WASH situation Assessment @ Workplace and Home of TOOKU garments Tanzania Ltd workers at Benjamin William Mkapa special economic zone in Dar es salaam Tanzania

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# LIST OF ACRONYMS AND ABBREVIATIONS

AWS	Alliance for Water Stewardship
FGD	Focus Group Discussion
GoT	Government of Tanzania
LGA	Local Government Authority
MC	Municipal Council
MOHGCEC	Ministry of Health, Gender, Community Development, Elderly and Children
NSC	National Sanitation Campaign
NVIVO	Qualitative Software for coding and analysis
SDG	Sustainable Development Goals
SOP	Standard operating procedure
TZS	Tanzanian Shillings
UNICEF	United Nations International Children's Emergency Fund (UNICEF)
WASH	Water and sanitation hygiene
WHO	World Health Organization (WHO).
WSDP	Water Sector Development Plan

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## **EXECUTIVE SUMMARY**

**INTRODUCTION:** Globally, Water Resources management is increasingly significant, not only for domestic use but also for sustainable socio-economic and livelihood development as well as political stability. The link between access to safe water, sanitation and hygiene (WASH) and health is well documented. Since workplaces represent a major focus in the life of workers and employers, access to WASH in workplaces can contribute greatly to both occupational and general health.

However, methodologically robust assessment of WASH at the workplace and home of the workforce at a national level combining with Household Water Insecurity Experiences (HWIE) has not been undertaken. Moreover, the results of such assessments are critical in aiding decision making by private sector, policymakers, planners, researchers, academics, development partners, and the Got among others. This assessment was undertaken to fill such a gap. This assessment was anchored on five specific objectives: 1) To assess water services at workplace and at home, water availability from improved source on the premise and the main water supply source for the workplace and home.; 2) To assess the availability and adequacy of improved sanitation facilities with toilet dedicated for staff, menstrual hygiene, and accessible to persons with limited mobility; 3) To assess the hygiene status by observing the availability and functionality of hand hygiene facilities particularly with water and soap both at the workplace and at home; 4) To assess the household water insecurity experiences at the TOOKU workforce residents; and 5) To assess the knowledge of the link between WASH and COVID-19 responses and factory preparedness in responding to the pandemic.

**METHODS:** This was a two-setting assessment survey that was implemented at TOOKU garment workplace and selected streets where most of the TOOKU workforce resides at Ubungo Municipality. Much as the assessment involved workplace and the household, purposively, TOOKU garments company Limited was assessed client's demand. For the household, the assessment used a two-stage stratified sampling design conducted in two phases. In the first phase, using purposive sampling the streets with high number of TOOKU workforces living closer to the factory was mapped. Thereafter three streets were randomly selected from the sampling frame. Secondly households to be involved in the assessment were selected using simple random sampling technique. Data was collected through electronic data capture tools and the completed tools were uploaded in mWater platform. Observations were conducted at both workplace and selected household. The results were presented using different approaches such as tables and graphs.

**FINDINGS:** One factory and 100 households were assessed. The assessment showed WASH services available at all settings. For access of water, 98% and 96% receive water from piped water supply system operated by DAWASA both at the household and factory respectively. The factory provides 104 toilets with dedicated bins for used sanitary pads in all female's toilets. There are no specific guidelines which give out staff-pit hole ratio, the number of pit-hole provided seem to be enough due to the fact that there was no line of staff waiting for the service even during lunch time where all staff went out at once. A total of 53% (n=53) of households have improved toilets and the remaining have either basic or shared latrines. Only 10% of the household toilets did accommodate persons with disability while there was no toilet with accessibility for this group at the factory. Functional Hand washing facilities at the factory was 54% while 64% of households had hand washing facilities with evidence of being used. Both at the workplace and home, individual's behavior toward hygiene best practices was lagging behind. Evidence shows areas of the factory where waste bins provided with lid and labels improperly used and not covered may attract birds and other scavengers. Wearing of masks to most of the staff was not correctly done. This was also the case at home were most of the household did not segregate waste, did not use face-mask to mention.

**CONCLUSIONS:** Much as the factory took important measures to respond to the COVID-19 and ensure availability of WASH services so do the homes of the workforces, hygiene practices remain key driver for the improvement of working environment and at the household. Having all the services such as water supply, toilets and hand washing facilities without addressing the behavior of the user of the services may end up with limited outcomes especially on intended impacts. The survey recommends that rain water harvesting to be done especially at the workplace to enhance the profit which will be earn out of it. Detailed study will be needed to determine the quality of effluent which escapes through water channels crossing Makuburi Kibangu and Ukombozi streets.

## 1.0 INTRODUCTION

Globally, water resources management is increasingly significant, not only for domestic use, but also for sustainable socio-economic development, livelihood development and political stability. Global (Donors and partners) and Government's entities have continuously demonstrated efforts to protect this finite resource. The link between access to safe water, sanitation and hygiene (WASH) and health is well documented. Since workplaces represent a major focus in the life of workers and employers, access to WASH in workplaces can contribute greatly to both occupational and general health.

UN General Assembly in 2010, recognized access to safe water and sanitation as a human right (UGA 2010). The right to safe drinking water, sanitation and hygiene is fundamental to the realization of the right to health and well-being, including the right to healthy occupational and environmental conditions (International Covenant on Economic, Social and Cultural Rights 1966).

Despite of these universally recognized rights, there are almost 400,000 work-related deaths annually from communicable diseases, and the main contributing and preventable factors are poor drinking water, sanitation and hygiene, and the related lack of knowledge (WWAP 2016). There is limited knowledge in middle- and low-income countries on the importance of WASH in non-household settings, such as workplaces. Available data show that WASH access is lower in workplace settings than in household settings (Cronk et al., 2015).

Recently, the international community took note of the importance of sanitation at the workplace following the ILO engagement on promoting decent work in all economic sectors, at the country level and in global supply chains. As part of this effort, ILO's member States and the social partners (employer and worker organizations) have adopted a broad array of international instruments to promote occupational safety and health (OSH).

In-line with above international efforts, the Government of Tanzania (GoT) has committed to achieving the Sustainable Development Goals (SDGs) 2030 and the 2025 National Development Vision as well as the five-year National Development Plan 2016-2021. Basically, WASH is the center of these commitments because of its contributions to related SDGs such as:no poverty (SDG 1), good health and wellbeing for all persons at all ages (SDG 3), quality education (SDG 4), gender equality (SDG 5), reduce inequalities (SDG 10), and sustainable cities and communities (SDG 11). It is important to mention here that limited access to WASH services in general causes significant

economic burden to most of the countries. For example, estimates suggest that the GoT loses about 301 billion (\$206 million) annually due to poor sanitation (WSP 2012).

To attain the commitments and plans, Tanzania with support from sector stakeholders has put in place several frameworks including the water resources management act (2009) that seeks to ensure the nation's water resources are protected, developed, used and controlled in ways which consider some key fundamental principles. The above commitment is articulated as well in Water and Sanitation Policy (2020) and the Water Sector Development Programme (2025), all gearing towards meeting the SDGs, especially for water and Tanzania's development vision by 2030 and 2025 respectively.

Private sector (PS) participation in water resources management and WASH services delivery, within the space of massive emphasis on a Tanzania of industrial economy, is fundamentally enshrined in several Governments' policy frameworks including; the Private sector strategy preceded by guidelines for private sector participation, Government's declaration for private sector participation (PSP) and action plan for private sector participation. Water stewardships (WS) is one among other forms for bringing in the contribution of PS in sustainable management of Water resources (specifically water security and climate resilience) and ultimately adequate access water supply services in Tanzania.

Several initiatives have happened so far, to spearhead accountable management and use of water through the Alliance for Water Stewardship (AWS) programme. Development of guidelines for waste water discharge for the EPZ industrial zone and Inter-ministerial MoU on roles and responsibilities to manage industrial waste water in Tanzania are some of the policy level achievements through the cooperation between EPZA and NatuReS to date. Other achievements include approved waste water discharge permit system, guidelines for industrial water discharge and Polluter-Pay-Principle as well as industrial waste water treatment business models.

The studies referenced above showed promising status in WASH services at workplace and home of TOOKU garments workforce. As well, it demonstrated the undocumented limitations to the workplace in providing safe and quality basic services especially to member of staff. WASH assessment at the workplace is a new area of study therefore it present challenges especially on getting credible evidence on the current picture of adequacy accessibility, and affordability of WASH services at workplace in Tanzania. It is therefore evident that WASH coverage and accessibility data at workplace in Tanzania is unclear. The action research to assess the WASH situation at TOOKU

garments as workplace and the situation of its workforce at home conducted to provide a countrywide baseline data that can be usable by the GOT and its partners in setting realistic targets.

## 1.1 Survey objectives

The primary objective of this assessment was to understand the current status of WASH services at TOOKU garments as workplace and at the area where staff reside. The assessment also intended to facilitate and develop knowledge of water and sanitation related risks for investors, specifically for TOOKU LTD; the Garment manufacturer at BWM-SEZ. The objectives of the assessment are in the following four thematic areas of WASH:

- 1. To assess water services at workplace and at home, water availability from an improved source on the premise and the main water supply source for the workplace and home.
- 2. To assess the availability and adequacy of improved sanitation facilities with toilet dedicated for staff, menstrual hygiene, and accessible to persons with limited mobility.
- 3. To assess the hygiene status by observing the availability and functionality of hand hygiene facilities particularly with water and soap both at the workplace and at home.
- 4. To assess the household water insecurity experiences at the TOOKU workforce residents
- 5. To assess the knowledge of the link between WASH and COVID-19 responses and factory preparedness in responding to COVID-19

## 1.2 Significance of the survey

Advancing the realization of WASH targets by the GoT and key partners is one among catalytic factors for fast-tracking the achievement of the SDGs. While WASH does not earn the deserved priority to many water users from the private sector in Tanzania, yet access to sustainable WASH services in workplace actively being part of addressing external issues that are riskier to their businesses; workers; raw material producers and communities surrounding their investments. In brief WASH services has multiple effects in the production chain and the business at large where lack of it may negatively impact the business and the vice versa.

