5 | 0.0 | 6.6 | 0.0 | 60 |

| | | | | | | |
|--------------|-------------|-------------|------------|-------------|-------------|------------|
| Mwanza | 6.6 | 3.3 | 0.0 | 9.2 | 0.7 | 60 |
| Total | 18.4 | 45.1 | 0.7 | 23.7 | 12.2 | 304 |

Are you satisfied with sanitation services available in this area?

| Background characteristics | Very satisfactory | Satisfactory | Somehow | Not satisfactory | I don't know | Total |
|----------------------------|-------------------|--------------|-------------|------------------|--------------|------------|
| Age | | | | | | |
| 18-20 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 3 |
| 20-34 | 2.6 | 8.9 | 9.9 | 7.2 | 1.3 | 91 |
| 35-49 | 4.9 | 14.8 | 9.9 | 10.2 | 1.3 | 125 |
| 50+ | 4.3 | 6.9 | 9.2 | 6.9 | 0.7 | 85 |
| Sex | | | | | | |
| Male | 3.3 | 6.6 | 8.6 | 4.9 | 1.0 | 74 |
| Female | 8.9 | 24.3 | 20.7 | 19.4 | 2.3 | 230 |
| Region | | | | | | |
| Arusha | 6.3 | 5.6 | 3.3 | 3.6 | 1.0 | 60 |
| Dar es Salaam | 5.6 | 5.3 | 3.3 | 6.6 | 0.0 | 63 |
| Dodoma | 0.0 | 4.6 | 7.9 | 5.9 | 1.6 | 61 |
| Mbeya | 0.3 | 11.2 | 5.3 | 2.3 | 0.7 | 60 |
| Mwanza | 0.0 | 4.3 | 9.5 | 5.9 | 0.0 | 60 |
| Total | 12.2 | 30.9 | 29.3 | 24.3 | 3.3 | 304 |

SECTION FOUR: WATERSUPPLY AND SANITATION SERVICES MARKET

What type of Water Supply and Sanitation service is available in this area?

| Background characteristics | Water supply | All Materials for Water and sanitation infrastructures construction | Some Materials for water sanitation infrastructures construction | Pit empty r trucks | Frogmen | Other specify | Total |
|----------------------------|--------------|---|--|--------------------|---------|---------------|------------|
| Age | | | | | | | |
| 18-20 | 0.3 | 0.3 | 0.0 | 0.0 | 0.3 | 0.0 | 3 |
| 20-34 | 2.6 | 15.1 | 10.2 | 0.7 | 1.0 | 0.3 | 91 |
| 35-49 | 6.3 | 20.4 | 9.5 | 1.6 | 2.3 | 1.0 | 125 |
| 50+ | 5.6 | 13.8 | 5.9 | 1.6 | 0.7 | 0.3 | 85 |
| Sex | | | | | | | 304 |
| Male | 4.3 | 13.2 | 3.9 | 1.6 | 1.0 | 0.3 | 74 |
| Female | 10.5 | 36.5 | 21.7 | 2.3 | 3.3 | 1.3 | 230 |
| Region | | | | | | | |
| Arusha | 5.9 | 11.8 | 0.0 | 1.6 | 0.0 | 0.3 | 60 |
| Dar es Salaam | 6.9 | 10.9 | 0.7 | 1.0 | 0.0 | 1.3 | 63 |

| | | | | | | | |
|--------------|-------------|-------------|-------------|------------|------------|------------|------------|
| Dodoma | 0.0 | 2.3 | 13.8 | 0.7 | 3.3 | 0.0 | 61 |
| Mbeya | 0.0 | 19.1 | 0.7 | 0.0 | 0.0 | 0.0 | 60 |
| Mwanza | 2.0 | 5.6 | 10.5 | 0.7 | 1.0 | 0.0 | 60 |
| Total | 14.8 | 49.7 | 25.7 | 3.9 | 4.3 | 1.6 | 304 |

Can you get Water Supply and Sanitation product anytime you need it in this area?

| Background characteristics | Yes | No | May be | I don't know | Total |
|----------------------------|-------------|-------------|------------|--------------|------------|
| Age | | | | | |
| 18-20 | 0.7 | 0.3 | 0.0 | 0.0 | 3 |
| 20-34 | 16.8 | 9.5 | 2.0 | 1.6 | 91 |
| 35-49 | 28.0 | 9.5 | 1.3 | 2.3 | 125 |
| 50+ | 20.4 | 5.3 | 1.6 | 0.7 | 85 |
| Sex | | | | | |
| Male | 19.4 | 3.0 | 1.0 | 1.0 | 74 |
| Female | 46.4 | 21.7 | 3.9 | 3.6 | 230 |
| Region | | | | | |
| Arusha | 18.4 | 0.0 | 1.0 | 0.3 | 60 |
| Dar es Salaam | 18.4 | 1.0 | 0.3 | 1.0 | 63 |
| Dodoma | 4.6 | 10.2 | 3.0 | 2.3 | 61 |
| Mbeya | 17.1 | 1.6 | 0.0 | 1.0 | 60 |
| Mwanza | 7.2 | 11.8 | 0.7 | 0.0 | 60 |
| Total | 65.8 | 24.7 | 4.9 | 4.6 | 304 |

