Tanzania




2018 School Water, Sanitation and Hygiene Assessment

MAIN REPORT

February 2020

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Foreword

This report presents the findings of the 2018 School Water, Sanitation and Hygiene (SWASH) Assessment survey. This survey was implemented through a multi-sectoral collaboration of the National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician (OCGS) Zanzibar; the Ministry of Education, Science and Technology (MoEST); the Ministry of Education and Vocational Training, Zanzibar (MoEVT); President's Office Regional Administration and Local Government (PO–RALG); and President's Office Regional Administration, Local Government and Special Departments (PO–RALGSD), Zanzibar.

The 2018 School Water, Sanitation and Hygiene (SWASH) Assessment is the first comprehensive, nationally representative survey of primary and secondary schools designed to provide information about the status of safe drinking water, adequate sanitation and hygiene facilities as well as appropriate hygiene practices in Tanzania. Results from this assessment will be used to validate and complement administrative data that the ministries collect from schools on water, sanitation and hygiene services.

The main objective of the SWASH Assessment was to provide up-to-date national data and information on WASH services in primary and secondary schools in Tanzania. This assessment also provides baseline data for reporting, monitoring, and tracking progress on national and global targets, including Sustainable Development Goal (SDG) targets and indicators; specifically those in Goal 4 (ensure inclusive and quality education for all and to promote lifelong learning) and Goal 6 (ensure availability and sustainable management of water and sanitation for all).

I, therefore, take this opportunity to encourage policymakers, planners and other stakeholders in WASH, education and health sectors to use these findings to plan, implement, monitor and evaluate their programmes for improving water, sanitation and hygiene services in schools. Advantage should be taken on the availability of this information to inform various processes in educational programmes in Tanzania to ensure that children enjoy a healthy and friendly learning environment that could allow them to be healthier, and more attentive learners. This will also help in improving pupils'/students' school attendance and their cognitive abilities that, in future, will be instrumental in fulfilling their dreams.

I would like to call upon all policymakers, planners and other stakeholders in WASH, education and health sectors to adopt and devise integrated and sustainable planning so as to enhance and achieve Goals 6 and 4 that will ensure availability and sustainable management of water and sanitation for all, and attain inclusive and quality education for all promoting lifelong learning.

I also would like to take this opportunity to thank all partners in this exercise: the NBS, OCGS, the Ministry of Education, Science and Technology, President's Office Regional Administration and Local Government (PO–RALG), the President's Office Regional Administration, Local Government and Special Departments, Zanzibar and the Ministry of Education and Vocational Training, Zanzibar for active participation and technical inputs.

Special thanks are extended to the United Nations Children's Fund (UNICEF) for financing this important undertaking, which has led to the availability of updated data and information that will inform policymakers' decisions. This will further ensure that children in schools learn in a dignified and healthy environment through access to improved water, sanitation and hygiene services.

Engineer Joseph M. Nyamhanga
Permanent Secretary
President's Office – Regional Administration and Local Government
February 2020

Acknowledgement

The successful completion of the first nationally representative survey on SWASH Assessment was made possible by a number of collaborators. The National Bureau of Statistics (NBS) and the Office of Chief Government Statistician (OCGS) would like to take this opportunity to recognize their contributions.

First and foremost, we would like to extend our sincere gratitude to the Government of the United Republic of Tanzania and UNICEF for providing financial assistance that led to the smooth implementation of the 2018 Tanzania SWASH Assessment survey.

We would also like to thank the team from UNICEF Tanzania for their technical assistance provided at all stages: from preparation to implementation of this survey. We are even more grateful for the guidance and support of the survey's Technical Committee members who came from various organizations including the President's Office, Regional Administration and Local Government; President's Office, Regional Administration, Local Government and Special Departments, Zanzibar (PO–RALGSD); the Ministry of Education, Science and Technology; the Ministry of Education and Vocational Training, Zanzibar; WaterAid Tanzania; the Ministry of Land, Housing, Water and Energy Zanzibar, the Water Supply and Sanitation Collaborative Council (WSSCC), and Sanitation and Water Action (SAWA).

Last but not least, the NBS and the OCGS are grateful to the Regional and District Education Officers who provided the needed guidance to reach the selected schools. We are also grateful to the field teams and other officials and administrators of the schools visited for their co-operation. We also thank the survey respondents for their willingness and patience in providing relevant information.

It is not possible to mention each and every one of those who contributed to the development of this report; however, the NBS values the participation of all those who contributed in one way or another to the successful completion of this important survey.

Dr. Albina Chuwa
Statistician General
National Bureau of Statistics
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Abbreviations

CAPI	Computer-Assisted Personal Interview
CEDAW	Conventions on the Elimination of All Forms of Discrimination against Women
CRC	Convention on the Rights of the Child
FYDP II	Five-Year Development Plan II
JMP	Joint Monitoring Programme
MHM	Menstrual Hygiene Management
MoEST	Ministry of Education, Science and Technology
MoEVT	Ministry of Education and Vocational Training, Zanzibar
NBS	National Bureau of Statistics
NGOs	Non-Governmental Organizations
NSC	National Sanitation Campaign
OCGS	Office of the Chief Government Statistician, Zanzibar
PO-RALG	President's Office, Regional Administration and Local Government
PO-RALGSD	President's Office, Regional Administration, Local Government and Special Departments, Zanzibar
SAWA	Sanitation and Water Action
SDGs	Sustainable Development Goals
SNV	Netherlands Development Organization
SWASH	School Water, Sanitation and Hygiene
UN	United Nations
UNICEF	United Nations Children's Fund
URT	United Republic of Tanzania
WASH	Water, Sanitation and Hygiene
WB	World Bank
WHO	World Health Organization
WSSCC	Water Supply and Sanitation Collaborative Council

Executive Summary

Background

Adequate access to water, sanitation and hygiene (WASH) services is a fundamental human right. It is essential for the realization of all human rights and is necessary for the attainment of better health, education, nutrition and other indices of human development. WASH also contributes to other development goals, particularly those related to poverty and economic growth, urban services, gender equality, resilience and climate change. Access to water and sanitation is interlinked with a number of other key issues and has significant impact on children's lives and their ability to develop and thrive.

The SDGs have included WASH in schools and have specified indicators for global monitoring of SDG 6 targets 6.1 and 6.2: universal access to WASH – and SDG 4 target 4.a: inclusive and effective learning environments for all. These targets and indicators for WASH in schools focus on achieving a basic minimum level of service by 2030. To effectively monitor this, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has introduced new service ladders that identify availability of WASH services at three levels of basic, limited and no service.

In Tanzania the SDGs are being implemented in the framework of Tanzania Development Vision 2025 and the Five-Year Development Plan II (FYDP II 2016/17 to 2020/21); Zanzibar Vision 2020 and Zanzibar Strategy for Growth and Reduction of Poverty (MKUZA III). As part of its Vision 2025, the Government has pledged universal access to safe drinking water by 2025. The Second Five-Year Development Plan (FYDP II) has also set the target for access to improved sanitation facilities at 75 per cent in rural areas. The Zanzibar Vision 2020 and Zanzibar Strategy for Growth and Reduction of Poverty have set targets of 100 per cent for households' use of improved toilet facilities and access to safe and clean water.

Rationale for the School WASH Assessment

Recognizing insufficiencies in the quantity and quality of data available on school WASH in Tanzania, the National Bureau of Statistics and the Office of Chief Government Statistician in collaboration with the Ministry of Education, Science and Technology (MoEST); President's Office Regional Administration and Local Government (PO–RALG); the Ministry of Education and Vocational Training, Zanzibar; President's Office, Regional Administration, Local Government and Special Departments, Zanzibar (PO–RALGSD); and UNICEF conducted a nation-wide School WASH Assessment survey in 2018.

The 2018 Tanzania SWASH Assessment is the first comprehensive nationally representative survey of primary and secondary schools that was designed to provide information about the availability of safe drinking water, adequate sanitation and hygiene services.

Objectives of the 2018 School WASH Assessment

The Tanzania School WASH Assessment aimed at determining the national coverage

estimates for water, sanitation and hygiene services in schools and establishing baselines for the standard SDG targets and indicators to allow harmonized monitoring, cross-country comparability and regional or global aggregation.

The School WASH Assessment collected information on the number of pupils, teachers and classrooms; services on water, sanitation, and hygiene available at the school; pupil's engagement in WASH programmes; operation and maintenance of the WASH facilities including funding for maintenance; and responsibility for cleanliness of the facilities.

Sample for the Tanzania School WASH Assessment

The sample design of the 2018 School WASH Assessment survey was a stratified random sample of 2,396 schools (2,240 schools from Tanzania Mainland and 156 schools from Zanzibar) selected with equal probability systematic sampling. The sample also provides representative results for urban and rural areas as well as for each of the 26 regions of Tanzania Mainland and the five regions of Zanzibar.

Main Results

The 2018 Assessment survey has established the situation of WASH services in schools in the areas of drinking water, sanitation and hygiene. Other important areas, that the survey covered, included operations and maintenance arrangements and children engagement in planning, implementation and monitoring of WASH services. The key results under these components are outlined below.

School Water Services

The results from the survey indicate that 68.2 per cent of the schools have **an improved source[1] of drinking water**. Schools in urban areas seem to have better access to an improved source of drinking water than schools in rural areas (84.2 per cent against 63.8 respectively). The most common improved sources of drinking water in Tanzania schools are water piped into school premises (29.5 per cent), tube wells or boreholes (12.1 per cent) and protected wells (9.8 per cent).

Seventy-six per cent of primary schools with drinking water sources in Tanzania provide **drinking water to the youngest children in the school**. Two thirds of the primary and secondary schools with drinking water sources have made it possible for **pupils with limited mobility or vision to access drinking water** at school.

Classified with respect to the WHO/UNICEF Joint Monitoring Programme (JMP) ladders for WASH in Schools, more than half of schools in Tanzania (55.3 per cent) had **basic drinking water services** (had improved sources of drinking water with water available during the assessment). Seven out of ten schools in urban areas (70.5 per cent) had basic water services, while slightly more than half of the rural based schools (51.0 per cent) had basic water services. High regional variations were noticed and the percentage of schools with basic water services ranged from 29.7 per cent in Songwe Region to 91.9 per cent in Kusini Pemba Region.

Thirteen per cent of schools had **limited water services**, meaning that they had improved sources but water was not available at the time of the assessment. On the other hand, 31.8 per cent of schools **had no water**

[1] 'Improved drinking water sources include sources that by nature of their construction or active intervention are protected from outside contamination, particularly faecal matter. These include piped water, boreholes or tube wells, protected dug wells, and protected springs/ wells.

services, meaning that they either relied on unimproved sources, such as unprotected dug wells, unprotected springs/surface water, or had no water services at all.

The survey further established that two third of schools in Tanzania (67.3 per cent) **did not treat their water** prior to drinking. For the schools that treated water, the most common methods used were chlorination (50.4 per cent) and boiling (39.3 per cent).

School Sanitation Services

Eighty-nine per cent of the schools had **improved toilet facilities**, regardless of quality. The three most common types of toilet facilities in Tanzanian schools were pit latrine with washable slabs (41.8 per cent), flush to pit latrines (19.7 per cent) and ventilated improved pit latrines (14.0 per cent). Less than one per cent of schools in Tanzania were found to have **no toilet facilities**.

Thirty per cent of schools had **basic sanitation services** (improved single-sex sanitation facilities usable at the time of the assessment). Slightly more than a half of schools in urban areas (51.0 per cent) had basic sanitation services compared to 24.3 per cent of schools in rural areas.

In addition, 58.4 per cent of schools were providing **limited sanitation services** (had improved facilities that were either not single-sex or not usable). Thirteen per cent of schools owned by the Government had **no sanitation services** compared to only 2.4 per cent of non-government schools. Schools without sanitation services either relied on unimproved facilities, such as pit latrines without a slab, or had no sanitation facility at all. Schools in rural areas were more likely to have no sanitation services than schools in urban areas (13.4 per cent and 4.0 per cent, respectively).

Ninety-four per cent of all-girls schools had basic sanitation services compared to 65.2 per cent of all-boys schools and 28.7 per cent of co-education schools.

There were marked regional variations in the availability of basic sanitation services in schools: the percentage of schools with basic sanitation services ranged from 4.4 per cent in Rukwa Region to 84.4 per cent in Kaskazini Pemba Region.

More than a quarter (26.0 per cent) of primary schools with sanitation services had at least one usable toilet that was **accessible to the youngest children** at the school. Only 12.2 per cent of schools had at least one usable toilet that was accessible to **pupils with physical disability or limited vision**.

Twenty-eight per cent of schools in Tanzania met the **minimum standard for the number of pupils per drop hole** (20 girls and 25 boys per drop hole) set by the Government.

School Hygiene Services

Six out of ten schools (63.8 per cent) in Tanzania had **handwashing facilities**. Urban schools (75.3 per cent) were more likely to have handwashing facilities than rural schools (60.6 per cent). The coverage of **basic hygiene services** in Tanzania was low (17.6 per cent) as only approximately two out of ten schools had handwashing facilities with soap and water available at the time of the survey.

Government-owned schools had a smaller percentage of schools with **basic hygiene services** (14.4 per cent), compared to schools owned by non-government institutions (39.0 per cent).

Significant variations in the availability of basic hygiene services in schools were found across regions, ranging from 1.4 per cent in Songwe Region to 47.2 per cent in Kilimanjaro.

Twenty-eight per cent of schools in Tanzania had **limited hygiene services** (water was available but no soap available at the time of the assessment). On the other hand, more than five out of ten schools (54.8 per cent) **had no hygiene services** at all.

Eight out of ten schools that had handwashing facilities also had facilities **accessible to the youngest children**. Fifty-nine per cent of the schools with handwashing facilities had facilities that are **accessible to pupils with physical disability or limited vision**.

While 66.8 per cent of schools in Tanzania provided **Menstrual Hygiene Management (MHM) services**, only one-quarter of the schools had a disposal mechanism for menstrual hygiene waste. Of the Tanzanian schools that provided MHM services, 84.2 per cent provided **MHM education** and 49.0 per cent provided **MHM materials** (for example sanitary pads, pants etc.).

Twenty-four per cent of schools in Tanzania that had disposal mechanisms **used incinerators for disposal of menstrual hygiene** materials followed by sanitary disposal pits (22.8 per cent) and burning chambers (19.5 per cent).

Hygiene education was delivered in 95.8 per cent of schools in Tanzania. There was no significant variations in the teaching of hygiene in terms of level of the school (primary or secondary), ownership and location.

Forty-four per cent of schools in Tanzania had **teachers who were trained in hygiene promotion**. Primary school teachers (49.2 per cent) were more likely to be trained in hygiene promotion than those working in secondary schools (33.3 per cent).

Operation and Maintenance

Fifty-one per cent of schools in Tanzania had **funds to cover the maintenance and repair** of school WASH facilities at the time of the survey. Sixty-five per cent of schools had funds to maintain and repair school WASH facilities in urban areas at the time of the survey, compared to 47.0 per cent of schools in rural areas.

Non-government schools were more likely to have allocated funds to cover the maintenance and repair of school WASH facilities (86.3 per cent) than government schools (45.6 per cent).

Across regions, the proportion of schools that had funds (at the time of the survey) to cover the maintenance and repair of school WASH facilities was the highest in Mwanza (70.0 per cent) and the lowest in Kaskazini Unguja (24.3 per cent).

Overall, students or pupils were responsible for **cleaning toilets facilities** in almost all government schools (99.1 per cent) compared to 50.5 per cent in non-government schools. On the other hand, 57.5 per cent of non-government schools employed cleaning staff compared to less than one per cent of the government schools (0.8 per cent).

Pupils Engagement

Findings from the survey indicate that 63.6 per cent of all schools had **WASH/Health/ Mazingira clubs' activities**. Zanzibar had a slightly higher per cent of schools with these clubs (66.8 per cent) than Tanzania Mainland (63.5 per cent). As part of implementing activities of the clubs, many **schools were conducting WASH meetings weekly (43.3 per cent) or monthly (38.3 per cent)**.

Among schools with WASH clubs, while 27.9 per cent had **visual materials for promotion of good WASH behaviours**, only 21.5 per cent had their **visual materials displayed on the school premises**.

Chapter 1

Introduction

1.1 Background Information

Water, sanitation and hygiene (WASH) is important in its own right, and is also necessary for the attainment of better health, education, nutrition and other indices of human development. WASH also contributes to other development goals, particularly those relating to poverty and economic growth, urban services, gender equality, resilience and climate change. Access to water and sanitation is interlinked with a number of other key issues and has significant impact on children's lives and their ability to develop and thrive.

In 2010[2], the UN General Assembly recognised access to water and sanitation as a basic human right, and essential to the realization of all human rights. Likewise, two human treaties – the Convention on the Rights of the Child (CRC)[3] and the Conventions on the Elimination of All Forms of Discrimination against Women (CEDAW) – have directly specified the right to water and sanitation as an essential right. This recognition is a testament to the fundamental nature of these basics in every person's life. The rights to water and sanitation require that these basics are adequate, accessible, safe, acceptable and affordable for all and without any discrimination. This is emphasized in the SDG 6 and its respective targets, which advocate for availability and sustainable management of water and sanitation for all, a call that requires "leaving no one behind".

Inadequate and inequitable access to water and sanitation services, along with inappropriate hygiene practices, in households and institutions largely deter efforts to realize the rights of every child, especially the most deprived, to live in a safe and clean environment. In Tanzania, children and young people, who comprise over 60 per cent of the population, are especially affected by the lack of safe water, proper sanitation and inappropriate hygiene practices.

Providing children with safe, dignified, inclusive and reliable school WASH services helps to make the learning environment pleasant and healthy, boosts education achievement and promotes gender equity. It largely contributes to overcoming exclusion from, and discrimination within, education, particularly for girls and children from disadvantaged communities. On the other hand, offering children with high-quality hygiene education provides them with the basis for healthy and productive lives, and creates future demand for safe water and sanitation services. When integrated with a community programme, it can turn children into agents of change for the whole community. However, most schools in developing countries lack even basic water and sanitation facilities, and hygiene education programmes are often inadequate.[4]

The appalling situation of WASH services in schools result in obstacles that mostly affect adolescent girls as they go through puberty. For adolescent girls, the absence of privacy and dignity owing to lack of improved sanitation facilities has especially negative impacts on health and safety, self-esteem, education and well-being. The situation could lead to stress, shame, embarrassment, confusion and fear. Challenges may stem from a variety of sources: lack of knowledge about menstruation, insufficient access to menstrual hygiene materials, and inadequate school WASH facilities for girls that could enable them to change in a private space and discreetly

[2] The United Nations; Resolution 64/292; The Human Rights to Water and Sanitation: Resolution adopted by the General Assembly on 28 July 2010. <https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/292>

[3] The United Nations Resolution 44/25; Convention on the Rights of the Child: Resolution adopted by the General Assembly on 20 November 1989. <https://www.ohchr.org/Documents/ProfessionalInterest/crc.pdf>

[4] The United Nations Children's Fund, Child friendly schools manual, UNICEF, New York, 2009.<www.unicef.org/publications/files/Child_Friendly_Schools_Manual_EN_040809.pdf>

dispose of menstrual hygiene materials. There is growing evidence that inadequate WASH facilities limits school enrolment, attendance, leads to early dropout and affects performance and completion of education.

1.2 Global Overview of WASH in Schools

Globally, access to WASH services in schools remains a matter of serious concern that requires concerted efforts and urgent attention. The 2018 WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene report on WASH in schools, that presents the first global estimates for the new SDG indicators, has established that in 2016[5] about 31 per cent of schools had no basic drinking water services, implying that nearly 570 million children worldwide lacked basic drinking water services at their schools. The report has also observed disparities between the percentage of primary schools (25 per cent) and secondary schools (17 per cent) having no basic drinking water services. The situation is particularly dire in sub-Saharan Africa where 47 per cent of schools have no drinking water service.

The availability of functional and private school toilets can positively impact health and learning outcomes, particularly for girls. The JMP report further indicates that in 2016, over 620 million children worldwide (34 per cent) lacked access to basic sanitation services in their schools. Among them, over 410 million (23 per cent) had no sanitation services at all at their schools. Coverage of basic sanitation services was lower in rural schools (57 per cent compared to 66 per cent of total schools), and in primary schools (63 per cent) compared to secondary schools (72 per cent).

In terms of hygiene, the report established that 53 per cent of schools had basic hygiene services defined as handwashing facilities, with water and soap available at the time of the survey. Nearly 900 million children worldwide lacked access to basic hygiene services in their schools. The coverage of hygiene services was below 50 per cent in Oceania and sub-Saharan Africa.

Table 1.1: Global goals and targets related to WASH in schools

SDG	Targets
Goal 6: Ensure availability and sustainable management of water and sanitation for all	6.1 By 2030, achieve **universal** and equitable access to safe and affordable drinking water **for all** 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene **for all** and end open defecation, paying special attention to the needs of women and **girls,** and those in vulnerable situations
Goal 4: Ensure inclusive and quality education for all and promote lifelong learning	4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all 4.a.1 Increase the proportion of schools with access to: (a) electricity, (b) the Internet for pedagogical purposes, (c) computers for pedagogical purposes, (d) adapted infrastructure and materials for students with disabilities, **(e) basic drinking water, (f) single-sex basic sanitation facilities, and (g) basic handwashing facilities** (as per the WASH indicator definitions)

[5] Drinking water, sanitation and hygiene in schools: global baseline report 2018. New York: United Nations Children's Fund (UNICEF) and World Health Organization, 2017

Figure 1.1: New JMP service ladders for monitoring WASH in schools[6]

Service Level	Drinking Water	Sanitation	Hygiene
Basic Service	Drinking water from an improved source and water is available at the school	Improved sanitation facilities at the school that are single-sex and usable (available, functional and private)	Hand-washing facilities with water & soap available at the school
Limited Service	There is an improved source (piped water, protected well/spring, rainwater, bottled water), but water not available at the time of survey	There are improved facilities (flush/pour flush, pit latrine with slab, composting toilet), but not sex-separated or not usable	Hand-washing facilities with water but no soap available at the school
No Service	Drinking water from an unimproved source or no water source at the school	Unimproved sanitation facilities or no sanitation facilities at the school	No hand-washing facilities available or no water available at the school

The SDGs aim for universal access to WASH and inclusive and effective learning environments for all. These have included WASH services in schools and have specified indicators for the global monitoring of SDG targets 6.1 and 6.2: universal access to WASH – and SDG target 4.a: inclusive and effective learning environment for all (Table 1.1).

SDG targets and indicators for WASH in schools focus on achieving a basic minimum level of service by 2030. To effectively monitor this, the WHO/UNICEF Joint Monitoring Programme (JMP) for WASH has introduced new service ladders that are clearly elaborated in Figure 1.1.

1.3 Overview of WASH in Schools in Tanzania

In Tanzania today, more children are attending schools as parents heed to the national call for education of their children. This is the result of a number of successful policy initiatives, most notably the abolition of school fees and improvement on the quality of education through various programmes. The fee-free education policy, introduced in 2015, has had positive effects in increasing the number of pupils enrolled in schools across the country.

However, the increased number of pupils enrolled in schools means that the infrastructure in existing schools is overloaded and is supporting numbers of pupils that far exceed the initial design loads. This means that even where WASH facilities had been provided they are now insufficient to meet the needs of all pupils enrolled. Overloaded WASH facilities can remain functional only up to a certain point, even assuming the presence of good operations and maintenance regime. Added to this is the fact that most investments in schools under the education sector have focused on educational infrastructures, often overlooking WASH facilities.

[6] WHO/UNICEF JMP (2018). For further information see https://washdata.org

According to the 2018 statistics from PO–RALG[7] in Mainland, and the Ministry of Education and Vocational Training[8] in Zanzibar, Tanzania had 18,002 primary schools. Of this, 94 per cent (16,922) are owned and operated by the Government and 6 per cent are run by non-government institutions. These schools accommodate more than 9.6 million school children of which 97 per cent (9.3 million) are enrolled in government schools. The country also had over 5,022 secondary schools that offer post-primary education.

Low access to WASH services in schools has been a persistent problem over decades and contributes to poor and unhealthy learning environment. The school WASH mapping that was conducted in 2010 by UNICEF, WaterAid and the Netherlands Development Organization (SNV), covering 2,697 schools in 16 districts, established a dire situation indicating that 38 per cent of government primary schools had no water supply on the school premises and only 46 per cent had access to improved toilets. Existing facilities seldom benefitted children with mobility disabilities as only 4 per cent of schools had suitable sanitation facilities for them. The mapping further revealed that, in schools with functional latrines, 52 per cent of facilities for girls had no doors to offer privacy.

1.4 National School WASH Assessment

Monitoring and data management are necessary for evidence-based policy-making, planning and service delivery. In Tanzania, monitoring and data management for WASH services in the sector are often conducted by a range of different actors within the Government, including different ministries in charge of water, sanitation, health or planning. The sources of data and methods applied to produce national and sub-national estimates often vary within the country and between different agencies. Donors, UN agencies and non-governmental organizations (NGOs) often use their own approaches to collect and monitor data for their own projects. Lack of coordination among different stakeholders result in difficulties in collating data from different sources, measuring trends and duplication of efforts. It also results in contradictory conclusions in the assessment of school WASH status and progress. Addressing this situation requires harmonization and clear coordination of these efforts. This will ensure that the Government and all school WASH stakeholders have access to credible data to underpin planning, and to ensure service delivery for scaling-up of WASH in schools.

The prevailing situation on monitoring and data management has led to a lack of up-to-date data and information on school WASH. The last meaningful assessment that covered only 16 districts was done in 2009/2010. Available information through routine monitoring by the education sector provides very basic information and is usually limited to the number of toilet stances per school. It provides little information on the quality and adequacy of services measured against the school WASH guidelines. The need for a national assessment to establish the status of WASH services in Tanzanian schools was very important to help fill in the current critical data gap.

1.5 Objective

The overall objective of this assessment was to determine the national coverage estimates for water, sanitation and hygiene services in schools, thus helping to establish baselines for the standard SDG targets indicators to allow harmonized monitoring, cross-

[7] BEST 2017

[8] Zanzibar Statistical Education Abstract 2017

country comparability and regional or global aggregation.

Specific objectives of this undertaking were to:

1. Fill in data gaps to inform sector programme-planning, strategies for scaling up school WASH services, and policy advocacy in efforts towards fulfilling children's right to better education
2. Inform equity/policy advocacy, resource mobilization, allocation and better targeting
3. Obtain information that will be used to create awareness of the scale of the problem and how it affects educational outcomes for school children, especially girls
4. Establish database for data definitions and appropriate data sets for the management and monitoring of school WASH in the country
5. Help strengthen the routine data collection system in the education sector to consider the quality of WASH services provided to students and staff in data collection

Chapter 2

METHODOLOGY AND IMPLEMENTATION

The 2018 School Water, Sanitation and Hygiene Assessment (SWASH) was a sample survey of all formal and active schools in Tanzania. This chapter provides detailed information on the sample design of the Tanzania School WASH Assessment and some key aspects of the implementation of the assessment.

2.1 Sample Design

The survey was designed to provide national-level representative results by school level, that is, primary and secondary schools; and by managing authority, that is government and non-government-owned schools. The survey was also designed to provide representative results for rural-urban areas, Tanzania Mainland and Zanzibar, and for 31 regions of Tanzania (26 regions of Tanzania Mainland and the five regions of Zanzibar).

2.1.1 Sampling Frame

The sampling frame used, for the 2018 School WASH Assessment, was a complete list of all formal schools in Tanzania. The list was provided by the President's Office, Regional Administration and Local Government (PO–RALG) in Tanzania Mainland and the Ministry of Education and Vocational Training in Zanzibar. The list consisted of 23,024 schools (22,410 schools of Tanzania Mainland and 614 schools of Zanzibar) – among them,18,002 were primary schools and 5,022 were secondary schools. Among all schools, 20,233 were managed by the Government and 2,791 were managed by non-government institutions.

The classification of school levels in Tanzania Mainland is different from that in Zanzibar. The structures of school level in Tanzania Mainland are pre-primary and primary, and secondary; while in Zanzibar, the levels of schools are pre-primary and primary, primary only, basic (primary and secondary) and secondary.

For the purpose of this assessment, the sampling frame of the levels of schools in Zanzibar was modified to match that of schools in Tanzania Mainland. All pre-primary and primary, primary only and basic schools from the sample were grouped as primary schools. Table A 2.1.1 in Annex A presents a detailed distribution of schools in a sampling frame by region, level of school and the managing authority.

2.1.2 Sampling Procedure

The sample design of the 2018 School WASH Assessment used a stratified random sampling methodology whereby a total sample of 2,396 schools was selected (2,240 schools in Tanzania Mainland and 156 schools in Zanzibar). The distribution of selected schools in each region was proportional to the number of schools in each region. In order to achieve comparable survey precision across regions, regions with small number of schools were oversampled. For the same reason, secondary schools were also oversampled, whereas primary schools were under sampled because they were relatively in larger numbers compared to secondary schools. In each region, the schools to participate in the assessment were systematically selected. The sample size allocation is shown in Table 2.1.

Stratification was accomplished by separating the schools by school level within each region. To achieve implicit stratification, it was desirable to sort the sampling frame based on management authority and it was done independently within the sampling stratum. The sampled schools in each region were then systematically selected from the sorted list of schools using a fixed sampling interval and a random start. Table A2.1.2 in Annex A provides details about the final sample allocation (according to the management authority) of schools by region, which used the above described sampling procedure.

Table 2.1: Final sample allocation of schools by region and by level of school, Tanzania, 2018

Regions	Level of schools		Number of schools
	Primary	Secondary	
Dodoma	68	32	100
Arusha	65	35	100
Kilimanjaro	76	42	118
Tanga	82	37	119
Morogoro	76	33	109
Pwani	60	27	87
Dar es Salaam	58	44	102
Lindi	54	22	76
Mtwara	65	24	89
Ruvuma	68	29	97
Iringa	49	28	77
Mbeya	63	32	95
Singida	53	27	80
Tabora	70	26	96
Rukwa	44	18	62
Kigoma	60	28	88
Shinyanga	60	23	83
Kagera	76	34	110
Mwanza	76	36	112
Mara	70	30	100
Manyara	48	21	69
Njombe	41	18	59
Katavi	22	9	31
Simiyu	42	21	63
Geita	49	16	65
Songwe	36	17	53
Tanzania Mainland	**1,531**	**709**	**2,240**
Kaskazini Unguja	17	9	26
Kusini Unguja	16	9	25
Mjini Magharibi	35	12	47
Kaskazini Pemba	14	14	28
Kusini Pemba	16	14	30
Zanzibar	**98**	**58**	**156**
Tanzania	**1,629**	**767**	**2,396**

2.1.3 Sampling Weights

In order for the sample estimates from the 2018 School WASH survey to be representative at the national, regional, school-type and managing authority levels, sampling weights were employed during analysis. Similarly, sampling weights were used to account for unequal allocation of sampled schools to different school types and regions. Since the School WASH Assessment sample is a stratified random sample, survey sampling weights were calculated based on school design weights after adjusting for non-response at the sampling stratum level. The school design weight for each sampled school in each stratum equals to the inverse of its probability of selection.

During data analysis, using statistical software (STATA), the analytic weights option was used to produce weighted results. With the analytic weights option, the total number of unweighted cases (total number of sampled schools) equals the total number of weighted cases at the national level (Table 2.2).

Table 2.2: Percentage distribution of surveyed schools (weighted), and weighted and unweighted numbers of schools, by background characteristics, Tanzania, 2018

Background characteristics	Percentage distribution of surveyed schools (Weighted)	Number of schools surveyed	
		Weighted	Unweighted
Level of school			
Primary school	68.8	1,640	1,612
Secondary school	31.2	745	773
Ownership status			
Government	86.8	2,069	2,066
Non-Government	13.2	316	319
Region			
Dodoma	4.3	102	100
Arusha	4.4	105	100
Kilimanjaro	5.5	131	118
Tanga	5.6	135	119
Morogoro	5.1	121	109
Pwani	4.3	102	87
Dar es Salaam	4.6	109	97
Lindi	3.0	72	76
Mtwara	3.5	83	89
Ruvuma	4.5	106	97
Iringa	2.9	68	77
Mbeya	4.0	96	94
Singida	2.9	69	79
Tabora	4.2	101	96

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Background characteristics	Percentage distribution of surveyed schools (Weighted)	Number of schools surveyed	
		Weighted	Unweighted
Rukwa	2.0	48	62
Kigoma	3.5	83	88
Shinyanga	3.0	72	83
Kagera	5.3	127	107
Mwanza	5.2	124	112
Mara	4.5	106	99
Manyara	3.5	84	69
Njombe	2.7	64	59
Katavi	1.1	26	31
Simiyu	2.8	66	63
Geita	2.9	69	65
Songwe	2.1	51	53
Kaskazini Unguja	0.4	9	26
Kusini Unguja	0.4	9	26
Mjini Magharibi	1.1	25	47
Kaskazini Pemba	0.4	10	28
Kusini Pemba	0.5	12	29
Tanzania	**100.0**	**2,385**	**2,385**

2.2 Survey Implementation

2.2.1 Questionnaire Design and Type

The 2018 School WASH Assessment questionnaires were developed after a series of meetings by technical staff from the NBS, the OCGS, the President's Office, Regional Administration and Local Government (PO–RALG), the Ministry of Education, Science and Technology (MoEST) in Tanzania Mainland and the Ministry of Education and Vocational Training, Zanzibar and UNICEF. Core and extended questions for WASH in schools from WHO/UNICEF JMP were included and adapted to reflect relevant issues in Tanzania along with questions proposed by the ministries responsible for education in both Tanzania Mainland and Zanzibar. Inputs were also solicited from various key stakeholders representing government ministries and agencies, NGOs and international donors. The final drafts of the questionnaires were discussed at a stakeholders' meeting organized by the NBS in September, 2018. The adapted questionnaires were translated from English into Kiswahili and pretested from 1 to 7 October 2018 in Kilimanjaro Region.

The 2018 School WASH Assessment used three main types of data collection tools:

- **School Water, Sanitation and Hygiene Facility Questionnaire:** This questionnaire collected information mainly

on school identification, water sources and availability, sanitation and hygiene services, operation and maintenance, and pupils' engagement.

- **School Water, Sanitation and Hygiene Observation Questionnaire:** This questionnaire was used as a check list to guide observations on the availability of school duty rosters and health messaging, drinking water services, handwashing stations and toilets.

- **Local Government Level Questionnaire:** This questionnaire was used to capture information for monitoring implementation of National Sanitation Campaign (NSC) at the Council level.

Final versions of the English questionnaires have been included as Annex B to this report. The School WASH Assessment facility questionnaire and the School WASH Assessment Observation questionnaire were loaded in tablets and administered as computer-assisted personal interviews (CAPI). The Local Government Level questionnaire was administered as a paper questionnaire but the data were entered and edited immediately after the collection.