SwM, having registered significant experience on promoting water stewardship (WS) practices to private sector investors, collaborates with the Export Processing Zone Authority (EPZA) to institutionalize water stewardships standards to other investors at BWM - EPZ. This strategic endeavor is based on the understanding that water and sanitation (W&S) are among major drivers for

successful economic investment and active labor force. W&S catalyzes achievement of development vision on economy in Tanzania and globally. The adequate availability of water supply and sanitation services with recommended quality standards is an important factor for smooth operations of production. Also, wastewater discharge requirements need to be clearly articulated such that investors appreciate these requirements for environmental compliance and related cost implications from the onset of setting up the businesses.

This assessment provides information to leverage learnings from the existing WASH situation at TOOKU garments as workplace and at the household where the majority of workforce resides. It will also reveal level of COVID-19 response preparedness at the work place and HHs levels, thus enabling the determination of areas for improvement and scale up.

## 2.0 METHODOLOGY

## 2.1 Survey setting and design

This was a two-setting assessment survey that was implemented at TOOKU garment LTD as workplace and selected streets where most of the TOOKU workforce reside in three streets; Makuburi Kibangu, Muongozo, Kibangu; Ubungo Municipal, Dar es Salaam, Tanzania.



Figure 2.1 Map of Surveyed area in Ubungo showing spatial distribution of surveyed household

## 2.2 Sampling procedure

Much as the assessment involved workplace and the household, purposively TOOKU garments was selected as workplace as per client demand. For the household the assessment used a two-stage

stratified sampling design conducted in two phases. In the first phase, using purposive sampling the streets with high number of workforces living closer to the factory was mapped. A sampling frame created which consisted of five (5) streets; Kibangu, External, Ubungo Maziwa, Makuburi Kibangu and Muongozo. Thereafter three streets were selected randomly using ballots by giving them numbers from 1-5. Second phase was selection of household to be involved in the assessment, simple random technique was employed and three pieces of papers written 1-3 dropped for a anyone to pick one to determine the interval between houses. With the support of street government leader, the team of enumerators positioned themselves at the Centre of the street and roll the pen to find the direction to take. Proportion of household selected per street was based on estimated workforce resides in a given street.

#### 2.3 Sample size estimation

The assessment targeted workplace namely TOOKU garments (Workplace) and households from selected streets of Makuburi-kibangu, Muongozo and Kibangu. At the workplace, a total of five (5) key informants selected from different department (Management 1, Workers Association 2, security department 1 and Cleaners 1). A total of 21 staff (11 female and 10 Male) from the factory were selected to participate in focus group discussion which makes 26 participants included in the assessment as respondents. Due to the fact that having actual number of staff residing in this street was difficult from the factory management and even from worker's association at the factory, the consultant decided to dwell on estimations given by street government leaders which was about 120 household in total. The survey used Taro Yamane's formula below to determine the sample size.

$$n = \frac{N}{1 + N(e^2)}$$

where N is the total number of households with staff (Population), e an acceptable sampling error and n – Expected sample size.

The formula above was used to estimate the sample size required and we used the margin of sampling error of 5%. The final estimated sample size was adjusted for non-response at 7.5%. (The non-response rate was taken at 7.5% as we anticipate non-response due to the fear of losing their job which some of the staff mentioned over the phone during the arrangement for HH interview)

A representative sample of **93** households was determined as the minimum. A non-response rate of 7.5% was added to bring the final sample size to **100** households. This sample size proportionally

allocated to the street. A breakdown of households included in the sample by street is provided in Table 2.1.

Street	Number of households	Minimum sample estimated
Makuburi-kibangu	78	65
Muongozo	25	21
Kibangu	17	14
Total	120	100

Table 2.1: Sample size estimates for only Household

#### 2.4 Data collection and quality assurance measures

To ensure data integrity, quality assurance measures were impregnated in the data collection procedures. The survey ensured that data collected using mobile phone were synched daily and centrally. In the field, Research Supervisors checked completed questionnaires for completeness and accuracy of logical skips. Any flagged queries were shared with interviewer for action such as corrections and verifications.

The database was routinely subjected to consistency test, reliability and durability to ensure that the conditioning of the codes never predisposed the database to easy crash. At all level, the survey had a Resident Information and Technology (IT) team that ensured full time support. At data processing stage, data were thoroughly cleaned to ensure accuracy before the analysis was performed.

## 2.4.1 Data collection procedure

Given that SwM had collaboration with EPZA and other government levels, discussions were first held on the best engagement modality at the factory and household. At the factory the management were informed about the assessment. Additionally, local government leaders at the street level were informed and asked to support the exercise. The survey used electronic data collection method to ensure real-time data visualization and exploration using mWater. The platform provided capability to publish dashboards and to share the most recently collected data with the Project Data Manager for real-time decision making. Lastly, the capability of mWater enabled the translation of survey instruments into other languages including English and Kiswahili.

## 2.4.2 Data collection instruments

Three methods of data collection were used: a researcher-administered questionnaire as the main approach, Focus Group Discussion and observation.

**Questionnaire:** A questionnaire was administered by trained enumerator to each respondent. Two sets of questionnaires namely a household questionnaire targeting head of household or adult member of the household stayed in the given household for s period not less than 2 months and In-depth Interview questionnaire for key informants working at TOOKU garments. The questionnaire for household had the following five sections: 1) Demographic characteristics of respondents 2) Household Water Insecurity Experience 3) Water source information 4) Hand washing facilities information 4) Waste Management. The questionnaire on key informants mainly had two sections: 1) General WASH information; 2) Behavior Change. In each questionnaire, responses to questions were coded. The main purpose of the household questionnaires was to capture the information from adult member of the selected household measuring level of Water and Sanitation services, Hygiene practices and the experience on water insecurity. For the workplace, the interview was conducted with 5 key informants with vast knowledge of the area and WASH related issues. It was aimed to discover the status of WASH and preparedness of the factory in responding to the pandemic

**Observation:** The assessment employed direct observation both at the workplace and household using a checklist due to the fact that, certain aspects of the data collection required this approach for the purposes of verification/or confirmation. All observations were carefully directed to identify additional information that might have not been provided by respondents. A digital observation tool/or checklist was used to enable electronic submission which will allow the statistician to access them immediately after synchronization.

**Focus Group Discussion**: The Assessment used FGD further gather information which might not be captured by other tools. A total of three FGD with seven (7) participants each conducted at the workplace where one was for females only, the other was for men and the last one was mixed of male and female member of staff at TOOKU garments. A ten-seed technique<sup>1</sup> was used to gather quality

<sup>&</sup>lt;sup>1</sup> The 10-seed technique is a modified PLA tool and was introduced after a lot of modification and experimentation as a tool that can be used to carry out several of the PLA-Participatory Learning and Action exercises. It is useful in gathering qualitative information on various issues, especially related to the perceptions of the community and the way people see themselves in relation to others. The technique is very flexible and therefore versatile, enabling its use in combination with other techniques and also for collecting a wide range of information

information, helped to open up a room for more discussion, negotiation and it gives the focus group discussion participants to score on each item discussed as well as coming with a common understanding and consensus on the item. The seed technique made participants free to express their feelings, views, opinions and propose solutions; feel valued, empowered and fosters ownership during the process.

#### 2.4.3 Pre-test of survey tools

Both qualitative and quantitative survey tool was programmed on an electronic platform and rigorously tested under the guidance of the statistician. Feedbacks from Enumerators were elicited and used to improve the logical flow and sequence of the tool. For the pre-testing, household that were not part of the assessment was selected closer to consultant's office in Dar es Salaam. All the appointed enumerators participated in the pretest of two household using a paper-based and electronically configured tool.

#### 2.4.5 Study implementation

The survey was implemented by Project Clear Limited who (PCL) constituted a team of consultants comprising of a Public Health Specialist and Statistician to oversee the entire process of initial preparations, training, data collection, analysis and report writing. A technical team that comprised of Shahidi wa Maji staff, representatives from TOOKU garments, and NatuRes supported the team of consultants to organize inception meetings, prepare the assessment tool for approval, and to undertake the training of the Enumerators and Team Supervisor. The technical team also provided oversight in field data collection through regular checks on completed assessment tools before submission. This ensured that inconsistencies in data were identified appropriately and resolved in real time and field operational challenges were identified and effective measures provided. In addition, spot checks were implemented through visits to sampled section at the selected factory.

## 2.4.6 Training of data collection teams

Enumerators are selected from the consultant's team of staff based on the topic at hand. Basically, all of them have had considerable experience, possession of prior practical experience and skills in conducting public health research, proficiency in English and Swahili languages which is common language in Tanzania.

To avoid delays in data collection, the consultant appointed and trained an excess (125%) number of potential enumerators. All potential enumerators initially underwent a centralized two days training that was conducted using a training manual developed by the Consultant. The training approaches included the following: class-based sessions, practical sessions, role plays on informed consent acquisition, conduct of interviews, paper-based and electronic data capture and entry on the mWater, and electronic data submission. The main topics covered in the training included: introduction to the study protocol, WASH concepts, research ethics and informed consent; study tools, and data capture. One day were designated to pilot test and debrief the Enumerators.

Team Leaders or Supervisors were selected from among the middle managers in the organization with capacity to manage other staff. She is as well WASH expert with vast experience in data collection and research at large. Most of the enumerators are reporting to her in their day-to-day operations at the office.

## 2.4.7 Data management and analysis

Data were translated and downloaded, verified, before analysis. The data were descriptively analyzed using frequencies and percentages for categorical data. For numerical data, means and standard deviation and medians with interquartile ranges were computed. All FGDs were recorded electronically, transcribed into Swahili then translated to English. Themes were identified based on evaluation questions and then codes developed using NVIVO software. Results were presented in accordance to the assessment objectives using different techniques. WASH services were summarized as per National Sanitation Campaign standards.

