

Ethiopia: ANALYSIS OF POLICIES AND IMPLEMENTATION BLOCKAGES TO SCHOOL WASH

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Report produced and submitted by: Girma Aboma (MSc), Fromsa Taye (MBA) & Selam Yirga (MPh), GAA Economic Development Consult; Tel.: +251 911 639461; Email: gaa_edconsult@yahoo.com, Addis Ababa

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Acronyms

WASH – Water Supply, Sanitation and Hygiene
O&M – Operation and Maintenance
WAE – WaterAid Ethiopia
MoE – Ministry of Education
WinS – WASH in Schools
ESDP – Education Sector Development Program
NGO – Non-Government Organization
OWNP – One WASH National Program
ODF – Open Defecation Free
SLTSH – School Led Total Sanitation and Hygiene
WHO – World Health Organization
VIP – Ventilated Improved Pit
LQAS – Lot Quality Assurance Sampling
PTA – Parent Teachers Association
WIF – WASH Implementation Framework
POM – Program Operation Manual
PMU – Program Management Unit
GTP – Growth and Transformation Plan
CWA – Consolidated WASH Account
NWI – National WASH Inventory
MHM – Menstrual Hygiene Management
WWT – Woreda WASH Team
SNNPR – Southern Nations, Nationalities and Peoples Region
MoU – Memorandum of Understanding
SIP – School Improvement Program
BoH – Bureau of Health
BoE – Bureau of Education
COWASH – Community Water Supply, Sanitation and Hygiene
HEW – Health Extension Workers
SMC – School Management Committee

Executive Summary

WaterAid commissioned a study entitled “Analyzing policy and implementation blockages to school WASH” to GAA Economic Development Consult during January and February 2015. The study aims at generating evidences on the barriers to the effectiveness of WASH in Schools that are adversely impacting on the quality of education. It used bottleneck analysis tools to collect relevant data at national, regional, local and school levels. Both qualitative and quantitative methods were employed to collect relevant data. Desk reviews, key informant interviews, student interview, spot checks, direct observation, pocket voting and small group interviews were used at different levels (refer methodology section for details). The following paragraphs discuss the major findings and recommendations.

One WASH National Program (2013), Program Operation Manual (2014), WASH Implementation Framework (2013), Memorandum of Understanding (2012) and other associated sector wide program documents have clear directions for WASH in schools. They have highlighted the existing situations in terms of policies and support structures, developing and sustaining WASH in schools, and how they are approaching future implementations to achieve universal access. Other sector specific policies such as education and training policy (1994), health policy (1993) and water resources management policy (1999) are, however, silent with respect to WASH in schools. These policies do not provide specific directions for WASH in schools. And there is no nationally agreed WASH in Schools guideline that directs the delivery and management of WASH facilities in schools. But, most importantly, MoE, in its ESDP IV, has recognized the problems associated with WASH in schools; and MoH is planning to revise its health policy (MoH, 2014). On the basis of Memorandum of Understanding signed between the WASH ministries and/or regional WASH bureaus, it can be concluded that there is greater clarity of roles and responsibilities for WASH in Schools at national and regional levels. But, results of bottleneck analysis indicated that MoU has not yet signed at local government levels and clarity of roles created at upper tiers of government has not yet been achieved at district/town levels, the ultimate service providers for schools. Even if there is an agreed minimum national standard for WASH in schools, regions not yet fully cascaded down to local governments (note that this refers to sample local governments).

Specific regular WASH in school plan does not exist at all levels. But, during the current year, joint action plan was prepared by signatory ministries which will be financed under the channel 1b that flows through consolidated WASH Account. A specific water supply target was indicated in the fourth education sector development program (planned to increase access to water supply from 34% to 64% by 2015). But, no specific targets are indicated for sanitation and hygiene in schools at all levels. There is no specific system for monitoring WASH in schools at all levels. The existing school monitoring checklists only captures availability of water supply and sanitation facilities in schools, but it doesn't capture indicators associated with hand washing facilities & practices, adequacy, functionality, O&M, sustainability, solid & liquid waste management, etc. Findings revealed that hygiene education is partly included in the national curriculum for primary schools. It is not age and gender sensitive; means that a specific hygiene needs for adolescent girls is not fully addressed. It lacks safe water practices at schools; even

teachers and local experts lack such capacity to promote its practices. Though not sufficient, hygiene is partly included in the environmental science and science text books for the first and second cycle primary schools. WASH in school has no specific public budget line. And government is not allocating any specific budget for WASH in schools at all levels. However, schools receive block grant and school grant for school improvement activities including WASH. Either because of the insufficiency of the grants or the low priority attached to WASH, school administration or school board is not allocating specific budget for WASH improvement activities (as evidenced from the school survey).