2.2.2 Pilot Test

A pilot test was conducted in Kilimanjaro Region for seven days, from 1 to 7 October 2018. The main objective of the pilot exercise was to determine the strengths and shortcomings of the questionnaires and to ensure reliable formatting, wording and ordering of questions. This helped to refine and finalize the questionnaires. The exercise involved technical members from the NBS, the OCGS, the MoEST, Tanzania Mainland, the MoEVT, Zanzibar, PO–RALG, and UNICEF, Tanzania.

Prior to the pilot test, classroom instructions were given to interviewers over three days, followed by two days of field practice and two days for feedback from the fieldwork.

2.2.3 Main Training of the Field Staff

The main training of interviewers and supervisors took place in Dar es Salaam Region from 23 to 31 October 2018. A total of 70 interviewers and 18 supervisors were recruited across the country to participate in the training.

The training was conducted through lectures, classroom presentations, mock interviews, role plays and field practice. Interviewers were evaluated through in-class exercises, quizzes and observations made especially during field practices. Towards the end of the classroom training, the trainees were assigned to 18 teams (15 teams in Tanzania Mainland and 3 teams in Zanzibar), each team consisting of one supervisor, three interviewers and one driver to conduct data collection exercise.

2.2.4 Data Collection and Activities

Data collection exercise was conducted from 1 November 2018 to 10 December 2018 by the 18 field teams mentioned above. The interviewers were responsible for filling in the electronic questionnaires on tablets and the supervisors were responsible for reviewing all questions for completeness, quality, and consistency before transferring data electronically to the NBS headquarters daily. The system allowed real time checks and data access to the server.

Face-to-face interviews were used as a method of data collection in which the

questionnaire was administered by the enumerator to the head teacher or any other knowledgeable representative at the school. Direct observations and spot checks were used to complete observation questionnaires to establish whether schools adhered to acceptable WASH guidelines for safe and healthy learning environments. Additionally, supervisors had roles of overseeing fieldwork logistic activities and completing the Local Government questionnaire at the council level. Respondents for this questionnaire were the Councils' school WASH Coordinators.

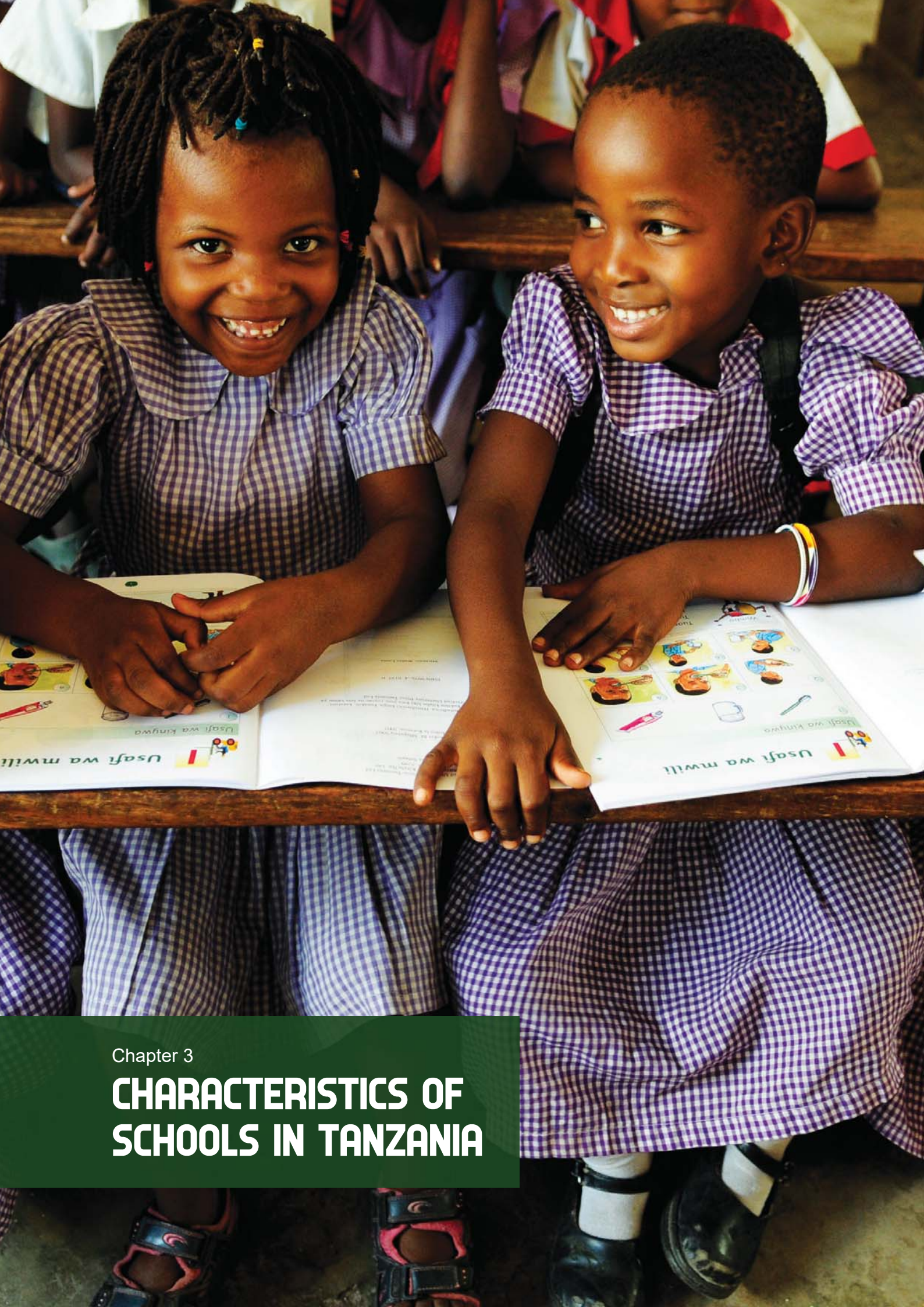
Fieldwork supervision and quality control visits were coordinated at the NBS and the OCGS headquarters. Technical people from the NBS, the OCGS, the MoEST, Tanzania Mainland, the PO-RALG and the MoEVT, Zanzibar and UNICEF constituted the quality control teams. They periodically visited teams to review their work and monitor data quality.

2.2.5 Data Processing

In the 2018 School WASH Assessment, data processing was done concurrently with data collection in the field. This was done by entering information on tablets. Using the Internet, team supervisors transferred data to a server located at the NBS headquarters in Dodoma on a daily basis. Processing of the data allowed for regular monitoring of team performance and data quality. Feedback was individually tailored for each team. Data cleaning and finalization were completed in December, 2018.

2.2.6 Response Rate

The final school response rate is in reference to the original number of schools selected. Out of the 2,396 selected schools, two non-government schools denied taking part in the survey and nine schools could not be reached. The remaining 2,385 schools were successfully interviewed, yielding a response rate of 99.5 per cent.



Chapter 3

CHARACTERISTICS OF SCHOOLS IN TANZANIA

This chapter presents background information on primary and secondary schools in Tanzania with the aim of assessing availability and level of use of school facilities by pupils/students and school staff. For example, details in terms of school population and available facilities, such as the average number of pupils/students or classes and pupils per school are good indicators of the pressure exerted on school infrastructure including WASH facilities.

3.1 Average Number of Pupils/Students per School

The results of the 2018 School WASH Assessment indicate that; by level of school, the average number of pupils/students per school is 642 pupils and 440 students for primary and secondary schools respectively. The average number of pupils/students in both primary schools and secondary schools is higher in Zanzibar (825 and 618 in primary and secondary schools respectively) than in the Mainland (638 and 434 respectively).

Urban schools were found to have a higher average number of pupils/students per school (876 for primary schools and 544 for secondary schools) than schools in rural areas (592 pupils and 391 students respectively). Non-Government schools had significantly lower average number of primary school pupils (259) and secondary school students (294) than schools owned by the Government (675 pupils for primary schools and 489 students for secondary schools).

Co-education secondary schools had a higher average number of students (446) than schools with only girls (372) and those with boys only (398). Furthermore, secondary schools with both day and boarding students tended to have a higher average number of students (514) than boarding only (379) and day only (436) schools.

Differences exist across regions in Tanzania with primary schools in Dar es Salaam having the highest average number of pupils (1,359) and Kilimanjaro having the lowest (283). On the other hand, the highest average number of students for secondary schools is found in Mjini Magharibi Region (804), whereas the lowest is found in Lindi Region (228) (Table 3.1).

Table 3.1: Average and median number of primary and secondary schools' pupils/ students by residence, ownership, type of school and model of school, Tanzania, 2018

Background characteristics	Primary schools		Secondary schools	
	Average	Median	Average	Median
Mainland/Zanzibar				
Mainland	638	516	434	355
Zanzibar	825	618	618	503
Location of School				
Rural	592	505	391	337
Urban	876	606	544	475
Ownership Status				
Government	675	548	489	411
Non-Government	259	227	294	213

(Continued)

(Continued)

Background characteristics	Primary schools		Secondary schools	
	Average	Median	Average	Median
Model of School				
Boarding School	270	92	379	324
Day Schools	651	521	436	363
Both (Boarding and Day)	419	333	514	441
Region				
Dodoma	636	583	401	373
Arusha	461	412	470	400
Kilimanjaro	283	232	416	335
Tanga	494	455	437	406
Morogoro	543	468	370	275
Pwani	418	322	399	315
Dar es Salaam	1,359	596	487	167
Lindi	358	315	228	169
Mtwara	435	387	337	324
Ruvuma	487	435	498	438
Iringa	449	413	445	435
Mbeya	483	373	467	339
Singida	657	614	305	257
Tabora	765	687	492	487
Rukwa	832	754	360	298
Kigoma	762	745	345	318
Shinyanga	781	653	361	324
Kagera	725	595	402	396
Mwanza	928	811	626	654
Mara	711	715	454	366
Manyara	535	528	449	402
Njombe	511	504	423	303
Katavi	1,150	905	577	587
Simiyu	1,026	992	321	238
Geita	973	776	648	645
Songwe	462	309	471	386
Kaskazini Unguja	699	658	528	460
Kusini Unguja	443	448	497	462
Mjini Magharibi	750	258	804	774
Kaskazini Pemba	1,080	849	462	379
Kusini Pemba	1,110	896	565	468
Tanzania	**642**	**516**	**440**	**363**

3.3 Average Number of Teachers per School

According to the 2018 School WASH Assessment, the average number of teachers per school was 12 and 14 for primary and secondary schools, respectively. Like the number of pupils, the average numbers of teachers in both primary and secondary schools were higher in Zanzibar (36 and 23 respectively) than in the Mainland (11 and 14 respectively).

As expected, urban schools were found to have a significantly higher average number of teachers (27 for primary schools and 21 for secondary schools) than schools in rural areas (8 and 10 teachers respectively).

Findings also revealed that government schools had a higher average number of teachers per school for both primary (12) and secondary (16) schools than the non-government-owned schools (eight for primary schools and seven teachers for secondary schools).

Secondary schools with both day and boarding students and day only schools had a higher average number of teachers (15) than only boarding schools (9) did.

Among all the regions surveyed, Mjini Magharibi Region had the highest average number of teachers per school for both primary schools (49) and secondary schools (35); whereas, Lindi Region had the lowest average number of teachers per school for both primary (5) and secondary (4) schools (Table 3.2).

Table 3.2: Average and median number of primary and secondary schools' teachers by location, ownership status, type of school and model of school, Tanzania, 2018

Background characteristics	Primary schools		Secondary schools	
	Average	Median	Average	Median
Mainland/Zanzibar				
Mainland	11	6	14	8
Zanzibar	36	24	23	14
Location of School				
Rural	8	6	10	8
Urban	27	18	21	12
Ownership Status				
Government	12	6	16	10
Non-Government	8	4	7	4
Model of School				
Boarding School	7	12	9	6
Day School	12	6	15	8
Both (Boarding and Day)	11	8	15	8
Region				

(Continued)

(Continued)

Background characteristics	Primary schools		Secondary schools	
	Average	Median	Average	Median
Dodoma	10	8	14	8
Arusha	15	12	21	12
Kilimanjaro	10	8	18	12
Tanga	10	6	15	10
Morogoro	11	8	16	14
Pwani	11	6	18	16
Dar es Salaam	40	26	22	6
Lindi	5	4	4	2
Mtwara	6	4	7	6
Ruvuma	7	4	14	8
Iringa	11	10	18	10
Mbeya	11	6	15	8
Singida	7	4	7	6
Tabora	11	6	10	8
Rukwa	8	8	7	4
Kigoma	8	4	6	6
Shinyanga	11	8	11	8
Kagera	9	6	9	8
Mwanza	17	8	16	10
Mara	8	6	6	4
Manyara	8	6	18	12
Njombe	12	8	13	14
Katavi	13	10	9	12
Simiyu	9	8	6	6
Geita	11	4	13	8
Songwe	6	6	12	10
Kaskazini Unguja	39	38	20	18
Kusini Unguja	26	28	24	20
Mjini Magharibi	49	20	35	30
Kaskazini Pemba	17	18	8	6
Kusini Pemba	29	30	15	14
Tanzania	**12**	**6**	**14**	**8**

3.4 Average Number of Classrooms in Use per School

The 2018 School WASH Assessment results show that, on average, a school in Tanzania had eight classrooms that were being used at the time of the assessment. Zanzibar had a relatively higher average number of classrooms that were being used (12) than the Mainland (8). In urban schools, an average of 11 classrooms was being used as compared to an average of 8 classrooms being used in rural schools.

Primary schools in Tanzania had a relatively smaller average number of classrooms in use at the time of the assessment than secondary schools did.

On the other hand, while schools having both day and boarding facilities had an average of 12 classrooms in use at the time of the survey, boarding and day schools had an average of ten and eight classrooms in use, respectively (Table 3.3).

Schools in the Mjini Magharibi Region had the highest average number of classrooms in use (13) while the Lindi Region had schools with the lowest average number of classrooms in use (6) (Table 3.3).

Table 3.3: Average, median and total number of classrooms by location, level of school, ownership status and model of school, Tanzania, 2018

Background characteristics	Average number	Median	Total
Mainland/Zanzibar			
Mainland	8	7	182,132
Zanzibar	12	10	7,205
Location of School			
Rural	8	7	135,759
Urban	11	9	53,578
Level of School			
Primary school	8	7	119,467
Secondary school	10	8	69,870
Ownership Status			
Government	8	7	160,652
Non-Government	9	8	28,686
Model of School			
Boarding School	10	8	12,739
Day School	8	7	156,393
Both (Boarding and Day)	12	10	20,205
Region			
Dodoma	8	7	7,413

(Continued)

(Continued)

Background characteristics	Average number	Median	Total
Arusha	10	9	9,875
Kilimanjaro	8	7	10,434
Tanga	8	7	10,064
Morogoro	7	7	8,583
Pwani	8	7	7,791
Dar es Salaam	12	10	12,570
Lindi	6	6	4,389
Mtwara	7	6	5,459
Ruvuma	8	8	8,382
Iringa	9	8	5,736
Mbeya	9	8	8,431
Singida	7	6	4,344
Tabora	7	7	7,161
Rukwa	8	7	3,553
Kigoma	7	7	5,845
Shinyanga	9	7	5,907
Kagera	8	7	9,678
Mwanza	9	8	10,268
Mara	8	7	8,057
Manyara	8	7	6,786
Njombe	9	8	5,340
Katavi	9	7	2,174
Simiyu	8	8	5,182
Geita	7	7	4,674
Songwe	8	7	4,037
Kaskazini Unguja	11	11	934
Kusini Unguja	11	11	953
Mjini Magharibi	13	11	3,136
Kaskazini Pemba	10	9	960
Kusini Pemba	11	10	1,222
Tanzania	**8**	**7**	**189,337**

3.5 Access and Sources of Electricity in Schools

The 2018 School WASH Assessment collected information on whether a school was connected to electricity or not.

Almost half of the schools in Tanzania (49.9 per cent) had electricity regardless of the source (Table 3.4). The coverage of schools with electricity in Zanzibar (94.9 per cent) was significantly higher than that of schools in Tanzania Mainland (48.7 per cent). As expected, schools located in urban areas were more likely to have electricity (76.6 per cent) than those in rural areas (42.3 per cent).

Schools owned by non-government organization were more likely to have electricity (95.3 per cent) than government-owned schools (43.0 per cent).

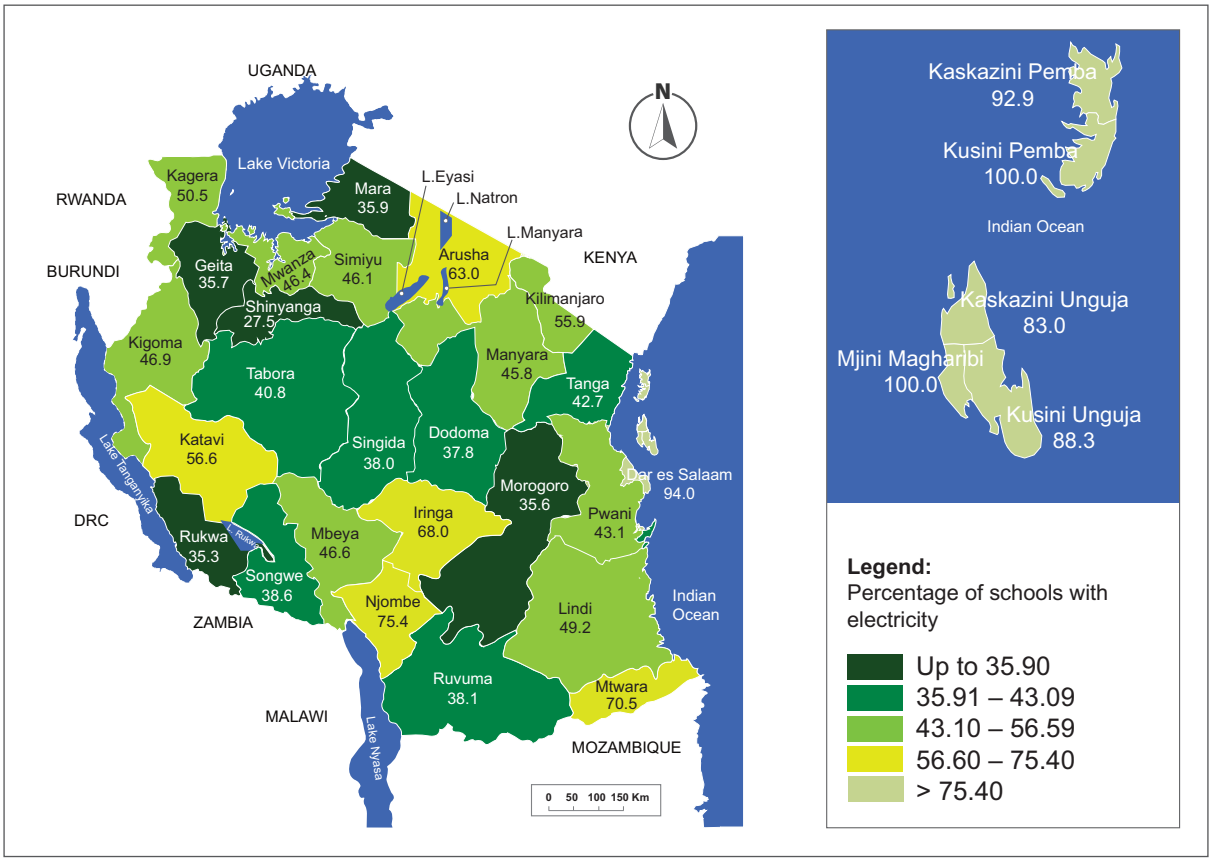
While only about four out of ten primary schools (35.6 per cent) had electricity, eight out of ten secondary schools (81.6 per cent) were connected to electricity. Almost all boarding schools (98.5 per cent) were connected to electricity.

Map 3.1 indicates significant differences across regions of Tanzania with respect to electricity connectivity among schools. While almost all schools (100 per cent) in Kusini Pemba and Mjini Magharibi regions were connected to electricity, only 27.5 per cent of schools in Shinyanga Region had electricity.

Table 3.4: Percentage of schools with electricity by background characteristics, Tanzania, 2018

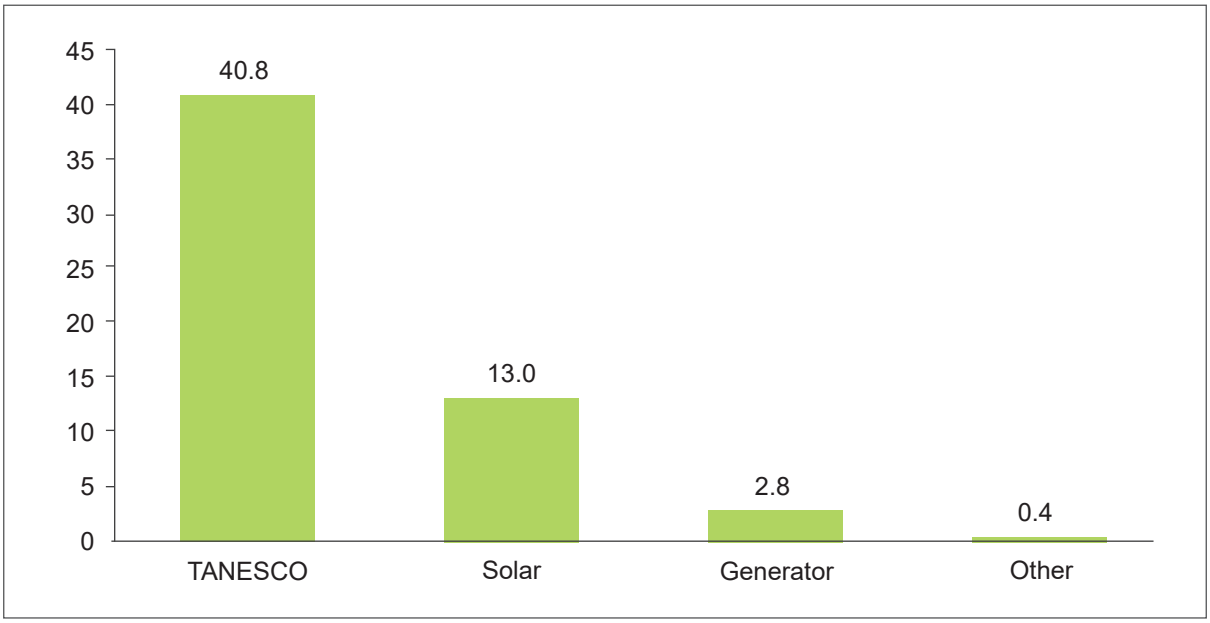
Background characteristics	Schools with electricity	Number of schools
Mainland/Zanzibar		
Mainland	48.7	2,320
Zanzibar	94.9	65
Location of School		
Rural	42.3	1,857
Urban	76.6	528
Level of School		
Primary school	35.6	1,640
Secondary school	81.6	745
Ownership Status		
Government	43.0	2,069
Non-Government	95.3	316
Model of School		
Boarding School	98.5	127
Day School	43.0	2,077
Both (Boarding and Day)	95.5	181
Tanzania	**49.9**	**2,385**

Map 3.1: Percentage of schools with electricity by region, Tanzania, 2018



Overall, the main source of electricity for schools in Tanzania was connection to the National grid supplied by TANESCO (40.8 per cent), followed by solar power (13 per cent). About 3 per cent of schools in Tanzania used generators as the main source of electricity and less than one per cent used other sources of electricity (Figure 3.1).

Figure 3.1: Percentage of schools by main source of electricity, Tanzania, 2018



3.6 Provision of Meals for Pupils

Information on the provision of meals for pupils was also collected in the 2018 School WASH Assessment. Meal include any food (breakfast, lunch or dinner) provided to the pupils/students. About half of the schools (49.7 per cent) in Tanzania provided meals to pupils/students. While about half of the schools (50.3 per cent) in Tanzania Mainland provided meals to the pupils/students, only 28.2 per cent of the schools in Zanzibar did so. Urban schools (54.9 per cent) were more likely to provide meals to the pupils/students than rural based schools (48.2 per cent). Furthermore, a higher percentage of secondary schools (64.4 per cent) provided meals to their students than primary schools (43.0 per cent).

More than nine out of ten non-government schools provided meals to their-pupils/students, compared to only to about four out of ten government-owned schools that provided meals to pupils/students.

As expected, all boarding schools provided meals to their students whereas; 42.2 per cent of the day schools and 97.7 per cent of schools with both day and boarding facilities provided meals to their pupils/students (Table 3.5).

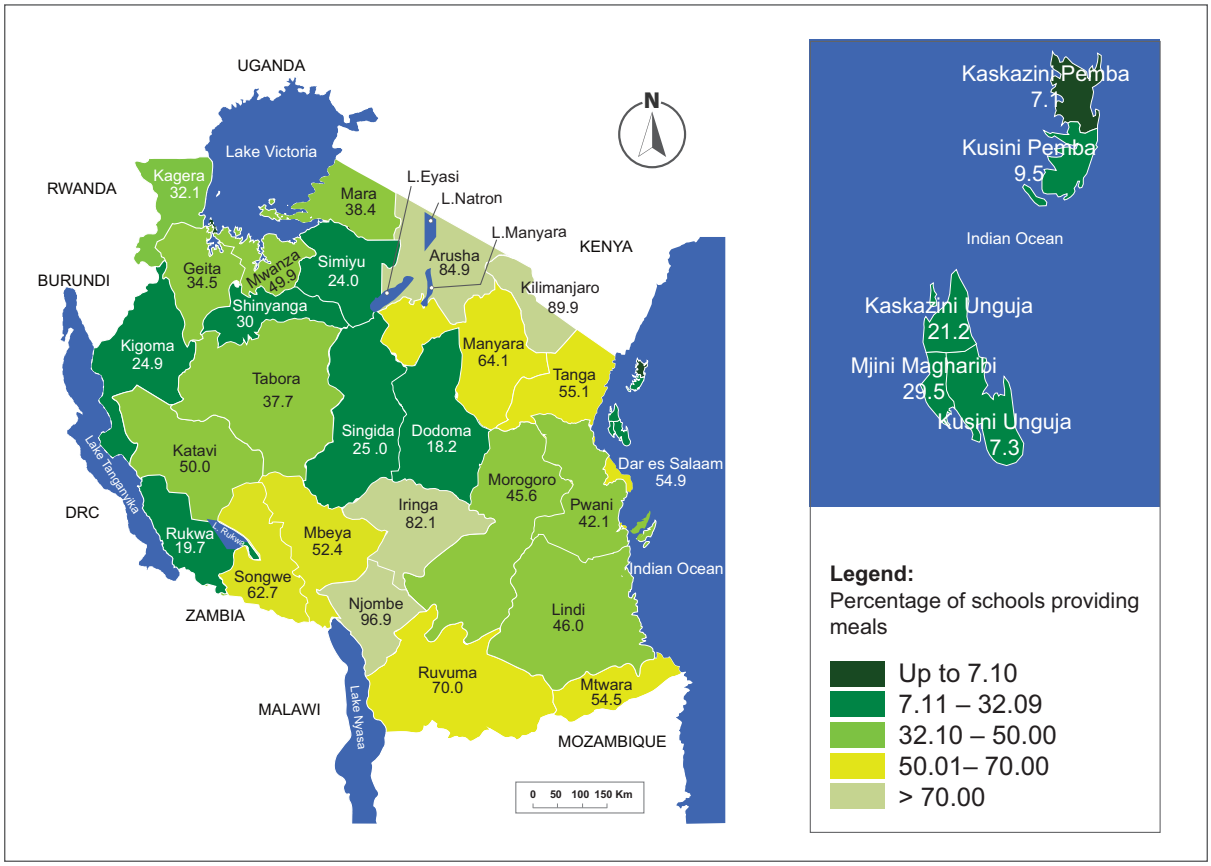
Table 3.5: Percentage of schools providing meal by background characteristics, Tanzania, 2018

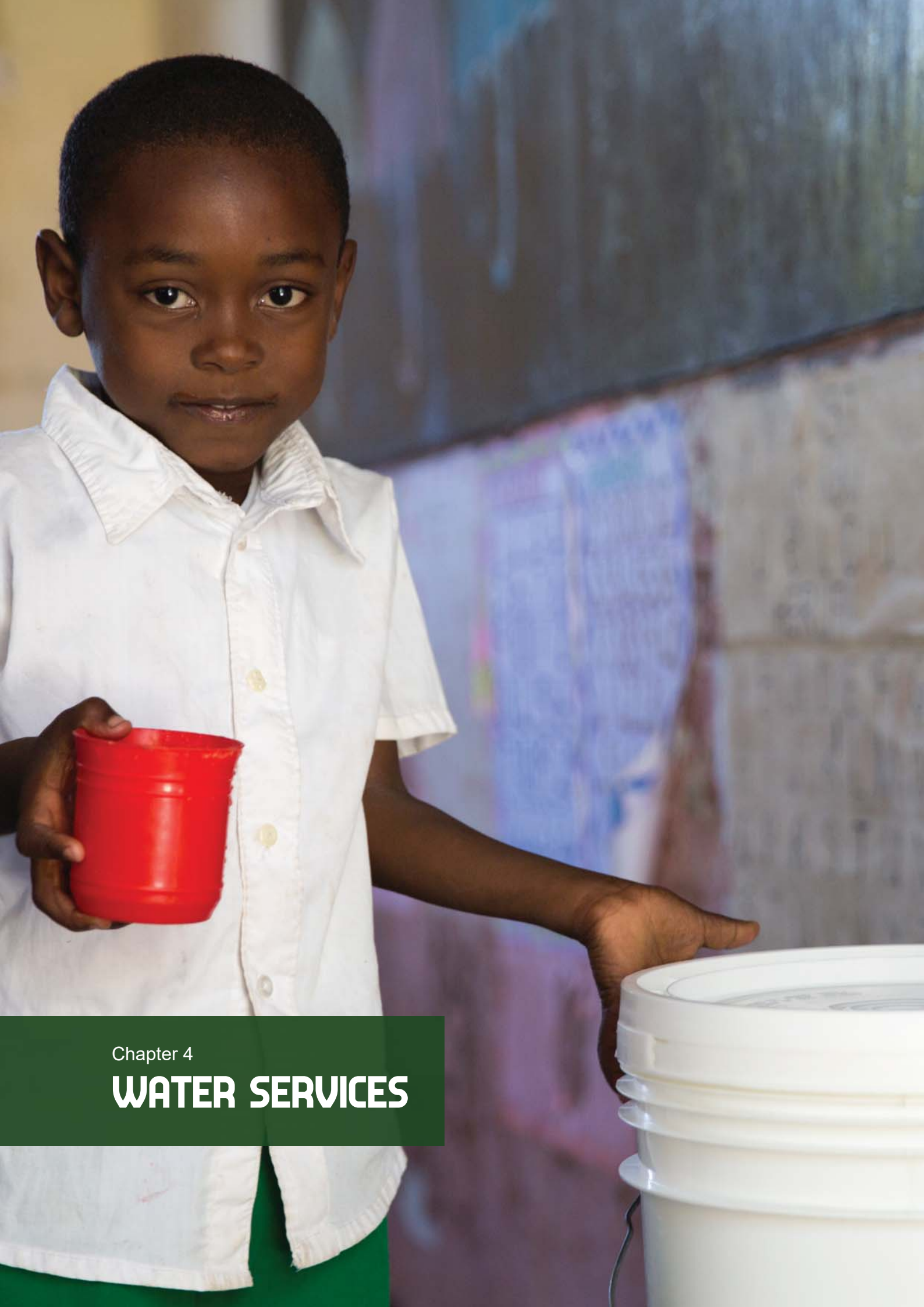
Background characteristics	Percentage	Number of schools
Mainland/Zanzibar		
Mainland	50.3	2,320
Zanzibar	28.2	65
Location of School		
Rural	48.2	1,857
Urban	54.9	528
Level of School		
Primary school	43.0	1,640
Secondary school	64.4	745
Ownership Status		
Government	43.1	2,069
Non-Government	92.8	316
Model of School		
Boarding School	100.0	127
Day School	42.4	2,077
Both (Boarding and Day)	97.7	181
Total	**49.7**	**2,385**

Map 3.2 shows that significant differences existed among schools in regions of Tanzania with respect to the provision of food to pupils/students.

While Njombe Region had the highest percentage of schools offering meals to their pupils/students (96.9 per cent), Kusini Pemba Region had the lowest percentage of schools (4.1 per cent) providing food to their pupils/students.

Map 3.2: Percentage of schools providing meals to the pupils by region, Tanzania, 2018





Chapter 4

WATER SERVICES

Sufficient and reliable safe water supply in schools helps to prevent spreading of infectious and waterborne diseases among pupils/students. Providing safe drinking water can be achieved by ensuring that water comes from an improved source or is treated prior to drinking. Generally, water sources are categorized as improved or unimproved.

Improved water sources are those which, by nature of their design and construction, have the potential to deliver safe water by preventing water contamination. Improved sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and rainwater.

Unimproved sources include unprotected dug wells or springs and surface water (e.g. lakes, rivers, streams, ponds, canals, irrigation ditches).

4.1 Accessibility to Drinking Water in Schools

Nationally, the proportion of schools with access to an improved source of drinking water was 68.2 per cent. While 17.6 per cent of schools in Tanzania used unimproved sources of water, 14.2 per cent did not have any source of water (Table 4.1).

Nearly all schools in Zanzibar (96.0 per cent) obtained their drinking water from an improved source as compared to 67.4 per cent of schools in Tanzania Mainland. Furthermore, 18.0 per cent of schools in Tanzania Mainland used unimproved source of drinking water compared to only 2.4 per cent of schools in Zanzibar.

Table 4.1: Percentage distribution of schools by source of drinking water and location, Tanzania, 2018

Sources of water	Tanzania mainland	Zanzibar	Rural	Urban	Tanzania
Improved Source	**67.4**	**96.0**	**63.8**	**84.2**	**68.2**
Piped into school grounds	29.1	43.5	24.2	48.2	29.5
Public tap/standpipe off school grounds	2.3	1.5	2.4	1.9	2.3
Piped water from elsewhere	2.7	2.4	2.8	2.6	2.7
Tube well or Borehole	11.8	25.4	10.9	16.6	12.1
Protected Well	9.5	20.8	9.7	10.3	9.8
Protected Spring	3.3	0.9	3.9	1.1	3.3
Rainwater with roof catchment	8.3	0.6	9.4	3.4	8.1
Rainwater, but no roof catchment	0.4	0.0	0.5	0.0	0.4
Packaged Bottled Water	0.0	0.9	0.0	0.1	0.0
Unimproved Source	**18.0**	**2.4**	**20.3**	**8.2**	**17.6**
Unprotected Well	5.2	2.4	6.1	1.7	5.1
Unprotected Spring	3.0	0.0	3.5	0.9	2.9
Water Vendor or Tanker	1.0	0.0	0.6	2.3	1.0
Surface Water (River, Pond, Lake, Dam etc)	6.4	0.0	7.5	2.1	6.3
Other Sources	2.4	0.0	2.6	1.2	2.3
No Water Source	**14.6**	**1.6**	**16.1**	**7.7**	**14.2**
Total	**100**	**100**	**100**	**100**	**100**

Schools in urban areas were more likely to have access to an improved source of drinking water (84.2 per cent) compared to those in rural areas (63.8 per cent). About two out of ten schools in rural areas used unimproved source of water and 16.1 per cent had no water source. On the contrary, in urban settings, only 8.2 per cent of schools used unimproved source of water, whereas, 7.7 per cent did not have any source of drinking water for pupils/students.