## 2.4.8 Key survey steps, activities, and schedule

Figure below illustrates major steps of the survey namely: 1) Desk review of relevant and important documents to inform the study design and the development of data collection tools; 2) Inception meeting between Shahidi wa Maji, NatuRes, TOOKU garments and the Consultant to harmonize understanding about the Terms of Reference (TOR) and assessment methodology; 3) Training of the enumerators and pre-testing of the tools, 4) Data collection, cleaning, data processing, and data analysis; 5) Thinking of the report and template development; 6) Writing draft report, sharing and gathering comments; and 6) Writing of final report and submission. The process of report writing followed three steps: 1) draft report by the Consultant; 2) review of draft report by Shahidi wa Maji and other key stakeholders; and, 3) tackling of comments, finalization integration of comments into

the final report, submission, and approval. The flow of the above activities was done under close supervision of the senior officer with experience in research and WASH. Pre-arrangement was paramount to encounter all unforeseen challenges which happened at the field. Prio-information was also shared to the government from the Municipal level down to the street to seek for the needed support from the Authorities.



Final Assessment Report after addressing the comments

Figure 2.2 Shows the flow of steps and activities in executing the assessment

## 3.0 FINDINGS

## 3.1 Characteristics of respondents at the workplace and household

Results presented in the following tables were obtained from both quantitative and qualitative data analysis based on the tools used for household and workplace in Annex 1 to 5. The proportions for non-response if any, was established and compared as displayed in Table 3.1. Where possible, the reasons for non-response were explored, outlined, and the implications for interpretation or triangulation of evidence was provided. The survey achieved 100% response rate. 100 household were surveyed which were distributed as follows: 65 Makuburi Kibangu street, 21 Muongozo street, and 14 Kibangu street. All households' assessment were from Ubungo ward (n=100 or 100%). At the workplace (TOOKU garments), 26 respondents participated in the assessment

Table 3.1 Results of the	workplace and	Household <b>R</b>	espondents
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District	Street				
	Makuburi Kibangu	Muongozo	Kibangu	Workplace	Total
Ubungo	65	21	14	26	126
TOTAL	65	21	14	26	126

The distribution of participant characteristics by training or educational levels, street representation, gender and age amongst others is shown in Table 3.2. Of 126 respondents, 75 (60%) were females, 22(17%) attended University as the highest level of academic qualification, 65 (57%) were in the age category of 35-60 years and above and 35% (n=44) fall under 18-24 years old. The table below presents the background characteristics of all respondents involved in the survey.

Table 3.2 Background characteristics of respondents

	Street				
Characteristic	Makuburi Kibangu	Muongozo	Kibangu	Workplace	
	No.	No.	No.	No.	No.
Sex					
Male	23	10	6	12	51
Female	42	11	8	14	75
Education Level					

Primary	15	9	6	9	39
Some Primary	2	1	0	0	3
Secondary O level	17	6	3	12	28
Secondary A level	7	1	1	1	10
Post-secondary	10	0	1	1	12
University	14	3	2	3	22
Non formal	0	1	1	0	2
Age					
18 - 24	22	14	5	3	44
25 - 34	2	0	0	9	11
35 - 60	36	7	7	14	65
>60	1	3	2	0	6
Total	65	21	14	26	126

## 3.2 Water supply services

## 3.2.1a Water Services at the Household

The proportion of households with various water services available onsite is shown in Table 3.4. A high proportion of households 98% (n=98) access water from a piped source supplied by DAWASA. Eighty one percent (81%) of household the main source of water was piped water at the house yard or plot and 12% were connected to piped water into the house. A total of 5% access water from the public tap while 1% accessed from rain water harvesting using roof tops and another 1% from Protected household-owned borehole

T-1-1-2-2	Description	- (1 1 1	.1 .1.	<b>.</b>	- 4		
Table 3.3	Proportion	of househol	d with	various	water	services	available
	- <b>r</b>						

Main Source of Water	Percentage of households (in %)
Piped Water Supplied by DAWASA	<u>98</u>
Piped Water at the house yard or plot	81
Piped Water connected into the house	12
Public Tap	5
Rain Water	1
Protected household-owned borehole	<u>1</u>
Total	100

## 3.2.1b Water Services at the Factory

The factory mainly accesses piped water from the Dar es salaam water supply and sanitation authority (DAWASA), they also own two boreholes as backup which provide water during cut-off which rarely happen in the piped water supply.

## 3.2.2 Satisfaction with water Quality and quantity

This section reports on the level of satisfaction with the quality of water used both at workplace and at home and the quantity supplied. Under this section, the indicator used was turbidity level, odor and the taste of water, no laboratory test was included. Source of water used at the workplace and at the household were piped water, rain water harvesting and boreholes. Mostly borehole stood as backup source of in all settings.

## 3.2.2a Water Quality and quantity at the household

About 6% of the respondents pointed out to be dissatisfied with the quality of water supplied at the households, 13% are somehow satisfactory with the quality of water supplied from DAWASA where 81% of the respondent from the households were satisfied with water quality supplied by DAWASA. Furthermore, 92% of the respondents indicated that the quantity of water supplied from DAWASA is adequate where 7% and 1% stands as inadequate and didn't know if is adequate or not respectively.

Indicator	Number of Respondents	Percentage
Satisfaction		
Satisfactory	<u>81</u>	<u>81</u>
Somehow Satisfactory	13	13
Not Satisfactory at all	6	6
<u>Adequacy</u>		
Adequate	92	92
<u>Inadequate</u>	7	<u>7</u>
Don't know	<u>1</u>	<u>1</u>
Total	100	100

Table 3.4 Proportions of household with level of satisfaction of water quality

## 3.2.2b Water Quality and quantity at the workplace

The water supply services were in good quality and adequate. The main sources were piped water (DAWASA) and borehole. The quality of piped water supplied from DAWASA was satisfactory where staff used it direct for drinking and other purposes. Moreover, the industry in collaboration with OSHA conduct water analysis on monthly basis in all buildings (TOOKU A- F) ensure there is no contamination. In

"We are satisfied with the quality of water because every month water samples are taken from TOOKU A to F for analysis at the Occupational Safety and Health Authority (OSHA)"

Key informant - Workplace

some occasion. despite all of them to indicate their satisfaction of both water quality and quantity, admit to understand that water is treated by DAWASA before being supplied, but they also treat them before use.

## 3.2.3 Water treatment at the workplace and household

At the household, a total of 61% of the household reported to treat water all the time, 24% rarely treat water where the remaining 15% do not treat water at all. Boiling stand as the main treatment method (60%) followed by filtration 13% and 12% chlorination. The proportions of treatment and treatment method shown in the Table 3.6. Although it was difficult to figure out the percentage, all 26 TOOKU staff participated in the assessment reveal that most of the staff treat water at their home but use it direct from the tap at the workplace. The treatment may take form of boiling, filtering, or adding chemicals such as chlorine.

Indicator	Number of Respondents	Percentage
<u>Treat Water</u>		
Treat all the time	<u>61</u>	<u>61</u>
Rarely treat	24	24
Don't treat at all	15	15
Methods		
Boiling	60	60
Filtration	<u>13</u>	<u>13</u>
Chlorination	<u>12</u>	<u>12</u>

## Table 3.5 Results of water treatment and methods

## 3.3 Sanitation and Hygiene Services

Sanitation and hygiene services section revealed the status of sanitation facilities and hygiene practices both at the workplace and at home; mainly looking at Toilets, waste water management and solid waste management using National definitions given by Water Sector Development Program under National Sanitation Campaign which is in component four (Sanitation and Hygiene). Furthermore, it reports on the hygiene practices of factory workforces and they nearby residents. Key target behaviors include hand washing with water and soap, respiratory hygiene, social and physical distancing together with construction and use of toilets. The consultant based the finding on the requirements stipulated by Public Health Act 2009, National Environmental Management Act 2004 and Environmental Management regulation of 2007 due to lack of specific sanitation or rather WASH guideline for workplace save health care facilities and schools.

## 3.3.1a Availability of toilet facilities at the workplace

The assessment found that, at the factory there were 104 functional toilets provided for staff in all building of TOOKU garment limited (TOOKU A to TOOKU F). These toilets were located leeward side of the buildings enhancing the privacy for female and male. Table 3.7 indicates the general status of the toilets using key indicators. All toilets were visibly clean at the time of data collection where all female building were provided with bins for used sanitary pads. The factory did not observe inclusivity in their toilet designs where in all buildings visited, the accessibility of the toilets for the people with impaired vision and movement may be hindered

	Status of the toilet		
Indicator			
	Availability		
Produce smell	No		
Bins for used pads and other solids	Yes		
Material for anal cleansing (water/toilet paper)	Yes		
Clean running water for hand washing	Yes		
Bar/ liquid soap for hand washing	Yes		
Water for flushing	Yes		

Table	3.6	Status	of the	key	indicators	available in	or near	the toilet	/latrine
				~					

Furthermore, the company is having special auditing arrangement where they adopted 5S Kaizen principle where 5S stands for Sorting, Set in Order, Shine, Standardize and Sustain.

"Toilets are clean, and we feel safe to use them because they don't have any problem even when we are in our menstrual periods. We have freedom as there is bins for used sanitary pads and company hired cleaners to ensure cleanliness and removed bins when they are full. Every time auditors are visiting our company to check if we are complying with the standards set. The company is using Japanese 5S to ensure we are safe all the time"

Respondent from the Focus Group Discussion

## 3.3.1b Availability of toilet facilities at the household

This section reports on the status of toilets at the households and the material supplied. Out of 100 households, 53% had improved toilets; 15% basic latrine where 32% were shared. Only 71% was visibly clean on the day of assessment and the 16% produce foul smell; 68% provide water for hand washing near or in the toilet. Only 10% of surveyed households had toilet accessible to people with impaired movement or vision. A total of 68% of the toilets had water for hand washing during the study with only 32% having soap. Only 6% had dedicated bins for collection of used sanitary pads and 32% of the toilets found producing bad smell during the time of study. Figure 1: shows the distribution of toilets by type at the household.





# Figure 3:1 Proportion of toilets' availability at the household by type and status of materials' supply

## 3.3.2 Waste and storm water management

This section is reporting on the status of the workplace and households in managing waste water generated and storm water. The assessment based on the compliance of the Tanzanian wastewater quality standards (TZS Standards 860:2005). According to national standards, wastewater from the factory need to undergo pre-treatment onsite attain specific standards before taken to the secondary treatment.