As it evident from education abstract, 59.3% of the primary schools and 16.2% of secondary schools lack access to water supply, which shows a long way to go to reach these schools. Similarly, 92% of primary schools and 100% of secondary schools have access to basic sanitation facilities, predominantly traditional pits but access to improved sanitation is very small (only 32% in 2013). Toilet stance to pupils' ratio ranged between 1:15 and 1:522 (1:19 and 1:585 for boys; 1:11 and 1:459 for female) which is by far greater than the national standard (1:50 as specified in the OWNP). Almost all schools lack hand washing facilities, even though it was not counted yet by any of the previous monitoring systems. Equitable access to WASH facilities in schools is still a bigger challenge. Some efforts are being made in terms of constructing separate toilet blocks for boys and girls, and for teachers and students regardless of their quality and quantity standards. But, almost all schools lack separate sanitation facilities for adolescent girls for the first time starting their menstruation at schools. Besides, existing WASH facilities in schools are conventional types and fail to address the special needs of persons with physical disabilities or younger children. Traditional toilets in schools are not user friendly; they are not cleanable, not safe and deprive privacy. Capacities to develop and sustain WASH in schools is lacking at local level. Local governments have access to limited resources which may not be sufficient to cover salaries and operating costs. They lack capacity to allocate specific budget for WASH in schools; besides, where there are some financial capacities low attitude towards WASH is affecting budget decisions at school levels. Hence, developing and sustaining WASH in schools is the major challenge at local level. Schools also lack sufficient knowledge on the health risks associated with lack of improved WASH; and hence they are not in a position to educate or promote improved WASH practices to school children.

Schools lack specific rules and regulation that guides management of WASH facilities. In other words, there is no system for managing WASH in schools. WASH in schools is not regularly maintained because there is lack of clarity as to who should be responsible to maintain the facilities. More specifically, there is no supply chain for spare parts and repair services for water supply in schools and hence timely fixing of simple non-functionality problems like breakdown of faucets takes longer time. Similarly, no one is responsible for solid and liquid waste management in schools; no clear plan and no clear responsibility for cleaning school toilets. In schools with water supply and hand washing facilities un-clarity of roles and responsibilities in supplying soap or its substitutes is adversely affecting hand washing practices during critical times. Lack of specific budget for WASH in schools was also reported as major challenge for sustainability. In schools with water supply, it is not common to treat unsafe water

before use. Findings showed that water is not treated at school level. The concept of safe water practices is not known at school level and students are not practicing the same. Even at local government level there is considerable knowledge gaps on safe water practices. Hand washing practices during critical times is adversely affected by lack of the facility near the toilet, low level of awareness, lack of water and absence of soap or its substitutes.

This study therefore provides three key recommendations that ignite changes in the existing situation of WASH in schools. (1) Developing national WASH in school guideline and institutionalizing specific annual regular planning and budgeting for WASH in schools at all levels. (2) Establishing specific monitoring and reporting system for WASH in schools that informs annual planning and budgeting at all levels. And (3) making revision of education and training policy, as well as proclamations to accommodate WASH in schools. Other recommendations are provided under section 8.

1. INTRODUCTION

1.1 Purpose and objectives

As clearly indicated in the term of reference, this study aims at generating evidences on the barriers to the effectiveness of WASH in Schools and adversely impacting quality of education. It categorizes the bottlenecks to school WASH in three headings, namely, enabling environments (policies, planning, budget), developing (access, equity and capacity) and sustainability (O&M inputs, maintenance and utilization). Each of the three headings has three sub-headings as indicated in the brackets. Details are provided in the main body of the report. Findings from this study will inform program planning and influencing policies and practices.

The specific objectives of the study include the following.

- Produce evidences on the major policy or institutional barriers to school WASH;
- Produce evidences on the major implementation barriers to school WASH;
- Identify challenges and available opportunities to integrate school WASH in the overall WASH and education sector programming; and finally
- Make recommendations and practical proposals on how best WAE can implement school WASH and influence the government and other development actors to mainstream School WASH and achieve universal access.