Piped water into school premises was the most common type of improved source of drinking water for 29.5 per cent in Tanzanian schools, followed by tube wells or boreholes (12.1 per cent) and protected wells (9.8 per cent).

Data on the availability of water sources in terms of the level of school indicates that 62.8 per cent of primary schools and 80.3 per cent of secondary schools had access to improved source of drinking water. Furthermore, the findings show significant differences in the use of improved source of water with regard to school managing authorities: 90.6 per cent of non-government schools had access to improved source of drinking water compared to 64.8 per cent of government schools (Table 4.2).

Table 4.2: Percentage distribution of schools by source of drinking water, level of school and ownership status, Tanzania, 2018

Sources	Level of schools		Ownership status	
	Primary school	Secondary school	Government	Non-Government
Improved Source	**62.8**	**80.3**	**64.8**	**90.6**
Piped into school grounds	25.5	38.1	27.1	45.1
Public tap/standpipe off school grounds	2.4	2.1	2.3	1.8
Piped water from elsewhere	1.9	4.5	2.6	3.3
Tube well or Borehole	11.0	14.7	10.6	22.4
Protected Well	10.1	9.3	9.7	10.9
Protected Spring	3.2	3.4	3.2	3.7
Rainwater with roof catchment	8.1	8.1	8.9	3.1
Rainwater, but no roof catchment	0.5	0.1	0.4	0.0
Packaged Bottled Water	0.1	0.0	0.0	0.3
Unimproved Source	**19.5**	**13.1**	**19.1**	**7.8**
Unprotected Well	5.9	3.3	5.8	1.0
Unprotected Spring	3.5	1.7	3.3	0.6
Water Vendor or Tanker	0.7	1.4	0.5	3.7
Surface Water (River, Pond, Lake, Dam etc)	6.9	4.8	6.9	1.9
Other Sources	2.5	1.9	2.6	0.6
No Water Source	**17.7**	**6.6**	**16.1**	**1.8**
Total	**100**	**100**	**100**	**100**

4.2 Availability of Water Services According to JMP Classifications

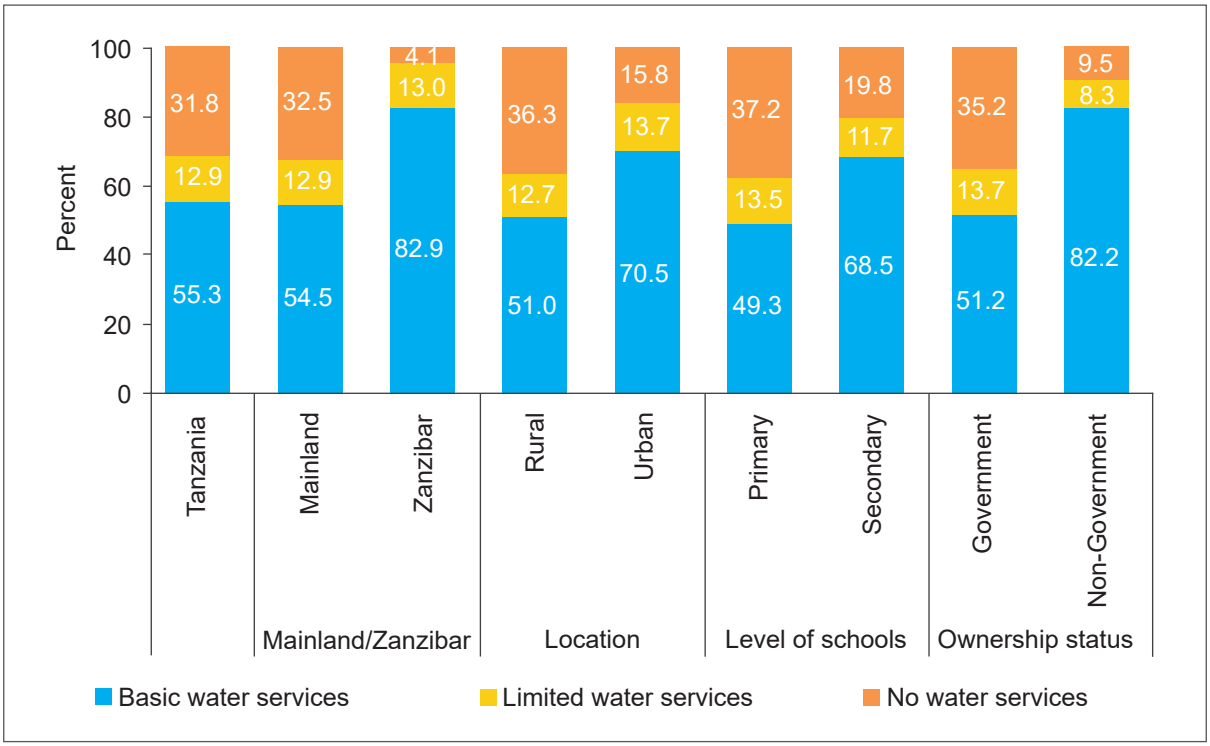
The SDG targets and indicators for WASH in schools focus on achieving a basic minimum level of water services by 2030. To effectively monitor this, the JMP introduced the concept of service ladder that categorizes water services into three levels: basic water service, limited water service and no water service.

Basic water service means that a school has drinking water from an improved source (piped water, protected well/spring, rainwater, bottled water) and water is available at the school at the time of the survey. Limited service means school has an improved source, but water was not available at the time of survey. No water service means the school had either drinking water from an unimproved source or no water source at the school at all. Information on the availability of water at the time of the survey was derived from observation data rather than from information provided by the respondents.

The 2018 School WASH Assessment shows that more than half of schools in Tanzania (55.3 per cent) had basic drinking water services, 12.9 per cent had limited water services and 31.8 per cent did not have any water service (Figure 4.1).

Zanzibar had a higher percentage of schools with basic water services (82.9 per cent) than Tanzania Mainland (54.5 per cent). Thirteen per cent of schools in Tanzania Mainland and Zanzibar depended on limited water services. Only 4.1 per cent of schools in Zanzibar did not have water services compared to 32.5 per cent of schools in Tanzania Mainland.

Figure 4.1: Percentage distribution of schools with basic water services, limited water services and no water services by location, level of school and ownership status, Tanzania, 2018



Seven out of ten schools in urban areas (70.5 per cent) had basic water services, whereas slightly more than half of schools in rural areas (51.0 per cent) had basic water services. While there was no significant difference in the availability of limited water services between schools in urban (13.7 per cent) and rural (12.7 per cent) areas, the situation was quite different for schools with no water services where it was established that 36.3 per cent of rural schools had no water services compared to 15.8 per cent of urban schools.

With regard to the level of school, 68.5 per cent of secondary schools had basic water services compared to 49.3 per cent of primary schools. Fourteen per cent of primary schools and 11.7 per cent of secondary schools had limited water services, while 37.2 per cent of primary schools and 19.8 per cent of secondary schools did not have any water service.

Furthermore, schools owned by non-government institutions were more likely to have basic water services (82.2 per cent) than schools owned by the Government (51.2 per cent). The rates of limited water services and no water services were very low in schools owned by non-government institutions (8.3 per cent and 9.5 per cent, respectively) compared to government owned schools (13.7 per cent and 35.2 per cent, respectively).

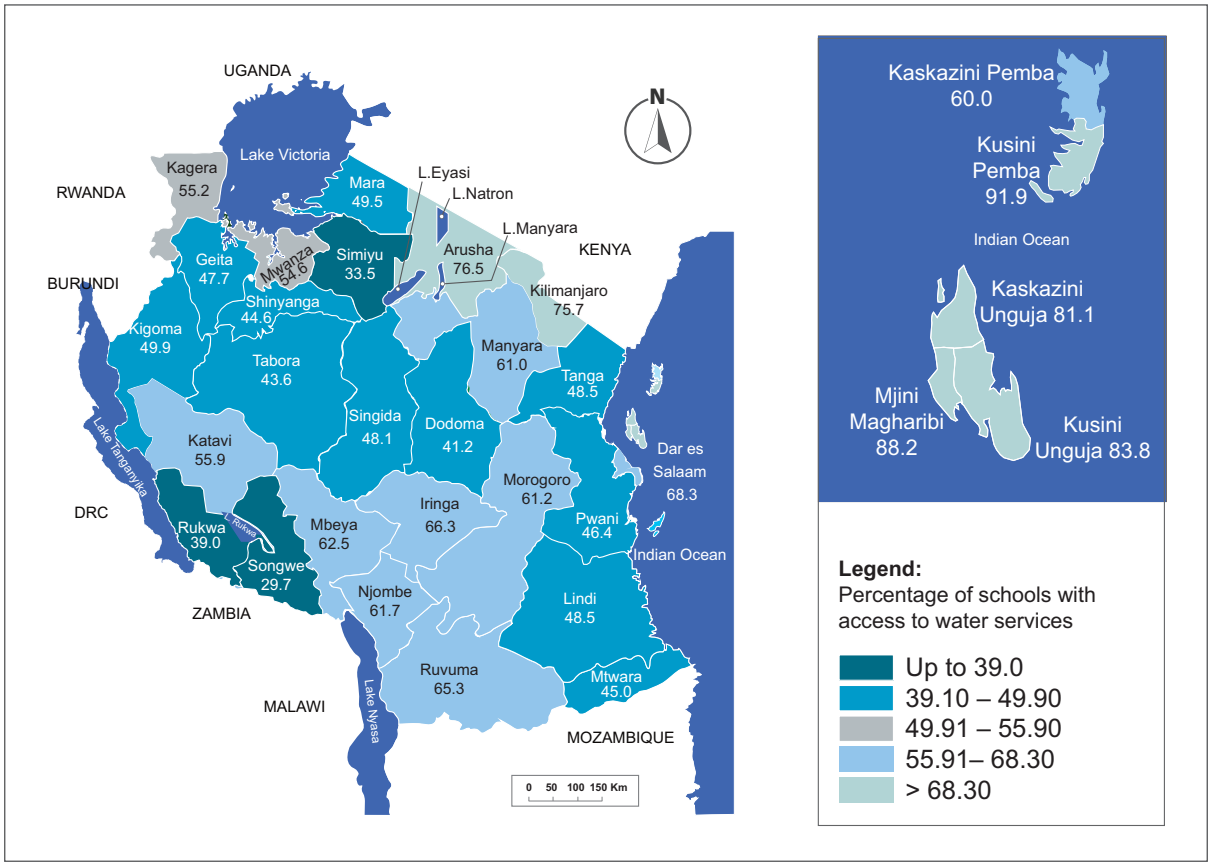
The 2018 School WASH survey shows that boarding schools (81.8 per cent) and schools with both day and boarding facilities (85.4 per cent) were more likely to have basic water services than day schools (51.0 per cent). In addition, day schools were more likely to have no water services (35.0 per cent) than boarding schools (6.9 per cent) and schools with both day and boarding facilities (12.1 per cent) (Table 4.3).

Regional variations were highly visible in the percentages of schools with basic water services, ranging from 29.7 per cent in Songwe Region to 91.9 per cent in Kusini Pemba Region (Map 4.1).

Table 4.3: Percentage of schools with basic water services, limited water services and no water services by background characteristics, Tanzania, 2018

Background characteristics	Basic water services	Limited water services	No water services	Number of schools
Tanzania	**55.3**	**12.3**	**31.8**	**2,385**
Type of school				
Girls only	76.7	23.3	0.0	40
Boys only	93.5	0.0	6.5	30
Mixed	54.4	12.9	32.7	2,315
Model of school				
Boarding School	81.8	11.3	6.9	127
Day School	51.0	14.0	35.0	2,077
Both (Boarding and Day)	85.4	2.5	12.1	181

Map 4.1: Percentage of schools with basic water services by region, Tanzania, 2018



4.3 Drinking Water Availability from the Main Source

This part provides more understanding on the availability of drinking water from the main source of the school during the time of the survey, all days in the two weeks preceding the survey, and throughout the school academic year. Unlike for JMP Classifications, availability of water in this section does not consider the type of source of water (improved or not improved).

About eight out of ten schools (80.4 per cent) in Tanzania had drinking water available from the main source at the time of the survey and 79.5 per cent of schools had drinking water two weeks before the survey. However, only 66.6 per cent of schools had water from the same source throughout a school year.

More than eight out of ten (84.1 per cent) schools in urban areas had water available from their main source at the time of the survey, compared to 79.3 per cent of schools in rural areas. A similar pattern was observed with regard to the availability of water two weeks prior to the day of interview (82.4 per cent and 78.6 per cent for urban and rural schools, respectively) and throughout the school year (72.8 per cent and 64.7 per cent for urban and rural schools, respectively).

The results also show that secondary schools were more likely to have drinking water available from the main source at the time of interview (86.3 per cent) than primary schools (77.4 per cent). While there was no difference in terms of the availability of water throughout a school year between primary (66.7 per cent) and secondary schools (66.3 per cent), secondary schools were more likely to have water two weeks preceding the survey (81.8 per cent) than primary schools (78.3 per cent).

Significant differences were seen in the availability of water in schools with regard

to ownership status. Seventy-nine per cent of government-owned schools had water available from the main source at the time of the interview compared to 90.9 per cent of schools owned by non-government institutions. A similar pattern was observed with respect to the availability of water in the two weeks preceding the survey, whereby 92.9 per cent of non-government-owned schools and 77.1 per cent of government-owned schools had water available from the main source two weeks preceding the survey; and 84.9 per cent of non-government-owned secondary schools and 63.3 per cent of government-owned schools had water available from the main source throughout the school year.

The percentages of schools with drinking water from their main sources at the time of the survey ranged from 62.3 per cent in Simiyu Region to 92.0 per cent in Mjini Magharibi. While Mjini Magharibi remains the region with the highest percentage of schools having regular water on all days in the two weeks preceding the survey (93.0 per cent) and throughout the school year (86.0 per cent), Kaskazini Pemba had the lowest percentages (52.9 per cent and 24.3 per cent, respectively) (Table 4.4).

Table 4.4: Percentage of schools with drinking water currently available at the school, was available in the two weeks before the survey, and is available throughout a year by location, ownership, level of school, type of school, model of school and region, Tanzania, 2018

Background characteristics	Percentage of schools with drinking water from the main source:		
	available at the time of interview	available in the previous two weeks	available throughout the school year
Mainland/Zanzibar			
Mainland	80.2	79.5	66.5
Zanzibar	86.8	80.0	70.1
Location of School			
Rural	79.3	78.6	64.7
Urban	84.1	82.4	72.8
Level of School			
Primary school	77.4	78.3	66.7
Secondary school	86.3	81.8	66.3
Ownership Status			
Government	78.5	77.1	63.3
Non-Government	90.9	92.9	84.9
Type of school			
Girls only	76.7	89.0	91.6
Boys only	100	98.2	84.4
Mixed	80.2	79.0	65.8
Model of school			
Boarding school	88.7	94.4	87.1

(Continued)

(Continued)

Background characteristics	Percentage of schools with drinking water from the main source:		
	available at the time of interview	available in the previous two weeks	available throughout the school year
Day school	78.1	77.5	64.3
Both (Boarding and Day)	97.4	88.5	74.8
Region			
Dodoma	63.9	69.8	44.2
Arusha	83.9	84.5	69.3
Kilimanjaro	90.8	80.3	74.2
Tanga	78.4	81.0	82.2
Morogoro	82.5	79.4	67.7
Pwani	77.5	87.0	71.0
Dar es Salaam	76.9	86.4	79.5
Lindi	88.2	79.0	73.0
Mtwara	65.5	58.6	51.4
Ruvuma	90.8	86.2	69.6
Iringa	85.8	73.3	75.3
Mbeya	75.9	82.7	61.9
Singida	80.5	74.2	53.5
Tabora	72.4	77.4	50.4
Rukwa	78.5	80.9	79.9
Kigoma	79.7	65.6	53.0
Shinyanga	64.3	61.9	59.1
Kagera	81.8	89.8	67.9
Mwanza	76.1	80.5	63.1
Mara	88.9	69.5	42.4
Manyara	85.2	79.2	67.1
Njombe	86.0	89.5	81.9
Katavi	88.2	83.2	83.1
Simiyu	62.3	64.9	38.3
Geita	88.4	91.9	74.6
Songwe	79.7	89.5	79.6
Kaskazini Unguja	87.5	69.2	65.8
Kusini Unguja	83.8	86.6	79.3
Mjini Magharibi	92.0	93.0	86.0
Kaskazini Pemba	70.1	52.9	24.3
Kusini Pemba	91.9	78.4	71.6
Tanzania	**80.4**	**79.5**	**66.6**

4.4 Location of the School Water Source

Sixty-three per cent of the schools had their water sources on the school premises. This means that 37.0 per cent of the schools had their water sources off the school premises.

Schools in Zanzibar were more likely to have their water sources on their premises (78.5 per cent) than schools in the Mainland (62.9 per cent).

Eighty-four per cent of schools in urban areas had their water source located on the school premises as compared to 56.9 per cent of schools located in rural areas. About three quarter (75.3 per cent) of secondary schools and 57.3 per cent of primary schools had their water sources located on school premises.

The results further indicate that 59.8 per cent of government schools and 83.5 per cent non-government schools had their water sources on the school premises (Figure 4.2).

4.5 Treatment of Drinking Water

Figure 4.3 shows that 32.7 per cent of the primary and secondary schools in Tanzania treated their water prior to drinking. This means that more than two thirds (67.3 per cent) of schools in Tanzania did not treat their water prior to drinking.

On the other hand, only 32.0 per cent of schools in Tanzania Mainland and 53.3 per cent of those in Zanzibar treated their drinking water. About half of schools in urban areas (48.2 per cent) and slightly more than a quarter (27.8 per cent) of schools in rural areas treated their drinking water prior to drinking.

Significant differences in treating drinking water were observed in terms of ownership, whereby 77.3 per cent of the non-government schools treated their drinking water compared to only 24.7 per cent of the government schools (Figure 4.3).

Nevertheless, appropriate treatment methods (that is, boiling, filtration, solar disinfection, chlorination and flocculants) were mostly used by schools that treated water before consumption. The most commonly used methods were chlorination, boiling and filtration, which were being used by 50.4 per cent, 39.3 per cent and 8.5 per cent of schools, respectively (Figure 4.3). Boiling and chlorination were the most commonly used methods for water treatment across several background characteristics.

Figure 4.2: Percentage of schools with water source located on school premises by location, level of school and ownership status, Tanzania, 2018

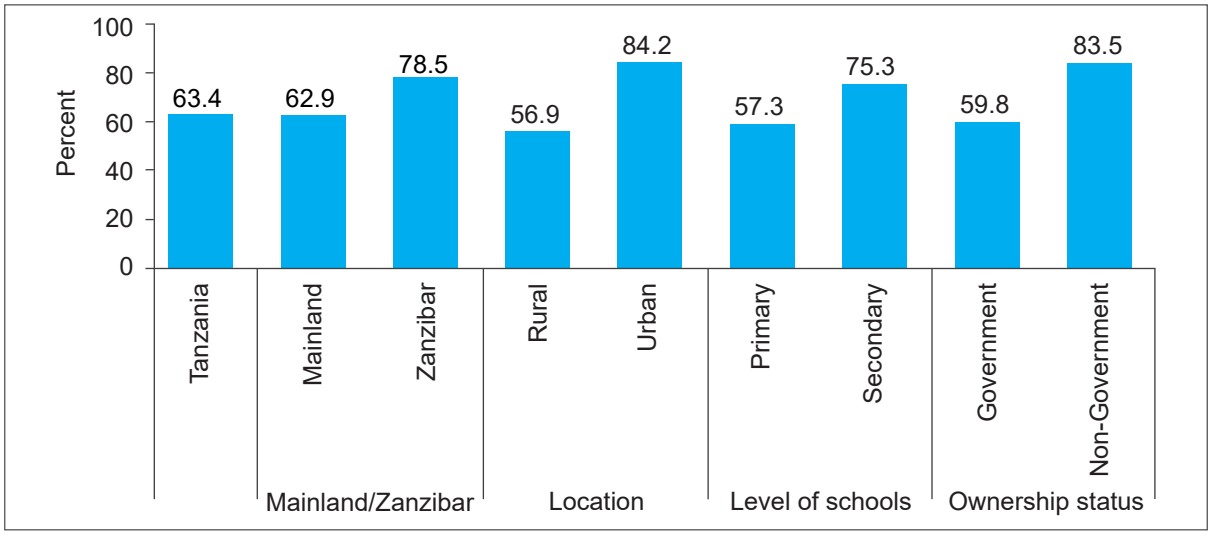


Figure 4.3: Percentage of schools that treated their water prior to drinking by location, level of school, model of school and ownership status, Tanzania, 2018

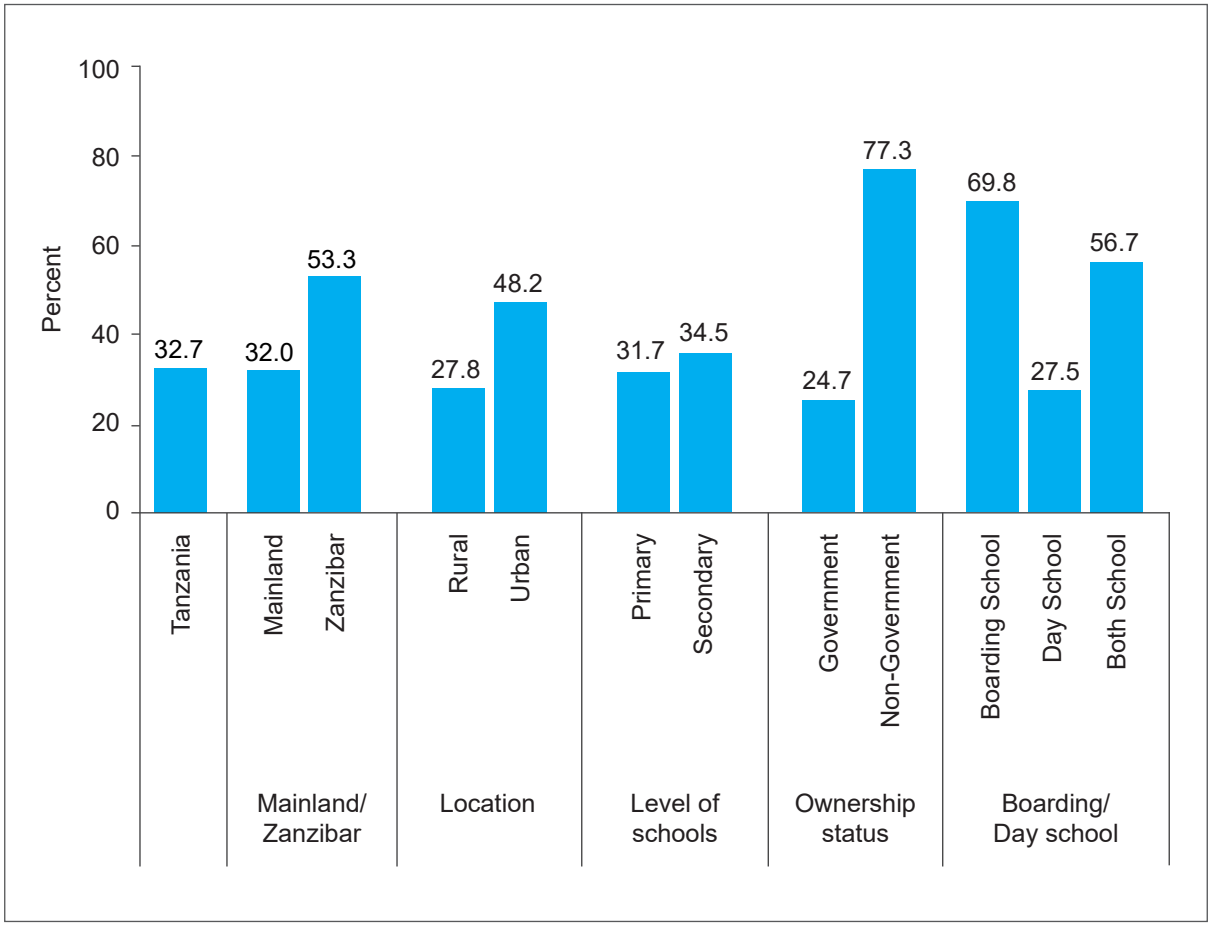


Table 4.5: Percentage of schools with water treatment method with regard to the location, level and ownership status of school, Tanzania, 2018

Water treatment types	Location		Level of schools		Ownership status		
	Rural	Urban	Primary school	Secondary school	Government	Non-Government	Tanzania
Filtration	8.4	8.7	9.8	6.1	7.7	9.9	8.5
Strain through a cloth	2.0	2.2	2.0	2.1	1.9	2.3	2.0
Boiling	43.6	31.2	40.6	36.8	37.8	41.9	39.3
Chlorination/ bleach e.g., water Guard	47.7	55.3	51.2	48.8	53.4	45.0	50.4
Solar disinfection	0.5	0.9	0.5	0.8	0.5	0.9	0.6
Let it stand or settle	1.1	0.7	0.8	1.2	1.0	0.9	1.0
Flocculant e.g., pure water purifier	3.2	9.9	3.1	9.9	2.5	11	5.5
Other	0.9	2.9	0.6	3.4	0.8	3.1	1.6
Don't know	0.0	0.5	0.3	0.0	0.3	0.0	0.2

4.6 Accessibility to Water Services to the Youngest Children and Pupils with Limited Mobility and Poor Vision

The 2018 Tanzania School WASH Assessment collected information on access to water services to the youngest children in primary schools and pupils with limited mobility or vision for both primary and secondary schools. The information was collected from the schools that had water sources.

Overall, the results show that in Tanzania, more than three quarters (75.8 per cent) of primary schools with a water source had drinking water accessible to the youngest children. On the other hand, 65.5 per cent of both primary and secondary schools had water sources that were accessible to pupils with limited mobility or vision (Table 4.6).

The findings also revealed that primary schools in Zanzibar were more likely to have their water sources accessible to youngest children (94.3 per cent) than those in Mainland Tanzania (75.3 per cent). Likewise, 85.0 per cent of schools in Zanzibar had water sources accessible to those with limited mobility or vision compared to 64.8 per cent of the schools in the Mainland.

Seventy-four per cent of primary schools in rural areas and 84.9 per cent of primary schools in urban areas had drinking water sources accessible to the youngest children. On the other hand, 62.6 per cent of schools (both primary and secondary schools combined) in rural areas and 74.7 per cent in urban areas had water sources accessible to pupils with limited mobility or vision.

Table 4.6: Percentage distribution of schools by location, level, ownership status and accessibility of drinking water facilities to the youngest children and those with limited mobility or vision, Tanzania, 2018

Background characteristics	Drinking water accessible to the youngest children at the school (Primary schools)	Number of schools	Drinking water accessible to pupils/students with limited mobility or vision (Primary and Secondary schools)	Number of schools
Mainland/Zanzibar				
Mainland	75.3	1,287	64.8	1,977
Zanzibar	94.3	37	85.0	63
Location of School				
Rural	73.7	1,074	62.6	1,555
Urban	84.9	250	74.7	485
Level of School				
Primary school	75.8	1,324	64.4	1,347
Secondary school	N/A	N/A	67.6	693
Ownership Status				
Government	74.8	1,201	64.1	1,731
Non-Government	85.8	123	73.2	309
Tanzania	**75.8**	**1,324**	**65.5**	**2,040**

Furthermore, there was no significant difference between primary and secondary schools with regard to having water sources accessible to pupils with limited mobility or vision (64.4 per cent versus 67.6 per cent).

More results show that non-government primary schools (85.8 per cent) were better equipped with water facilities accessible to the youngest children than government-owned primary schools (74.8 per cent). The same pattern was observed for schools with water sources accessible to pupils and students with limited mobility or vision (73.2 per cent for non-government schools and 64.1 per cent for government schools).

4.7 Utilization of School Water Facilities by Community

The 2018 Tanzania School WASH Assessment collected information on whether the community utilized school water services. The information collected includes collection of and payment for water from the schools' water sources by members of the community. In 31.8 per cent of schools in Tanzania, community members collected water from the school source and community members were paying for the water in about 15.7 per cent of the schools.

While it was more common for schools in Zanzibar to allow community members to collect water from the school sources (41.6 per cent) than for those in the Mainland (31.5 per cent), it was less common for the community to pay for water in Zanzibar (7.0 per cent) than in the Mainland (16.1 per cent).

The percentage of schools whose community utilized school water services was higher in rural areas (38.1 per cent) than in urban areas (18.4 per cent). While the rural percentage was slightly higher than the national average, the urban percentage was lower than the national average. The percentage of schools charging community members for water from school sources was almost the same for rural (15.9 per cent) and urban (14.7 per cent) schools.

The results further show that at school level, primary schools were more likely to have their communities utilizing school water services (35.2 per cent) than in secondary schools (26.9 per cent). However, 16 per cent of both primary and secondary schools were charging community members for the water collected from school water sources. On the other hand, community members were more likely to collect water from government school water sources (34.1 per cent) than in non-government school water sources (23.0 per cent) (Table 4.7).

Table 4.7: Percentage distribution of schools by location, ownership, model, level and community utilization of school water supply services, Tanzania, 2018

Background characteristics	Percentage of schools with:	
	Community members collecting water from the school water source	Community members paying for the school water they collect
Mainland/Zanzibar		
Mainland	31.5	16.1
Zanzibar	41.6	7.0
Location of School		
Rural	38.1	15.9
Urban	18.4	14.7
Level of School		
Primary school	35.2	15.8
Secondary school	26.9	15.5
Ownership Status		
Government	34.1	16.7
Non-Government	23.0	9.6
Model of School		
Boarding School	27.3	4.9
Day School	33.6	17.3
Both (Boarding and Day)	22.3	8.2
Tanzania	**31.8**	**15.7**

Chapter 5

SANITATION SERVICES

Adequate sanitation is a basic human right, and access to it for every person is compelling. It focuses on provision of facilities and services that ensure safe management of human excreta from the toilet to containment and storage, safe use and disposal to reduce adverse effects on users and other people. Improved sanitation services play an important role in ensuring dignity and achieving human right to sanitation, and has an important gendered aspect due to the different needs, in terms of privacy, dignity and safety of girls and boys. The lack of adequate sanitation is a major cause of infectious diseases, such as cholera, typhoid and dysentery among others. It impacts the well-being of students (especially of girls) in terms of school attendance, anxiety and safety.

Regardless of the general cleanliness and quality, sanitation facilities can be categorized as improved or unimproved. Improved sanitation facilities are those that have been designed to hygienically separate excreta from human contact. It includes flush/pour flush to piped sewer system, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets or pit latrines with slabs. Unimproved facilities include pit latrines without a slab or platform, hanging latrines and bucket latrines.

This section presents findings on types of sanitation, the availability and accessibility of single-sex toilets and usable/functional toilets, pupil/toilet ratio for boys and girls, location of sanitation facilities, toilet cleanliness and the presence of urinal facilities.

5.1 Types of Sanitation, Availability and Accessibility

The 2018 Tanzania School WASH Assessment also collected information on the provision of adequate sanitation in schools, including types of toilets commonly used. The findings revealed that 88.7 per cent of the schools used improved toilet facilities: flush/pour flush to piped sewer system, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets or pit latrines with slabs, regardless of the quality that categorises the facility offering basic sanitation services. The three most common types of toilet facilities in Tanzanian schools were: pit latrine with washable slabs (41.8 per cent), flush to pit latrines (19.7 per cent) and ventilated improved pit latrines (14.0 per cent) (Table 5.1).

Less than one per cent of schools in Tanzania had no toilet facilities. Since the policy of the Government clearly state that a school cannot be established without sanitation facilities, it should be noted that the absence of toilet facilities in this small number of schools could have been a temporary situation due to collapsing of the toilets as a result of rains or other reasons. Schools in Zanzibar were likely to use improved sanitation facilities (98.2 per cent) than schools in Mainland (88.4 per cent). Almost all schools in Zanzibar had some sort of a toilet facility. The use of improved sanitation facilities was higher in urban schools (96.0 per cent) than schools in rural areas (86.6 per cent). On the other hand, 12.8 per cent of schools in rural areas used unimproved toilet facilities compared to 3.9 per cent of schools in urban areas.

In terms of the school level, use of improved toilet facility was higher among secondary schools (95.9 per cent) than among primary schools (86.6 per cent). Thirteen per cent of primary schools used unimproved toilet facilities compared to only 4.1 per cent of secondary schools. All secondary schools had some type of toilet facility, while 0.6 per cent of the primary schools had no toilet facilities (Table 5.1).

Table 5.1: Percentage distribution of schools by type of sanitation facilities, location and level of school, Tanzania, 2018

Types of sanitation services	Tanzania	Tanzania mainland	Zanzibar	Rural	Urban	Primary school	Secondary school
Improved Sanitation	**88.7**	**88.4**	**98.2**	**86.6**	**96**	**86.6**	**95.9**
Flush to piped sewer system	1.0	0.9	4.3	0.5	2.8	0.5	2.0
Flush to septic tank	12.1	12.5	0.4	10.2	19.0	10.2	17.6
Flush to pit latrine	19.7	19.1	41.8	16.2	32.1	16.2	29.7
Ventilated improve pit latrine	14.0	13.5	32.7	12.6	19.1	12.6	16.7
Pit latrine with slab (washable)	41.8	42.5	19.0	47.2	23.1	47.2	30.0
Unimproved Sanitation	**10.9**	**11.1**	**1.8**	**12.8**	**3.9**	**12.8**	**4.1**
Flush to somewhere else	0.4	0.4	0.0	0.4	0.6	0.4	0.5
Pit latrine with slab not (not washable)	6.0	6.1	0.6	7.3	1.3	7.3	2.1
Pit latrine without slab/open pit	3.6	3.6	1.2	4.2	1.1	4.2	0.8
Other	0.9	0.9	0.0	0.9	0.9	0.9	0.6
No toilets or latrine/ bush/field	**0.5**	**0.5**	**0.0**	**0.6**	**0.1**	**0.6**	**0.0**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

5.2 Sanitation Services According to the JMP Classifications

As is the case with water services, WHO/ UNICEF JMP ladder classifications for sanitation services are categorized into three levels: basic sanitation service, limited sanitation service and no sanitation service.