## 3.3.2a Waste water and storm management water at the factory

The factory was mainly generating much of waste water from laundry and some from toilets and other places like drinking water station. Wastewater from the laundry undergoes primary treatment under conventional wastewater treatment plant within the factory to reach acceptable standards for it to be discharged to the EPZA systems for transportation to the waste stabilization ponds for secondary treatment. Water from this point contain chemical compounds where primary treatment is paramount Figure 3.2 Raw waste water from the laundry



to remove them and being capture in sludge; Secondary treatment which is biological own by EPZA. The management of the factory provided evidence of the permit that allow the factory to discharge wastewater after pre-treatment within the factory and attain required standards. The permit was granted on 30th of April, 2015



Figure 3.3 Open inspection chamber at the toilet drainage of TOOKU C

Waste water from the toilets and other places like drinking water station was collected using factory drainage systems connected to the public sewer owned by EPZA. Wastewater disposal is done after treatment which is happening outside the factory compound. The volume of waste water generated from this source is big due to high number of employees (around 3724) staff. Drainage system at one of the building (TOOKU C) is not sound due to lack of covers at the inspection chamber.

EPZA provided open channels which is not adequate to collect storm water all over the area. During the study, it was evident that some areas storm water fails to get connected into the channels hence form ditches especially at the backyard and finds its way to the nearby residential houses at Muongozo and Makuburi Kibangu streets. Furthermore, there was flowing wastewater from the buildings connected into the open storm water channels hence cause eutrophication in some parts of the channels.

## 3.3.2b Waste and storm water management at the households

The survey found that out of 100 households 70% had sound drainage systems from the toilet where 28% of the sound drainage system connected to the sewer and 51% used cesspool emptier and 21% used soakaway pit. There was evidence of leakages in 20% of the household's drainage systems and 10% had onsite disposal pit latrines which does not include drainage system. On waste water from areas other than toilets such as kitchen, area for dish washing and laundry: 68% used open pit which may allow leachates where 20% allow it to flow backyard of the houses and 12% properly collect it and connect to the drainage system,

There were storm water channels at all three streets included in the assessment which cover part of the area with estimation of less than 10% of the needed. Rain water in these street finds its way to the two natural streams one passing along Makuburi Kibangu and the other one passing through external from Ubungo Maziwa. Two street (Muongozo and Makuburi Kibangu) Figure 3.4 Storm water inside the house – Makuburi Kibangu EPZA specifically on the side of TOOKU



"I was born here. am having babies now, I never experienced this until when EPZA developed that area" - Respondent Makuburi Kibangu

## 3.3.3 Solid Waste Management

The assessment covered three main areas of waste management services: 1) Provisional of waste collection tools; 2) Waste segregation; 3) Treatment/disposal waste. The report shows the status both at home and at the workplace.

## 3.3.3a Solid Waste Management at the workplace

All buildings from TOOKU A to F were provided with waste collection bins with lids; provision of bins considered waste separation and includes labelling. Moreover, the company has hired the cleanliness and sanitation team responsible for cleanliness and waste management in the environment. A special company was contracted to transport waste from the collection point to the final disposal. In all 6 buildings of TOOKU factory (A-F) waste separation was not practised and most of the lids were not properly placed on the bins. At least 2 buildings were found with waste scattered around waste collection point. Team of assessors did not find dedicated bins for used mask collections in all buildings



## Figure 3.5 Solid Waste collection point

## 3.3.3b Solid Waste Management at the household level

Out of 100 households 92% had waste collection bins; 16% with lids. A total of 45% conduct partial waste separation where most of the household considers combustible and non-combustible as the key category of waste separation. It was found that 81% of household kept the surrounding especially waste collection point clean and 13% had signs of leachates from waste collection point.





All three streets included in the study, had a private company hired by Ubungo municipal Council to collect waste from the household transport them to the final disposal. Out of 100 respondents, 18% considered waste collection services from the company hired by the Municipality as very good while 57% considered it as satisfactory; 15% unsatisfactory with the service while another 15% considered the service as very bad service. On other hand, 72% reported that they pay individuals who are taking

waste to the disposal, 18% admitted that waste was collected by hired company. Furthermore, there were 9% who buried waste and 1% did not have proper ways

## 3.3.4 Hygiene Status

Results presented in this section report the status of hygiene both at the workplace and the household from three selected streets of Ubungo Ward where most of the TOOKU workforce reside.

## 3.3.4.1a Hygiene status at the households

The study found that a85% of surveyed households had functional handwashing facilities made from different materials; 39% bucket with a tap, 26% sink with a connected tap, 5% a bucket without taps and 12% others. It is found that 52% of all hand washing facilities placed near or in the wash room; 38% placed at the entrance of the households and 1% had hand washing facility at the dining room. Out of all 85 handwashing facilities, 86% had water at the time of assessment, 29% had soap or suitable alternative, 1% had materials for drying hands. Out of 85 hand washing facilities, only 11% were

connected to the drainage system. Using proxy indicator which was to assess the wetness of the handwashing facility, it was evident that 64% of handwashing facilities were in use and 29% had evidence of using soap. A total of 6% was designed to accommodate people with special need such as impaired movement.

## 3.3.4.1bHygiene status at TOOKU garments

Hand washing is the first and the most effective means in breaking the infectious diseases transmission cycle such as COVID-19. Out of 15 handwashing facilities provided 8 (54%) were functional made by sinks connected by tap and were placed near to toilet facilities. The remaining 46% were not functional and most of them located at the entrance of factory (TOOKU A-F). All functional handwashing facilities (8) had water and soap at the time of assessment. All 8 handwashing facilities were connected to the drainage systems and it was evident that they were in use during the assessment. The design of all 8 handwashing facilities were neglective of people with special need such as impaired movement.

#### 3.3.4.2 Link between WASH and COVID-19 responses and preparedness

This section is reporting the level of knowledge on linkages between WASH and COVID-19 and the preparedness of the factory and household in responding to the pandemic

## 3.3.4.2a WASH and COVID-19 Response at the household

High proportion which is 86% Out of 100 respondents, mentioned hand washing with water and soap; 53% mentioned respiratory hygiene in additional to hand washing where 24% mentioned physical and social distancing in additional to handwashing. About 4% fail to mention any of the behaviour associated to COVID-19. In protecting the family from the pandemic, 65% mention that they follow authority's guideline and instruction, 53% teaches family members' key preventive measure; where 35% prohibit any person to enter the house without washing their hands with water and soap; A total of 8% didn't know what exactly should be done to protect the family.

The results on the knowledge of critical moment for hand washing had the following findings; 86% mentioned before eating; 63% mentioned after eating where 60% mentioned after visiting toilet. In additional 29% indicated that every time when I see my hand is dirty; 18% when I feel like doing it and 15% after taking care a child. After taking care of the patient was mentioned by 9%; where 5% mentioned that after daily movement and 2% after breastfeeding.

## 3.3.4.2b WASH and COVID-19 Response at the workplace

There was vivid evidence of effort being made at the factory to respond to COVID-19 pandemic. All 6 gates were provided with hand washing facility. However, 5 hand washing facilities (83.3%) of them were not functional during the assessment. Body Temperature checks were only done in two gets and no register to keep the

"Management gave us face mask, soap for hand washing but also educate us that we should not shake hands and must avoid unnecessary gathering"

Participant FGD

records of the staff especially on the body temperature. The factory provided enough space to maintain distancing and all staff had face mask during the assessment. The focus group discussion with staff clearly demonstrated awareness and knowledge of all the target behaviour to observe as preventative measures against COVID-19 infection.

During In-Depth Interview, respondents indicated that in response to COVID-19, the factory developed action plan to prevent the spread of disease as part of business continuity plan. The factory deliberately developed the action plan to maintain a healthy workforce so that its production activities continue during the COVID-19 pandemic. Included in action plan is that every worker is given mask manufactured from TOOKU factory to wear, and installation of hand washing facilities at every corner of the factory for hand washing to fight spread of COVID -19. Among other conditions and monitoring strategy no one is allowed to enter the factory without adhering to COVID-19 preventing practices including mask wearing.

"As factory we have the obligation to set strategies and plans to ensure business continuity because once you get one patient at the factory it may spoil the business completely."

Respondent IDI

All respondents indicated that there a SoP on how to deal with suspect cases in the factory area. The factory has clinic with nurses trained on how to handle COVID-19 related cases.

Moreover, they have been directed where to report the COVID-19 suspect cases to selected hospitals such as Mloganzila as directed by government. The nurses at factory's clinic work closely with chief government medical officer and other government doctors

## 3.4 Household Water Insecurity Experiences (HWIE)

The assessment borrowed global tool (HWIES) to look at the experiences of water insecurity at the household level. The report revealed that 4% of the household selected in a study were insecure during the time of the study. Despite all the household having some score, only 4 households out of 100 involved in the study scored 12 and beyond which is the cut-off points for the household to be insecure. The findings based on incidence happened in last 4 weeks which does not necessary give out conclusive findings due to some of the incidence may occur in a specific season of the year. Table 3.8 below detailed the findings as follows

Indicator	Never (0 times) %	Rarely (1-2 times) %	Sometimes (3-10 times) %	Often (11-20 times) %
Water shortfall at Household	77	14	9	0
Water sources being interrupted	81	11	8	0
No enough water for Household	80	12	7	1
Changing schedule/plan due to problems of water situation	88	11	1	0
Change what to eat due to water shortfall	81	11	8	0
Fail to wash hands after dirty activity due to water shortfall	89	10	1	0
Fail to wash body due to water shortfall	88	12	0	0
No enough water to drink as preferred	96	2	2	0
Feeling angry about water situation	83	7	2	8
Gone to sleep with thirsty as no water to drink	97	2	1	0
No usable or drinking water whatsoever	96	3	1	0
Being ashamed/ excluded or stigmatized by water problems	95	4	1	0
Drinking water that looked, tasted or smelled bad	80	17	3	0
Drinking water thought unsafe	83	12	4	0
Unable to access water that you preferred	81	9	5	5