How does your household consider Water Supply and Sanitation services in terms of resource allocation for it?

| Background characteristics | Very important that we allocate enough resources for | Important that we allocate some resources for | Somehow important seldom we allocate resources for | Important but we don't have enough resources to allocate for | Not important to allocate resources for | I don't know | Total |
|----------------------------|--|---|--|--|---|--------------|------------|
| Age | | | | | | | |
| 18-20 | 0.0 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 3 |
| 20-34 | 7.6 | 6.6 | 4.9 | 10.2 | 0.3 | 0.3 | 91 |
| 35-49 | 13.2 | 9.9 | 6.9 | 10.9 | 0.3 | 0.0 | 125 |
| 50+ | 8.2 | 7.6 | 3.6 | 7.9 | 0.7 | 0.0 | 85 |
| Sex | | | | | | | |
| Male | 5.9 | 5.6 | 4.3 | 8.2 | 0.3 | 0.0 | 74 |
| Female | 23.0 | 18.8 | 11.5 | 21.1 | 1.0 | 0.3 | 230 |
| Region | | | | | | | |
| Arusha | 3.3 | 3.6 | 0.7 | 12.2 | 0.0 | 0.0 | 60 |
| Dar es Salaam | 3.9 | 8.9 | 2.3 | 5.3 | 0.0 | 0.3 | 63 |
| Dodoma | 4.9 | 3.6 | 3.9 | 6.6 | 1.0 | 0.0 | 61 |
| Mbeya | 2.6 | 4.3 | 0.7 | 12.2 | 0.0 | 0.0 | 60 |
| Mwanza | 2.3 | 7.9 | 4.6 | 4.6 | 0.3 | 0.0 | 60 |
| Total | 17.0 | 28.3 | 12.2 | 40.9 | 1.3 | 0.3 | 304 |

Are you willing to incur some costs for Water Supply Sanitation services?

| Background characteristics | No | Yes | Total |
|----------------------------|-------------|-------------|------------|
| Age | | | |
| 18-20 | 0.3 | 0.7 | 3 |
| 20-34 | 3.9 | 26.0 | 91 |
| 35-49 | 3.6 | 37.5 | 125 |
| 50+ | 3.3 | 24.7 | 85 |
| Sex | | | |
| Male | 3.0 | 21.4 | 74 |
| Female | 8.2 | 67.4 | 230 |
| Region | | | |
| Arusha | 1.6 | 18.1 | 60 |
| Dar es Salaam | 1.0 | 19.7 | 63 |
| Dodoma | 3.9 | 16.1 | 61 |
| Mbeya | 4.6 | 15.1 | 60 |
| Mwanza | 0.0 | 19.7 | 60 |
| Total | 11.2 | 88.8 | 304 |

Can you take a loan to facilitate your household to get Water Supply and Sanitation services?

| Background characteristics | Yes | No | May be | I don't know | Total |
|----------------------------|-------------|-------------|-------------|--------------|------------|
| Age | | | | | |
| 18-20 | 0.0 | 0.7 | 0.0 | 0.3 | 3 |
| 20-34 | 16.8 | 6.6 | 3.9 | 2.6 | 91 |
| 35-49 | 21.7 | 7.2 | 9.2 | 3.0 | 125 |
| 50+ | 18.1 | 5.3 | 4.6 | 0.0 | 85 |
| Sex | | | | | |
| Male | 14.1 | 4.3 | 4.9 | 1.0 | 74 |
| Female | 42.4 | 15.5 | 12.8 | 4.9 | 230 |
| Region | | | | | |
| Arusha | 9.5 | 2.3 | 6.9 | 1.0 | 60 |
| Dar es Salaam | 14.1 | 2.0 | 2.6 | 2.0 | 63 |
| Dodoma | 2.0 | 10.2 | 6.6 | 1.3 | 61 |
| Mbeya | 11.5 | 4.9 | 1.6 | 1.6 | 60 |
| Mwanza | 19.4 | 0.3 | 0.0 | 0.0 | 60 |
| Total | 56.6 | 19.7 | 17.8 | 5.9 | 304 |

ANNEX 5: WATER SECTOR STATUS REPORT 2020/21

<https://drive.google.com/file/d/1tSJ-ibmWvK9NKHyaNfppuqGerYxM6cWq/view?usp=sharing>

ANNEX 6: EWURA's WATER UTILITIES PERFORMANCE REVIEW REPORT FOR FY 2020/21

https://drive.google.com/file/d/1GuNIA8KPIPy8jcf3ouwdcCwN_nW_YO/view?usp=sharing