The school is categorized as having basic sanitation service if it has improved and single-sex sanitation facilities, usable at the time of the survey. Usable means sanitation facilities should be available, functional and private. Limited sanitation service means improved sanitation facilities at the school that are either not single-sex or not usable at the time of the survey. No service means toilet facilities are unimproved (pit latrines without a slab or platform, hanging latrines and bucket latrines), or there are no toilets or latrines in the school at all. Information on types of facilities for the surveyed schools was verified against the observations data as reported by the interviewers.

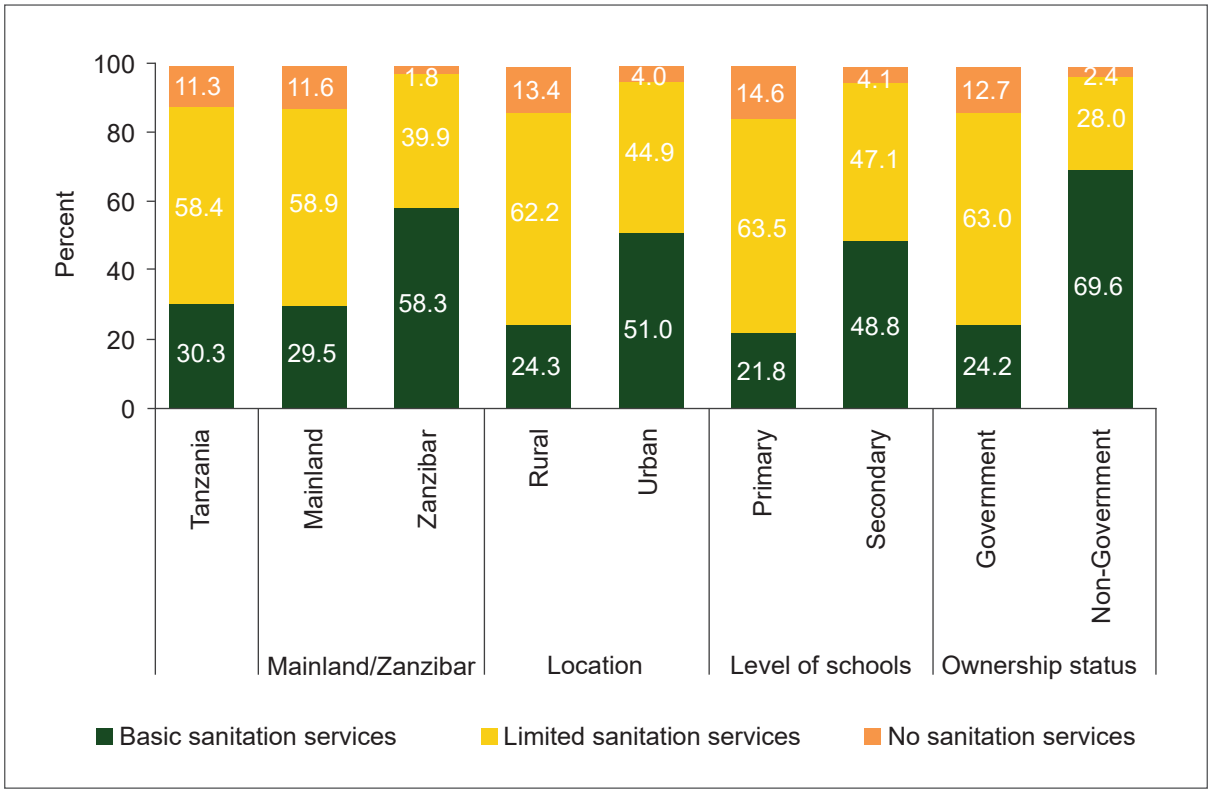
As reported in the observation questionnaire, usability of toilets looked into the quality of sanitation facilities. Adequate sanitation

services offer safety, dignity and privacy to users (pupils/students). Qualitative assessment was done in terms of functioning doors and windows, cleanliness (toilets without smells, faeces, flies), structure of the building (no cracks, visible holes or unstable) and state of the platform/slab (secured, without holes, no erosion or not safe). Information on the quality of sanitation services is available from observation data.

By factoring in the quality elements, the 2018 Tanzania School WASH Assessment findings show that more than half of the primary and secondary schools in Tanzania (58.4 per cent) had limited sanitation services, meaning that they had improved sanitation facilities that were either not single-sex or not usable. It should be noted that almost all school toilets were single-sex, therefore the largest percentage of limited sanitation is attributable to the usability of toilets, rather than to non-single-sex toilet facilities. Almost a third of those schools (30.3 per cent) had improved single-sex sanitation facilities usable at the time of the assessment and was hence classified as providing basic sanitation services. Furthermore, 11.3 per cent of schools were classified as having no sanitation services, meaning that they used unimproved facilities, such as pit latrines without a slab, or had no sanitation facility at all.

The assessment on sanitation showed that more than a half of schools in Zanzibar (58.3 per cent) had basic sanitation services compared to 29.5 per cent of those in Mainland. On the other hand, schools in Tanzania Mainland were more likely to have both limited and no sanitation services (58.9 per cent and 11.6 per cent, respectively) than schools in Zanzibar (39.9 per cent and 1.8 per cent, respectively) (Figure 5.1).

Figure 5.1: Percentage distribution of schools with basic sanitation services, limited sanitation services and no sanitation services by location, level and ownership status, Tanzania, 2018



Slightly more than five out of ten schools in urban areas (51.0 per cent) had basic sanitation services compared to about two out of ten schools in rural areas (24.3 per cent). About 13 per cent of rural schools however, were found having no sanitation services compared to about four per cent of urban schools.

Almost two thirds of the primary schools (63.5 per cent) and 47.1 per cent of secondary schools had limited sanitation services. About 48.8 per cent of secondary schools offered basic sanitation services compared to 21.8 per cent of primary schools. Furthermore, primary schools were more likely to have no sanitation services (14.6 per cent) than secondary schools (4.1 per cent).

With regard to ownership status, the use of basic sanitation services was much higher among schools managed by non-government institutions (69.6 per cent) than those managed by the Government (24.2 per cent). Majority of government-owned school had limited sanitation services (63.0 per cent) and 12.7 per cent had no sanitation services. About 2.4 per cent of non-government schools had no sanitation services and 28.0 per cent had limited sanitation services.

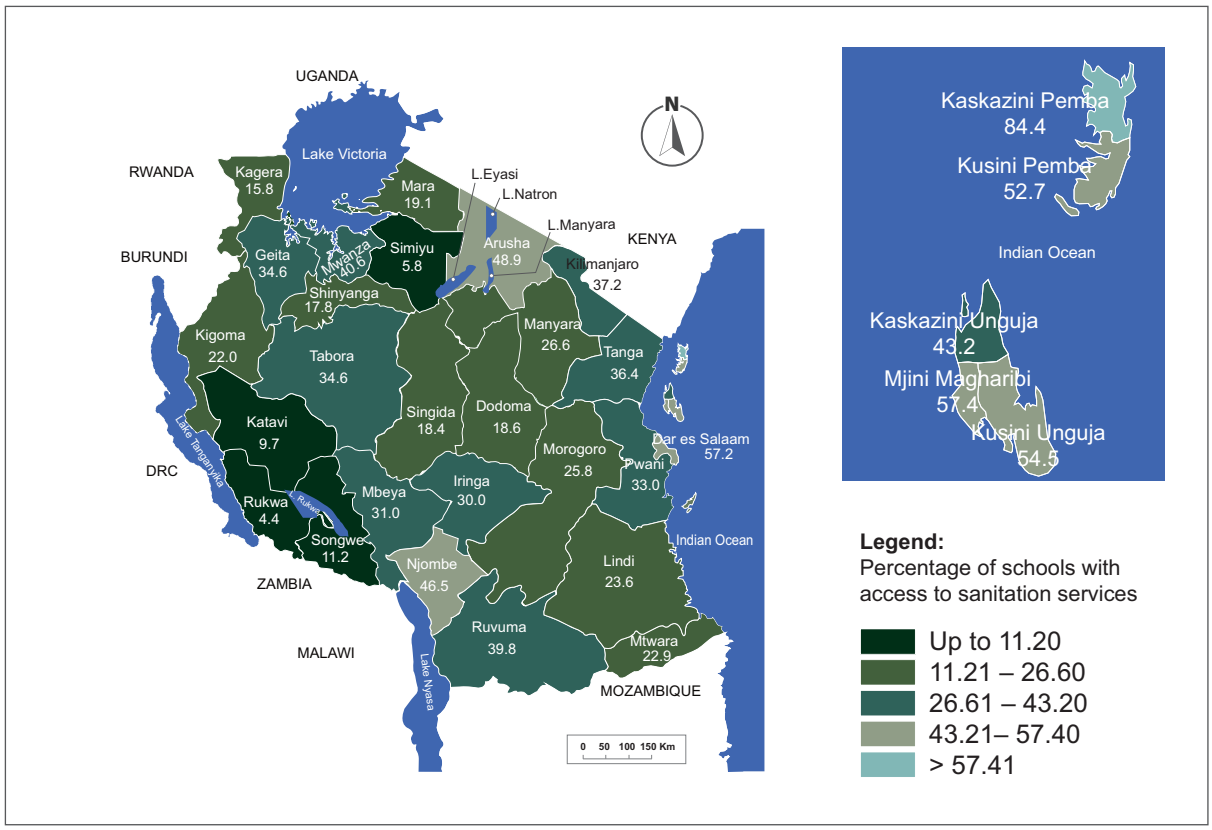
More than two thirds of boarding schools (66.7 per cent) and 70.2 per cent of schools with both boarding and day facilities had basic sanitation services compared to only a quarter (24.5 per cent) of the day schools. Day schools on the other hand, were more likely to have a higher percentage of limited sanitation services (62.9 per cent) compared to boarding schools (28.1 per cent), and schools with both day and boarding facilities (28.5 per cent). More than one out of ten day schools (12.6 per cent) had no sanitation services (Table 5.2).

There were marked regional disparities in the availability of basic sanitation services among schools, whereby the percentage of schools with basic sanitation services ranged from 4.4 per cent in Rukwa Region to 84.4 per cent in Kaskazini Pemba Region (Map 5.1). Moreover, five regions had more than 50.0 per cent of schools with basic sanitation services: Kaskazini Pemba (84.4 per cent), Mjini Magharibi (57.4 per cent), Dar es Salaam (57.2 per cent), Kusini Unguja (54.5 per cent) and Kusini Pemba (52.7 per cent). The rest of the regions had less than 50.0 per cent of the schools with basic sanitation services. Regions with relatively smaller percentages of schools with basic sanitation services were:

Table 5.2: Percentage of schools with basic sanitation, limited sanitation and no sanitation services by type and model of school, Tanzania, 2018

Background characteristics	Basic sanitation services	Limited sanitation services	No sanitation services	Number of schools
Type of school				
Girls only	93.7	6.3	0.0	40
Boys only	65.2	21.4	13.4	30
Mixed	28.7	59.8	11.5	2,315
Model of School				
Boarding School	66.7	28.1	5.1	127
Day School	24.5	62.9	12.6	2,077
Both (Boarding and Day)	70.2	28.5	1.3	181
Tanzania	**30.3**	**58.4**	**11.3**	**2,385**

Map 5.1: Percentage of schools with basic sanitation services by region, Tanzania, 2018



Rukwa (4.4 per cent), Simiyu (5.8 per cent), Katavi (9.7 per cent), Songwe (11.2 per cent) and Kagera (15.8 per cent).

5.3 Use of Improved Single-Sex and Improved Usable/ Functional Toilets

Single-sex sanitation facilities mean that the toilets are separated for boys and girls, while usable means sanitation facilities are available for use, functional and private.

Table 5.3 provides more information on the percentage of schools with improved sanitation, improved and usable sanitation, improved and single-sex sanitation, and improved, usable and single-sex sanitation services in terms of different background characteristics. The use of improved and improved usable and single-sex sanitation (basic sanitation) has been explained in parts 5.1 and 5.2.

This part presents findings with respect to **"improved and usable sanitation"** and **"improved and single-sex sanitation"** attributes.

Generally, most of the schools in Tanzania had improved and single-sex sanitation facilities with toilets separated for boys and girls (82.6 per cent). However, the percentage of toilets that were usable was much lower (32.5 per cent) (Table 5.3).

Across all background characteristics, there seem to be slight variations in terms of the availability of single-sex improved sanitation facilities. However, differences were observed in the case of improved and usable sanitation facilities. For example, the percentage of improved and usable toilets in Zanzibar was

almost twice that of the Mainland (58.3 per cent against 29.5 per cent). A similar pattern was observed for schools in rural and urban areas (24.3 per cent against 51.0 per cent) and in terms of the level of school (21.8 per cent for primary school and 48.8 per cent for secondary schools).

Significant differences were also observed in terms of ownership status of schools. While only about two out of ten (26.1 per cent) government schools had improved and usable sanitation facilities, almost seven out of ten (74.6 per cent) non-government schools had improved and usable sanitation facilities.

Table 5.3: Percentage of schools with improved sanitation, improved and usable sanitation, improved and single-sex sanitation, and improved usable and single-sex sanitation facilities by background characteristics, Tanzania, 2018

Background characteristics	Improved sanitation	Improved usable sanitation	Improved and single-sex sanitation	Improved, usable and single-sex sanitation (Basic sanitation)	Number of schools
Mainland/Zanzibar					
Mainland	88.4	31.6	82.5	29.5	2,320
Zanzibar	98.2	67.4	84.2	58.3	65
Location of School					
Rural	86.6	26.2	80.9	24.3	1,857
Urban	96.0	54.8	88.6	51.0	528
Level of School					
Primary school	85.4	23.3	79.6	21.8	1,640
Secondary school	95.9	53.0	89.1	48.8	745
Ownership Status					
Government	87.3	26.1	81.3	24.2	2,069
Non-Government	97.6	74.6	90.8	69.6	316
Type of School					
Girls only	100.0	93.7	96.6	93.7	40
Boys only	86.6	65.2	86.6	65.2	30
Mixed	88.5	31.1	82.3	28.7	2,315
Model of School					
Boarding school	94.9	74.0	84.7	66.7	127
Day school	87.4	26.4	81.5	24.5	2,077
Boarding and day	98.7	73.9	93.3	70.2	181
Tanzania	**88.7**	**32.5**	**82.6**	**30.3**	**2,385**

5.4 Accessibility to Sanitation Services to the Youngest Children (in primary schools) and Children with Physical Disability and Impaired Vision

Availability and accessibility of toilets/latrine facilities to the youngest children in primary schools and pupils/students with physical disability or limited vision in all schools contribute to increased enrolment, retention and completion for these two groups.

The findings from the assessment show that only 26.0 per cent of primary schools in Tanzania had at least one usable toilet that was accessible to the youngest pupils. Likewise, only 12.2 per cent of schools in Tanzania (both primary and secondary) had at least one usable toilet accessible to pupils/students with physical disability or impaired vision (Table 5.4).

In Zanzibar, 49.0 per cent of schools had at least one usable toilet accessible to pupils with physical disability or impaired vision. Furthermore, the findings indicate that 70.3 per cent of primary schools (in Zanzibar) had at least one toilet/latrine accessible to the

Table 5.4: Percentage of schools with at least one usable toilet accessible to the youngest children and pupils with physical disability impaired vision by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools with			
	At least one usable toilet/latrine that is accessible to the youngest pupils (Primary schools only)		At least one usable toilet/latrine that is accessible to the pupil with physical disability or impaired vision (Primary and Secondary schools)	
	Percentage	Number of schools	Percentage	Number of schools
Mainland/Zanzibar				
Mainland	24.9	1,574	11.2	2,320
Zanzibar	70.3	38	49.0	65
Location of School				
Rural	23.0	1,328	10.6	1,857
Urban	39.7	284	17.6	528
Level of school				
Primary school	26.0	1,612	10.3	1,640
Secondary school	N/A	N/A	16.2	745
Ownership status				
Government	22.9	1,485	11.1	2,069
Non-Government	62.1	127	19.4	316
Tanzania	**26.0**	**1,612**	**12.2**	**2,385**

youngest pupils. On the other hand, 11.2 per cent of both primary and secondary schools in Tanzania Mainland had at least one usable toilet accessible to pupils with physical disability or impaired vision, while 24.9 per cent of primary schools had at least one toilet/latrine accessible to the youngest pupils.

Presence of at least one usable toilet accessible to pupils with physical disability or impaired vision was higher in urban schools (17.6 per cent) than in rural schools (10.6 per cent). A similar pattern was observed for primary schools with at least one usable toilet/latrine accessible to the youngest pupils (39.7 per cent for urban and 23.0 per cent for rural schools). Also, availability of at least one usable toilet/latrine that was accessible to pupils with physical disability or impaired vision was much higher in secondary schools (16.2 per cent) than in primary schools (10.3 per cent).

More than six out of ten (62.1 per cent) non-government primary schools had at least one usable toilet/latrine that was accessible to the youngest children compared to 22.9 per cent of government-owned schools. Similarly, non-government schools were more likely to have at least one usable toilet/latrine that was accessible to pupils with physical disability or impaired vision (19.4 per cent) compared to government-owned schools (11.1 per cent).

5.5 Pupils Drop Hole Ratio

In order to ensure provision of quality education in the country, the Government of Tanzania has set Basic Standards[9] in education delivery that are to be adhered to by all education providers and stakeholders. These Basic Education Standards articulate the necessary educational inputs required to ensure the provision of quality education on an equitable basis throughout the country. One of the indicators under the infrastructure standards is the number of pupils/students who can use or are using one toilet (pupils to latrine ratio). The agreed standard is at least one drop hole/stance for 20 girls and one drop hole for 25 boys and special toilets for pupils with disability.

The 2018 School WASH survey examined the extent to which this standard was being observed; where it established that only 27.5 per cent of schools in Tanzania met the minimum standards for pupils per drop hole ratio (Figure 5.2).

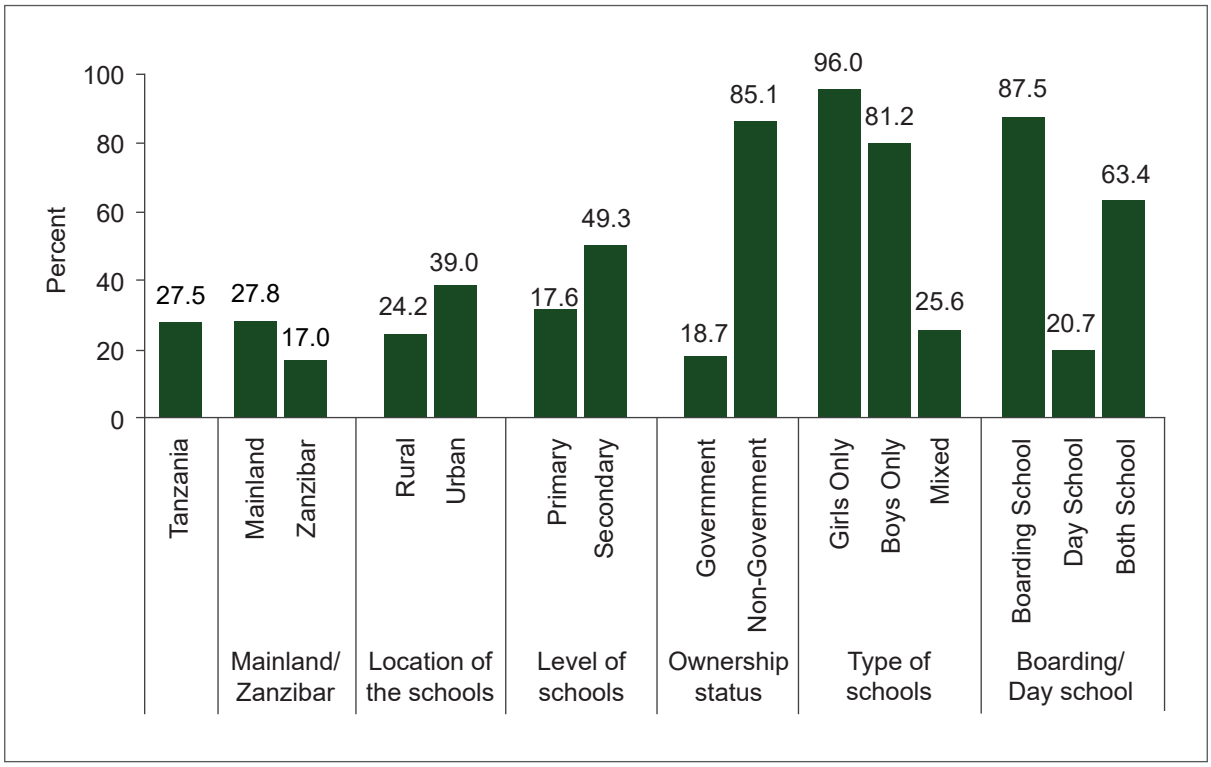
Twenty-eight per cent of schools in Tanzania Mainland had met the recommended pupil per drop hole ratio compared to 17.0 per cent of schools in Zanzibar. On the other hand, urban schools were more likely to meet the recommended pupils per drop hole ratio (38.9 per cent) than schools in rural areas (24.2 per cent).

Significant differences in pupils per drop hole ratio were found with respect to the level and ownership of schools. Pupils per drop hole ratio for secondary schools (49.3 per cent) was much higher than for primary schools (17.6 per cent). Furthermore, only two out of ten government-owned schools (18.7 per cent) met the recommended number of pupils per drop hole ratio compared to eight out of ten non-government-owned schools (85.1 per cent). Ninety-six per cent of all-girls schools and 81.2 per cent of all-boys schools met the recommended pupils per drop hole ratio.

Significant differences also existed in terms of the number of pupils per drop hole ratio across regions. While the largest percentage of schools that met the recommended number

[9] Basic Standards for Pre-Primary and Primary Education in Tanzania, URT 2009.

Figure 5.2: Percentage of schools that meet the recommended number of pupils per drop hole ratio by level of school, model of school, location and school ownership status, Tanzania, 2018



of pupils per drop hole ratio was found in Kilimanjaro Region (65.9 per cent), the smallest percentage was found in Kaskazini Pemba Region (2.9 per cent) (Figure 5.3).

Findings of the 2018 School WASH Assessment indicate that on average, in Tanzania, 57 girls and 63 boys use one drop hole, way above the government norm of 20 girls and 25 boys per drop hole.

Schools in Zanzibar had the highest mean number of pupils/students per drop hole (111 girls and 114 boys) compared to schools in Tanzania Mainland (56 girls and 61 boys). There were no significant differences in the average number of pupils per one drop hole between schools in rural areas (58 girls and 63 boys) and schools in urban areas (55 girls and 61 boys).

Furthermore, primary schools in Tanzania had more children that use one drop hole (average of 67 girls and 73 boys) compared to 35 girls and 39 boys in secondary schools.

Significant gap on the average number of pupils/students per drop hole was observed between non-government and government schools. The average in non-government schools was 15 girls and 17 boys compared to 63 girls and 69 boys in government owned schools. On average, almost all non-government schools surveyed meet the government minimum standard of number of pupils/students per drop hole.

Sufficiency of pupil to drop hole ratio varied greatly across regions of Tanzania. In Mainland, Kilimanjaro Region is well served in this regard, with an average of 23 girls and 25 boys per drop hole, while Simiyu Region is the least served where one drop hole serves 102 girls and 120 boys, respectively. On the other hand, all regions in Zanzibar had schools with more than average of 75 pupils per drop hole, with Kaskazini Pemba Region having a ratio of 174 girls and 172 boys. Such high number of users places a heavy burden on existing

Figure 5.3: Percentage of schools that meet the recommended number of pupils per drop hole ratio by region, Tanzania, 2018

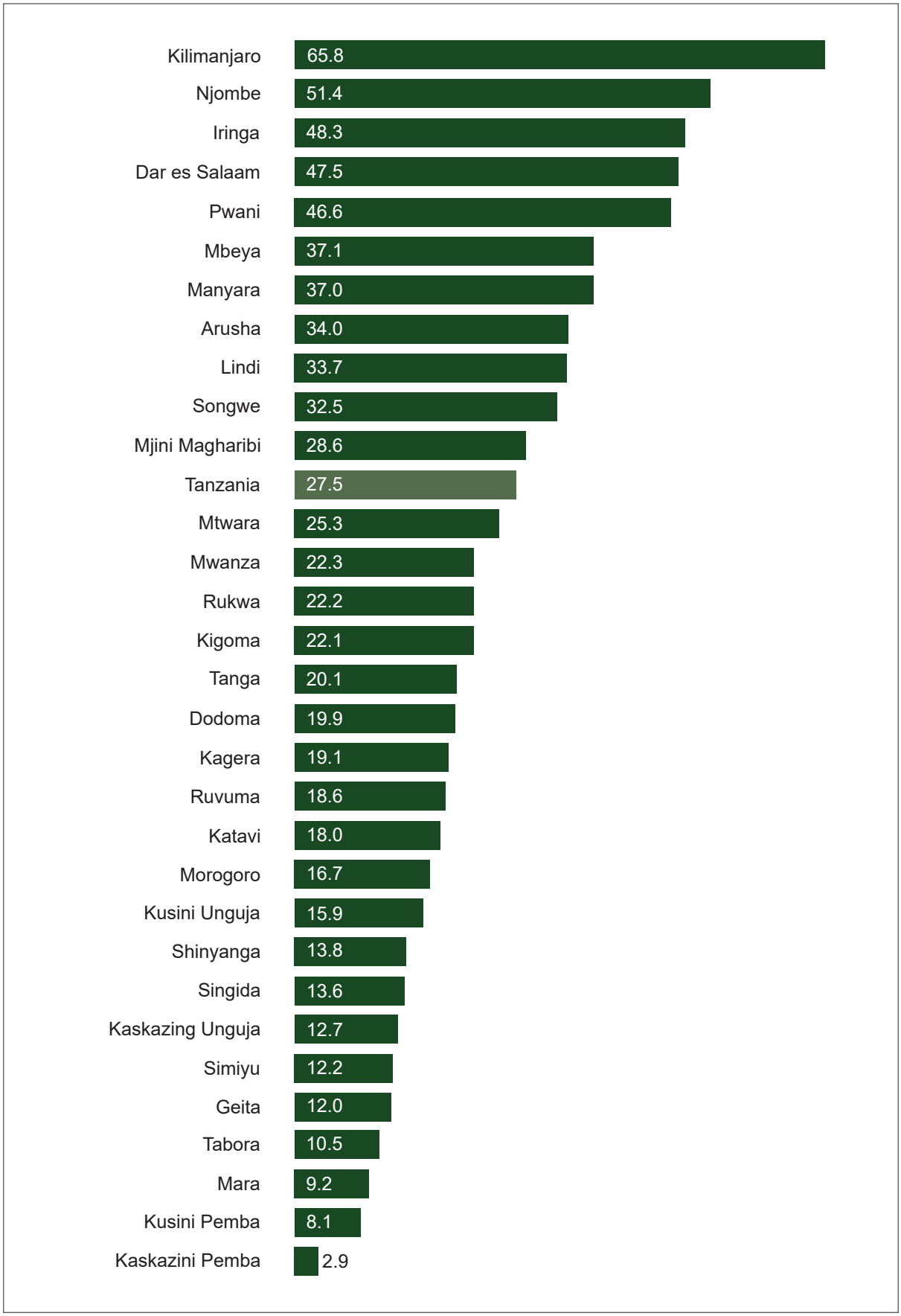


Table 5.5: Average number of pupils/students per drop hole by location, level of school, ownership, model of school and region, Tanzania, 2018

Background characteristics	Mean number of pupils/students per hole		Number of schools
	Girls	Boys	
Mainland/Zanzibar			
Mainland	56	61	2,320
Zanzibar	111	114	65
Location of School			
Rural	58	63	1,857
Urban	55	61	528
Level of School			
Primary school	67	73	1,640
Secondary school	35	39	745
Ownership Status			
Government	63	69	2,069
Non-Government	15	17	316
Model of School			
Boarding School	11	15	127
Day School	62	68	2,077
Both (Boarding and Day)	28	27	181
Region			
Dodoma	55	61	102
Arusha	34	37	105
Kilimanjaro	23	25	131
Tanga	54	59	135
Morogoro	54	59	121
Pwani	35	39	102
Dar es Salaam	56	66	109
Lindi	45	48	72
Mtwara	46	47	83
Ruvuma	47	48	106
Iringa	30	33	68
Mbeya	41	40	96
Singida	64	66	69
Tabora	80	85	101
Rukwa	58	68	48

(Continued)

(Continued)

Background characteristics	Mean number of pupils/students per hole		Number of schools
	Girls	Boys	
Kigoma	69	87	83
Shinyanga	82	88	72
Kagera	60	65	127
Mwanza	79	90	124
Mara	62	74	106
Manyara	54	45	84
Njombe	26	31	64
Katavi	98	110	26
Simiyu	102	120	66
Geita	95	97	69
Songwe	49	52	51
Kaskazini Unguja	91	114	9
Kusini Unguja	77	77	9
Mjini Magharibi	97	90	25
Kaskazini Pemba	174	172	10
Kusini Pemba	133	147	12
Tanzania	**57**	**63**	**2,385**

facilities, making maintenance challenging and also discouraging usage of the toilet facilities by pupils/students (Table 5.5).

5.6 Location of Sanitation Facilities

The 2018 School WASH Assessment investigated the location of the sanitation facilities to assess how convenient it was for its users. Sanitation facilities for a majority of schools in Tanzania schools were located within the school buildings or outside the school buildings, but on the school premises (97.8 per cent). Only 2.2 per cent of them were located off the premises (Table 5.6).

The pattern was almost the same for all other background characteristics as shown in Table 5.6 except for ownership status, where the findings indicate that 9.7 per cent of non-government schools had their toilets located off schools' premises compared to only 1.1 per cent of government-owned schools.

5.7 Cleanliness of Toilets in Schools

Having a toilet in place does not necessarily mean that people will use it. The toilet may not function, not being maintained or may be unhygienic, compelling people into avoiding them. In schools and other public places, it is very important to keep toilets clean to encourage children to use, and for them to enjoy their basic rights to adequate sanitation and better learning environment.

In light of this, the 2018 School WASH Assessment asked respondents to provide their views on how clean their school toilets were. Interviewers also used their own observations to confirm the views provided by

Table 5.6: Percentage on the location of sanitation facilities in schools by location, ownership status, and level of school, Tanzania, 2018

Background characteristics	Within school building/outside building, but on premises	Off premises/in and out of the building	Number of schools
Mainland/Zanzibar			
Mainland	97.8	2.2	2,320
Zanzibar	95.1	4.9	65
Location of School			
Rural	98.5	1.5	1,857
Urban	95.2	4.8	528
Level of School			
Primary school	99.2	0.8	1,640
Secondary school	94.7	5.3	745
Ownership Status			
Government	98.9	1.1	2,069
Non-Government	90.3	9.7	316
Tanzania	**97.8**	**2.2**	**2,385**

the respondents. The responses were divided into four categories – very clean, clean, somewhat clean and not clean.

Overall, it was observed that only 9.4 per cent of school toilets were very clean, 43.9 per cent were considered clean, 43.5 per cent were regarded as somewhat clean, while 3.2 per cent of the toilets were found to be not clean.

Toilets in urban schools were more likely to be very clean (17.3 per cent) and clean (48.1 per cent) compared to (7.2 per cent and 42.7 per cent respectively) of schools in rural areas. A similar pattern was observed for secondary schools where 13.6 per cent of toilets were observed as very clean and 47.3 per cent were observed as clean whereas, for primary schools, 7.6 per cent were observed as very clean and 42.3 per cent as clean. In terms of the ownership status, non-government schools had 30.5 per cent very clean toilets and 50.2 per cent clean toilets compared to 6.2 per cent and 42.9 per cent respectively in government schools. Significant disparity was observed in terms of the very clean toilets category with respect to type of school. About 51.4 per cent of toilets in all-girls' schools were found to be very clean compared to a meagre 5.7 per cent in all-boys schools. Only 8.8 per cent of toilets in co-education schools were very clean. (Table 5.7).

5.8 Methods Used to Empty Filled-up Latrines/Toilets

Providing adequate sanitation does not end with building toilets. On-site systems will eventually reach a limit capacity – excreta will decompose in the pit and the pit will fill up, which will then have to be emptied. Filled-up toilets will become unusable, which will leave schools without basic sanitation and this might lead to health hazards.

Table 5.7: Percentage of schools by perception of cleanliness of the students' toilets, by location, ownership status, level of school, type of school and model of school, Tanzania, 2018

Background characteristics	Very clean	Clean	Somewhat clean	Not clean	Number of schools
Mainland/Zanzibar					
Mainland	9.2	43.9	43.8	3.1	2,320
Zanzibar	19.6	43.3	31.9	5.2	65
Location of School					
Rural	7.2	42.7	46.8	3.3	1,857
Urban	17.3	48.1	31.7	2.8	528
Level of School					
Primary school	7.6	42.3	46.3	3.8	1,640
Secondary school	13.6	47.3	37.2	1.9	745
Ownership Status					
Government	6.2	42.9	47.3	3.6	2,069
Non-Government	30.5	50.2	18.7	0.7	316
Type of School					
Girls only	51.4	35.4	13.3	0.0	40
Boys only	5.7	64.4	29.9	0.0	30
Mixed	8.8	43.8	44.2	3.3	2,315
Model of School					
Boarding School	27.4	49.9	22.8	0.0	127
Day School	6.9	42.8	46.7	3.6	2,077
Both (Boarding and Day)	26.1	51.8	20.9	1.2	181
Tanzania	**9.4**	**43.9**	**43.5**	**3.2**	**2,385**

Choosing the most appropriate and effective emptying mechanisms for safe and hygienic containment of excreta is very important to prevent diseases and protect users. Emptying excreta from a pit is an unpleasant task and can be extremely hazardous, both in terms of public health and safety. Considering this importance, the 2018 School WASH Assessment investigated methods that were commonly employed by schools for emptying filled-up toilets.

The results indicate that, the most common method used to empty filled-up toilets/latrines in Tanzanian schools was digging a new pit (46.9 per cent), followed by tank collectors (40.3 per cent). While the most common method for emptying toilets in Tanzania Mainland was digging new pits (47.4 per cent), use of gulpers/tank collectors to empty filled-up toilets/latrines was the most commonly used method in Zanzibar (59.7 per cent).

Table 5.8: Percentage of schools by methods used to empty filled-up latrines, Tanzania, 2018

Types of methods	Tanzania	Mainland	Zanzibar	Rural	Urban
Gulpers/Tank collectors	40.3	39.9	59.7	22.4	78.6
Digging in new pits	46.9	47.4	20.6	63.0	12.6
Manually emptied	6.6	6.4	19.7	7.0	5.8
Other	6.2	6.3	0.0	7.7	3.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

About 79 per cent of urban schools mainly used gulpers/tank collectors to empty filled-up toilets/latrines compared to 63.0 per cent of rural schools that mainly dug new pits to replace filled-up toilets. (Table 5.8).