## Table 3.7 Proportions of household experienced water insecurity in a period of 4 weeks

## 3.5 SUMMARY OF MAJOR FINDINGS

## 3.6.1a Major findings at the household

- 98% of households have access to water from a piped supply compared to other sources
- 4% of the household were insecure as per Household Water Insecurity Experience scale
- 12% of the households have the main source of water on premises.
- 81% of the households were satisfied with the quality and quantity of water supplied
- 61% of the households treat water all the time for domestic use especially drinking
- 2% of the household spent TZS 50,000 or above in a month to pay for water tariff compared to 22% which pay between 5,000 to 10,000 TZS per month to pay for water tariff
- Only 53% of the household had improved toilet where 32% had shared toilets
- 10% of the designs of the toilets at the households accommodate people with special needs such as impaired movements.
- 6% of the toilets at the household provided dedicated bins for used sanitary pads
- 20% of the households allowed wastewater to flow at the backyard of the house
- 92% of the households had at least one waste collection bin
- 72% of the household use to pay individuals who are collecting waste and transport it to the disposal
- 15% of the household considered waste collection system by the private company commissioned by the council as very bad system
- 85% of the household had function hand washing facilities
- 64% of the hand wash facilities had evidence of being in use

## 3.6.1b Major findings at the Workplace

- 96% of water used at the factory are from a piped supply (DAWASA)
- All 26 staff involved in the study were satisfied with the quality and quantity of water
- Most of the staff treat water for drinking at their homeplace
- 104 functional toilets with bins for collecting used sanitary pad and visibly clean were available at the time of assessment

- Evidence of escaped effluent through water channel passing behind the factory at Makuburi Kibangu and Muongozo street
- Storm water not properly managed in some of the area especially behind TOOKU F
- Waste collection facilities with lid for different type of waste to allow waste separation were provided in all buildings of the factory
- Evidence of non-compliance of waste management principles done by factory staff
- Some of the litter bins (in two building) were not covered and waste was scattered around
- Peoples entering the premises were not washing hand at the gates
- Most of the staff did not comply with proper wearing of face masks

## 3.6 DISCUSSION OF MAJOR FINDINGS

The lack of access to safe drinking water and sanitation also reduces the capacity of the poor to work their way out of poverty (ILO 2008 Report IV), and hinders gender equality. Access to WASH in workplaces can contribute greatly to both occupational and general health. The WHO (2012) estimates that investments in sanitation bring four-fold economic returns in increased health and productivity... The study revealed less knowledge and information related to WASH in workplace, this finding aligned with the findings from Cronk et al, 2015 which indicated that there is limited knowledge in middleand low-income countries on WASH in non-household settings, such as workplaces and available scarce data show that WASH access is lower in workplace settings than in household settings. In Tanzania, there is neither data on work- related WASH impact nor specific guideline.

## 3.6.1 water services at workplace and at home

This assessment shows that both at the household and the workplace had high level supply of water from the piped system which is recommendable. Although this finding is positive, the assessment shows significant proportional of water users prefer to treat water before use.

Moreover, Studies show the possibility of post-collection and post-treatment contamination of drinking water despite being collected from improved sources (Benwic et al 2018, Bain et al, 2014; Shaheed et al, 2014). Having high number of households treating water after collecting from piped water supply which is said to be safe, indicate the possibility of unsafe storage at the point of use as it was evident in another study done by Mohamed et al., 2016 that revealed 14% of samples collected from storage containers had elevated concentration of fecal coliforms, indicating post treatment

contamination. The controversial actions of the household member raise alarm and create grey area for further studies to determine the quality of water at the outlet and at the point of use. Much as WASH assessment in African Countries is not popular, this finding is contrary to the situation at Myanmar where the baseline study revealed only 5% of the staff at the garment received water from piped supply where 89% of workers relied on boreholes for their water source, but complain about the smell and color (H&M and WA 2015)

## 3.6.2 Sanitation services at workplace and at home

Concerning to availability of toilets both at the household and workplace, the assessment revealed that almost everyone had access to toilet despite of having only 53% of the toilets at the household belong to the category of improved t as per definition of National Sanitation Campaign. This is somehow similar to earlier study in Hlaing Thar Yar which suggest that all workers at the garment factory and their residents had access to toilet (H&M and WA 2015). A total of 63% was shared as compared to 32% from this assessment.

Workplace provision of potable water for washing should also take into consideration needs for Menstrual Hygiene Management (MHM). The findings related to MHM at the workplace is relatively good in terms of provision of special bins for collecting used sanitary pad; at the household stands very low in both the provision of facilities and hygienic practices. This is contrary to International Labor Organization (ILO, 2016), which says Menstruating girls and women may have special needs for safe water access. Used menstrual materials must be disposed of in a sanitary way to reduce exposure with biological liquids. Separate bins should be provided within toilet cabins that have a tight-fitting lid. Bins should be lined with plastic or other appropriate bags to protect others from coming into direct contact with soiled products. The findings of the assessment show significant improvement at workplace where all female toilets had special bins for collecting used sanitary pads. There also a challenge on provisional of tight-fitting lid which poses health risk to the users and cleaners.

## 3.6.3 Hygiene services and COVID-19 preparedness at workplace and at home

This survey reports that a large proportion of the non-functional hand washing facilities where stands at 46% (n=7). Coronaviruses are spread through respiratory secretions or droplets, and potentially via contaminated surfaces. Along with other important behavior, such as physical distancing, frequent and thorough handwashing with soap and water is one of the best ways to prevent the spread of

infectious diseases, and is the first line of defense against COVID-19. The promotion of a culture of frequent and thorough handwashing, including by providing workers, customers and worksite visitors with places to wash their hands, is therefore essential (WHO 2020).

The assessment findings suggest that, the factory created enabling environment including development of action plan and protocols which stipulate necessary measure for staff to take before contracting the virus and after the infection. However, access to improved water and sanitation facilities does not, on its own, necessarily lead to improved health and hygiene. Evidence shows that hygienic behavior is crucial to protecting against illness and disease, and that handwashing with soap at key moments (after sneezing or coughing, before preparing and eating food) and other behaviors like proper wearing of face mask and maintain distance is of central importance (ILO 2020).

## 3.6.4 Water Insecurity Experience at the Household

As one of the key components of the assessment though is a new area where for Tanzania this study might be the first. Household water insecurity was determined after adopting the current available scale. Household water insecurity is a condition when affordability, reliability, adequacy, and/or safety is significantly reduced or unattainable so as to threaten or jeopardize well-being, which includes physical and mental health and the capacity to undertake necessary productive, social, and cultural activities (Jepson et al., 2017). The findings revel, out of 100 households 4% (n=4) are insecure after scoring 12 or more points during the survey. The house with this situation may expose the household members in a risk of poor health and poverty. This is also suggested by Web P (1998) by indicating Water-related issues also create the conditions that undermine health by lowering economic productivity triggering and perpetuating domestic, social, intercommunal and political tensions and conflicts; and reinforcing environmental, social and gender inequities.

## 3.7 STRENGHTS AND LIMITATIONS OF THE SURVEY

This assessment had several strengths and limitations that must be underscored in the interpretation of results. This was the first survey on WASH in Workplace in Tanzania and perhaps Sub-Saharan Africa. The survey results hence form the basis for prospective assessments in Tanzania. The assessment used a multi-disciplinary team of experts in the methodological design and this enabled comprehensive assessment of all aspects of WASH in workplace and at the household with the inclusion of HWIE.

All types of key indicator of WASH were included in the assessment and this made the results generalizable and applicable to the context of Tanzania and similar settings in sub-Saharan Africa. The Enumerators received intensive and rigorous training about major concepts/or aspects of WASH in workplace and this minimized biases.

However, there are some limitations to consider as well. First, in some cases staff tend to avoid being included as respondent or even hesitate to share the information. This is because they don't want to get into misunderstanding with factory management. Furthermore, it is difficult to conduct assessment at the household as most of the staff are young with no family remain back home during working hours almost six days of the week and also the spatial distribution around the city. This made the consultant to look for alternative ways to ensure the assignment is successful delivered.

## 3.8 MAJOR CONCLUSIONS

WASH services including hygiene practices remained key driver for the improvement of working environmental and at the households having all the services such as water supply, toilets, hand washing facilities without addressing the behavior of the users will have significant positive impact. It takes provisional of hardware, knowledge and change of mindset for the uptake of the behavior to an individual.

Mismanagement of storm water at the factory may become breeding site for public health insects such as mosquitoes. It may increase environmental and health effects/ risk at the nearby residents where significant number of houses experience water coming from underground inside their home. This habit started recently after the establishment of the industry zone therefore it is suggested that what is happening is caused by mismanagement of storm water within the industrial zone especially TOOKU garment. In line to above point, 4 houses experiences water insecurity which make their life at risk and fail to dedicate their time for economic activities which may help them to pave their way out of poverty. These gaps suggest the need of improving comprehensive WASH at the workplace and households in Tanzania is urgent if the quality of living, and the safety of workers is to be preserved and promoted. Addressing these gaps is important to ensure access to equitable WASH services in Tanzania and set regular monitoring to avoid any backfall.

## 3.9 IMPLICATIONS OF SURVEY RESULTS AND RECOMMENDATIONS

The gaps of WASH services at workplace and households indicate public health threat because it increases the risk of communicable diseases. In the current world of emerging and re-emerging public health challenges characterized by huge burden of infectious disease such as the current COVID-19 pandemic, the need for multi-sectoral and multidisciplinary approaches in quickly tackling the gaps in WASH at work and at the households in Tanzania should be prioritized. This assessment hence presents the most exhaustive report for health sector, planners, policy makers, economists and researchers in identifying the critical gaps in WASH at workplace and at home, subsequently serves as the starting point in designing site-specific interventions. Since interventions are context-specific, this report has not outlined most of them but has provided general recommendations below.

- The factory in collaboration should be routinely measure WASH indicators in order to inform improvements over time especially on hygiene practices and the quality of effluent discharged which may vary due various factors.
- To ensure compliance all staff on practicing hygiene behavior related to COVID-19 such as hand washing with water and soap, properly wearing of face mask, social/self-distancing.
- Ensure all entrance at the workplace have functional hand washing facilities.
- There is need to prioritize environmental cleaning and ensure all environmental cleaners receive appropriate training, provided personal protective equipment and monitored
- There is need to emphasize the separation at the point of generation and cover waste bins all the time to avoid scavengers and creating breeding sites of insect of public health importance.
- User-friendly toilets are needed for MHM and people with impaired movement.
- To introduce rain water harvesting system which will have multiple benefits including significant reduction of the cost incurred to cater for water bill but also will be proper management of storm water which is currently posing risks to the factory and nearby residents
- Behavior Change need multiple exposure to the intended messages, develop special program to expose all staff to the hygiene best practices messages regularly.