1.2 Background

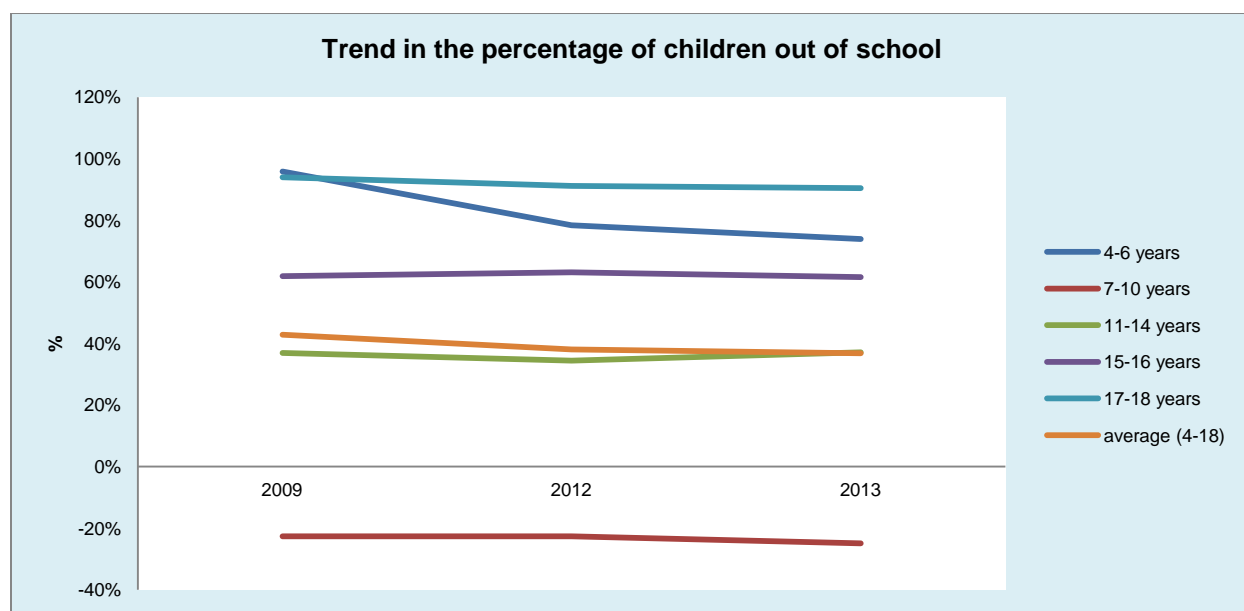
WASH is an integral part of education. It enhances the well-being of children and their families, and paves the way for healthy schooling environment for the new generations. Joint review mission led by the Ministry of Health reported that communicable diseases attributable to poor sanitation are still considered as the major health problems in Ethiopia (MoH, 2014). WASH interventions in schools can significantly reduces WASH related disease; increases student attendance; improves performances of the students and thereby achieve quality education; contributes to dignity, inclusive and equitable growth. It has a special significance for girls by ensuring their privacy, dignity and security. It has special meaning for girls for the first time starting their menstruation at school. If WASH facilities are not available in schools, girls are on the front side of those who are affected the most.

Ethiopia has registered significant achievements in increasing enrollment rates over the last years (MoE, 2008/9; 2011/12; 2012/13). This performance in the enrollments is derived from increasing access to schools (by expansions of school infrastructures in every village), influencing communities to send their children to schools and introducing school feeding program where necessary. School age population (4 – 18) has increased from 30.4 million in 2008/9 to 33.8 million in 2013. Out of the school age population (4 – 18), 17.4 million in 2008/9 and 21.3 million in 2013 have been enrolled to schools; an increase by 22% (MoE, 2013). Similarly, the number of teachers has increased from 320,813 in 2008/9 to 412,864 in 2013 (an increase of 29%). School expansion also

registered a significant increase during these years (increased by 19%). As of 2013 there are 36,134 schools in the country; of which 30,534 are primary schools, 1912 are secondary schools and the remaining are pre-primary schools. This shows that the government at all levels has put significant effort to expand school infrastructures that encouraged society at large to send their children to schools. The political commitments further extended free primary schooling to encourage poor households to send their children to schools. Besides, non-government agencies are also supporting these initiatives by designing and funding school feeding program to address issues associated with malnutrition in general and poor children in particular.