5.9 Presence of Urinal Facilities

Generally, the use of urinals in Tanzanian schools was low. About 2.7 per cent of schools reported to having urinals for both girls and boys. While 21.7 per cent of schools reported to having urinal facilities for boys, less than one per cent (0.5 per cent) of schools had urinal facilities for girls. Urinals were not common in Zanzibar as 94.7 per cent of schools reported to having no urinals for their students.

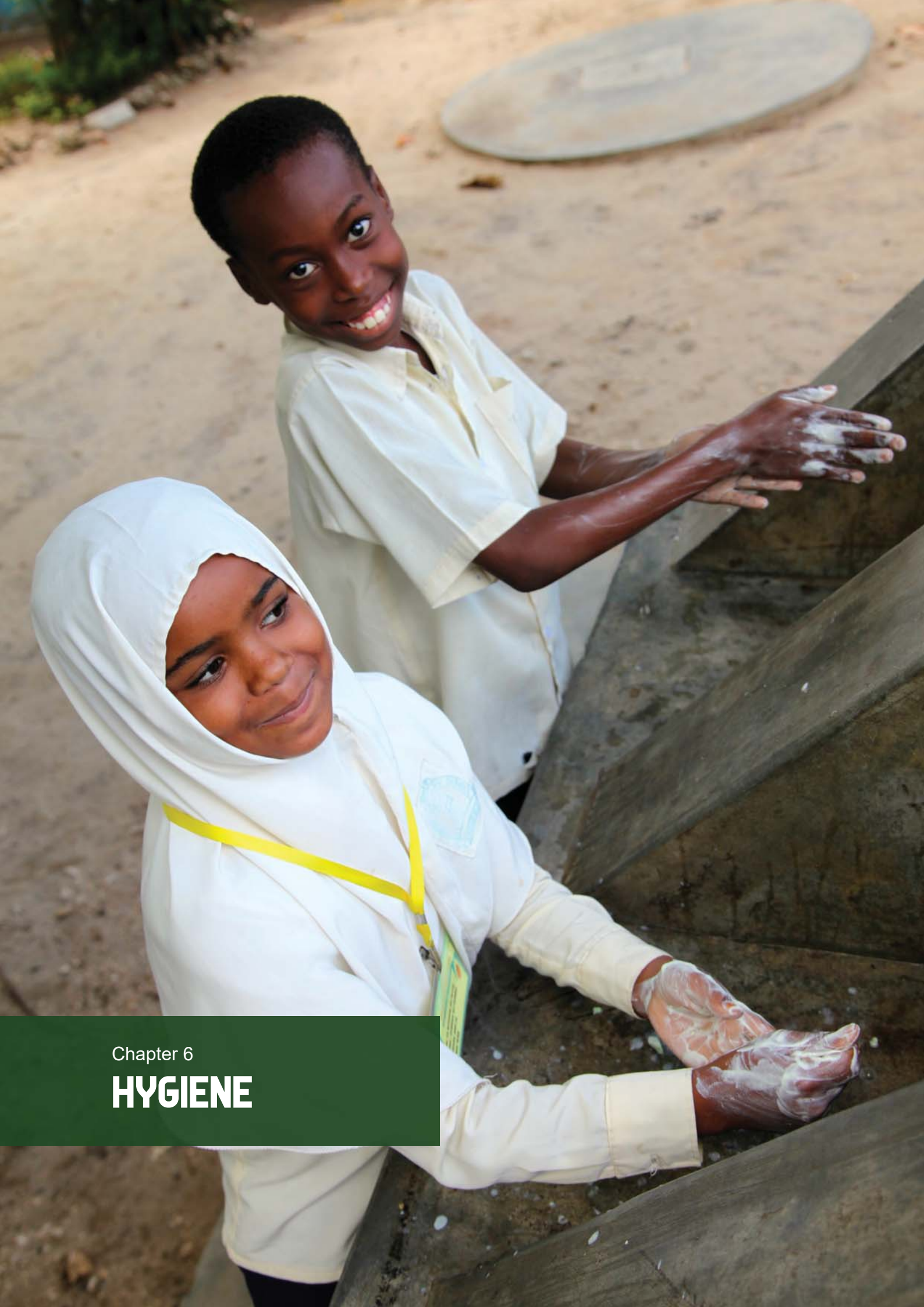
Schools in urban areas (34.4 per cent) were more likely to have urinals for boys compared to schools in rural areas (18.1 per cent). Urinal facilities for boys were more common in secondary schools (27.2 per cent) than in primary school (19.2 per cent).

Thirty-seven per cent of non-government-owned schools had urinal facilities for boys compared to 19.3 per cent of government-owned schools (Table 5.9).

Table 5.9: Percentage of schools with urinal facilities by location, level, ownership status, type and model of school, Tanzania, 2018

Background characteristics	Availability of urinals for:				Number of schools
	Girls students	Boys students	Both for boys and girls students	No urinals	
Mainland/Zanzibar					
Mainland	0.5	22.2	2.7	74.6	2,310
Zanzibar	0.0	5.3	0.0	94.7	65
Location of School					
Rural	0.2	18.1	2.4	79.4	1,848
Urban	1.5	34.4	3.6	60.5	527
Level of School					
Primary school	0.2	19.2	3.1	77.5	1,630
Secondary school	1.1	27.2	1.8	70.0	745
Ownership Status					
Government	0.3	19.3	2.2	78.1	2,059
Non-Government	1.4	37.4	5.5	55.7	316
Type of School					
Girls only	1.6	0.0	0.0	98.4	40
Boys only	0.0	56.6	0.0	43.4	30
Mixed	0.5	21.7	2.7	75.2	2,305
Model of School					
Boarding School	0.5	36.3	1.7	61.5	127
Day School	0.4	19.6	2.5	77.5	2,077
Both (Boarding and Day)	1.2	36.2	5.1	57.5	181
Tanzania	**0.5**	**21.7**	**2.7**	**75.2**	**2,375**

Note: 10 schools had missing information on the presence of urinals



Chapter 6

HYGIENE

Promoting hygiene is a key intervention in schools. It encourages a child to practise good hygiene early on, both in school and at home, and this fosters healthy behaviours for life. The success of any school WASH intervention will not be determined by the number of constructed toilets or the number of hand pumps or water systems installed. It is largely predicated on, and determined by, what students practise. Key hygiene interventions include teacher training, formation and training of SWASH clubs, and teaching hygiene education. The main aim of forming and strengthening school WASH clubs is to foster positive attitudes towards good hygiene practices and proper use and maintenance of WASH facilities in schools.

Good and effective education about hygiene is as important as good water supply systems or sanitary facilities. Life skills-based hygiene education allows children to learn about water and sanitation related behaviours and how these lead to good or bad health. The idea is that when children understand and think together about their situations and practices, they can plan and act to prevent diseases, now and in the future. Global experience has shown that children are enthusiastic promoters of their newly acquired hygiene skills and can potentially be effective agents of change within their homes and communities. If messaging and practices are consistent with the cultural environment, children's advocacy can lead to better hygiene practices at homes and in communities.

This section presents findings of the 2018 Tanzania School WASH Assessment on hygiene, paying particular attention to two major components: hand hygiene and menstrual hygiene management (MHM).

Hand hygiene involves any action of hand cleansing, especially washing hands with soap and water to avoid the growth of germs on hands. The practices of hand hygiene are performed by teachers, pupil and other staff within the school environment. However, hand hygiene can be practised only if handwashing facilities are in a proper condition and are maintained regularly.

6.1 Presence of Handwashing Facilities

Handwashing facilities in schools refer to any infrastructure (fixed or mobile) that enables students to wash their hands effectively using running water from piped water with taps, sink with tap, water tank with tap, bucket with tap, and tippy tap among others. A shared bucket used for dipping hands is not considered an effective handwashing facility.

Table 6.1 provides information on the percentage of schools that were reported and observed to have handwashing facilities with regard to location, level of school, ownership, type of school, and model of school and region. Generally, findings from observations are always less than the reported ones for all background characteristics.

The 2018 School WASH Assessment findings show that handwashing facilities were present in more than six out of ten (63.8 per cent) schools in Tanzania. The percentage of schools reported to having handwashing facilities was higher in Zanzibar (78.1 per cent) than in Tanzania Mainland (63.4 per cent).

Presence of handwashing facilities were more likely in urban schools (75.3 per cent) than schools in rural areas (60.6 per cent). On the other hand, there were small differences, with regard to presence of handwashing facilities, between primary schools (63.1 per cent) and secondary schools (65.5 per cent). Handwashing facilities seem to be more common in non-government schools (89.2 per cent) than in government schools (60.0 per cent).

Table 6.1: Percentage of schools reported and observed to have handwashing facilities by location, level of school, ownership status, type of school, model of school and region, Tanzania, 2018

Background characteristics	Percentage of schools with handwashing facilities		Number of schools
	Reported	Observed	
Mainland/Zanzibar			
Mainland	63.4	54.3	2,320
Zanzibar	78.1	72.1	65
Location of School			
Rural	60.6	52.0	1,857
Urban	75.3	64.6	528
Level of School			
Primary school	63.1	53.4	1,640
Secondary school	65.5	57.9	745
Ownership Status			
Government	60.0	50.4	2,069
Non-Government	89.2	83.9	316
Type of School			
Girls only	93.4	93.4	40
Boys only	92.8	94.8	30
Mixed	62.9	53.6	2,315
Model of School			
Boarding School	87.0	83.1	127
Day School	61.2	51.4	2,077
Both (Boarding and Day)	77.7	74.6	181
Region			
Dodoma	63.2	41.4	102
Arusha	91.6	81.7	105
Kilimanjaro	79.5	76.0	131
Tanga	62.4	49.1	135
Morogoro	60.5	60.7	121
Pwani	68.7	58.5	102
Dar es Salaam	84.1	67.9	109
Lindi	58.7	52.7	72
Mtwara	45.8	36.9	83
Ruvuma	81.3	71.3	106

(Continued)

(Continued)

Background characteristics	Percentage of schools with handwashing facilities		Number of schools
	Reported	Observed	
Iringa	92.8	82.2	68
Mbeya	62.6	58.3	96
Singida	67.1	55.4	69
Tabora	55.6	43.6	101
Rukwa	52.1	24.6	48
Kigoma	27.8	26.0	83
Shinyanga	68.2	59.0	72
Kagera	43.0	43.4	127
Mwanza	65.5	50.8	124
Mara	52.3	46.3	106
Manyara	53.0	44.8	84
Njombe	79.4	73.8	64
Katavi	62.0	54.3	26
Simiyu	50.7	42.4	66
Geita	45.9	39.9	69
Songwe	59.6	45.4	51
Kaskazini Unguja	71.5	67.2	9
Kusini Unguja	79.1	72.1	9
Mjini Magharibi	88.5	80.0	25
Kaskazini Pemba	62.7	55.6	10
Kusini Pemba	73.2	73.2	12
Tanzania	**63.8**	**54.8**	**2,385**

Regionally, there were large variations with respect to presence of handwashing facilities in schools: ranging from 27.8 per cent in Kigoma Region to 92.8 per cent in Iringa Region.

6.2 Types of Handwashing Facilities

Overall, the most common types of handwashing facilities used in Tanzanian schools were tippy taps (41.7 per cent) and piped water with taps (33.8 per cent). Buckets or basins with taps were used by 15.3 per cent of schools with handwashing facilities (Table 6.2).

Schools with handwashing facilities in Zanzibar were more likely to use piped water with taps (95.0 per cent) than schools in Tanzania Mainland (31.7 per cent). However, the use of tippy tap was more common in Tanzania Mainland (43.0 per cent) than in Zanzibar (4.2 per cent).

Within schools with handwashing facilities, use of tippy taps was much higher in rural schools (48.6 per cent) than in those in

urban areas (22.1 per cent). Piped water with taps was more commonly used in urban schools (61.7 per cent) than in rural schools (23.9 per cent).

With regard to the school level, secondary schools were more likely to use piped water with taps as handwashing facility (55.6 per cent) than primary schools (23.5 per cent). The pattern was different with regard to the use of tippy taps: only 19.4 per cent of secondary schools used tippy taps compared to 52.2 per cent of primary schools.

Table 6.2: Percentage of schools with handwashing facilities by location, level, ownership status, type of school and model of school, Tanzania, 2018

Background characteristics	Types of handwashing facilities							Number of schools
	Piped water with taps	Storage tank with taps	Buckets/ basins with tap	Buckets/ basins without tap	Hand-poured water system	Tippy tap	Other	
Mainland/Zanzibar								
Mainland	31.7	5.7	15.7	9.6	6.6	43.0	2.3	1,402
Zanzibar	95.0	4.1	4.1	7.2	5.0	4.2	0.8	119
Location of School								
Rural	23.9	5.7	14.3	10.3	6.6	48.6	2.7	1,111
Urban	61.7	5.8	18.0	7.2	6.2	22.1	1.2	410
Level of School								
Primary school	23.5	5.9	14.3	9.4	6.0	52.2	2.6	1,015
Secondary school	55.6	5.1	17.4	9.7	7.7	19.4	1.7	506
Ownership Status								
Government	24.3	5	14.3	9.9	7.1	49.5	2.5	1,238
Non-Government	75.7	8.5	19.5	7.6	4.1	7.6	1.5	283
Type of School								
Girls only	89.0	5.9	15.6	8.8	0.0	4.8	0.0	28
Boys only	85.9	2.4	14.7	4.0	2.0	8.3	0.0	22
Mixed	31.4	5.7	15.3	9.6	6.8	43.3	2.4	1,471
Model of School								
Boarding School	78.8	8.4	9.4	5.5	3.4	8.0	1.8	92
Day School	25.7	5.3	15.3	10.5	7.1	47.3	2.3	1,293
Both (Boarding and Day)	71.5	7.3	20.2	3.6	4.1	17.7	2.7	136
Tanzania	**33.8**	**5.7**	**15.3**	**9.5**	**6.5**	**41.7**	**2.3**	**1,521**

6.3 Availability of Water and Soap

Handwashing is one of the best ways to prevent the spread of germs and protect people from contracting dangerous or even fatal infections (which can lead to children missing school). Washing hands with soap and water is the effective way to get rid of germs in most situations. It reduces the risks of people contracting infections and prevents germs from spreading from one person to another and across an entire community.

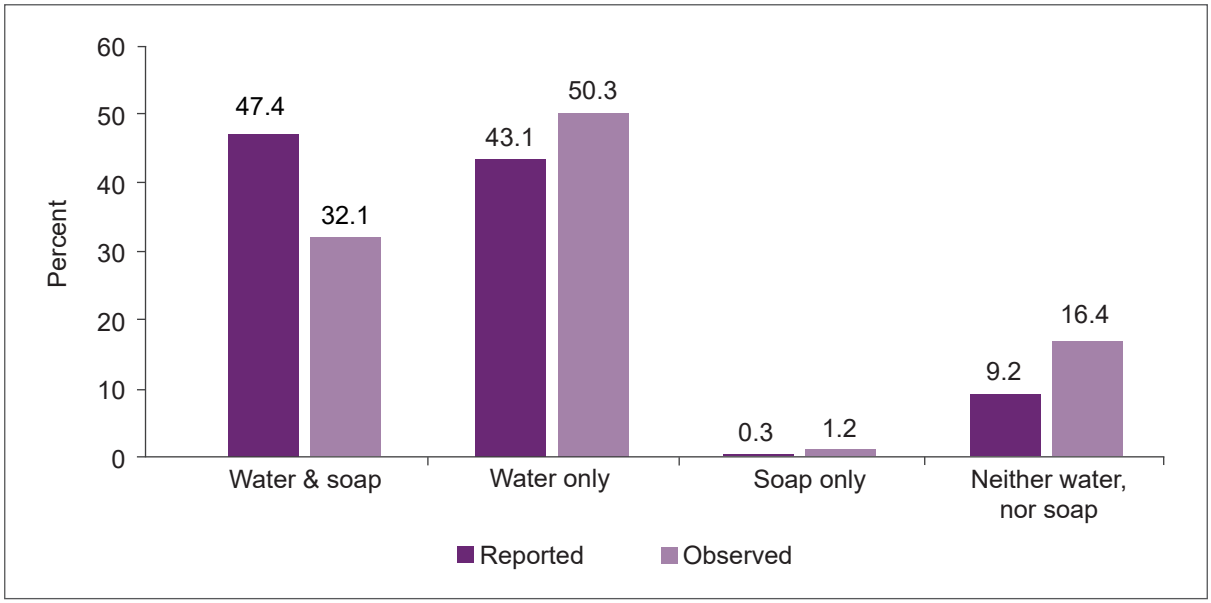
Besides recording responses (reported by respondents) with regard to the availability of water and soap for schools with handwashing facilities on the day of the survey, fieldwork interviewers in the 2018 Tanzania School WASH Assessment also observed the availability of water and soap at various handwashing facilities. Figure 6.1 presents a comparison of results obtained from both reported and observed data. The two approaches mentioned above are expected to yield differences between reported and observed data since respondents may have over-reported the availability of water and soap.

For example, though almost half of the schools with handwashing facilities (47.4 per cent) reported to have water and soap at handwashing facilities on the day of the survey, data from observations revealed that only 32.1 per cent of schools actually had water and soap at handwashing facilities.

Although through interview, 43.1 per cent of schools reported having only water and 9.2 per cent of schools having neither water nor soap at their handwashing facilities on the day of the survey, data from observations indicated that 50.3 per cent of schools actually had only water and 16.4 per cent had neither water nor soap.

Table 6.3 provides data on the percentages of schools observed to have water and soap, water only, soap only and neither water nor soap at their handwashing facilities with regard to the various background characteristics. In terms of school location, schools in urban

Figure 6.1: Percentage of schools with water and soap, water only, soap only and neither water nor soap at the handwashing facilities from reported and observed data, Tanzania, 2018



areas were more likely to have water and soap at their handwashing facilities (36.0 per cent) compared to schools in rural areas (30.8 per cent). Likewise, non-government schools with handwashing facilities were more likely to have water and soap (46.5 per cent) than government schools (28.5 per cent).

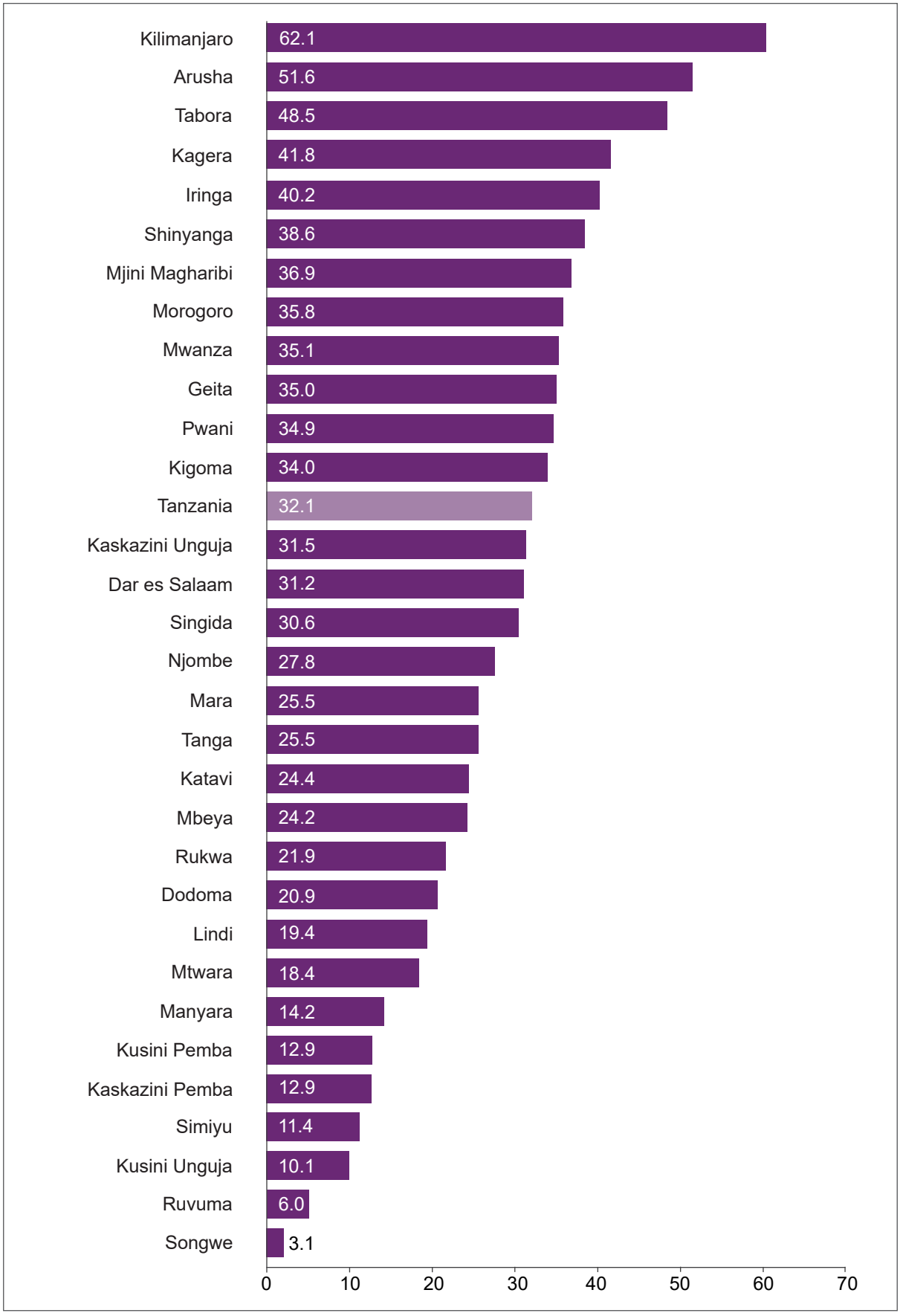
On the other hand, schools with girls only had a higher percentage of their handwashing facilities having soap and water (42.8 per cent) than schools with boys only (32.4 per cent) and co-education schools (31.8 per cent). Findings also revealed that only 6.6 per cent of non-government schools had neither water nor soap at their handwashing facilities as compared to 18.9 per cent of government schools.

Across the regions, the percentage of schools with both water and soap available at the handwashing facilities was highest in Kilimanjaro region (62.1 per cent), and smallest in Songwe Region (3.1 per cent) (Figure 6.2).

Table 6.3: Percentage distribution of schools observed to have water and soap, water only, soap only and neither water nor soap at their handwashing facilities by background characteristics, Tanzania, 2018

Background characteristics	Water and soap	Water only	Soap only	Neither water, nor soap	Number of schools
Mainland/Zanzibar					
Mainland	32.4	49.8	1.2	16.6	1,278
Zanzibar	25.3	62.7	0.0	12.0	47
Location of School					
Rural	30.8	49.5	1.0	18.7	980
Urban	36.0	52.6	1.8	9.7	345
Level of School					
Primary school	32.4	46.6	1.5	19.4	888
Secondary school	31.6	57.7	0.5	10.3	437
Ownership Status					
Government	28.5	51.4	1.2	18.9	1,057
Non-Government	46.5	45.7	1.1	6.6	268
Type of School					
Girls only	42.8	53.3	0.0	3.8	38
Boys only	32.4	58.5	0.0	9.1	28
Mixed	31.8	50.0	1.2	16.9	1,259
Model of School					
Boarding School	36.9	56.3	0.0	6.8	107
Day School	30.6	49.4	1.3	18.6	1,081
Both (Boarding and Day)	40.7	52.2	0.9	6.2	1,37
Tanzania	**32.1**	**50.3**	**1.2**	**16.4**	**1,325**

Figure 6.2: Percentage of schools observed to have water and soap at their handwashing facilities by region, Tanzania, 2018



6.4 Classifications of Hygiene Services According to the Joint Monitoring Programme (JMP)

Much as like water and sanitation services, the JMP ladder classifications for hygiene services is categorized into three levels – basic, limited or no hygiene services.

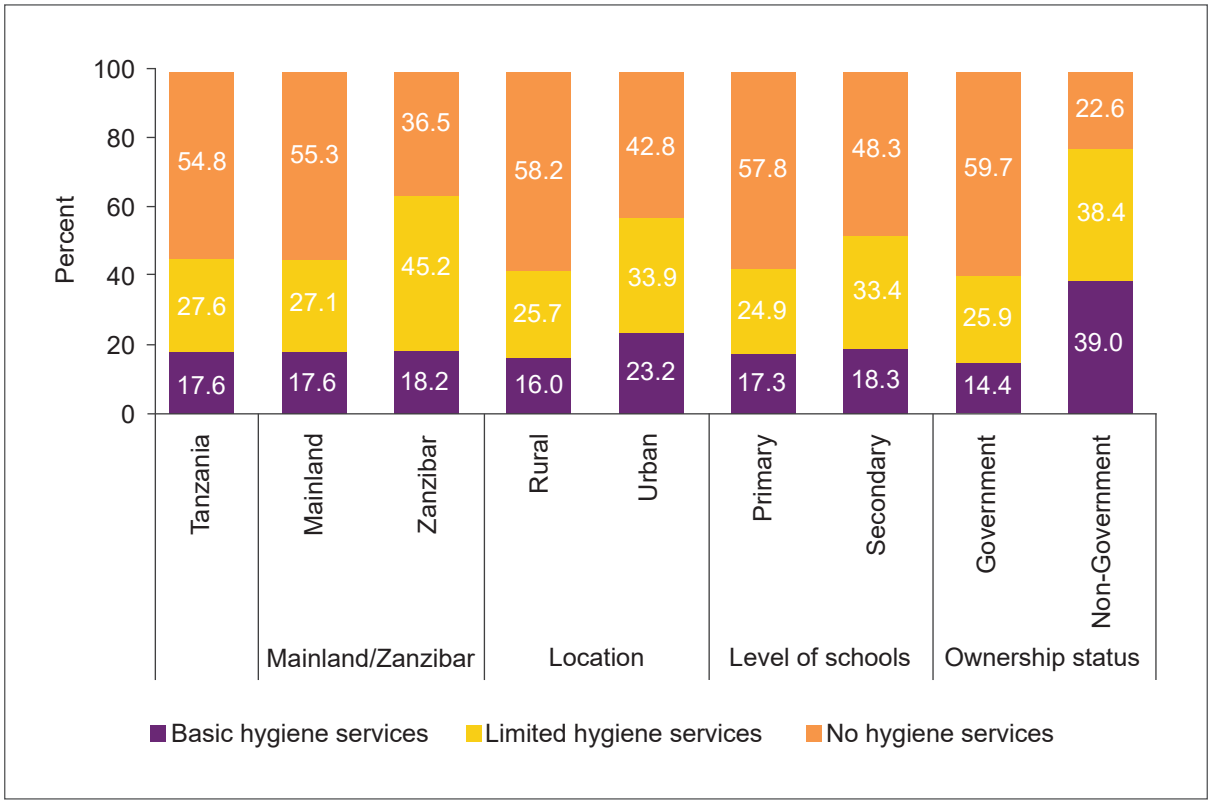
Basic hygiene service means that handwashing facilities with soap and water are available at the time of the survey interview. Limited hygiene service means that handwashing facilities with water are available, but no soap is available at the time of the survey interview. If a school has handwashing facilities but no water and soap, or does not have handwashing facility, the school is classified as having no hygiene services at all.

This section presents results obtained from observations data collected for the hygiene module that was included in the 2018 Tanzania School WASH Assessment Observation Questionnaire. Interviewers observed the availability of services and infrastructure on site, instead of simply relying on the respondents' data. Therefore, results from observation data may represent the actual situation regarding the availability of key components for classifying hygiene services.

By using classifications of hygiene services according to the JMP, it was observed that, about 17.6 per cent schools in Tanzania had basic hygiene services, 27.6 per cent had limited hygiene services and more than half of schools (54.8 per cent) had no hygiene services (Figure 6.3).

While there was a slight variation in the availability of basic hygiene services among schools in Zanzibar (18.2 per cent) and those

Figure 6.3: Percentage of schools with hygiene services by location, level of school and ownership status, Tanzania, 2018



in the Mainland (17.6 per cent), significant differences were observed for limited services (45.2 per cent for Zanzibar and 27.1 per cent for the Mainland) and for no hygiene services (36.5 per cent for Zanzibar and 55.3 per cent for the Mainland).

Schools in urban areas had a higher percentages of basic hygiene services (23.2 per cent) and limited hygiene services (33.9 per cent) compared to schools in rural areas (16.0 per cent and 25.7 per cent, respectively). It was also observed that 58.2 per cent of rural schools had no hygiene services compared to 42.8 per cent in urban areas.

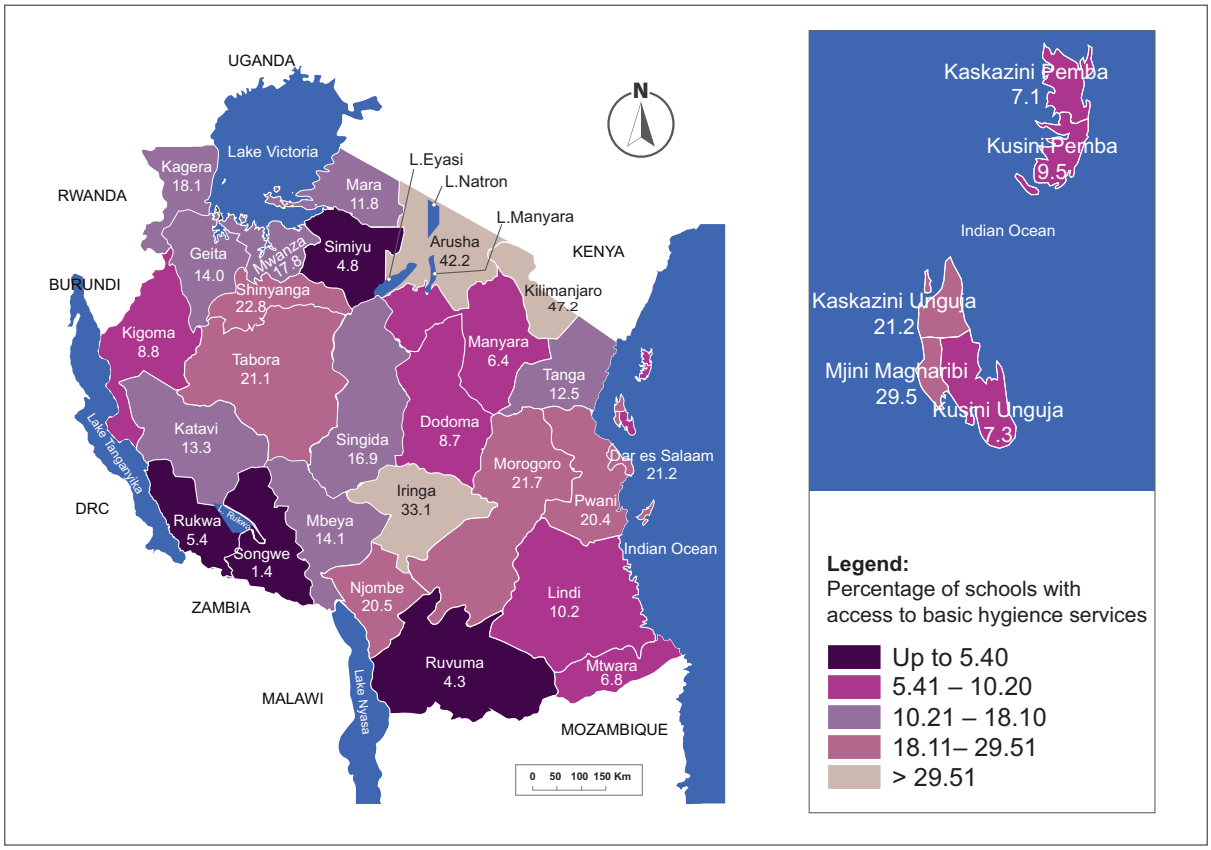
Noticeable differences for basic hygiene services were observed with regard to ownership of schools. The survey has established that 39.0 per cent of non-government-owned schools had basic hygiene services which was more than twice that of government-owned schools (14.4 per cent). About 60 per cent of government-owned schools had no hygiene services compared to only 22.6 per cent of non-government-owned schools.

Remarkable variations in the availability of basic hygiene services in school were found across regions: ranging from 1.4 per cent in Songwe Region to 47.2 per cent in Kilimanjaro Region (Map 6.1).

6.5 Location of Handwashing Facilities

Location of handwashing facilities plays a key role in children washing their hands every time they visit the toilet. If handwashing facilities in schools are poorly located and inaccessible, children may find it hard to access.

Map 6.1: Percentage of schools observed to have basic hygiene services by region, Tanzania, 2018



The 2018 Tanzania School WASH Assessment investigated the location of handwashing facilities in important areas: inside or near toilets, food preparation areas, dining areas, classrooms, teachers' offices, dormitory or other relevant areas.

Results indicate that eight out of ten schools in Tanzania (81.1 per cent) had their handwashing facilities located inside/outside toilets or near toilets, followed by those located within the school yard (33.3 per cent). A similar pattern was observed for most of the background characteristics as detailed in Table 6.4.

Table 6.4: Percentage of schools with handwashing facilities by background characteristics and location of handwashing facilities, Tanzania, 2018

Background characteristics	Handwashing location							Other
	Toilets	Food preparation area	Dining areas	Classrooms	School yard	Teachers office	Dormitory	
Mainland/Zanzibar								
Mainland	81.4	9.2	9.9	4.5	31.3	6.9	5.2	2.7
Zanzibar	73.9	3.1	0.6	0.0	91.0	0.0	1.2	0.8
Location of School								
Rural	81.3	7.0	5.8	3.5	29.9	6.6	3.5	2.8
Urban	80.6	14.7	20.2	6.6	42.8	6.8	9.4	2.3
Level of School								
Primary school	80.7	5.2	5.2	4.6	31.7	4.4	1.1	1.4
Secondary school	82.0	17.0	18.7	3.7	36.6	11.4	13.4	5.2
Ownership Status								
Government	80.4	4.7	2.6	3.5	31.0	6.3	1.7	2.6
Non-Government	84.4	28	40.2	7.7	43.2	8.2	20.0	2.8
Type of School								
Girls only	94.9	48.2	59.0	2.2	43.2	4.5	36.3	13.0
Boys only	100.0	31.2	59.8	0.0	43.3	20.9	34.2	0.0
Mixed	80.4	7.6	7.3	4.5	32.8	6.4	3.7	2.4
Model of School								
Boarding School	83.0	34.1	48.4	4.6	40.6	9.8	31.1	7.2
Day School	80.7	4.9	3.8	4.1	31.0	5.9	0.1	2.3
Both (Boarding and Day)	83.4	26.4	31.5	6.5	48.6	10.7	29.7	1.7
Tanzania	**81.1**	**9.0**	**9.6**	**4.3**	**33.3**	**6.6**	**5**	**2.6**

6.6 Accessibility to Handwashing Facilities for the Youngest Children and Pupils with Limited Mobility and Impaired Vision

In terms of equitable accessibility, the 2018 Tanzania School WASH Assessment findings show that more than eight out of ten primary schools (84.7 per cent) with handwashing facilities had facilities that were accessible to the youngest children, while 58.6 per cent of schools (both primary and secondary) with handwashing facilities had facilities that were accessible to pupils with limited mobility or vision.