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## ANNEXES

## Annex 1: Observation Checklist at the Household

STUDY TITLE: ACTION RESEARCH TO ASSESS THE WASH@HOME SITUATION OF TOOKU GARMENTS TANZANIA LTD

**DATE**: \_\_\_\_/\_\_\_ [DD/MM/YYYY]

EN NAME: \_\_\_\_\_

OBSERVATION START TIME: \_\_\_\_\_ [HRS]\_\_\_\_\_[MIN]

#### GEOGRAPHIC AND SITE INFORMATION

REGION NAME: \_\_\_\_\_ DISTRICT NAME: \_\_\_\_\_

WARD NAME: \_\_\_\_\_

1.	Observe and circle the	Piped water	Yes	No	
	available water points at the	Piped into the household	1	0	
	household from the list.	Piped into household yard/plot	1	0	
		Public tap	1	0	
	[circle all those that apply]	Water from well			
	[	Open/unprotected household-owned well	1	0	
		Open/unprotected public well	1	0	
		Protected household-owned well	1	0	
		Protected public well	1	0	
		Borehole		-	
		Borehole at Open/unprotected yard/plot	1	0	
		Surface water			
		River/stream	1	0	
		Pond/lake	1	0	
		Dam	1	0	
		Spring	1	0	
		Rain water	1	0	
		Water brought in tanker trucks or			
		containers	1	0	
		No water source	1	0	
		Other (specify)	96		
2.	How the condition of the most	Good [No visible cracks, Water drains freely No			
	commonly used water source	standing water, no rubbish or animal excreta are			
	and its surroundings?	present]	1		
	and its surroundings.	Moderate [Minor cracks, some standing water, no			
		animal excreta present1	2		
		<b>Poor</b> [Badly cracked Very limited drainage Standing			
	fulles a charmen and accord	water collects around presence of animal excreta			
	[please observe and record	and other rubbish	3		
	own observations]		5		
2		Vec	1		
3.	is there running water available	Yes			
	at the nousehold today? (during	N0	0		
4	Le there a water storage facility	Vac	1		
4.	for a water back up in case of	No			
	water interruption?	NU			
F	Which of the following water		Voc	No	
э.	which of the following water	Directic toply	1	<u>INU</u>	
	containers are used to store			0	
1	1	DI UIII		U	1

## **PART 1 - WATER SOURCE INFORMATION**

	back-up water on-site in the	Bucket	1	0	
	facility?	Plastic bowl	1	0	
	[circle the appropriate	Other (specify)	96		
	option, multiple responses				
	allowed]				
6.	What is the capacity of the				
	biggest water container at the				
	household?	Volume capacity in litres			
	[If this is unknown, please				
	give an estimate]				

## PART 2 - HAND WASHING FACILITIES

7.	Number of hand washing stations in the household The <u>commonly used</u> hand washing facility;	All    Functional    Broken/non-functional    A sink with a connected tap    A bucket with a tap    A standing water in a bucket    Other (specify)	_   _   _ 1 2 3 96	 	
9.	Observe the location and status of the hand washing facility(ies)	Location Near/ Close to Wash room At the HH entrance Eating place/ Dining room Status Water is currently available Soap or suitable alternative is available There is material to dry hands Is there connected waste water drainage?	YES 1 1 1 1 1 1 1 1 1	NO 0 0 0 1 1 1	NA 2 2 2 2 2 2 2 2 2 2
10.	Observe the evidence of being used	If the facility is wet If the soap in a container/ bar shows evidence of being used	<u>YES</u> 1 1	<u>NO</u> 0 0	
11.	Design of hand washing facilities	It accommodates people with impaired movement It accommodates people with different height (kids and adults)	<u>YES</u> 1 1	<u>NO</u> 0 0	

#### PART 3 – SANITATION FACILITIES

12.	Availability of toilet(s) or				
	latrine(s)	All			
		Functional toilets			
		Broken/non-functional toilets			
13.	Type of sanitation facility		YES	<u>N0</u>	
		Improved	1	0	

		Basic			
			1	0	
		Shared	1	0	
			-	Ŭ	
		No form of toilet	1	0	
				-	
14.	Status of the toilet/latrine	Toilet cleanliness:	YES	NO	
		Visibly clean	1	0	
		Do not smell	1	0	
		The following items are available in or near the	YES	<u>NO</u>	NA
		toilet/latrine:			
		Clean water for hand washing	1	0	2
		Hand-washing bar/liquid			
		soap/sanitizer	1	0	2
		Bin for pads and other solid waste			
		disposal	1	0	2
		Materials for anal cleansing (water/toilet paper)			
			1	0	2
		Flushing water (for flushing toilets)	1	0	2
15					
15.	Availability of nandwasning				
	COVID 10 response				
	COVID-19 response				
	-				
16.	Drainage system		<u>YES</u>	<u>NO</u>	<u>NA</u>
		Is it available	1	0	2
		Functional.	1	0	2
		Nonfunctional		0	2
		Sound		0	2
			1		2
17.	Design of Toilet/ latrine		<u>YES</u>	<u>NO</u>	
	facilities	It accommodates people with impaired	1	0	
		movement			

## PART 4 - WASTE MANAGEMENT

18.	Are there waste collection		YES	<u>NO</u>	NA
	facilities at the household?	Available	1	0	2
		With lid cover	1	0	2
		Without lid	<u>1</u>	<u>0</u>	2
		cover			
19.	Does waste separation done at		YES	<u>NO</u>	NA
	the point of generation?	Biodegradable waste	1	0	2
		Non-biodegradable waste	1	0	2
		Combustible waste	1	0	2
		Non-combustible waste	1	0	2
		(Check collection facilities available)			

20.	What is the situation of the		<u>YES</u>	NO	<u>NA</u>
	pre-collection sites	Is there scattered waste around	1	0	2
		Is there signs of leachates	1	0	2
		It looks clean and well arranged	1	0	2
21.	What is the status of the		<u>YES</u>	<u>NO</u>	NA
	surroundings at the household	Very clean	1	0	2
		Somehow clean	1	0	2
		Dirty with scattered waste	1	0	2
22.	Waste water management system	Availability Is there sound drainage system in the household?	<u>1</u>	0	2
		Is there any sign of waste water leakage?	<u>1</u>	0	<u>4</u>
		is it onsite treatment system?	<u>1</u>	<u>U</u>	<u> </u>
		How does waste water disposed?			
		Through soak away pit	<u>1</u>	<u>0</u>	<u>2</u>
		Using cesspool emptier?	<u>1</u>	<u>0</u>	<u>2</u>
		Connected to public sewer	<u>1</u>	<u>0</u>	<u>2</u>

OBSERVATION END TIME: \_\_\_\_\_ [HRS]\_\_\_\_[MIN]

## Annex 2: Observation Checklist at the Workplace

STUDY TITLE: ACTION RESEARCH TO ASSESS THE WASH@HOME SITUATION OF TOOKU GARMENTS TANZANIA LTD

**DATE**: \_\_\_\_/\_\_\_ [DD/MM/YYYY]

EN NAME: \_\_\_\_\_

OBSERVATION START TIME: \_\_\_\_\_ [HRS] \_\_\_\_\_ [MIN]

## GEOGRAPHIC AND SITE INFORMATION

REGION NAME: \_\_\_\_\_

DISTRICT NAME: \_\_\_\_\_

WARD NAME: \_\_\_\_\_

#### PRELIMINARY

1	Availability of WASH services		Yes	No	<u>NA</u>
	and COVID-19 Response at	Is there functional hand washing facilities at the			
	the entrance	entrance	1	0	2
		Is there temperature check at the			
		entrance	1	0	2
		Is there register to keep staff temperature			
		record at the entrance	1	0	2

## PART 1 - WATER SOURCE INFORMATION

23.	Observe and circle the available	<u>Piped water</u>	<u>Yes</u>	<u>No</u>	
	water points at the workplace	Piped into the building 1		0	
	from the list. Piped into yard/plot		1	0	
		Public tap	1	0	
	[circle all those that apply]	Water from well			
		Open/unprotected company-owned well	1	0	
	Open/unprotected public well		1	0	
		Protected company-owned well	1	0	

			Protected public well	1	0	
			<u>Borehole</u>			
			Borehole at Open/unprotected yard/plot	1	0	
			Surface water			
			River/stream	1	0	
			Pond/lake	1	0	
			Dam	1	0	
			Spring	1	0	
			Rain water	1	0	
			Water brought in tanker trucks or			
			containers	1	0	
			No water source	1	0	
			Other (specify)	96		
	24.	How the condition of the most	Good [No visible cracks, Water drains freely No standing			
		<u>commonly used</u> water source	water, no rubbish or animal excreta are present]			
		and its surroundings?		1		
			Moderate [Minor cracks, some standing water, no animal			
			excreta present]	2		
			<b>Poor</b> [Badly cracked. Very limited drainage. Standing water			
		[plazed observe and record	collects around, presence of animal excreta and other			
		[please observe and record	rubbish]	3		
		own observationsj				
	25	Is there running water available a	Voc	1		
	23.	the workplace today? (during the	No			
		visit)	110	0		
	26	Is there a water storage facility	Vas	1		
	20.	for a water back-up in case of	No			
		water interruption?	110	0		
1	27	Which of the following water		Ves	No	
	27.	containers are used to store	Concrete tank	1	0	
		hack-up water on-site in the	Iron tank	1	0	
		facility?	Plastic tank	1	0	
		circle the appropriate option	Drum	1	0	
		multiple responses allowed	Bucket	1	0	
		multiple responses anoweuj	Plastic howl	1	0	
			Other (specify)	96	0	
	28	What is the canacity of the			1	
	20.	higgest on-site water container?				
		If this is unknown, please	Volume canacity in litres			
		give an estimatel	volume cupacity in neres imministration			
	29	Is there drinking water for staff		Yes		No
	<u> </u>	and patients at the facility?	Drinking water for all staff available	1		0
		and putterno at the menty.	Drinking water for visitors available			0
			Strang water for visitors available minimum	1		
J						