Despite this, data collected from the MoE indicated that significant numbers of school age children are still out of school. In 2008/9 out of 30.5 million of school age (4-18) only 17.4 million were enrolled into schools; which means 13.1 million of school age population were out of schools. This figure has reduced to 12.4 million populations in 2013; 21.3 out of 33.8 million of school age population have been enrolled into schools). A study conducted by MoE (2012) in collaboration with UNICEF indicated that Oromia has the highest number of out of school children followed by Somali. The following line graph shows the trend in the percentages of school age children out of schools during the last five years.

Figure 1. Trend in the percentage of school age children out of schools over the last five years



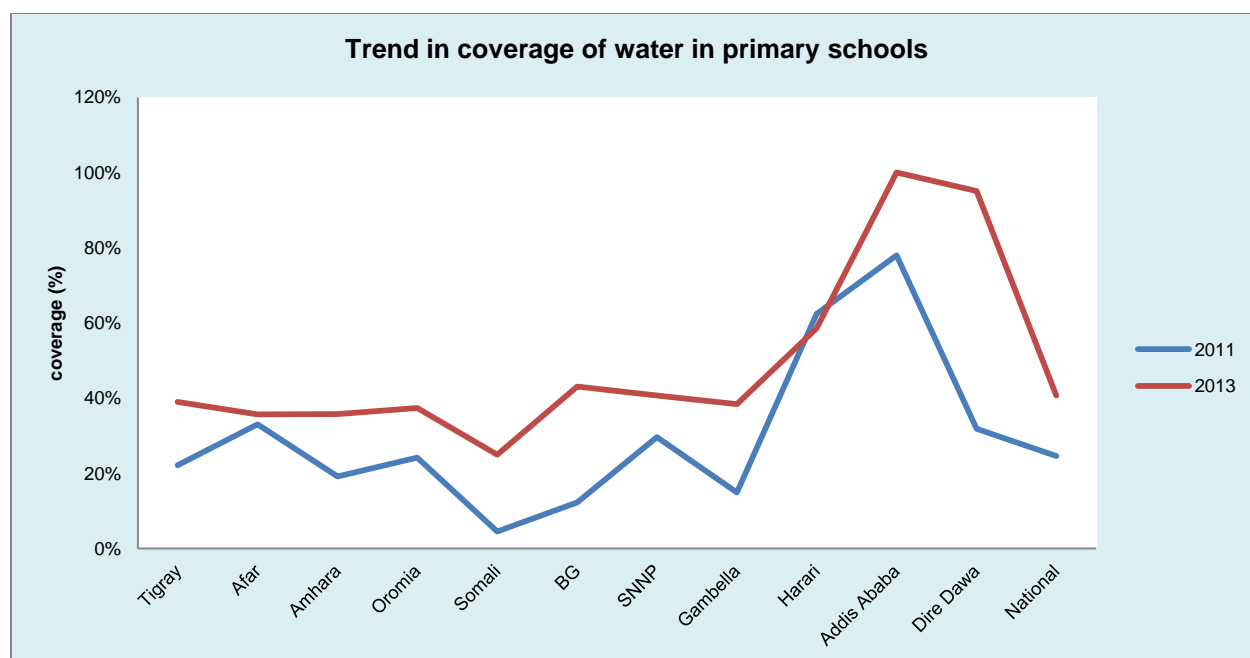
WASH facilities

Efforts put into bringing schools nearby communities and increasing enrollment rates are not sufficiently accompanied by provision of WASH facilities. The previous design for the construction of schools was not demanding for WASH facilities and hence most of the primary schools are lacking access to WASH. As of 2013, the Ministry of Education reported that 40.7% of primary schools have access to Water facilities. Access to water supply however varies across the regions and city administrations, ranging from 25% in Somali to 100% in Addis Ababa. Refer the following figure for details.

MoE also reported that 92% of primary schools have access to latrine facilities; but latrines are predominantly traditional pits (ESDP IV, 2011-15). This means that larger proportion of the school latrine does not meet the national standard. National WASH Inventory results indicated that only 31.4% of the schools have access to improved latrine (MoWE, 2013). MoE, in its ESDP IV, indicated that none of the schools have access to hand washing facilities. But only few schools with NGO interventions might have hand washing facilities. Checklists used in the monitoring of schools lack indicators to measure availability of hand washing facilities in schools.