Primary schools in Zanzibar were more likely to have handwashing facilities that were accessible to the youngest children (88.4 per cent) compared to 84.6 percent in Tanzania Mainland. Likewise, 77.3 per cent of both primary and secondary schools in Zanzibar had handwashing facilities accessible to children with limited mobility or impaired vision compared to 58.0 per cent in Tanzania Mainland.

There was a slight difference between rural and urban primary schools, with respect to the accessibility to handwashing facilities for the youngest children (84.1 per cent for rural and 87.1 per cent for urban). Furthermore, 64.1 per cent of urban schools (primary and secondary) had handwashing facilities accessible to children with limited mobility and impaired vision compared to 56.7 per cent of schools in rural areas.

Almost no differences were noticed (for handwashing facilities accessible to pupils/ students with limited physical mobility or impaired vision) with respect to levels of schools and ownership of schools. However, non-government primary schools were more likely having handwashing facilities accessible to the youngest children (93.3 per cent) than government-owned primary schools (83.6 per cent) (Table 6.5).

Table 6.5: Percentage of schools with handwashing facilities accessible to the youngest children and schools with hand washing accessible to pupils with physical disabilities or impaired vision by background characteristics, Tanzania, 2018

Background characteristics	Schools with handwashing facilities accessible to the youngest children (Primary schools only)	Number of schools	Schools with handwashing facilities accessible to those with physical disability or impaired vision	Number of schools
Mainland/Zanzibar				
Mainland	84.6	986	58.0	1,471
Zanzibar	88.4	29	77.3	50
Location of School				
Rural	84.1	803	56.7	1,124
Urban	87.1	212	64.1	397
Level of School				
Primary school	84.7	1,015	58.6	1,034
Secondary school	N/A	N/A	58.7	487
Ownership Status				
Government	83.6	898	58.3	1,240
Non-Government	93.3	117	59.9	281
Tanzania	**84.7**	**1,015**	**58.6**	**1,521**

6.7 Hygiene Education

Teaching students about hygiene involves dissemination of health information and proper practice aimed at empowering children. Hygiene education motivates them into adopting responsible hygiene practices for themselves, their schools and the entire community.

Results from the 2018 Tanzania School WASH Assessment show that almost all schools in Tanzania were teaching hygiene education (95.8 per cent).

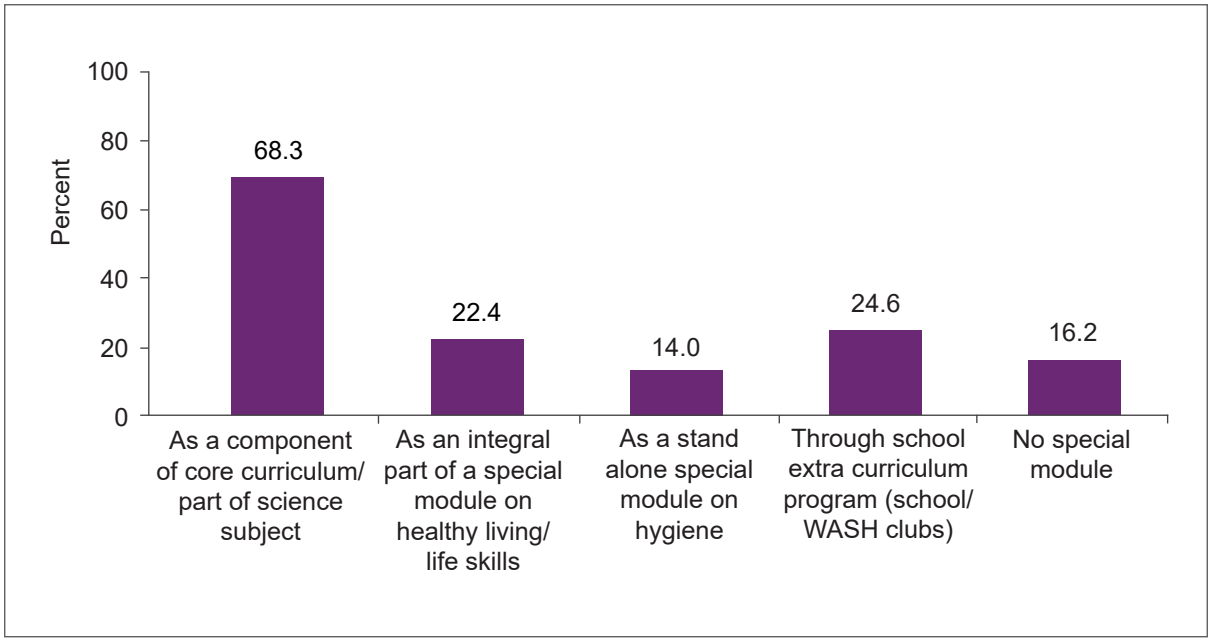
Table 6.6 indicates that there were slight variations in the percentages of schools teaching hygiene education in terms of background characteristics. Hygiene education in schools was over 92.0 per cent for each of the characteristics.

Hygiene education is delivered in various ways, such as a component of the core curriculum, as an integral part of a special module on life skills, as a standalone module on hygiene or through school-sponsored extra curriculum programmes (e.g. school WASH clubs). The survey has revealed that hygiene education in Tanzanian schools was most commonly taught as a component of the core curriculum or as part of a science subject in about 68.3 per cent of the school teaching hygiene education. About 25 per cent of schools taught hygiene through school-sponsored extra curriculum programmes and 22.4 per cent taught hygiene as an integral part of a special module on life skills. However, 16.2 per cent of schools taught hygiene without following any special recommended module (Figure 6.4).

Table 6.6: Percentage distribution of schools teaching hygiene education by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools teaching hygiene education	Number of schools
Mainland/Zanzibar		
Mainland	95.9	2,320
Zanzibar	92.5	65
Location of School		
Rural	95.9	1,857
Urban	95.6	528
Level of School		
Primary school	97.2	1,640
Secondary school	92.8	745
Ownership Status		
Government	95.9	2,069
Non-Government	95.2	316
Type of School		
Girls only	94.3	40
Boys only	93.7	30
Mixed	95.9	2,315
Tanzania	**95.8**	**2,385**

Figure 6.4: Percentage of schools teaching hygiene education by mode of teaching, Tanzania, 2018



6.8 Teachers trained in WASH

The survey found out that 44.2 per cent of schools had teachers trained in WASH (Table 6.7). Teachers in Zanzibar were more likely to be trained in WASH (54.6 per cent) than teachers in Mainland (43.9 per cent). The percentage of teachers taught on WASH was higher for urban schools (51.2 per cent) than for rural schools (42.3 per cent). However, there was no difference in the proportion of teachers trained in WASH with respect to ownership of schools (44.1 per cent for government schools and 45.3 per cent for non-government schools).

6.9 Menstrual Hygiene Management (MHM) Services

Menstrual hygiene management (MHM) is an essential aspect of hygiene for women and adolescent girls. Inappropriate management and practices of menstrual hygiene can have adverse impact on health, education and psychosocial outcomes for women and girls. In schools, poor menstrual hygiene may lead to absenteeism, dropping out of school, compromised dignity, and various sexual and reproductive health concerns that can have substantial and long-term health and socio-economic effects for adolescent girls. Additionally, this could lead to other forms of social exclusion.

Schools are a potentially important setting in relation to MHM. In schools, the capacity of adolescent girls to manage their periods is affected by a number of factors that includes inadequate access to safe and private toilets, lack of clean water and soap for personal hygiene, and limited access to affordable and hygienic sanitary materials and disposal options. All these factors prevent them from managing their menstruation safely and hygienically. The continued silence around menstruation, combined with limited access to information, at home and in schools results in millions of girls having very little knowledge about what happens to their bodies when they menstruate and how they need to deal with

Table 6.7: Percentage of schools with teachers trained or oriented on WASH by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools with teachers trained/oriented on WASH	Number of schools
Mainland/Zanzibar		
Mainland	43.9	2,320
Zanzibar	54.6	65
Location of School		
Rural	42.3	1,857
Urban	51.2	528
Level of School		
Primary school	49.2	1,640
Secondary school	33.3	745
Ownership Status		
Government	44.1	2,069
Non-Government	45.3	316
Type of School		
Girls only	42.0	40
Boys only	1.3	30
Mixed	44.8	2,315
Model of School		
Boarding School	29.3	127
Day School	45.2	2,077
Boarding and Day	44.0	181
Tanzania	**44.2**	**2,385**

it. As a result, menstruating girls often feel ashamed and embarrassed, they either miss school or drop out of school. Nevertheless, school settings are also more conducive to reaching out to adolescent girls and helping them improve their knowledge, attitudes and practices in relation to MHM.

Given the multiple challenges that adolescent girls face with regard to inadequate menstrual hygiene management services in schools, MHM is not only a sanitation matter, but it is also an important step towards safeguarding the dignity and bodily integrity of women and girls.

The 2018 Tanzania School WASH Assessment also collected information on MHM services for adolescent girls in schools. The information pertained to only all-girls schools or co-education schools. The assessment found out that two thirds (66.8 per cent) of Tanzanian schools (excluding schools with boys only) provided MHM services to adolescent girls (Table 6.8).

Table 6.8: Percentage of schools providing MHM services by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools providing MHM services	Number of schools
Mainland/Zanzibar		
Mainland	68.0	2,296
Zanzibar	21.3	65
Location of School		
Rural	65.6	1,846
Urban	70.9	515
Level of School		
Primary school	64.9	1,642
Secondary school	71.1	719
Ownership Status		
Government	66.1	2,067
Non-Government	71.3	294
Type of School		
Girls only	90.2	40
Mixed	66.4	2,321
Model of School		
Boarding School	74.4	100
Day School	65.9	2,080
Boarding and Day	72.6	181
Tanzania	**66.8**	**2,361**

Percentage of MHM services was much higher in Tanzania Mainland schools (68.0 per cent) than in Zanzibar (21.3 per cent). In addition, urban schools were more likely to provide MHM services (70.9 per cent) than rural schools (65.6 per cent) did.

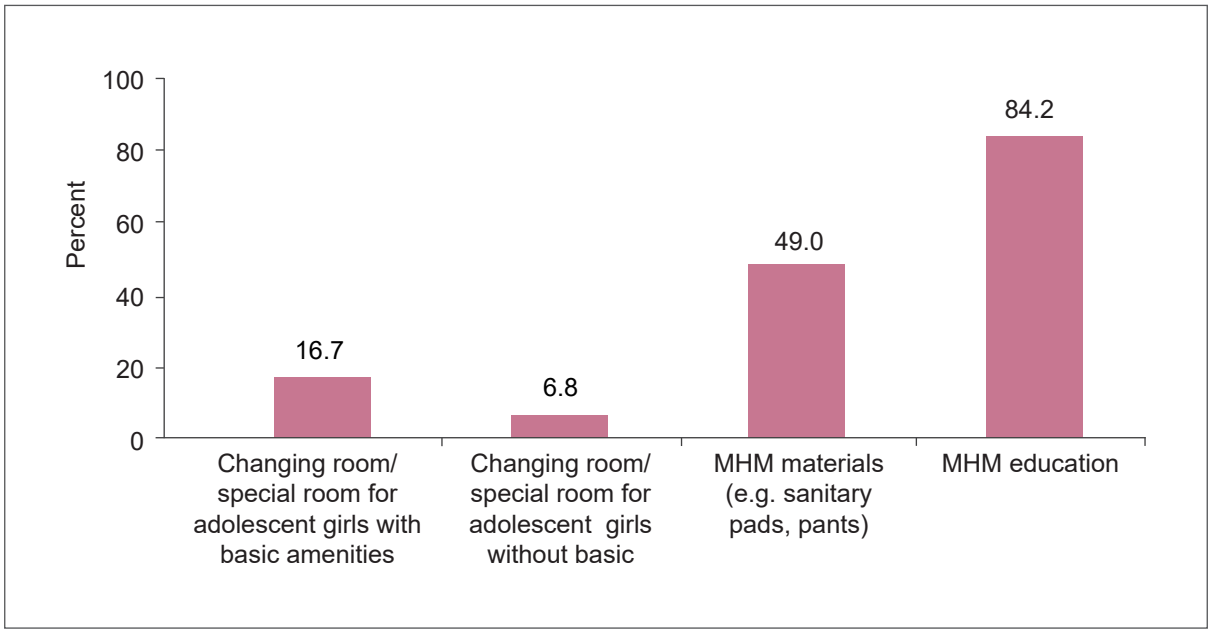
In terms of school level, 71.1 per cent of secondary schools provided MHM services to adolescents girls compared to 64.9 per cent of primary schools.

While more than seven out of ten (71.3 per cent) of non-government schools provided MHM services, only 66.1 per cent of government-owned schools provided MHM services to their pupils/students.

6.10 Components of MHM Provided at the School

Of the schools that provided MHM services, most of them (84.2 per cent) provided MHM education as a component of MHM services, while only 49.0 per cent provided MHM materials (e.g. sanitary pads, pants etc.). Results also show that 16.7 per cent of schools that provided MHM services had changing rooms with basic amenities (water, waste bin, soap and emergency supplies), while 6.8 per cent of schools had changing rooms without basic amenities (Figure 6.5).

Figure 6.5: Percentage distribution of schools by components of MHM provided by the school, Tanzania, 2018



6.11 Provision of Menstrual Hygiene Products for Adolescent Girls

The 2018 School WASH Assessment findings indicate that half of schools (50.8 per cent) with girl students provided only a certain type of menstrual hygiene products to adolescent girls.

While more than half of schools in Tanzania Mainland (51.4 per cent) provided some type of hygiene products to adolescent girls, only three out of ten schools (29.9 per cent) in Zanzibar provided hygiene products to adolescent girls. Making hygiene products available to adolescent girls was more common in urban schools (62.5 per cent) than in rural schools (47.6 per cent).

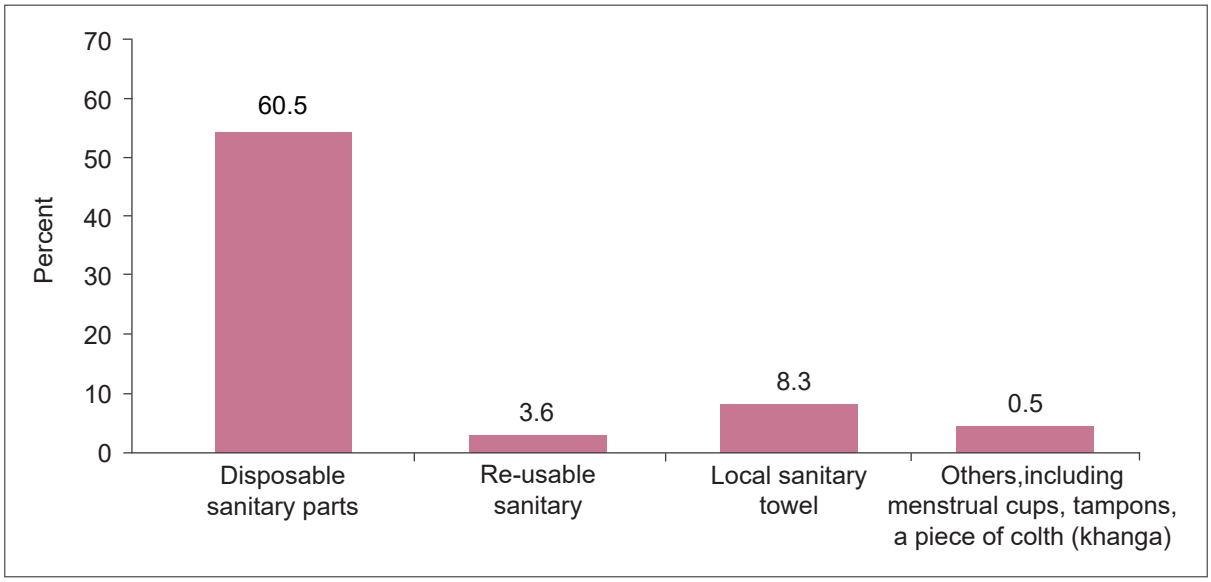
There were remarkable differences in the provision of hygiene products with regard to the level of school – 68.8 per cent of secondary schools provided hygiene products to adolescent girls compared to 43.0 per cent of primary schools. There was only a slight difference in the provision of hygiene products in terms of ownership of schools (50.4 of government schools and 53.6 per cent of non-government schools) (Table 6.9).

To manage their menstruation safely and with dignity adolescent girls in schools use different materials and strategies. Menstrual hygiene materials are those used to catch menstrual flow, such as cloths, reusable and disposable pads, menstrual cups and tampons. The 2018 National school WASH Assessment investigated on this and established that disposable sanitary pads accounts for the majority (60.5 per cent) of menstrual materials used by adolescent girls in schools that were providing (Figure 6.6).

Table 6.9: Percentage of schools providing hygiene products by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools providing hygiene products	Number of schools
Mainland/Zanzibar		
Mainland	51.4	2,296
Zanzibar	29.9	65
Location of School		
Rural	47.6	1,846
Urban	62.5	515
Level of School		
Primary school	43.0	1,642
Secondary school	68.8	719
Ownership Status		
Government	50.4	2,067
Non-Government	53.6	294
Type of School		
Girls only	50.4	40
Mixed	50.8	2,321
Model of School		
Boarding School	44.6	100
Day School	49.3	2,080
Boarding and Day	71.2	181
Tanzania	**50.8**	**2,361**

Figure 6.6: Percentage distribution of menstrual hygiene materials provided to the adolescent girls in schools, Tanzania, 2018



6.12 Presence of a Separate Room/Space for Menstrual Hygiene Management

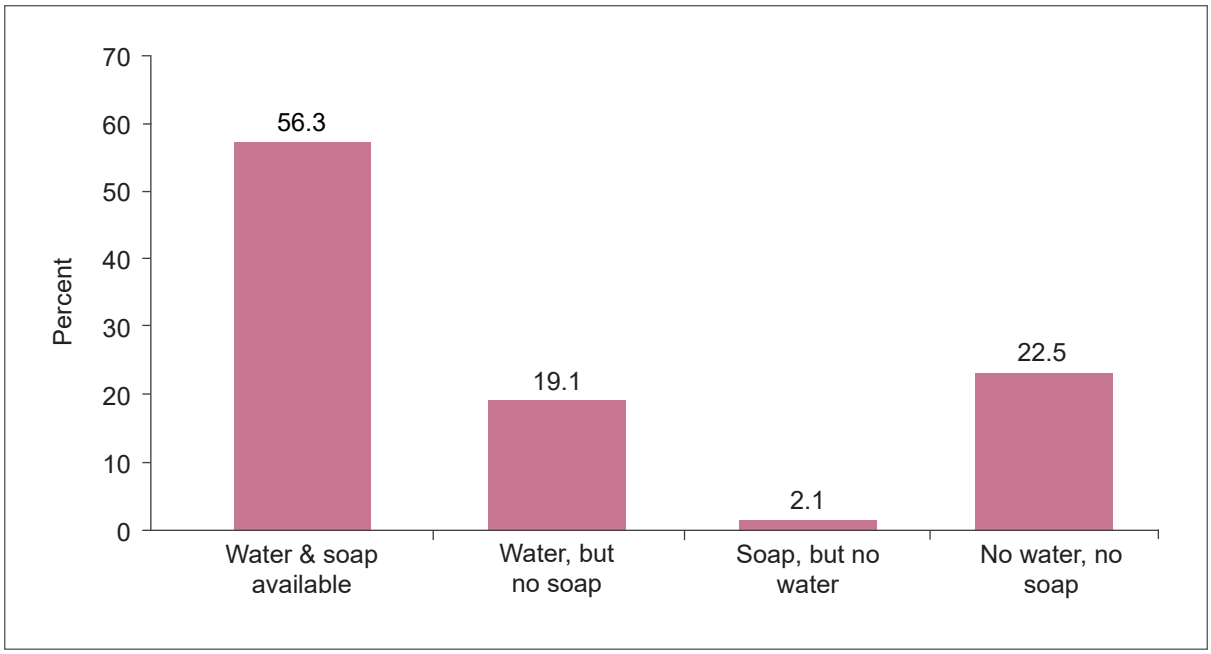
A private space/room with soap, handwashing facilities, emergency pads and privacy is an important determinant of proper MHM in schools. The 2018 School WASH Assessment showed that about one-quarter (24.7 per cent) of schools (excluding all schools with boys only) in Tanzania reported to having a private space/room for menstrual hygiene management. Schools in Tanzania Mainland were more likely to have a separate room/space for MHM services (24.9 per cent) than schools in Zanzibar (19.3 per cent).

The findings also indicate that urban schools (38.0 per cent) were more likely to have separate rooms for MHM than rural schools (21.1 per cent). However, in terms of the level of school, the findings show that there was a slight difference between primary schools (23.4 per cent) and secondary schools (27.7 per cent) with regard to having separate rooms/space for MHM services. On the other hand, non-government schools were two times more likely (46.6 per cent) having separate rooms/space for MHM services than government schools (21.6 per cent) (Table 6.10).

Table 6.10: Percentage of schools with a private room for menstrual hygiene services by background characteristics, Tanzania, 2018

Background characteristics	Percentage of schools with a private room for menstrual hygiene services	Number of schools
Mainland/Zanzibar		
Mainland	24.9	2,296
Zanzibar	19.3	65
Location of School		
Rural	21.1	1,846
Urban	38.0	515
Level of School		
Primary school	23.4	1,642
Secondary school	27.7	719
Ownership Status		
Government	21.6	2,067
Non-Government	46.6	2,94
Type of School		
Girls only	35.3	40
Mixed	24.6	2,321
Model of School		
Boarding School	36.3	100
Day School	22.7	2,080
Boarding and Day	42.2	181
Tanzania	**24.7**	**2,361**

Figure 6.7: Percentage of schools with a separate room/space for MHM service by availability of water or soap, Tanzania, 2018

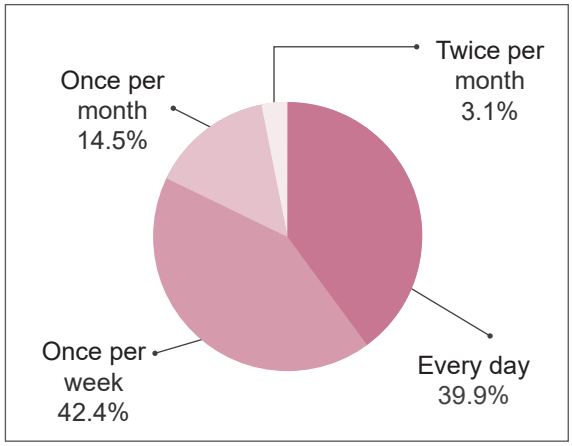


Overall, more than half of the schools with separate rooms/spaces for menstrual hygiene services had water and soap at the time of the survey, 19.1 per cent had water but no soap and 2.1 per cent had only soap. Twenty-three per cent of schools with a separate room for menstrual hygiene services had neither water nor soap at the time of the interview (Figure 6.7).

6.13 Frequency of Disposal of Menstrual Hygiene Materials

Overall, 42.4 per cent of schools providing menstrual hygiene services in Tanzania disposed of menstrual hygiene materials once every week, 39.9 per cent of schools disposed of menstrual hygiene materials every day, 14.5 per cent of schools disposed of once every month and 3.1 per cent disposed of twice every month (Figure 6.8).

Figure 6.8: Percentage distribution of schools by the frequency of disposal of menstrual hygiene materials, Tanzania, 2018

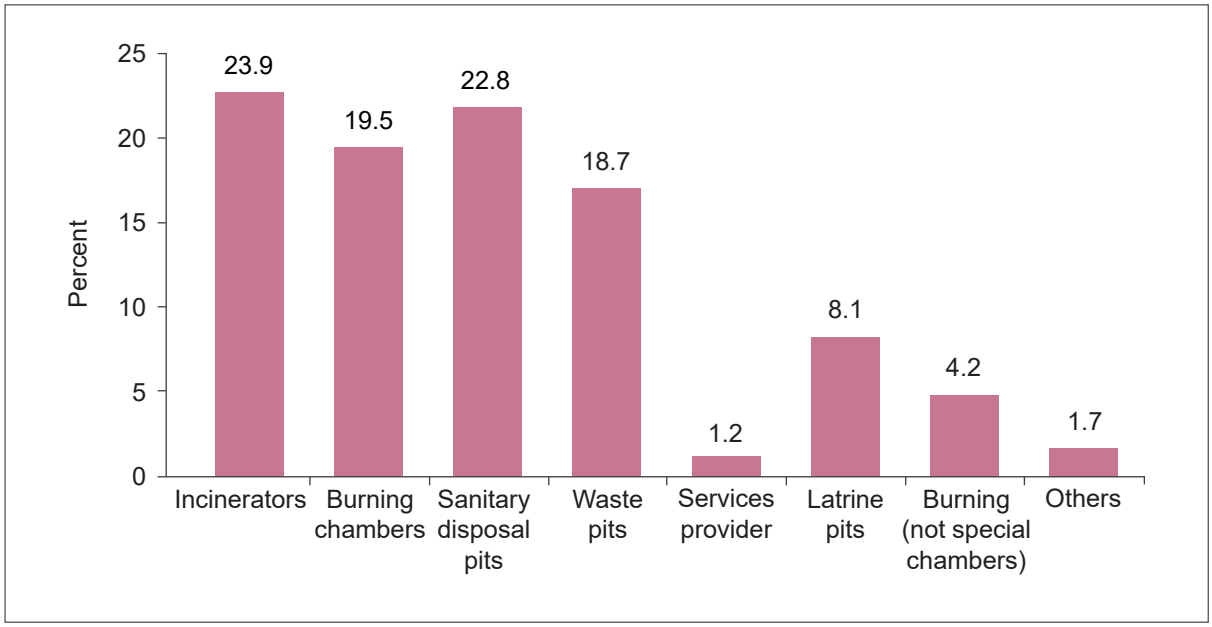


6.14 Type of Mechanisms for the Disposal of Menstrual Hygiene Materials

The 2018 School WASH Assessment findings revealed that 23.9 per cent of schools in Tanzania used incinerators as a mechanism

for disposal of menstrual hygiene materials, 22.8 per cent used sanitary disposal pits, 19.5 per cent used burning chambers and 18.7 per cent of schools used waste pits. Other mechanisms used for the disposal of menstrual hygiene materials included latrine pits (8.1 per cent) and burning in places other than the ones specially reserved for burning sanitary materials (4.2 per cent). It was further established that only 1.2 per cent of schools use outsourced service providers to dispose of menstrual hygiene materials (Figure 6.9).

Figure 6.9: Type of mechanisms for disposal of menstrual hygiene materials, Tanzania, 2018



Chapter 7

OPERATION AND MAINTENANCE

The provision of adequate WASH services in schools has demonstrated quantifiable improvements for both health and educational outcomes. Unfortunately, school WASH interventions face serious challenges to sustainability. Experience has demonstrated sharp declines over time in the functionality of WASH infrastructures and the provision of key inputs like soap and treated drinking water. Moreover, WASH facilities that are not maintained and used adequately not only cannot offer the intended benefits, but also can actually lead to the transmission of diseases.

Operation and maintenance (O&M) of WASH facilities implies regular maintenance of equipment or system and normally consists of inspecting, cleaning, servicing, preserving and adjusting as required. School WASH facilities' maintenance and repair include purchasing soaps, replacing taps and pumps, pipe networks, point of use water treatment, and emptying septic tanks among others. This warrants continued access to handwashing facilities, sanitary facilities, and clean and safe drinking water. If proper operation and maintenance is not instituted, facilities will quickly deteriorate and cease to offer intended services.

To ensure sustainability of WASH facilities, schools, in collaboration with key stakeholders including communities, school management committees and school boards need to have reliable systems in place to keep water supply systems, toilets and handwashing facilities usable and clean. WASH facilities such as toilets are considered usable only if they are accessible, private, functional and clean for children to use them. To achieve this, the engagement of everyone, teachers, parents, students and community members is very important as the O&M of WASH facilities is a shared responsibility. Having **a functional O&M plan** will enable schools to have a clear picture of the resources needed, ways to mobilize them, responsibilities of each stakeholder, and various other tasks involved. This plan will form a basic structure for O&M arrangements.

7.1 Funding for Maintenance of School WASH Facilities

Sound O&M system requires checks and balances, established procedures, a system for regular monitoring, clear roles and responsibilities as well as subsequent follow-ups to ensure functionality. Furthermore, reliable and steady funding mechanisms are an important element of strong O&M systems.

In Tanzania, institutional arrangements for operations and maintenance of WASH services in schools continue to encounter enormous challenges given the multi-sectoral nature of the sub-sector. To some extent, this multi-faceted nature has led to the inadequacy of existing structures in relation to O&M of WASH facilities. The ministries responsible for education (MoEST for Mainland and MoEVT in Zanzibar) are responsible for the overall coordination of SWASH; whereas PO–RALG and PO–RALGSD are respectively responsible for management and implementation. Other ministries responsible for water and health, along with the respective local government departments and schools, are also involved. Such complexity in institutional set-up has important implications for O&M of WASH services. In light of this, the 2018 School WASH Assessment investigated the extent to which O&M for WASH in schools was being implemented and its implications for the sustainability of WASH services.

The assessment has revealed that 51.0 per cent of schools had funds to maintain and repair school WASH facilities at the time of the survey interview (Table 7.1). Schools on the Mainland were more likely to have funds allocated for maintenance and repair of school WASH facilities (51.3 per cent) than those in Zanzibar (40.5 per cent). Sixty-five per cent of urban schools had funds to maintain and repair of school WASH facilities as compared to 47.0 per cent of schools in rural areas. Non-Government schools were more likely to have funds for the repair and maintenance of school WASH facilities than government schools (86.3 per cent and 45.6 per cent respectively). Across regions, Mwanza Region had the highest percentage (70.0 per cent) of schools with funds for repair and maintenance, and Kaskazini Unguja Region had the lowest percentage (24.3 per cent).

Table 7.1: Percentage of schools with funds for maintenance and repair of school WASH facilities by location, level of school, ownership status of school, type of school, model of school and region, Tanzania, 2018

Background characteristics	Percentage	Number of schools
Mainland/Zanzibar		
Mainland	51.3	2,320
Zanzibar	40.5	65
Location of School		
Rural	47.0	1,857
Urban	65.1	528
Level of School		
Primary school	45.3	1,640
Secondary school	63.5	745
Ownership Status		
Government	45.6	2,069
Non-Government	86.3	316
Type of School		
Girls only	89.4	40
Boys only	80.6	30
Mixed	49.9	2,315
Model of School		
Boarding School	82.9	127
Day School	46.7	2,077
Both (Boarding and Day)	77.2	181
Region		
Dodoma	31.6	102

(Continued)

(Continued)

Background characteristics	Percentage	Number of schools
Arusha	56.3	105
Kilimanjaro	60.3	131
Tanga	53.2	135
Morogoro	44.2	121
Pwani	55.5	102
Dar es Salaam	63.0	109
Lindi	37.2	72
Mtwara	39.9	83
Ruvuma	51.7	106
Iringa	53.3	68
Mbeya	40.3	96
Singida	45.1	69
Tabora	42.6	101
Rukwa	31.8	48
Kigoma	42.6	83
Shinyanga	58.4	72
Kagera	64.0	127
Mwanza	70.0	124
Mara	59.3	106
Manyara	40.4	84
Njombe	43.9	64
Katavi	38.9	26
Simiyu	63.2	66
Geita	68.8	69
Songwe	37.9	51
Kaskazini Unguja	24.3	9
Kusini Unguja	25.1	9
Mjini Magharibi	54.8	25
Kaskazini Pemba	34.4	10
Kusini Pemba	39.1	12
Tanzania	**51.0**	**2,385**

7.2 Responsibility for Repair and Maintenance of the WASH Facilities

Clearly defined roles are some of the most crucial elements for effective O&M of WASH facilities. On assessing which institutions or bodies were responsible for O&M, the survey established that 52.2 per cent of schools were responsible for repair and maintenance of their WASH facilities, while the community and PO–RALG/PO–RALGSD were responsible for the maintenance and repair of school WASH facilities in 16.4 per cent, and 12.6 per cent of schools in the Mainland and Zanzibar, respectively.

Seventy-nine per cent of schools in Zanzibar were responsible for repair and maintenance of their WASH facilities compared to 51.5 per cent of schools in the Mainland. In rural areas, 47.5 per cent of schools were responsible

Table 7.2: Percentage of schools by location, level of school, ownership status of school, type of school, model of school and entity responsible for maintenance and repair of school WASH facilities, Tanzania, 2018

Background characteristics	PO–RALG/PO–RALGSD	The Ministry responsible for water supply	Ministry responsible for education	District/ Municipality authorities	The school itself	Community	RALGSD	Other	Number of schools
Mainland/Zanzibar									
Mainland	13.0	0.8	1.4	11.0	51.5	16.8	0.4	5.2	2,320
Zanzibar	0.0	1.8	4.1	12.3	78.5	0.6	0.0	2.6	65
Location of School									
Rural	13.0	0.6	1.6	11.7	47.5	20	0.4	5.2	1,857
Urban	11.0	1.5	1.0	8.6	68.9	3.8	0.3	4.9	528
Level of School									
Primary school	12.6	0.5	1.5	10.0	47.6	21	0.4	6.3	1,640
Secondary school	12.5	1.3	1.3	13.2	62.5	6.3	0.4	2.4	745
Ownership Status									
Government	14.5	0.9	1.7	12.7	45.6	18.9	0.4	5.4	2,069
Non-Government	0.3	0.1	0.0	0.0	95.9	0.2	0	3.5	316
Type of School									
Girls only	14.1	4.9	0.0	0.0	81	0.0	0.0	0.0	40
Boys only	5.9	3.1	0.0	6.2	84.7	0.0	0.0	0.0	30
Mixed	12.7	0.7	1.5	11.3	51.3	16.9	0.4	5.3	2,315
Model of School									
Boarding School	7.8	0.7	1.1	2.5	85.2	0.0	1.3	1.4	127
Day School	13.6	0.8	1.6	11.9	48.1	18.4	0.4	5.3	2,077
Boarding and Day	4.6	1.2	0.0	7.2	76.3	5.3	0.0	5.4	181
Tanzania	**12.6**	**0.8**	**1.4**	**11.0**	**52.2**	**16.4**	**0.4**	**5.1**	**2,385**

for repair and maintenance of their WASH facilities while the community was responsible for 20.0 per cent of schools. In urban areas, 68.9 per cent of schools were responsible for repair and maintenance of WASH facilities while District/Municipality authorities were responsible for repair and maintenance of 8.6 per cent of schools.