## PART 2 - HAND WASHING FACILITIES

30.	Number of hand washing stations in the workplace	All Functional Broken/non-functional	 		
31.	The <u>commonly used</u> hand washing facility;	A sink with a connected tap A bucket with a tap A standing water in a bucket Other (specify)	1 2 3 96		
32.	Observe the location and status of the hand washing facility(ies)	Location Near/ Close to Wash room At the entrance of each building/ section	<u>YES</u> 1 1	<u>NO</u> 0 0	<u>NA</u> <u>2</u> <u>2</u>

		Eating place/ Dining room	1	0	<u>2</u>
		StatusWater is currently availableSoap or suitable alternative is availableThere is material to dry handsIllustrated hand hygiene posters are displayedIs there connected waste water drainage?	1 1 1 1	0 0 1 1 1	2 2 2 2 2 2
33.	Observe the evidence of hand washing facility being used	If the facility is wet	<u>YES</u> 1	<u>NO</u> 0	
		If the soap in a container/ bar shows evidence of being used	1	0	
34.	Design of hand washing		<u>YES</u>	<u>N0</u>	NA
	facilities	It accommodates people with impaired movement	1	0	2
		It accommodates people with different height Easily accessible with all users	1	0	2
			1	0	2
35.	Possibility of observing physical	Is there enough office areas for staff to shear a distance	<u>YES</u>	<u>NO</u>	
	uistancing	between them	1	0	
		Is the meeting place spatial enough to hold meetings with distance maintained	1	0	

## PART 3 - SANITATION FACILITIES

36	Availability of toilet(s) or				
50.	latrine(s) for staff and visitors	All Functional toilets Broken/non-functional toilets	 		
37.	Status of the toilet/ latrine	<u>Toilet cleanliness</u> : Visibly clean Do not smell	<u>YES</u> 1 1	<u>NO</u> 0 0	
		The following items are available in or near the toilet /latrine:	<u>YES</u>	<u>NO</u>	<u>NA</u>
		Clean water for hand washing	1	0	2
		soap/sanitizer Bin for pads and other solid waste	1	0	2
		disposal	1	0	2
		Flushing water (for flushing toilets)	1 1	0 0	2 2
38.	Drainage system	Is it available Functional Nonfunctional Sound Broken	<u>YES</u> 1 1 1 1 1	<u>NO</u> 0 0 0 0 0	<u>NA</u> 2 2 2 2 2 2

39.	Design of Toilet/ latrine		YES	NO	NA
	facilities	Does separate female and male	1	0	<u>2</u>
		Does it provide privacy	1	0	2
		Facility for collecting/ disposing used sanitary padIt	1	0	2
		accommodates people with impaired movement	1	0	2

## PART 4 - WASTE MANAGEMENT

40			VEC	NO	NT A
40.	Are there waste collection		<u>YES</u>	NO	<u>NA</u>
	facilities at the workplace?	Available in each point of generation/ section	1	0	2
		With lid cover	1	0	2
		Without lid cover	<u>1</u>	<u>0</u>	
41.	Does waste separation done at		<u>YES</u>	<u>NO</u>	<u>NA</u>
	the point of generation?	Yes	1	0	2
		Biodegradable waste	1	0	2
		Non-biodegradable waste	1	0	2
		Combustible waste	1	0	2
		Non-combustible waste	1	0	2
		(Check collection facilities available)	_		
42.	What is the situation of the		YES	NO	NA
	pre-collection sites	Is there scattered waste around?	1	0	2
		Is there signs of leachates?	1	0	2
		It looks clean and well arranged?	1	0	2
43	Collection of used face mask		VFS	NO	-
-15.	concetion of used face mask	Availability of dedicated bins for used face masks	1	0	
		Availability of dedicated birs for used face masks	1	0	
44.	What is the status of the		YES	NO	NA
	surroundings at the workplace	Verv clean	1	0	2
	J. J	Somehow clean	1	0	2
		Dirty with scattered waste	1	0	2
45	Waste water management	Availability	YES	NO	NA
15.	system	Is there sound drainage system in the household?	1	0	2
	system	Is there any sign of waste water leakage?	1	0	2
		Is there any sign of waste water reakage.	1	0	2
		Doog Workplace have onsite treatment before release	1	<u>U</u>	<u> </u>
		boes workplace have offsite treatment before release	1	0	2
		water to the environment?	<u>+</u>	<u>U</u>	<u> </u>
		How doos waste water disposed?			
		Through coale away pit	1	0	2
		Hinough soak away pit	<u>1</u>	<u>U</u>	$\frac{4}{2}$
		Using cesspool emptier?	<u>1</u>	<u>U</u>	4
		Connected to public sewer	<u>1</u>	<u>U</u>	<u> </u>
					1

OBSERVATION END TIME: \_\_\_\_\_ [HRS]\_\_\_\_\_[MIN]

# Annex 3 : Focus Group Discussion

**STUDY TITLE:** ACTION RESEARCH TO ASSESS THE WASH@HOME SITUATION OF TOOKU GARMENTS TANZANIA LTD

DATE OF FGD://	[DD/MM	/YYYY]			
FIELD SUPERVISOR NAME:					
DISCUSSION START TIME:	[HRS]	[MIN]	END TIME:	[HRS]	[MIN]

INFORMATION TO PARTICIPANTS
[The participants of the Discussion must be staff and community members at the residence of many staff.]
My name is and I am working on behalf of Project Clear. We are gathering information about Water
sanitation and hygiene behavior in this workplace. 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 the industry future planning and improvement of such
services at work place and where possible at homes of its workers. 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 Linitiate the discussion now?
RESPONDENT AGREES TO PARTICIPATE
RESPONDENT DOES NOT AGREE TO PARTICIPATE
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?
SIGNATUKE OF INTERVIEWER: DATE: DATE:

## SECTION 1: FGD participants' Demographic data

NO.	QUESTIONS& INSTRUC	TIONS	RESPONSES	CODES	SKIPS
1.	Sn. Age	Sex	Education		
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	Responses for education				
	No formal education		1		
	University	7			
	Some primary education		2 Other		
	(specify)				
	Completed primary education	tion	3		

NO.	QUESTIONS& INSTRUCTIONS	RESPONSES	CODES	SKIPS
	Secondary O-Level	4		
	Secondary A-Level	5		
	Post-secondary Level	6		

## SECTION 2 – WASH Services:

- 1. What is your opinion on water supply services in this area?
  - a. Probe to know more about the availability and quantity
  - b. Ask if they are comfortable with the quality of water supplied,
  - c. Probe to know if water is treated prior to be used
- 2. What is your opinion on sanitation services in this area?
  - a. Probe to know if they have enough toilet facilities separated by gender
  - b. Ask if the toilet facilities provide privacy, they need
  - c. Probe if female feel safe to use those toilets even during their period (for female group only)
  - d. Seek to know Who is responsible to clean the toilets and remaining environment
  - How does waste managed in this place
    - e. Probe to know if waste collection facilities are available in all point of waste generation
    - f. Probe to know how waste water are managed
    - g. Ask if the management hired company to manage waste and challenges aligned to it
- 3. What is your opinion on hygiene status in this area
  - a. Probe to know if hand wash facilities are available, functional and adequate
  - b. Ask if there is evidence of workers using hand washing facilities in accordingly
    - Allow them to mention critical moments which most of the staff wash their hands
  - c. Probe to know if the management provides soap for hand washing all the time
- 4. Are you aware about the relationship between WASH services and the control of COVID-19?
  - Probe to know their level of understanding
  - Probe to know if they ever had organized awareness session at the work place
- 5. What are the key behavior for the prevention of COVID-19
  - Probe them to discuss all that will be mentioned
  - Ask if the management provided IEC materials related to COVID-19 and if are needed
  - Probe to know any SoP/ guideline know to them regarding to COVID-19 and if are relevant
- 6. Ask the opinion toward staff compliance on COVID-19 response behaviors

#### Thank the respondent for his/her time.

## Annex 4 : In-Depth Interview

STUDY TITLE: – ACTION RESEARCH TO ASSESS THE WASH@HOME SITUATION OF TOOKU GARMENTS			
TANZANIA LTD			
DATE OF INTERVIEW:/ [DD/MM/YYYY]			
RA NAME:			
INTERVIEW START TIME: [HRS][MIN]			
GEOGRAPHIC AND SITE INFORMATION			
PARTICIPANT ID NUMBER			

STREET NAME:

#### INFORMATION TO PARTICIPANTS

[Respondent must be member of workplace management, local government officials or workers representative,). My name is \_\_\_\_\_\_\_ and I am working on behalf of Project Clear. We are gathering information about Water sanitation and hygiene behavior in this workplace. 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 the industry future planning and improvement of such services at work place and where possible at homes of its workers. 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?

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/YYY	Y]			

#### SECTION 1: - General:

- 7. How could you describe water, sanitation and hygiene services in this area?
  - a. What is your opinions regarding the quantity and quality of water supply in this area? And what is the reliable source and your comment on it?
  - b. Are sanitation facilities available, enough and clean in this area?
  - c. How does industry deals with sanitation issues such as waste collection and removal, wastewater management etc?
  - d. What is your opinion on the WASH service rendered by the factory?
- 8. Does the factory do have protocol/guidelines on COVID-19 response, if yes what does it entail briefly
- 9. Is there mechanism to ensure the protocol/ guidelines mainstreamed to all staff for them to comply
- 10. In response to COVID-19, does workplace developed action plan to prevent the spread of disease as part of business continuity plan for this area?
  - a. Is there any mechanism to monitor the plan and update accordingly?
  - b. How does management ensure the compliance of all staff, clients and visitors?
  - c. Is there a SoP on how to deal with suspect case in case happen in this area?
- 11. Is there specific budget allocated to carter WASH services in this workplace?
- 12. Are there dedicated personnel to monitor the status of WASH in this area?
- 13. What is your overall comment on the WASH services status in this area?