Figure below illustrated the changes in the coverage of primary schools with water supply between 2011 and 2013. The graph is derived from the data reported in the education abstracts, and shows the level of increase in the water supply coverage in primary schools between the two years. Minimum increase in the coverage of water supply in primary school was witnessed in Afar and Harari regions.

Figure 2. Trend in the coverage of water supply in primary schools between 2011 and 2013.

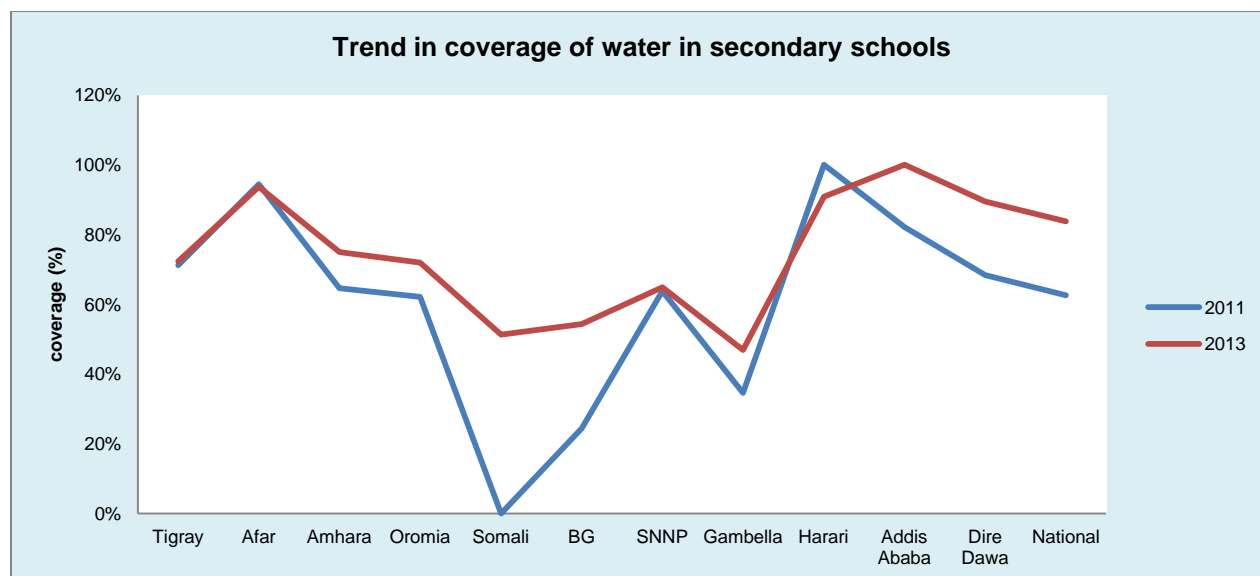


Similar trend has been witnessed in water supply coverage in secondary schools. It is vivid from the graph that Somali registered a major increase in the water supply for secondary schools; increased water supply in secondary schools from 0% in 2011 to 51.3% in 2013. And Harari region has registered a decline in the secondary schools' access to water supply in 2013.

MoE (2012/13) reported that all the secondary schools have latrine facilities regardless of the standard. Most of the latrine facilities are traditional pits and does not meet the national standard. Poor quality is the major concern in secondary schools compared to other parameters. Separate latrine facilities are available for boys and girls, but none of the schools are reported to have private facilities for adolescent girls with sanitary pads and changing rooms.

Hand washing facilities are not available in all the secondary schools; and hence school communities are not practicing hand washing at critical times. This indicates the presence of high health risks.

Figure 3. Trend in the coverage of water supply in secondary schools (2011 to 2013)



1.3 Overview of bottleneck analysis tool

Bottleneck analysis or performance analysis is a method used to identify components of a process that limit the effectiveness of the process as a whole (UNICEF, 2012). WAE adapted bottleneck analysis to identify factors limiting effectiveness of WASH in Schools.