Sixty-three per cent of secondary schools and 47.6 per cent of primary schools were responsible for repair and maintenance of their WASH facilities. While in secondary schools the second entity responsible for the maintenance of school WASH facilities was the district/municipal authority (13.2 per cent), the community was the second entity in primary schools (21.0 per cent).

In government schools, the authorities responsible for repair and maintenance of school WASH facilities were the schools themselves (45.6 per cent) and the community (18.9 per cent), whereas nearly all non-government schools (95.9 per cent) were responsible for the repair and maintenance of their school WASH facilities (Table 7.2).

7.3 Responsibility for Cleanliness of Toilet Facilities

Clean and well-maintained WASH facilities can be a key motivation for users to continue using the facilities. Defining clearly who is responsible for cleaning WASH facilities and having proper mechanisms to guide implementation is very important. In Tanzania responsibilities for cleaning WASH facilities in schools are assigned to schoolchildren, or janitors.

Overall, it was seen that pupils were responsible for cleanliness of school toilet facilities. Ninety-three per cent of schools in Tanzania had assigned the cleanliness of the schools' toilets to their pupils/students. Only 8.3 per cent of the schools had hired cleaning staff to clean the schools' toilets. Schools in Tanzania Mainland (93.0 per cent were more likely to assign pupils/students the responsibility of cleaning school toilets than schools in Zanzibar (78.4 per cent). Twenty per cent of schools in Zanzibar involved teachers to clean toilets, whereas in Tanzania Mainland only 7.9 per cent of schools required teachers to clean toilets.

Students were responsible for cleaning toilets in 97.1 per cent of schools in rural areas compared to 76.9 per cent of schools in urban areas. On the other hand, schools in urban areas (26.8 per cent) used cleaning staff more than schools in rural areas (3.0 per cent).

There was a slight difference between primary and secondary schools that assigned pupils/students to clean school toilet facilities (92.1 per cent and 93.9 per cent, respectively) (Table 7.3.).

Generally, 99.1 per cent of Government schools had assigned pupils/students the responsibility of cleaning toilets compared to 50.5 per cent of non-government schools. Moreover, more than half of non-government schools (57.5 per cent) hired janitors for cleaning school toilet facilities compared to only 0.8 per cent of government schools.

Table 7.3: Percentage of schools by location, level of school, ownership status of school, type of school, model of school and the entity responsible for cleaning schools' toilet facilities, Tanzania, 2018

Background characteristics	Cleaning staff	Teachers	Pupils	Others	Number of schools
Mainland/Zanzibar					
Mainland	7.9	1.6	93.0	0.7	2,229
Zanzibar	22.2	20.2	78.4	0.0	156
Location of School					
Rural	3.0	2.3	97.1	0.4	1,857
Urban	26.8	1.5	76.9	1.5	528
Level of School					
Primary school	7.2	2.5	92.1	0.6	1,640
Secondary school	10.6	1.3	93.9	0.7	745
Ownership Status					
Government	0.8	2.2	99.1	0.4	2,069
Non-Government	57.5	1.1	50.5	2.4	316
Type of School					
Girls only	33.9	0.0	78.7	0.0	40
Boys only	19.1	0.0	96.4	0.0	30
Mixed	7.7	2.2	92.8	0.7	2,315
Model of School					
Boarding School	25.8	0.0	85.4	0.0	127
Day School	4.7	2.3	94.8	0.5	2,077
Boarding and Day	37.5	0.8	72.5	2.8	181
Tanzania	**8.3**	**2.1**	**92.6**	**0.6**	**2,385**

Chapter 8

PUPILS' ENGAGEMENT

According to the National school WASH guidelines, the main objective of establishing a WASH Club is to raise awareness among pupils/students and develop skills related to water, hygiene and sanitation through fun and practical activities. To meet such a broad objective, WASH club membership should represent students from all grades under their teachers' guidance. The WASH club can organize itself into committees according to various WASH elements and appoint committee leaders or chairpersons.

The existence of school WASH clubs empowers pupils/students to play active roles in deciding and implementing issues related to WASH in schools. The clubs also offer pupils/students opportunities to become 'agents of change' within their respective communities by performing actions towards improving WASH practices. In some schools there are also other groups like Mazingira and Afya clubs, which in most cases, have similar objectives as the school WASH clubs do.

This chapter describes results of pupils'/students' engagement in WASH club activities. Respondents were asked to list the clubs that were available in their respective schools and their roles.

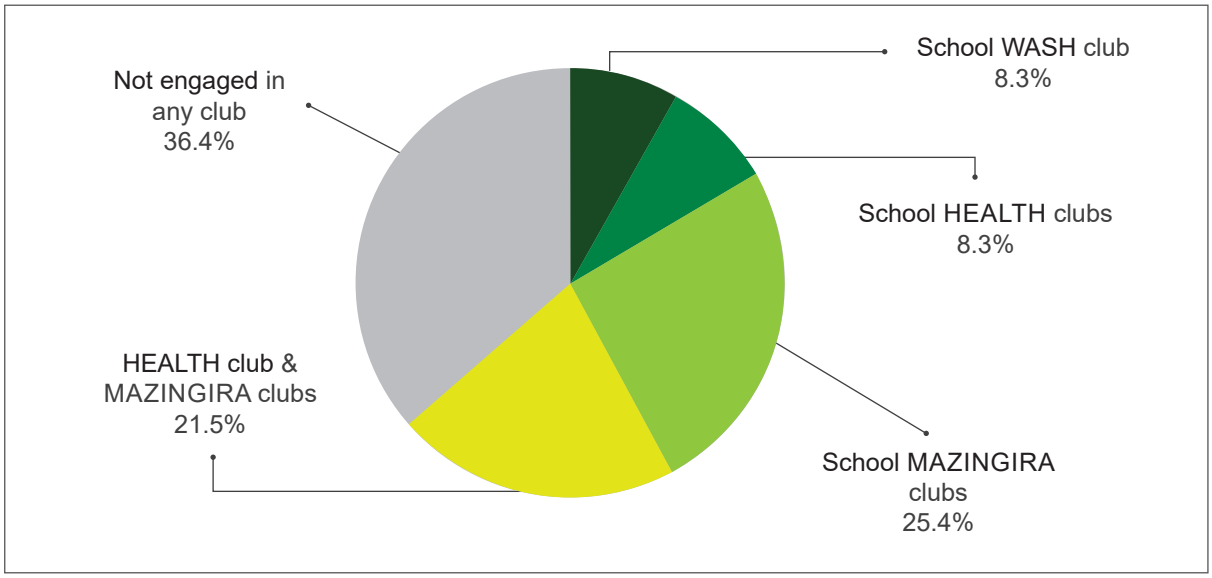
8.1 Engagement in WASH/ Mazingira/Afya Clubs

The survey results revealed that more than one third of schools in Tanzania (36.4 per cent) did not have any groups that pupils/students could engage themselves in, to implement issues related to WASH in schools. This means that almost two-thirds of schools (63.6 per cent) had students engaged in any one of the groups (WASH clubs, Mazingira club or Health club).

Furthermore, one-quarter of schools had Mazingira clubs, while 21.5 per cent of schools had both health and Mazingira clubs. WASH clubs and health clubs were present in 8.3 per cent (each) of the schools in Tanzania (Figure 8.1).

While students in Zanzibar were mostly engaged in school health clubs and Mazingira clubs (35.9), students in Mainland schools were mostly engaged in Mazingira clubs (25.6 per cent). The percentage of schools with no such clubs for their pupils/students in Zanzibar (33.2 per cent) was not that different from that of schools in Tanzania Mainland (36.5 per cent). Likewise, a similar pattern

Figure 8.1: Engagement of pupils in school WASH/MAZINGIRA/Health clubs, Tanzania, 2018



was observed in schools with no such clubs in rural (36.2 per cent) and urban (37.1 per cent) areas.

With reference to the level of the school, the percentage of secondary schools with WASH clubs was smaller (3.7 per cent) than the percentage of primary schools (10.4 per cent). School Mazingira clubs were more common in secondary schools (33.7 per cent) than in primary schools (21.7 per cent), whereas, both health and Mazingira clubs were more common in primary schools (22.5 per cent) than in secondary schools (19.3 per cent).

The 2018 School WASH Assessment revealed that WASH clubs were less common in both non-government (2.8 per cent) and government schools (9.2 per cent), while Mazingira clubs were more common in non-government schools (29.5 per cent) than in government schools (24.8 per cent) (Table 8.1).

Table 8.1: Percentage of schools with pupils/students engaged in WASH/health and Mazingira Clubs by location, level of school, ownership, type of school, model of school and region, Tanzania, 2018

Background characteristics	School WASH Club	School HEALTH club	School MAZINGIRA club	School HEALTH club and MAZINGIRA club	Not in any club	Number of schools
Mainland/Zanzibar						
Mainland	8.3	8.4	25.6	21.1	36.5	2,320
Zanzibar	8.1	4.1	18.7	35.9	33.2	65
Location of School						
Rural	8.2	9.0	24.6	21.9	36.2	1,857
Urban	8.6	5.7	28.5	20.0	37.1	528
Level of School						
Primary school	10.4	9.2	21.7	22.5	36.2	1,640
Secondary school	3.7	6.4	33.7	19.3	36.9	745
Ownership Status						
Government	9.2	9.3	24.8	22.2	34.6	2,069
Non-Government	2.8	2.1	29.5	17.0	48.6	316
Type of School						
Girls only	4.2	0.0	58.5	14.3	23.0	40
Boys only	0.0	0.0	48.1	14.3	37.6	30
Mixed	8.5	8.6	24.6	21.7	36.6	2,315
Model of School						
Boarding School	1.3	0.0	44.1	18.2	36.3	127
Day School	9.1	9.3	23.3	21.7	36.6	2,077

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Background characteristics	School WASH Club	School HEALTH club	School MAZINGIRA club	School HEALTH club and MAZINGIRA club	Not in any club	Number of schools
Co-education	4.5	3.0	36.7	21.0	34.8	181
Region						
Dodoma	4.9	29.8	14.0	25.0	26.3	102
Arusha	11.1	5.3	22.0	37.1	24.6	105
Kilimanjaro	17.6	2.9	21.2	24.1	34.2	131
Tanga	13.6	1.3	29.6	21.8	33.7	135
Morogoro	0.0	5.2	30.1	29.9	34.8	121
Pwani	8.6	16.5	27.6	9.4	37.9	102
Dar es Salaam	6.2	0.6	31.4	19.0	42.8	109
Lindi	7.6	3.8	54.6	10.6	23.3	72
Mtwara	10.5	3.8	23.8	10.7	51.2	83
Ruvuma	15.6	6.6	27.0	18.0	32.8	106
Iringa	27.7	1.6	19.7	20.2	30.8	68
Mbeya	6.3	16.5	20.4	5.6	51.2	96
Singida	5.3	7.8	9.2	46.9	30.8	69
Tabora	10.7	4.8	22.5	37.8	24.2	101
Rukwa	1.2	1.0	8.6	30.9	58.2	48
Kigoma	8.1	14.9	13.5	18.4	45.2	83
Shinyanga	9.1	8.2	31.7	35.3	15.7	72
Kagera	4.1	4.9	28.1	17.3	45.6	127
Mwanza	9.0	13.3	28.8	20.2	28.7	124
Mara	1.3	17.1	30	9.6	42.1	106
Manyara	6.4	2.3	30.8	11.5	49.0	84
Njombe	10.3	0.0	29.5	4.6	55.5	64
Katavi	0.0	7.6	34.8	27.3	30.3	26
Simiyu	0.0	10.9	35.9	33.9	19.3	66
Geita	0.3	22.5	17.0	22.3	37.9	69
Songwe	10.4	8.3	20.5	4.6	56.3	51
Kaskazini Unguja	8.5	7.3	25.1	39.0	20.1	9
Kusini Unguja	4.5	4.5	20.7	21.9	48.5	9
Mjini Magharibi	11.5	2.3	10.8	30.7	44.7	25
Kaskazini Pemba	4.2	10.0	22.8	45.8	17.2	10
Kusini Pemba	6.8	0.0	25.7	47.2	20.3	12
Tanzania	**8.3**	**8.3**	**25.4**	**21.5**	**36.4**	**2,385**

With respect to the type of schools, Mazingira clubs were more common in girls' schools (58.5 per cent) than in boys' schools (48.1 per cent) and co-education schools (24.6 per cent).

There were regional disparities in the percentages of schools with no pupils/students engaged in WASH clubs. Shinyanga Region had the smallest percentage of schools with pupils engaged in any of the clubs (15.7) and Rukwa Region had the highest percentage (58.2 per cent). While Iringa Region had the largest percentage of schools with WASH clubs (27.7 per cent), Dodoma Region had the largest percentage of schools with school Health clubs (29.8 per cent), Lindi Region had the highest percentage of schools with Mazingira clubs (54.6 per cent), and Kusini Pemba Region had the highest percentage of schools with both health and Mazingira clubs (47.2 per cent).

8.2 School WASH Club Meetings

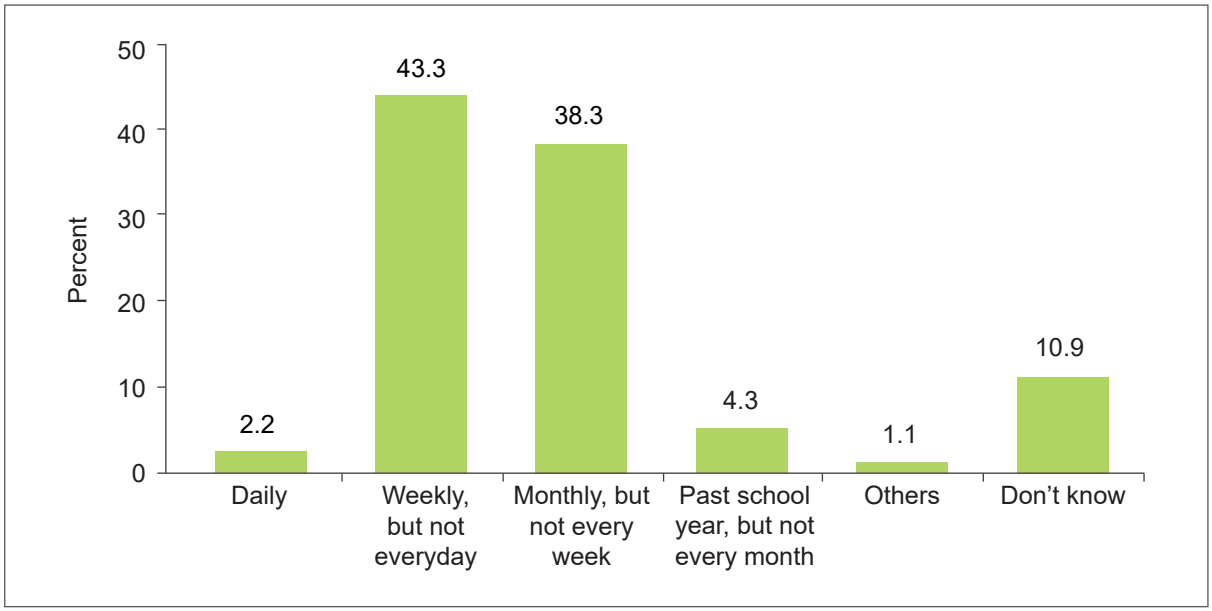
According to the Tanzania school WASH guidelines, pupils/students are supposed to meet at least once a week or a month. The findings show that schools followed this guidance with 43.3 per cent of schools convening once every week, 38.3 per cent meeting once every month and 2.2 per cent meeting on a daily basis (Figure 8.2).

8.3 Presence of Visual Promotion for Good WASH Behaviour

The display of different messages on the school premises or the school building is one of the proxy indicators used for measuring the presence of WASH activities and the promotion of WASH activities at a school. This was assessed through observations of messages and posters pasted or painted on school walls promoting good hygiene practices, such as key steps for appropriate handwashing.

The 2018 School WASH Assessment observed that only 21.5 per cent of all schools displayed visual promotion messages for WASH at the time of the visit and very few schools (6.4 per cent) had visual promotions available (but not displayed) at the time of the

Figure 8.2: Percentage of schools holding WASH club meetings by the frequency of the WASH meetings, Tanzania, 2018



visit. This implies that a whopping 72.1 per cent of surveyed schools did not have visual materials for the promotion of proper WASH behaviours at the time of the visit.

Thirty per cent of schools in Zanzibar and 21.2 per cent in Tanzania Mainland had WASH messages displayed in school surroundings. Generally, schools in urban areas (24.6 per cent) were more likely to follow WASH guidelines by displaying visual promotion messages at schools compared to schools in rural areas (20.6 per cent) (Table 8.2). There was no significant difference between primary and secondary schools with regard to the display of visual materials promoting good WASH behaviours. Only two out of ten schools at both levels used visual promotion at the time of the survey.

Display of WASH messages in terms of ownership of schools indicates that 28.9 per cent of non-government schools and 20.3 per cent of government schools were promoting appropriate WASH behaviours through visual materials.

Forty-one per cent of girls-only schools displayed visual promotion for good WASH behaviours compared to 25.2 per cent of boys-only schools and 21.1 per cent of co-education schools.

Display of materials for promotion of good WASH behaviours was slightly higher in boarding schools (33.8 per cent) than in schools with both boarding and day facilities (31.0 per cent) and in day schools (19.9 per cent).

Regional disparities were also observed with regard to presence of materials for the promotion of good WASH behaviours. Pwani Region had the highest number of schools with materials for the promotion of desirable WASH behaviours displayed (47.3 per cent) while Simiyu Region (5.9 per cent) had the fewest. Kigoma Region had the highest percentage (93.3 per cent) of schools with no materials for visual materials for promotion of good WASH behaviours (Table 8.2).

Table 8.2: Percentage of schools by location, level, ownership status, type and model of school, region and whether or not the school had visual promotion for good WASH behaviour, Tanzania, 2018

Background characteristics	Visual promotion for good WASH behaviour displayed	No visual promotion for good WASH behaviour	Visual promotion reported but not displayed at the time of visit	Number of schools
Mainland/Zanzibar				
Mainland	21.2	72.2	6.5	2,320
Zanzibar	30.0	68.8	1.2	65
Location of School				
Rural	20.6	73.1	6.3	1,857
Urban	24.6	68.6	6.8	528
Level of School				
Primary school	21.8	71.0	7.2	1,640
Secondary school	20.6	74.7	4.7	745

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Background characteristics	Visual promotion for good WASH behaviour displayed	No visual promotion for good WASH behaviour	Visual promotion reported but not displayed at the time of visit	Number of schools
Ownership Status				
Government	20.3	73.2	6.5	2,069
Non-Government	28.9	65.1	6.0	316
Type of School				
Girls only	40.9	59.1	0.0	40
Boys only	25.2	74.8	0.0	30
Mixed	21.1	72.3	6.6	2,315
Model of School				
Boarding School	33.8	64.7	1.5	127
Day School	19.9	73.7	6.4	2,077
Both (Boarding and Day)	31.0	59.3	9.7	181
Region				
Dodoma	19.2	69.4	11.4	102
Arusha	17.3	73.3	9.5	105
Kilimanjaro	29.5	70.5	0.0	131
Tanga	19.5	71.8	8.7	135
Morogoro	24.9	60.9	14.3	121
Pwani	47.3	48.5	4.2	102
Dar es Salaam	38.4	55.9	5.7	109
Lindi	17.1	78.0	4.9	72
Mtwara	16.9	73.1	10.1	83
Ruvuma	24.8	64.4	10.8	106
Iringa	25.5	63.1	11.4	68
Mbeya	14.5	84.5	1.0	96
Singida	17.6	73.4	9.1	69
Tabora	14.3	85.0	0.7	101
Rukwa	18.2	72.8	9.0	48
Kigoma	6.7	93.3	0.0	83
Shinyanga	27.4	69.3	3.2	72
Kagera	14.2	85.3	0.5	127
Mwanza	18.1	71.8	10.1	124
Mara	19.6	73.8	6.5	106
Manyara	13.7	80.8	5.5	84

(Continued)

(Continued)

Background characteristics	Visual promotion for good WASH behaviour displayed	No visual promotion for good WASH behaviour	Visual promotion reported but not displayed at the time of visit	Number of schools
Njombe	25.3	71.0	3.7	64
Katavi	28.2	67.7	4.1	26
Simiyu	5.9	84.8	9.3	66
Geita	18.0	66.6	15.4	69
Songwe	24.0	76.0	0.0	51
Kaskazini Unguja	20.9	74.9	4.2	9
Kusini Unguja	28.0	67.6	4.5	9
Mjini Magharibi	39.4	60.6	0.0	25
Kaskazini Pemba	22.8	77.2	0.0	10
Kusini Pemba	24.4	75.6	0.0	12
Tanzania	**21.5**	**72.1**	**6.4**	**2,385**

Chapter 9

SUMMARY OF KEY FINDINGS, POLICY IMPLICATION AND RECOMMENDATIONS

Key Findings

The 2018 National School WASH Assessment investigated a range of indicators and background characteristics of the core WASH themes (water, sanitation and hygiene). Assessed also were access, availability and functionality of WASH facilities in schools. The findings have revealed some disparities in service provision among other things. Overall, the findings provide an opportunity to guide, prioritize, and improve planning and delivery of school WASH services in Tanzania.

The results of the assessment conducted in 2,385 primary and secondary schools selected with equal probability systematic sampling, through a stratified random sample, provides representative results for each of the 26 regions of Tanzania Mainland and the five regions of Zanzibar with respect to different background characteristics such as location of the school (rural and urban areas), ownership of the school (Government or non-Government) etc. Consequently, the findings can be relied upon to inform decision-making, planning and policy formulation. It is hoped that the results presented, conclusions drawn from and actions recommended will help to stimulate debate and lead to strategic decisions and actions for improving and scaling up school WASH services in Tanzania. Furthermore, this being the first national representative survey of WASH in schools, the findings provide national-level estimates and baselines on various indicators for WASH in schools, paving the way for measuring future progress.

The key findings summarized according to the WHO/UNICEF JMP ladders for monitoring WASH in schools are classified into three levels of service: **no service, limited service and basic service**. The SDGs target the attainment of a **basic service level** whereby all schools should be enabled to provide basic WASH services (drinking water, sanitation and hygiene) by 2030.

Though 68.2 per cent of primary and secondary schools had access to an improved source of drinking water, **only 55.3 per cent** were providing **basic drinking water services**, and 12.9 per cent had limited water services as water was not available at the time of the survey even though they had improved water sources. Appropriate actions are required to investigate and understand the factors leading to intermittent water supply in all schools which had improved water sources. This not only will help to tackle the situation, but also could promptly raise the proportion of schools with a basic service. Furthermore, **31.8 per cent** of the schools that had **no water services** require urgent attention. With regard to on-site water treatment before drinking, only 32.7 per cent of the surveyed primary and secondary schools in Tanzania treated their water prior to making it available for drinking.

The assessment also identified issues in terms of the quality of toilets in schools. The results indicate that schools in Tanzania had high overall coverage of sanitation services (88.7 per cent). However, only **30.3 per cent** were providing a **basic sanitation services** with respect to the WHO/UNICEF JMP ladder for sanitation. The results therefore indicate that over half the schools in Tanzania (58.4 per cent) had **limited sanitation services**. This means that though they had improved toilets, they also had issues related to quality, functionality, compromised privacy, and operation and maintenance of the facilities. Special efforts are required to improve these facilities by addressing the existing gaps which could, in a short time, increase the number of schools offering basic sanitation services. This would accelerate the Government's efforts towards meeting SDG targets, but more importantly, would enable children to learn in secure and protective environments.

Additionally, **very few schools met the Government minimum standards of pupil to drop hole ratio**. The recommended standard for Tanzanian schools is one toilet per 20 girls and one toilet per 25 boys. **Only 27.5 per cent** of schools surveyed met the national "minimum" standards, with huge regional variations. In the Mainland, Kilimanjaro Region had the highest number of schools meeting the standard (65.8 per cent) and Mara had the lowest coverage with only (9.2 per cent) of its schools meeting the minimum standard. In Zanzibar, Mjini Magaharibi had the highest number of schools (only 28.6 per cent) meeting the minimum standard) and Kaskazini Pemba had the lowest number (only 2.9 per cent) of schools meeting the standard.

The vast majority of schools did not have basic hygiene services, meaning that they did not have functional handwashing facilities or did not provide soap for handwashing. The survey revealed that approximately only two out of ten schools had **basic hygiene services**, defined as a handwashing facilities with water and soap available at the time of the survey.

Many schools in Tanzania **(95.8 per cent) reported teaching hygiene education**, though differences with respect to the mode of teaching were noted. The survey revealed that most schools (68.3 per cent) taught hygiene education as a component of the core curriculum or as part of the science subject. It is important that schools that do not currently offer hygiene education do so to ensure that children learn critical WASH behaviours in their formative years.

While **84.2 per cent** of schools provided MHM **education** as a component of MHM services, only **16.7 per cent of schools had changing rooms with basic amenities** (water, waste bin, soap and emergency supplies of sanitary pads). Inadequate sanitation facilities such as lack of sex-separated toilets with optimum privacy are some of the major constraints to adolescent girls' consistent school attendance. Infrastructural improvements in schools should prioritize the construction of private and single-sex sanitation facilities, washing and MHM facilities for girls based on the standards as prescribed in the school WASH guidelines for both Mainland and Zanzibar. This should be undertaken along with other related WASH interventions.

Equity issues are clearly observed across different background characteristics. Disaggregation of data has helped to shed light on the disparities between rural and urban schools, primary and secondary schools, government and non-government schools and among regions. It was evident that WASH services deprivations were higher for children in rural schools and primary schools. For example, the results have revealed that with respect to drinking water, 37.2 per cent of primary schools had no service at the time of the survey compared to 19.9 per cent of secondary schools. While 15.8 per cent of schools in urban areas had no drinking water services, the situation was more serious for schools in rural areas where 36.3 per cent had no services.

Basic sanitation was very low in **rural schools (24.3 per cent) compared to schools in urban areas (51.0 per cent)**. Basic sanitation was also very low in **primary schools (21.8 per cent) compared to secondary schools (48.8 per cent)**.The coverage of basic hygiene services was **16.0 per cent** in rural schools compared to **23.2 per cent** in urban schools, with a slight difference observed between primary (17.3 per cent) and secondary (18.3 per cent) schools. With respect to operations and maintenance, 65.1 per cent of urban schools had funds to maintain and repair school WASH facilities compared to 47.0 per cent of schools in rural areas.

The availability of at least one usable toilet that is accessible to pupils with physical disability or impaired vision was higher in secondary schools (16.2 per cent) than in primary schools (10.3 per cent). About 19 per cent of non-government schools were found to have at least one usable toilet/latrine that was accessible to pupils with physical disability or impaired vision compared to 11.1 per cent of Government schools.

Overall it appears that the situation is better in urban schools than in rural schools, in secondary schools than in primary schools, and in non-government schools than in government schools. These findings should inform the development of a need-based national plan to address the disparities and inequities revealed in the assessment.

The operation and maintenance of WASH facilities, with respect to the availability of funds, remains the primary challenge. These problems should be systematically addressed to ensure that WASH facilities continue to provide intended services to schoolchildren and to avoid costs incurred in replacing damaged facilities due to poor maintenance.

Recommendations and Policy Implications

The gaps established in the National School WASH Assessment point to the major areas of actions to be undertaken by the government and the key stakeholders to address limited access to adequate WASH services in schools. So far, efforts to improve water supply, sanitation and hygiene in schools have been piecemeal and on a small scale. For the government to reach targets on quality of education and retention of students in schools, especially girls, it is essential to scale up efforts to improve WASH services in schools across the whole of Tanzania.

For informed decision-making, it is recommended that, these results should be looked into beyond national averages that could mask large variations across various background characteristics. Regional disparities should also be considered while planning, implementing and managing WASH services in schools. This will ensure coherent and equitable allocation of resources based on needs when making improvements to school WASH services. This will further reduce disparities and inequities given the fact that primary schools and schools in rural areas face the greatest challenges. As such, these should be prioritized to help narrow the gap which could continue widening if current trends continue.

Governments and development partners should establish a solid process and effective management model to address sustainability and inequity issues emerging from the assessment and employ strategies that will enable going to scale. To achieve this, it is recommended that **a national costed plan of action** with a realistic budget be developed to guide implementation of WASH in schools. This would be an important initiative given the current situation where resources for school WASH interventions are scattered among agencies and often as sub-components under larger budget lines. The national costed plan of action will further guide decision makers as they plan future efforts to scale up actions against inadequate WASH services in schools.

Considering the availability of resources and existing capacities and opportunities, the most practical means of improving school WASH services would be through the adoption of a progressive approach. The progressive approach should aim to upgrade services from no service through basic services across all WASH dimensions. Ultimately, this would ensure healthier learning environments and

improve learning outcomes. It would also improve attendance and retention rates.

Children with access to basic WASH services in schools and who have learnt appropriate WASH practices are more likely to positively influence WASH practices at their homes, among family members and in the wider community. In this respect, a **national handwashing with soap campaign should be initiated in all schools** to emphasize the importance of positive WASH practices. Such a campaign can be achieved on a meagre budget and yet yield great benefits for schoolchildren. Such a campaign can be held at the national, regional or even at district level.

Key stakeholders including parents, communities, the private sector, government and institutions (research, academic, etc.) should be engaged in fostering multi-sectoral **partnerships and actions on MHM**. Successful implementation could lead to expanded MHM initiatives. It could also reduce barriers to education for girls, fight stigma, contribute to positive health and enable girls to consistently attend school.

More robust O&M mechanisms and strategies need to be instituted to ensure that WASH services are sustainable and functional. This will reduce frequent new investments in construction of WASH facilities which are very expensive. This can be achieved through active involvement of key stakeholders including students, teachers, parents, the private sector, local government and respective ministries. Existing roles and responsibilities among key stakeholders need to be rejuvenated for successful implementation of future O&M plans. Furthermore, financial incentives can be initiated by rewarding well performing schools to encourage the effective use and maintenance of WASH facilities.

Increased access to basic WASH services in schools and its sustainability require the involvement, commitment and support of the ministries of education, PO–RALG/ PO–RALGSD and other related ministries, such as health, water, public works, finance, government agencies like the newly formed Rural Water Supply and Sanitation Agency (RUWASA) and water authorities, among others.

Without the political commitment and allocation of sufficient resources, WASH in schools is likely to remain externally subsidized. This would lead to continued low progress towards moving to scale towards ensuring that every school in Tanzania has adequate WASH services for a better learning environment. It is recommended to **identify high level political champions** to support efforts at ensuring that school WASH is given the priority it deserves in every school if SDG targets of leaving no one behind are to be attained.

It is recommended that the JMP's core questions for assessing WASH in schools is included in routine data collection in the education sector. If successfully implemented, it will facilitate annual collection of data on key indicators that will further help in measuring progress and enabling periodic reporting of both national and global indicators (including SDG tracking).

Finally, it is important to point out that improving WASH services is not the finish line for improving school children's health and attaining their right to WASH and education. The goal is to empower children and help them achieve their dreams. While WASH strongly contributes to the attainment of this goal, other factors need to be duly considered and addressed as well.