#### SECTION 2: - BEHAVIOR CHANGE:

- 14. What is your opinions concerning to attitude of staff and other visitors/ clients to use sanitation and hygiene services?
- 15. What your opinions are, concerning sanitation and hygiene behaviors in this community?
  - a. How do you gauge the behavior of the staff on prevention of COVID-19 and other communicable diseases?
  - *b.* Do you think there is a chance for behavior improvement for the people in this area especially on COVID-19 related behaviors?

- 16. What your opinions are to sustain good sanitation and hygiene practices in this area?
- 17. What could be the motive for behaviors change to the people of this area?
- 18. What collective accountability actions the management and staff has put in place to improve sanitation and hygiene services?

#### Thank the respondent for his/her time.

## Annex 5 : Household Interview

STUDY TITLE: ACTION RESEARCH TO ASSESS THE WASH@HOME SITUATION OF TOOKU GARMENTS TANZANIA LTD

DATE OF INTERVIEW: \_\_\_\_/\_\_\_ [DD/MM/YYYY]

RA NAME: \_\_\_\_

FIELD SUPERVISOR NAME: \_\_\_\_\_

INTERVIEW START TIME: \_\_\_\_\_ [HRS]\_\_\_\_\_[MIN]

#### GEOGRAPHIC AND SITE INFORMATION

REGION NAME: \_\_\_\_\_

DISTRICT NAME: \_\_\_\_

WARD NAME:	
------------	--

#### 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 Project Clear. 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 the industry future planning and improvement of such services at work place and where possible at homes of its workers. 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]

## **PART 1 - RESPONDENT INFORMATION**

NO.	QUESTIONS& INSTRUCTIONS	RESPONSES	CODES	SKIPS
1.	Respondent's age	Age in complete years		
2.	Respondent sex	Male Female	1 2	
3.	Respondent's <u>highest</u> level of education completed. [Please mark only 1 response]	No formal education Some primary education Completed primary education Secondary O-Level Secondary A-Level Post-secondary Level University Other (specify)	1 2 3 4 5 6 7 96	
4.	For how long have the respondent been at the household? [Please mark only 1 applicable response]	One year or more Less than one year Less than a month I don't remember	1 2 3 4	

#### PART 2 - HWIES

5.	In the last 4 weeks, how frequently did you or anyone in your household worry you would not have enough water for all of your household needs?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
6.	In the last 4 weeks, how frequently has your household water supply from your main water source been interrupted or limited (e.g., water pressure, less water than expected, source dried up)?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
7.	In the last 4 weeks, how frequently has there not been enough water in the household to wash clothes?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
8.	In the last 4 weeks, how frequently has you or anyone in your household had to change schedules/plans due to problems with your water situation,	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks)	1 2 3	

NO.	QUESTIONS& INSTRUCTIONS	RESPONSES	CODES	SKIPS
	such as problems getting or	Often (11-20 times in the last 4 weeks)	4	
	distributing water within the	Don't know	-	
	household? Activities that may have	Not applicable	5	
	others doing household chores		0	
	gardening work, income-generating			
	activities, etc.			
9.	In the last 4 weeks, how	Never (0 times in the last 4 weeks)	1	
	frequently have you or anyone in	Rarely (1-2 times in the last 4 weeks)	2	
	your household had to change	Sometimes (3-10 times in the last 4 weeks)	2	
	what was being eaten because	Often (11-20 times in the last 4 weeks)	4	
	there were problems with water	Don't know		
	(e.g., for washing foods, cooking,	Not applicable	5	
10	In the last 4 weeks have		6	
10.	In the last 4 weeks, now	Never (0 times in the last 4 weeks)	1	
	your household had to go without	Rarely (1-2 times in the last 4 weeks)	2	
	washing hands after dirty	Sometimes (3-10 times in the last 4 weeks)	3	
	activities (e.g., defecating or	Often (11-20 times in the last 4 weeks)	4	
	changing diapers, cleaning animal	Don't know	5	
	dung) because of problems with	Not applicable	6	
	water?			
11.	In the last 4 weeks, how	Never (0 times in the last 4 weeks)	1	
	frequently have you or anyone in	Rarely (1-2 times in the last 4 weeks)	2	
	your household had to go without	Sometimes (3-10 times in the last 4 weeks)	2	
	washing their body because of	Often (11-20 times in the last 4 weeks)	4	
	problems with water (e.g., not	Don't know	5	
	enough water, uirty, unsale)?	Not applicable	6	
12.	In the last 4 weeks, how	Never (0 times in the last 4 weeks)	1	
	frequently has there not been as	Rarely (1-2 times in the last 4 weeks)	2	
	much water to drink as you	Sometimes (3-10 times in the last 4 weeks)	3	
	would like for you or anyone in	Often (11-20 times in the last 4 weeks)	4	
	your nousenoid:	Don't know	5	
10		Not applicable	6	
13.	In the last 4 weeks, how	Never (0 times in the last 4 weeks)	1	
	frequently did you or anyone in	Rarely (1-2 times in the last 4 weeks)	2	
	your motor situation?	Sometimes (3-10 times in the last 4 weeks)	3	
	your water situation:	Often (11-20 times in the last 4 weeks)	4	
		Don't know	5	
14	In the last 4 are also been	Not applicable	0	
14.	In the last 4 weeks, now	Never (0 times in the last 4 weeks)	1	
	vour household gone to sleen	Rarely (1-2 times in the last 4 weeks)	2	
	thirsty because there wasn't any	Sometimes (3-10 times in the last 4 weeks)	3	
	water to drink?	Often (11-20 times in the last 4 weeks)	4	
		Don't know	5	
15	In the last 4 weeks how	Never (0 times in the last 4 weeks)	1	
10.	frequently has there been no	Paroly (1, 2 times in the last 4 weeks)		
	useable or drinkable water	Comptiment (2, 10 times in the last 4 weeks)	2	
	whatsoever in your household?	Sometimes (3-10 times in the last 4 weeks)	3	
		Urten (11-20 times in the last 4 weeks)	<del>1</del>   5	
		Not applicable		

NO.	QUESTIONS& INSTRUCTIONS	RESPONSES	CODES	SKIPS
			6	
16.	In the last 4 weeks, how frequently have problems with water caused you or anyone in your household to feel ashamed/excluded/stigmatized?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
17.	In the last 4 weeks, how frequently have you or anyone in your household drank water that looked, tasted, and/or smelled bad?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
18.	In the last 4 weeks, how frequently have you or anyone in your household drank water that you thought was unsafe?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	
19.	In the last 4 weeks, how frequently have you or anyone in your household been unable to access the water that you preferred?	Never (0 times in the last 4 weeks) Rarely (1-2 times in the last 4 weeks) Sometimes (3-10 times in the last 4 weeks) Often (11-20 times in the last 4 weeks) Don't know Not applicable	1 2 3 4 5 6	

## **PART 3 - WATER SOURCE INFORMATION**

20.	What is the commonly source	Piped water	Yes	
	of water for your household?	Piped into the household	1	
		Piped into household yard/plot	2	
	[circle all those that apply]	Public tap	3	
		Water from well		
		Open/unprotected household-owned well	4	
		Open/unprotected public well	5	
		Protected household-owned well	6	
		Protected public well	7	
		<u>Borehole</u>		
		Borehole at Open/unprotected yard/plot	8	
		<u>Surface water</u>		
		River/stream	9	
		Pond/lake	10	
		Dam	11	
		Spring	12	
		Rain water	13	
		Water brought in tanker trucks or		
		containers	14	
		No water source	15	
		Other (specify)	96	

21.	How do you rank the supply of water in this area?	Adequate Inadequate I don't know	1 2 3	
22.	Are you comfortable with the quality of water supplied in this area?	Yes Somehow Not all all I don't know	1 2 3 4	
23.	Do you have water storage facility for a water back-up for household use in case of water interruption?	Yes No	1 2	
24.	Do you treat water at home?	Yes, all the time Seldom Not at all I don't know	1 2 3 _4	
25.	Which method do you use to treat water at home?	Using Chlorine/ chemical Boiling Filtering Other (specify)	1 2 3 96	
26.	In average how much do you spend to pay water bills for your household?	Less than 5000 More than 5000 less than 10,000 Between 10,000 and 20,000 More than 20,000 less than 50,000 50,000 or more I don't know	1 2 3 4 5 6	

PART	4 - HAND WASHING FACILITIES		
27.	Do you know behaviors		
	associated to prevention of	Hand washing with water and soap	1
	COVID – 19?	Respiratory Hygiene	2
	(m. 1) 1 · · · · · · · ·	Social/ physical distancing	3
	(1 ell him/her to mention them and tick all that	Surface Cleanliness	4
	mentioned)	I don't know	5
28.	Do you have hand wash	Yes	1
	station in your household?	No	2
		I don't know	3
29.	As part of your routine		
	exercise what are the moment	Before eating	
	you always WASH your hands	After eating	2
	with water and soap?	When my hands look dirt	3
		After visiting toilet	4
	(Tick all the mentioned)	After cleaning baby	5
		After attending sick person	6
		Whenever I feel like washing my hands	7
		I don't know	8
		Other (Specify)	96
30.	Do you have separate soap for		
	hand washing only?	No, is for all uses	1
		Yes, I do	2
		I don't have soap for hand washing	3
31.	How do you protect your		
	family from communicable	Comply with guidance from the authority	1
	diseases such as COVID-19	Teach my family best practices	2
		Ensure no one get in without washing hands	3
	(Tick all the mentioned)	I don't do anything	4

## PART 5 - WASTE MANAGEMENT

32.	Do you separate waste at the			
	point of generation?	Yes	1	
		No	2	
		I don't know	<u>3</u>	
33.	Where do you dispose your			
	waste?	Burry at the backyard of the hose	1	
		Taken by people by paying them	2	
		Collected by the contracted company	3	
		No specific method	4	
		Other (Specify)	96	
34.	In your own opinion, how			
	do you rank waste	Very good	1	
	collection services	Satisfactory	2	
		Poor	3	
		Very poor	4	

INTERVIEW END TIME: \_\_\_\_\_ [HRS]\_\_\_\_\_[MIN]