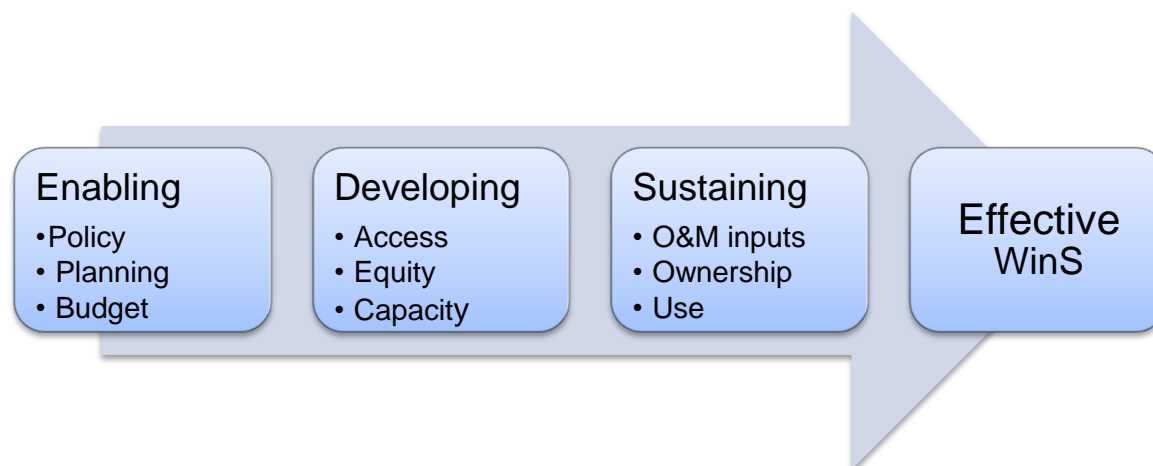
Tanahashi adapted bottleneck analysis tool in 1978 to evaluate effective health coverage from a systems perspective. Specific indicators were categorized under five headings such as availability, accessibility, acceptability, contact and effectiveness to identify bottlenecks to health coverage. And the bottlenecks identified informed focus areas of the interventions. One can understand from the explanation of Tanahashi that “bottlenecks shows where the difficulty in service provision lies, but it does not pinpoint the factor responsible for the poor coverage”; and identifying bottlenecks (or focus areas, barriers) is the entry point to prepare informed priority actions to address it.

UNICEF Tanzania (2012) further adapted bottleneck analysis to identify priority actions for WASH in Schools. Categories and indicators are based on their monitoring framework, country status reports and country bottleneck analysis. And they developed a simplified service delivery pathway for WASH in Schools. Indicators capture important aspects of WASH in Schools including the national-level enabling environment, equity considerations for menstrual hygiene management and children with disabilities, continued facility maintenance, and student hygiene behaviors.

WAE adapted UNICEF Tanzania version of the bottleneck analysis. The major components for ensuring effective WASH in Schools include enabling, developing and

sustaining, as indicated by the WASH service delivery pathway for schools designed by UNICEF. Each of the components has three sub-components. Enabling environment constitutes policy, planning and budget. Developing constitutes access, equity and capacity whereas sustaining has O&M inputs, ownership and use as sub-components to further analyze the bottlenecks. The service delivery pathway considered in this study is presented as follows.

Figure 4. WASH service delivery pathway for Schools (adapted from UNICEF Tanzania).



WAE adapted this service delivery pathway developed by UNICEF Tanzania because of the relevance of the components specified to ensure effective system for WASH in Schools. The other basic reason for adapting this tool was because of the coincidence of the subject under the study that is bottleneck analysis for WASH in Schools. The draft bottleneck analysis tools (prepared by GAA Economic Development Consult) were presented to a consultative stakeholder meetings organized by WAE with the objective of enriching the contents of the tools.

2. SCOPE AND LIMITATION OF THE STUDY

2.1. Scope

This study covered three regions, namely, Amhara, Oromia and Southern Nations, Nationalities and Peoples Regions. Responses from other regions are systematically covered by organizing consultative meetings at federal level on the 24th of February 2015. The consultant conducted desk reviews and key informant interviews at national and regional levels with relevant persons from the ministries and/or bureaus of education, water and health.

The consultant also provided support in shaping the process of the study and identifying the areas of focus for data collection and analysis. This includes adapting the bottleneck analysis tools and providing briefing for WAE staffs to apply the tool in collecting data at district or town levels, and school and student levels. And the consultant was responsible to collect data at the national and regional levels. On the other hand, the client deployed its staffs to collect data at district/town, school and student levels using

the bottleneck analysis tool developed by the consultant. The consultant made the analysis and wrote the report.