ANNEXES

ANNEX A: ADDITIONAL TABLES

Table A2.1.1: Distribution of schools by region, level of school and Ownership status, Tanzania, 2018

Regions	Primary			Secondary			Total of schools
	Ownership status		Number of primary schools	Ownership status		Number of secondary schools	
	Government	Non-Government		Government	Non-Government		
Dodoma	728	44	772	188	33	221	993
Arusha	527	227	754	143	97	240	994
Kilimanjaro	892	88	980	218	113	331	1,311
Tanga	990	47	1037	241	44	285	1,322
Morogoro	841	55	896	183	60	243	1,139
Pwani	558	60	618	111	64	175	793
Dar es Salaam	376	319	695	140	187	327	1,022
Lindi	498	7	505	116	7	123	628
Mtwara	660	8	668	135	12	147	815
Ruvuma	763	25	788	146	54	200	988
Iringa	481	23	504	107	61	168	672
Mbeya	704	32	736	152	64	216	952
Singida	528	21	549	142	22	164	713
Tabora	770	21	791	153	23	176	967
Rukwa	359	11	370	68	22	90	460
Kigoma	635	16	651	128	52	180	831
Shinyanga	563	48	611	116	24	140	751
Kagera	889	74	963	191	59	250	1,213
Mwanza	855	111	966	200	73	273	1,239
Mara	773	62	835	170	36	206	1,041
Manyara	602	38	640	138	18	156	796
Njombe	484	17	501	86	35	121	622
Katavi	177	2	179	32	6	38	217
Simiyu	522	11	533	140	12	152	685
Geita	576	35	611	102	12	114	725
Songwe	398	11	409	86	26	112	521
Tanzania Mainland	**16,149**	**1,413**	**17,562**	**3,632**	**1,216**	**4,848**	**22,410**

(Continued)

(Continued)

Regions	Primary			Secondary			Total of schools
	Ownership status		Number of primary schools	Ownership status		Number of secondary schools	
	Government	Non-Government		Government	Non-Government		
Kaskazini Unguja	54	8	62	24	0	24	86
Kusini Unguja	52	6	58	22	0	22	80
Mjini Magharibi	67	128	195	45	2	47	242
Kaskazini Pemba	53	4	57	37	2	39	96
Kusini Pemba	59	9	68	39	3	42	110
Zanzibar	**285**	**155**	**440**	**167**	**7**	**174**	**614**
Tanzania	**16,434**	**1,568**	**18,002**	**3,799**	**1,223**	**5,022**	**23,024**

Table A2.1.2: Final sample allocation of schools by region and ownership status, Tanzania, 2018

Status	Ownership Status		Number of schools
	Government	Non-Government	
Dodoma	92	8	100
Arusha	67	33	100
Kilimanjaro	97	21	118
Tanga	111	8	119
Morogoro	96	13	109
Pwani	71	16	87
Dar es Salaam	49	53	102
Lindi	74	2	76
Mtwara	87	2	89
Ruvuma	87	10	97
Iringa	65	12	77
Mbeya	82	13	95
Singida	75	5	80
Tabora	90	6	96
Rukwa	57	5	62
Kigoma	78	10	88

(Continued)

(Continued)

Status	Ownership Status		Number of schools
	Government	Non-Government	
Shinyanga	75	8	83
Kagera	97	13	110
Mwanza	94	18	112
Mara	89	11	100
Manyara	64	5	69
Njombe	53	6	59
Katavi	30	1	31
Simiyu	60	3	63
Geita	60	5	65
Songwe	48	5	53
Tanzania Mainland	**1,948**	**292**	**2,240**
KaskaziniUnguja	24	2	26
Kusini Unguja	23	2	25
Mjini Magharibi	24	23	47
Kaskazini Pemba	26	2	28
Kusini Pemba	27	3	30
Zanzibar	**124**	**32**	**156**
Tanzania	**2,072**	**324**	**2,396**

Table A4.1: Percentage of schools with basic, limited and no water services by region, Tanzania, 2018

Regions	Basic water services	Limited water services	No water services	Number of schools
Dodoma	41.2	17.4	41.4	102
Arusha	76.5	11.6	11.8	105
Kilimanjaro	75.7	7.9	16.4	131
Tanga	48.5	16.3	35.2	135
Morogoro	61.2	11.3	27.5	121
Pwani	46.4	18.8	34.8	102
Dar es Salaam	68.3	20.3	11.4	109
Lindi	48.5	10.9	40.6	72
Mtwara	45.0	21.4	33.6	83
Ruvuma	65.3	8.3	26.4	106
Iringa	66.3	13.0	20.6	68

(Continued)

(Continued)

Regions	Basic water services	Limited water services	No water services	Number of schools
Mbeya	62.5	13.1	24.4	96
Singida	48.1	9.2	42.7	69
Tabora	43.6	8.8	47.6	101
Rukwa	39.0	10.7	50.3	48
Kigoma	49.6	15.4	35.0	83
Shinyanga	44.6	15.7	39.7	72
Kagera	55.2	9.6	35.2	127
Mwanza	54.6	16.7	28.8	124
Mara	49.5	6.2	44.3	106
Manyara	61.0	10.6	28.4	84
Njombe	61.7	12.8	25.5	64
Katavi	55.9	3.7	40.4	26
Simiyu	33.5	20.7	45.8	66
Geita	47.7	6.0	46.4	69
Songwe	29.7	14.6	55.7	51
Kaskazini Unguja	81.1	11.6	7.3	9
Kusini Unguja	83.8	16.2	0.0	9
Mjini Magharibi	88.2	7.8	3.9	25
Kaskazini Pemba	60.0	29.9	10.0	10
Kusini Pemba	91.9	8.1	0.0	12
Tanzania	**55.3**	**12.9**	**31.8**	**2,385**

Table A5.1: Percentage of schools with basic, limited and no sanitation services by region, Tanzania, 2018

Regions	Basic sanitation services	Limited sanitation services	No sanitation services	Number of schools
Dodoma	18.6	51.8	29.6	102
Arusha	48.9	51.1	0.0	105
Kilimanjaro	37.2	55.4	7.4	131
Tanga	36.4	55.2	8.4	135
Morogoro	25.8	65.7	8.5	121
Pwani	33.0	47.5	19.5	102
Dar es Salaam	57.2	37.8	5.1	109
Lindi	23.6	64.5	11.9	72

(Continued)

(Continued)

Regions	Basic sanitation services	Limited sanitation services	No sanitation services	Number of schools
Mtwara	22.9	53.6	23.5	83
Ruvuma	39.8	51.9	8.2	106
Iringa	30.0	45.5	24.5	68
Mbeya	31.0	65.1	3.8	96
Singida	18.4	57.3	24.3	69
Tabora	34.6	53.3	12.1	101
Rukwa	4.4	57.7	37.9	48
Kigoma	22.0	65.4	12.6	83
Shinyanga	17.8	63.2	19.0	72
Kagera	15.8	79.8	4.4	127
Mwanza	40.6	59.4	0.0	124
Mara	19.1	74.7	6.2	106
Manyara	26.6	70.3	3.1	84
Njombe	46.5	44.5	9.0	64
Katavi	9.7	57.2	33.2	26
Simiyu	5.8	85.4	8.8	66
Geita	34.6	51.0	14.3	69
Songwe	11.2	70.0	18.8	51
Kaskazini Unguja	43.2	48.3	8.5	9
Kusini Unguja	54.5	41.1	4.5	9
Mjini Magharibi	57.4	42.6	0.0	25
Kaskazini Pemba	84.4	15.6	0.0	10
Kusini Pemba	52.7	47.3	0.0	12
Tanzania	**30.3**	**58.4**	**11.3**	**2,385**

Table A6.1.1: Percentage of schools with basic, limited and no hygiene services by region, Tanzania, 2018

Regions	Basic hygiene services	Limited hygiene services	No hygiene services	Number of schools
Dodoma	8.7	15.7	75.6	102
Arusha	42.2	29.8	28.0	105
Kilimanjaro	47.2	25.5	27.3	131
Tanga	12.5	30.2	57.3	135
Morogoro	21.7	31.2	47.1	121

(Continued)

(Continued)

Regions	Basic hygiene services	Limited hygiene services	No hygiene services	Number of schools
Pwani	20.4	24.3	55.3	102
Dar es Salaam	21.2	42.9	35.9	109
Lindi	10.2	35.7	54.1	72
Mtwara	6.8	22.5	70.7	83
Ruvuma	4.3	57.0	38.7	106
Iringa	33.1	43.4	23.5	68
Mbeya	14.1	37.3	48.6	96
Singida	16.9	17.9	65.2	69
Tabora	21.1	13.6	65.3	101
Rukwa	5.4	17.7	76.9	48
Kigoma	8.8	14.0	77.1	83
Shinyanga	22.8	15.4	61.8	72
Kagera	18.1	11.4	70.4	127
Mwanza	17.8	23.5	58.7	124
Mara	11.8	20.6	67.6	106
Manyara	6.4	31.1	62.5	84
Njombe	20.5	43.9	35.6	64
Katavi	13.3	37.3	49.4	26
Simiyu	4.8	23.2	72.0	66
Geita	14.0	16.3	69.7	69
Songwe	1.4	27.0	71.6	51
Kaskazini Unguja	21.2	31.3	47.5	9
Kusini Unguja	7.3	55.9	36.8	9
Mjini Magharibi	29.5	48.8	21.7	25
Kaskazini Pemba	7.1	28.6	64.3	10
Kusini Pemba	9.5	54.2	36.3	12
Tanzania	**17.6**	**27.6**	**54.8**	**2,385**

ANNEX B: QUESTIONNAIRES

2018 Tanzania School Water, Sanitation and Hygiene Assessment Questionnaire

Consent

Find The Head Teacher or any Other Teacher in Charge of The School Who is Present at The School. Read The Following Greeting:

Good day! My name is _____. I am here on behalf of the National Bureau of Statistics (NBS); the Office of Chief Government Statistician (OCGS), Zanzibar and the Ministry of Education, Science and Technology; President's Office Regional Administration and Local Government (PO–RALG); the Ministry of Education and Vocational Training, Zanzibar; and President's Office Regional Administration, Local Government and Special Department (PO–RALGSD). We are conducting an Assessment on School Water, Sanitation and Hygiene (WASH) to assist the Government in knowing more about SWASH services in Tanzania.

Now I will read a statement explaining the study.

Your school was selected to participate in this study. We will be asking you questions about various issues regarding water, sanitation and hygiene. Information collected about your school during this study may also be used by the Government, local and international organizations and researchers for further studies that aim at improving WASH services in Tanzanian schools.

Neither your name nor the names of any other workers who participate in this study will be included in the data set or in any report; however, there is little chance that any of these respondents may be identified later. Still, we are asking for your help in order to collect this information.

You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, because the information is much needed for the benefit of the schools and the nation at large.

If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information.

At this point, do you have any questions about the study? Do I have your agreement to proceed?

Interviewer's Signature Indicating Consent Obtained | | | | | 2 | 0 | 1 | 8 |

_____

Was Consent Given? 1. YES 2. NO –> Thank The Respondent and Stop The Interview

Interviewer's Name and Code: _____ | | | |

1.0 School Identification

Question No.	Question	Codes
101	Region: _____	
102	Council: _____	
103	Ward/Shehia: _____	
104	Village/Mtaa: _____	
105	School Name: _____	
106	School Registration Number:	
107	Ownership Status of the School: 1. Government 2. Faith-based 3. Company 4. Private	
108	Location of the School: 1. Rural 2. Urban	
109	Type of School: 1. Pre-primary and primary 2. Primary only 3. Pre-primary and primary and secondary 4. Primary and secondary 5. Secondary only	
110	Is this a Boarding or Day School? 1. Boarding 2. Day school 3. Both (boarding and day)	
110A	What is the type of students? 1. Girls only 2. Boys only 3. Mixed	
111	Number of Shifts: 1. One shift 2. Two shifts 3. Three shifts 4. Shift for some classes	

2.0 School Details

Question No.	Question	Codes
201	Interviewee Name:	
202	Position at School: 1. Head teacher 2. Teacher 3. Other (specify)_____	
203	Gender of Interviewee: 1. Male 2. Female	
204	Number of Teachers who Work at this School:	Female:
		Male:
205	Number of Teachers at Work Today:	Female:
		Male:
205A	Number of Temporary/Contract Teachers	Female:
		Male:
206	Number of Pupils Enrolled:	Girls:
		Boys:
207	Number of Girls/Boys with Vision or Physical Disability?	Girls:
		Boys:
208	Number of Classrooms in Use:	
209	Does the School have Electricity? 1. Yes 2. No	
209A	What is the main source of electricity in this school?	1. TANESCO/ ZECO 2. Solar 3. Generator (Private Source) 4. Gas (Industrial) 5. Natural gas 6. Gas (Biogas) 7. Electric (Wind) 8. Other, specify

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Question No.	Question	Codes
209B	What are the uses of electricity in this school?	1. Lighting in the toilets in the night 2. Pumping water from the wells 3. For Office works 4. For studying in the classrooms 5. Pumping drinking water 6. Pumping water for other uses
210	Does the School Provide Meals for Pupils? 1. Yes 2. No	
211	Does the School have a Dining Room/Hall? 1. Yes 2. No	
212	Was Deworming Program Service Provided in this School in the last 12 months? 1. Yes 2. No →301	
213	How Many Times Deworming Program services was Provided?	

3.0 Water Sources and Availability

I am now going to ask you a few questions about your school's water facilities.

<table>
<tr><th>Question No.</th><th>Question</th><th>Codes</th></tr>
<tr><td>301</td><td>What is the main source of drinking water provided by the school? (Check One – Most Frequently Used)

IF "51" or "52" continue to 301A

IF "95"► Skip TO 320

ELSE go to 302</td><td>
<table>
<tr><th>Water Sources List</th><th>Code</th></tr>
<tr><td>Piped Water</td><td></td></tr>
<tr><td>Piped Into School Grounds</td><td>11</td></tr>
<tr><td>Public Tap/Standpipe Off School Grounds</td><td>12</td></tr>
<tr><td>Piped Water From Elsewhere</td><td>13</td></tr>
<tr><td>Tube Well or Borehole</td><td>21</td></tr>
<tr><td>Dug Well</td><td></td></tr>
<tr><td>Protected Well</td><td>31</td></tr>
<tr><td>Unprotected Well</td><td>32</td></tr>
<tr><td>Water From Spring</td><td></td></tr>
<tr><td>Protected Spring</td><td>41</td></tr>
<tr><td>Unprotected Spring</td><td>42</td></tr>
<tr><td>Rainwater</td><td></td></tr>
<tr><td>Rainwater With Roof Catchment (Such as Gutters)</td><td>51</td></tr>
<tr><td>Rainwater, But no Roof Catchment</td><td>52</td></tr>
<tr><td>Water Vendor or Tanker</td><td>61</td></tr>
<tr><td>Surface Water (e.g., River, Pond, Lake, Dam, Stream, Canal, Irrigation Channel)</td><td>81</td></tr>
<tr><td>Packaged Bottled Water</td><td>91</td></tr>
<tr><td>No Water Source</td><td>95</td></tr>
<tr><td>Other, Specify</td><td>98</td></tr>
</table>
</td></tr>
<tr><td>301A</td><td>How big is your rain water storage tank?</td><td>_____ Litres</td></tr>
<tr><td>302</td><td>Where is that water source located?</td><td>1. On school grounds
2. Off school grounds
3. No water available</td></tr>
<tr><td>303</td><td>How long does it take to go there, get water, and come back?</td><td>Time_____ (in minutes)</td></tr>
<tr><td>304</td><td>Do you pay for water from that source?</td><td>1. Yes
2. No ► skip to 306</td></tr>
</table>

(Continued)

(Continued)

Question No.	Question	Codes
305	How much do you pay?	Value_____ (Circle One of The Following) 1. Per Jerry Can 2. Per Litre 3. Per Month
306	Is drinking water from the main source currently available at the school?	1. Yes 2. No
307	In the previous two weeks, was drinking water from the main source available at the school throughout each school day?	1. Yes 2. No
308	Is drinking water from the main source typically available throughout the school year?	1. Yes, always – **go to 310** 2. No
309	For how long is drinking water unavailable from the main source throughout the school year?	1. >= 30 Days total 2. 31 Days - 3 months 3. 4- 6 Months 4. 7-9 Months 5. 10-12 Months
310	Is drinking water accessible to those with limited mobility or vision?	1. Yes 2. No
311	Is drinking water accessible to the youngest children in the school?	1. Yes 2. No
312	How many drinking water points (e.g. taps) are at the school?	
313	Does the school do anything to the water from the main source to make it safe to drink?	1. Yes 2. No ► **skip to 319**
314	What treatment method is used? **(Circle all that apply)**	A. Filtration B. Strain Through a Cloth C. Boiling D. Chlorination/Bleach e.g., Water Guard E. Solar Disinfection F. Let It Stand or Settle G. Flocculant e.g., Pur=Water Purifier H. Other, Specify_____ I. Don't Know

(Continued)

(Continued)

Question No.	Question	Codes
315	**Only ask if there is a source at the school compound, otherwise go to 401:** Does the community collect water from the school source?	1. Yes 2. No ► **skip to 320**
316	Do community members pay for the school water they collect?	1. Yes 2. No ► **skip to 320**
317	How much do community members pay for the water they collect from the school?	Value_____ (Circle One of The Following) 1. Per Jerry Can 2. Per Litre 3. Per Month
318	How much money is collected per month for use of the facilities?	Value_____
319	How much of the money collected per month for use of the facilities is provided to the school per month?	Value_____
320	Are pupils allowed to bring drinking water from home?	1. Yes 2. No

4.0 Sanitation

Question No.	Question	Codes
401	What type of student toilets/latrines are at the school? **(Ask most common: show picture)**	1. Flush to piped sewer system 2. Flush to septic tank 3. Flush to pit latrine 4. Flush to somewhere else 5. Flush, don't know where 6. Ventilated improved pit latrine 7. Pit latrine with slab (washable) 8. Pit latrine with slab (not washable) 9. Pit latrine without slab/open pit 10. Composting toilets 11. Hanging latrines 12. Bucket latrines 13. No toilets or latrines/bush/field 14. Other (mention)

(Continued)

(Continued)

<table>
<tr><th>Question No.</th><th>Question</th><th>Codes</th></tr>
<tr><td>402</td><td>How many toilets/latrines are at the school? (Insert number)</td><td>
<table>
<tr><th></th><th>Girls Only Toilets</th><th>Boys Only Toilets</th><th>Common Use Toilets</th></tr>
<tr><td>Total number</td><td></td><td></td><td></td></tr>
<tr><td>Number that are usable (availble, functional, private)</td><td></td><td></td><td></td></tr>
</table>
<table>
<tr><th></th><th>Female Teacher Toilets</th><th>Male Teacher Toilet</th><th>Shared Toilets</th></tr>
<tr><td>Total number</td><td></td><td></td><td></td></tr>
<tr><td>Number that are usable (available, functional, private)</td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>403</td><td>Does the school have urinals?</td><td>1. Yes, for girls only
2. Yes, for boys only
3. Yes, for both boys and girls
4. No urinals</td></tr>
<tr><td colspan="3">Q404 – 413 should only be asked to co-education or girls only schools</td></tr>
<tr><td>404</td><td>Are water and soap available in a private space for girls to manage their menstrual hygiene?</td><td>1. Yes, water and soap
2. Water, but not soap
3. No water/no private space</td></tr>
<tr><td>405</td><td>Are there covered bins for collection of used menstrual hygiene materials in girls' toilets?</td><td>1. Yes
2. No</td></tr>
<tr><td>406</td><td>Does the school provide any type of menstrual hygiene product for adolescent girls (e.g. sanitary pads, tampons or cups)?</td><td>1. Yes, for free
2. Yes, for purchase
3. No</td></tr>
<tr><td>406 A</td><td>How does the school support access to menstrual hygiene products?</td><td>1. Emergency pads
2. School purchase outlets
3. School budget for free
4. Income generating activities (school initiative)</td></tr>
</table>

(Continued)

(Continued)

Question No.	Question	Codes
407	Which menstrual products are used by adolescent girls?	1. Disposable sanitary pads 2. Reusable sanitary 3. Menstrual cups 4. Tampons 5. Other (specify)
408	Are there disposal mechanisms for menstrual hygiene waste at the school?	1. Yes 2. No► **skip to 410**
409	What type of mechanism is used for disposal of menstrual hygiene?	1. Incinerators 2. Burning chambers 3. Sanitary disposal pits 4. Waste pits 5. Service provider 6. None
410	How frequent are the used menstrual hygiene materials disposed?	1. Every day 2. Once per week 3. Once per month 4. Twice per month
411	Are there provisions for Menstrual Hygiene Management (MHM) available at the school?	1. Yes 2. No
412	Which of the following provisions for menstrual hygiene management (MHM) are available at the school? **Circle all that apply**	Changing room/special room for adolescent girls with basic amenities Changing room/special room for adolescent girls without basic amenities MHM materials (e.g. Sanitary pads, pants) MHM education
413	If the school provides MHM Education, who is responsible for providing it?	1. Matron 2. Health teachers 3. Nurse 4. School councilors 5. School wash club 6. Other (mention) _____

(Continued)

(Continued)

Question No.	Question	Codes
414	How many times per week are the student toilets cleaned?	1. Every day 2. 2-4 Times per week 3. Once per week. 4. 6 Times per week 5. They are not cleaned
415	In general, how clean are the student toilets?	1. Very clean 2. Clean 3. Somewhat clean 4. Not clean
416	Is there at least one usable toilet/ latrine that is accessible to the youngest children at the school?	1. Yes 2. No
417	Is there at least one usable toilet/ latrine that is accessible to those with physical disability or impaired vision?	1. Yes 2. No
418	Where are the student toilets located?	1. Within school building 2. Outside building, but on-premises 3. Off-premises 4. In and out of the building
419	When are students permitted to use the school toilets/latrines?	1. At all times during the school day 2. During specific times the school day 3. There are no toilets available for use at the school
420	Do the students use anal cleansing materials currently available to all students?	1. Yes 2. No ► **skip to 422**
421	If yes, what types?	1. Leaves 2. Toilets paper 3. Cobs 4. Stones 5. Papers 6. Clothes 7. Water 8. Others (specify)
422	Is there sufficient light in the student toilets on the day of the survey/ questionnaire?	1. All toilets 2. Some toilets 3. None

(Continued)

(Continued)

Question No.	Question	Codes
423	Are latrines or septic tanks emptied (or latrines safely covered) when they fill up?	1. Yes 2. No
424	How are filled-up latrines emptied?	1. Connected to sewer system 2. Gulpers/tank collectors 3. Sewerage tank 4. Digging in new pits 5. Manually empting 6. Other specify .....
425	Are the school toilet secured from community members use?	1. Yes 2. No

5.0 Hygiene

Question No.	Question	Codes
501	Are there handwashing facilities at the school?	1. Yes 2. No► **skip to 510**
502	What type of handwashing facilities does the school have? **May be more than one**	A. Piped water with taps B. Storage tank with taps C. Basins or buckets without taps D. Hand-poured water system (such as from bucket or water container E. Tippy tap (kibuyu chirizi) F. Other, mention_____
503	Where are hand washing facilities located at the school? **(Mark all that apply)**	Toilets Food preparation area Dining area Classrooms School yard Teachers office Dormitories Other_____

(Continued)

(Continued)

Question No.	Question	Codes
504	How many hand washing facilities are located at the school? **(Insert number of taps)**	A. As a component of core curriculum/ part of science subject B. As an integral part of a special module on healthy living/life skills C. As a stand alone special module on hygiene D. Through schools sponsored extra curriculum program (school wash clubs) E. No special module
505	Are both soap and water currently available at the hand washing facilities?	1. Yes, water and soap 2. Water only 3. Soap only 4. Neither water or soap
506	Are there hand washing facilities accessible to those with physical disability or impaired vision?	1. Yes 2. No
507	Are there hand washing facilities accessible to the youngest children at the school?	1. Yes 2. No
508	Is there any hand washing activities?	1. Yes 2. No
509	How many times per week are group handwashing activities conducted for all students?	1. At least once Per school day 2. 2-4 Days per Week 3. Once per week
510	Is hygiene education taught at the school?	1. Yes 2. No ► **skip to 512**
511	How is hygiene education taught?	
512	How many teachers in the school who deal with WASH? **(Insert number of teachers)**	
512 A	Does the school have teachers trained/oriented on WASH?	1. Yes 2. No ► **skip to 514**
513	How many were trained/oriented?	Female..... Male.....

(Continued)

(Continued)

Question No.	Question	Codes
514	How is solid waste (garbage) from the school disposed off? **(Ask for most common)**	1. Collected by municipal waste system 2. Burned on premises 3. Buried and covered on premises 4. Openly dumped on premises 5. Other, specify ……
	Boarding School	
515	Are there separate facilities for girls and boys to bathe? **Not to be asked in a single sex school**	1. Yes 2. No► **skip to 517**
516	How many bathing areas are available?	Female.....
		Male.....
517	Are there separate facilities for students and residential staff to bathe?	1. Yes 2. No
518	Is there at least one bathing area that is accessible for females with limited mobility and a separate one for females with limited mobility?	1. Yes 2. No
519	Is there at least one bathing area that is accessible for males with limited mobility and a separate one for males with limited mobility?	1. Yes 2. No
520	For how many months of the school year is the school unable to provide water for students for bathing?	Months.....

6.0 Operation and Maintenance

Question No.	Question	Codes
601	What entity has the primary responsibility for maintenance and repair of school WASH facilities?	1. PO–RALG/PO–RALGSD 2. The ministry responsible for water supply 3. Ministry responsible for education 4. District/municipal authorities 5. The school itself 6. Community 7. Another body (specify)…… 8. Don't know

(Continued)

(Continued)

Question No.	Question	Codes
602	Does the school currently have funds available to cover the maintenance and repair of school WASH facilities? (e.g., purchasing soap, replacing taps and pumps, emptying septic tanks)?	1. Yes 2. No
603	Are the school water facilities successfully maintained and repaired when required?	1. Yes— **skip to om606** 2. No 3. Partially
604	Is the school's water supply system currently functional?	1. Functional ► **skip to 606** 2. Partially functional 3. Not functional
605	If the water supply system is not functional or partially functional at the time of visit. What are the main reasons? **Check all that apply**	A. Unclear responsibilities for operation and/or maintenance B. Poor operation and/or maintenance practices C. Lack of spare parts D. Lack of operational consumables (fuel, electricity, etc) E. Poor initial design of the system F. Age of the system G. Other (specify….)
606	Are the school sanitation facilities successfully maintained and repaired when required?	1. Yes 2. No 3. Partially
607	Is the school's sanitation facility currently functional?	1. Functional ► **skip to 608** 2. Partially functional 3. Not functional
608	If the sanitation facility is not functional or partially functional at the time of visit. What are the main reasons? **Check all that apply**	A. Unclear responsibilities for operation and/or maintenance B. Poor operation and/or maintenance practices C. Lack of spare parts D. Lack of operational consumables (lack of cleaning material, etc) E. Poor initial design of the of the sanitation facility F. Age of the facility G. Lack of emptying services H. Other (specify….)

(Continued)

(Continued)

Question No.	Question	Codes
609	Who is responsible for cleaning the toilet facility?	1. Cleaning staff 2. Teachers 3. Students/pupils 4. Community members 5. Other, specify
610	**If students/pupils** What are the respective responsibilities of girls and boys?	1. Girls usually clean their own toilets 2. Boys usually clean their own toilets 3. Girls usually clean boys toilets 4. Boys usually clean girls toilets 5. Girls usually clean teachers toilet 6. Boys usually clean teachers toilet
611	Are cleaning tools and disinfectants available?	1. Yes 2. No
612	Is there a daily cleaning schedule available and is it being followed?	1. Yes 2. No
613	Did the School Committee discuss School WASH in its last meeting? **(Check last minutes)**	1. Yes 2. No
614	Is there agreed mechanism of maintenance of water supply system and sanitation facility?	1. Yes 2. No

7.00 Pupil Engagement

I am now going to finish up this interview with a few last questions on pupil engagement around WASH activities in this school.

Question No.	Question	Codes
701	Does this school currently have pupils involved in any type of school health club/school WASH club/school Mazingira Club?	1. Yes, school wash club 2. Yes, school health club ► **skip to 706** 3. Yes, school Mazingira club **skip to 706** 4. Yes, school health club and Mazingira club 5. No ► **skip to 708**
702	How many members of the school WASH club are there?	_____ Members (Enter "99" for "don't know")

(Continued)

(Continued)

Question No.	Question	Codes
702A	How many girls and boys are members of the school WASH club?	_____ Girls _____ Boys
703	How often do school WASH club members meet?	1. Daily 2. Weekly, but not everyday 3. Monthly, but not every week 4. Within the past school year, but not every month 5. Other, specify _____ 6. Don't know
704	Do school WASH club members do activities outside of the school in the surrounding community?	1. Yes 2. No
705	Does the school health club/Mazingira club include WASH activities in their club activities?	1. Yes 2. No ► **skip to 708**
706	What type of WASH activities does the school health club/Mazingira club engage in? **(Multiple responses possible. Circle all that apply.)**	A. Cleaning latrines B. Cleaning handwashing/drinking water containers C. Cleaning rainwater harvesting tank(s) D. Collecting water E. Treating drinking water F. Promoting good hygiene behavior in the school through art, drama, and/or poetry G. Other, specify_____ H. 99. Don't know
707	Is there any visual promotion of good WASH behavior at this school (i.e. talking walls promoting WASH messages)? **(Verify by observation if response is yes)**	1. Yes, available and displayed at the time of visit 2. No 3. Yes, but not displayed at the time of visit

Thank you very much for your time. We have reached the end of the interview. Do you have any further questions for me?

2018 Tanzania

School Water, Sanitation and Hygiene (WASH) Assessment

Observation Questionnaire

1.00 Observations: Duty Rosters & Health Messaging

Observe the school's walls, classrooms, and head teacher's office to see whether there are any duty rosters and/or health messaging on display. Complete the following questions based on your observations

O101	Duty roster displayed for water collection?	1. Yes 2. No
O102	Duty roster displayed for water treatment?	1. Yes 2. No
O103	Duty roster displayed for cleaning drinking/handwashing containers?	1. Yes 2. No
O104	Duty roster displayed for cleaning latrines?	1. Yes 2. No
O105	Duty roster displayed for cleaning rain water (RWH) tanks?	1. Yes 2. No
O106	Do you observe any visual promotion of good WASH behavior at this school (i.e. talking walls promoting WASH messages)?	1. Yes 2. No

2.00 Observations: Drinking Water observations

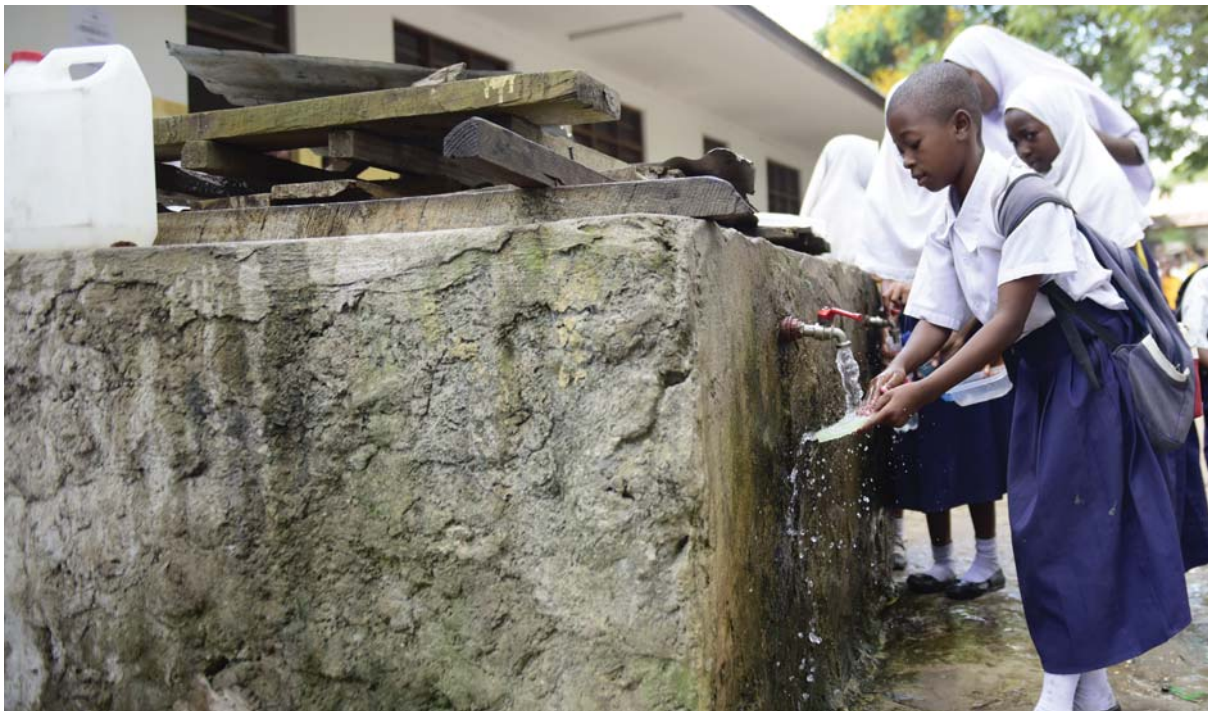
Ask to inspect the school's drinking water facilities and mark the observations below. Answer the questions using your own observations.

O201	Was drinking water provided to students today?	1. Yes 2. No
O202	Are there designated containers for storing drinking water that the pupils drink from directly?	1. Yes 2. No
O203	What type of storage containers do pupils drink directly from? *(Multiple responses possible. Circle all that apply.)*	A. Vessels with narrow mouth and tap B. Rainwater Tank C. Vessels with narrow mouth and no tap D. Wide mouth container with tap E. Wide mouth container with no tap F. Storage container, greater than 100 Litres G. Other, specify _____
O204	Are there designated containers for treatment of drinking water?	1. Yes 2. No

3.00 Observations: Handwashing Station observations

Ask to inspect the school's handwashing facilities and mark the observations below. Answer the questions using your own observations.

O301	Does the school have dedicated handwashing stations?	1. Yes 2. No ► **Skip to 4.00**
O302	How many dedicated handwashing stations are at this school?	_____ stations
O303	*Are there separate handwashing containers for girls and boys?*	1. Yes, girls only 2. Yes, boys only 3. Yes, girls and boys 4. No Handwashing containers
O304	Did the school provide water for handwashing for students today?	1. Yes 2. No
O305	Distance from girls' latrines to the nearest functioning handwashing containers/stations	1. Yes 2. No
O306	Did the school provide soap for handwashing for the students today?	_____meters
O307	Distance from girls' latrines to the nearest functioning handwashing containers/stations	_____meters
O308	Are there any visual promotion of good WASH behaviours at this school?	1. Yes 2. No ► **Skip to 4.00**
O309	Where are they displayed?	A. Walls B. Bango C. Other, Specify_____
O310	How many toilet blocks does this school have? **Insert Number of Blocks**	



4.00 Observations: Latrines

For each latrine toilet block, 15 observations will be conducted. The list of observations and response options are found in the column on the left of the table and each latrine block occupies one vertical column with 15 spaces for entry. Do not include latrines blocks that have been closed and are no longer in use.

-- Fill in table on the following page --

		Block 1	Block 2	Block 3	Block 4	Block 5
O401	**Total # of toilets in a block:** *(enter number)*					
O402	**Type** 1. Flush to piped sewer system 2. Flush to septic tank 3. Flush to pit latrine 4. Flush to somewhere else 5. Flush, don't know where 6. Ventilated improved pit latrine 7. Pit latrine with slab (washable) 8. Pit latrine with slab (not washable) 9. Pit latrine without slab/open pit 10. Composting toilets 11. Hanging latrines 12. Bucket latrines 13. No toilets or latrines/bush/field 14. Urinals 99. Other (mention)					
O403	**Who uses the toilets in this latrine block?** *(Write all that apply)* 1.Teachers 3. Girls 2. Boys 4. Shared 5. Not assigned					
O404	**How long ago were the toilets in this block built?** ***(Ask to confirm)*** 1. Below 12 months 2. Within past year 3. 1 to 2 years ago 4. 2 to 3 years ago 5. Over 3 years ago 99. Don't know					
O405	**Number of toilets with doors** *(enter number)*					

(Continued)

(Continued)

		Block 1	Block 2	Block 3	Block 4	Block 5
O406	**Number of toilets with functioning doors** (close completely, reach the floor/ provide privacy, have no large holes)					
O407	**Number of toilets with windows** *(enter number)*					
O408	**Number of toilets with functioning windows** (can close and open)					
O409	**Cleanliness: Smell** 1. No smell 2. Some smell inside 3. All smell inside 4. Smell inside and outside					
O410	**Cleanliness: Feces** 1. All clean 2. Some slightly dirty 3. All toilets dirty 4. Feces present					
O411	**Cleanliness: Flies** 1. None 2. Some flies in a few 3. Some flies in all 4. Flies inside & outside					
O412	**Slab/floor material** 1. Earth/sand 2. Dung 3. Wood planks 4. Palm/bamboo 5. Ceramic tiles, terrazzo 6. Cement/concrete 7. Plastic 88. Other (specify)					
O413	**Structure: Platform/Slab** 1. Secure 2. Some erosion 3. Holes under platform 4. Unstable/unsafe					

(Continued)

(Continued)

		Block 1	Block 2	Block 3	Block 4	Block 5
O414	**Wall material** 1. No wall 2. Grass/palm 3. Cane/Trunk/Bamboo 4. Poles with mud 5. Stone with mud 6. Wood/timber 7. Cement/concrete 8. Stone with lime/cement 9. Sun-dried brocks/mud brick 10. Burnt bricks 11. Cement block 12. Metal 88. Other (specify)					
O415	**Structure: Superstructure** 1. No cracks 3. Visible holes 2. Some cracks 4. Unstable					
O416	**Roofing materials** 1. No roof 2. Grass/thatch/palm leaf/mud 3. Rustic mat 4. Palm/bamboo 5. Wood planks 6. Iron sheet 7. Concrete 8. Tiles 88. Other (specify)					
O417	If the toilets have ventilation pipes, are they functioning (covered from pit to roof, screened, not broken)? 1. Yes 2. No 3. Toilets do not have ventilation pipes					