2.2. Limitations

This study is limited to sample regions, districts, towns and schools. It may not represent the whole country as it is constrained by availability of resources. But, when it comes to enabling environments for WASH in Schools, it might represent the country because policies are formulated by the federal government and regions adopt under their regional contexts. The other most important limitation is associated with availability of evidences or data at national, regional and local levels. Since there is no strong monitoring system evidences are not readily available at national and regional levels.

3. OPERATIONAL DEFINITIONS

Improved sanitation facilities: A sanitation system that is safe, clean and cleanable sealed to discourage exposure to the flies, other animals and the environment as well as promote dignity and privacy (SAP, 2011-15).

Gender requirements: this follows the design and construction manual (UNICEF 2010). Girls and boys should be consulted about the number, location and orientation of school WASH facilities in school. Consultation should be organized with girls and boys separately; and discussion should be facilitated by women and men respectively.

Physically separate facilities: this also follows the design and construction manual. It requires separate sanitary facilities for teachers, boys and girls. In between boys and girls, a hedge plant should be established to provide privacy for girls.

Sizing and orientation of facilities: toilet entrance should face the direction that provides the privacy, security and safety of girls. Orientation of the squatting plate, urinals, and hand washing area should also take this into account, as well as cultural and religious norms.

Locations of school toilets: location of toilets for girls requires special consideration in terms of providing privacy and security. The design and construction manual for water and sanitation facilities for primary schools show teachers' toilet in between that of the girls and boys.

Improved hygiene practices: hygiene refers to practices associated with ensuring good health and cleanliness. This includes Hand washing with soap and water at critical times most notably after defecation or before contact with food and strict observation of the safe drinking water chain.

Improved drinking water supply: use of piped water into dwelling yard or plot, public tap, or standpipe, tube-well or bore hole or protected spring, protected dug well and rain water-collection (taken from OWN-P).

Water quality: is water intended for drinking and domestic use that conforms to all the requirements specified in the Ethiopian drinking water quality standards (taken from Ethiopia National Water Quality Standards – MoH, 2011).

Safe water: water intended for drinking and domestic use whose limits for toxic substances, bacteriological and organoleptic levels conform to the requirements specified in the Ethiopian standards (taken from Ethiopia National Water Quality Standards).

Schools: in this document 'school' refers to the first cycle and second cycle primary and secondary schools included in this study. It refers to primary and secondary schools; boarding/day or both; rural or urban; public or government owned schools.

Open Defecation Free (ODF): an environment wherein no feces is openly exposed to the air. It describes a state in which all school communities practice use of toilet facilities at all times and a situation wherein no open defecation is practiced at all. ODF is a term used in SLTSH to describe 100% achievement of toilet coverage and use by all persons in the school.

School community: in this research refers to students, teachers and other staff working in the school.

School children: refers to children at school including pupils and students

WASH facilities: includes water supply facilities, latrines, hand-washing facilities, incinerators, refuse pits, and other waste collection and disposal facilities

Water sources: spring water, tap water, shallow wells, rain water harvesting etc

Sanitation: refers to means of preventing human contact from the hazards of waste to promote health. It is generally used to refer to the provision of facilities and services for the safe disposal of human faeces and urine, but it can also be used to refer to the maintenance of hygienic conditions, through services such as garbage collection, including for menstrual hygiene protection materials, and wastewater disposal.

Basic sanitation: means management of human faeces at the household level.

Environmental sanitation: is the control of environmental factors that form a link in disease transmission and have an impact on human health.

Hygiene: The science of preventive medicine and the preservation of health.. In Greek, "Hygeia" means health. **Or hygiene** is the method of using cleanliness as a method of preventing disease.

Environment is the sum of all external influences and conditions which effect health, life, and growth. This includes the physical, biological, chemical, and psycho-social environment"

Environmental Health is "the control of all those factors in man's physical environment which exercises or may exercise a deleterious effect on his physical, mental, and social well being." (WHO).

Personal hygiene – keeping the body clean to prevent disease.

Hygiene promotion – the planned, systematic attempt to enable people to take action to prevent or mitigate water, sanitation and hygiene related diseases.

Hygiene education – the provision of education and / or information to encourage people to maintain good hygiene and prevent hygiene related diseases.

Health promotion - is the process of enabling people to increase control over the determinants of health and thereby improve their health.

Hygiene facilities for schools are essentially hand and body washing facilities, and sanitary bins in girl's toilets and dustbins.

Gender - refers to the society constructed roles, behavior, activities and characteristic that particular society consider appropriate for men and women.

Disability –is the loss or limitation of opportunities due to temporary or permanent physical, mental or social barriers.

Traditional Pit Latrine: A latrine that has/is: a) Uncovered pit b) Rudimentary c) Uneven, difficult to clean 'slab' d) Allows flies to exit

Basic Pit Latrine: A latrine that has/is: a) Covered or VIP (Ventilation pipe with fly screen, dark interior) b) Basic slab c) No gaps/cracks in the floor) Cleanable, even surface e) Flies cannot exit

Improved Pit Latrine: A latrine that has/is: a) hole Covered or VIP b) Cement slab/san plat c) Cleanable, even surface d) Flies cannot exit

Improved latrine facilities: Sanitation facility that ensures hygienic separation of human excreta from human contact. ex. Flush/ pour to piped sewer system , septic tank or pit latrine. Ventilated improved pit latrine, pit latrine with slab and composting latrines

Unimproved latrine facilities: Facilities that do not ensure hygienic separation of human excreta from human contact. Ex. Pit latrine without slab, hanging and bucket latrines

Hand washing facility: A place within 3 meters of the latrine that includes both water and soap or ash or substitutes for hand washing.

Hand Dug Well: Water points that tap water from shallow water tables, typically less than 20m deep

Shallow Well: A borehole drilled by machine having a depth of less than 60 meters

Deep Well with Distribution: A borehole drilled by machine having a depth of greater than 60 meters and minimum diameter of 110mm with the pipe system for water distribution over certain area

Protected spring: Springs located at the point of water extraction, without any distribution system

Rain Water Harvesting Tanks: Collection and concentration of rain water and runoff and its productive use for domestic consumption, irrigation and livestock watering.

Other water facilities: This could include sand dams, animal/cattle troughs, emergency response water supply (water tanks, etc...)

Gender and Age: Age 14 years or more will be considered as men or women, age below 14 years will be considered as boys or girls, age more than 60 years will be considered as elderly people.

Person with disabilities: Person who needs special considerations in the systems to provide easier access to water and sanitation services e.g., people with visual impairment, people with locomotive impairment etc.

Person with chronic illness: Person who is affected with chronic illness such as HIV/AIDS, Cancer, etc.

People living in remote areas: people living in distant or hard to reach as well as isolated areas like the pastoralists

Stakeholder: refers to an individual or organization that partners and collaborates in School Health and Nutrition interventions.

4. METHODOLOGY

2.1 Approaches

This study was designed to be supported by external consultants while internal staffs are still engaging in the process. The consultant led the whole process including writing an inception report, adoption of bottleneck analysis tool, providing brief training on the tool to WAE staffs, supervise data collection, conducting analysis and writing the report. Whereas WAE staffs managed data collections from selected districts/towns and sample schools using the bottleneck analysis developed by the consultant. Besides, the staffs organized one day workshop at Bishoftu to discuss on the emerging findings and conduct problem analysis with representatives from all regional states.

2.2 Preparation phase

During this phase the consultant conducted a series of meetings with WAE to reach consensus on the variables to be included in the study. Following this, the consultant produced an inception report and developed bottleneck analysis tools for the federal, regional, district/town and school level data collection based on the materials provided by WAE. The consultant then presented the inception report and the bottleneck analysis tool to the wider stakeholders meeting organized by WAE. The main objective of this meeting was to enrich the bottleneck analysis tools and reach consensus with key stakeholders.

2.3 Sampling procedures

Multi-stage sampling procedures were followed to reach at the sample units. The first stage was sampling regions. As clearly indicated in the scope of study, mentioned above, the analysis covered the federal level and the three regions including Amhara, Oromia and Southern Nations, Nationalities and Peoples regions. These regions represent majority of WAE interventions as well as have larger coverage in terms of the geographic areas. Furthermore, the three WASH program components including the urban, rural and the pastoralist sub-programs could be considered while selecting districts/towns.

The second stage was selection of districts and/or towns to include in this bottleneck analysis. Depending on availability of resources (budget plus time available for data collection by WAE staffs) eight local governments were selected purposely, namely, (1) Yabelo district (representing rural, pastoral), (2) Yabelo town (representing urban & pastoral context), (3) Fiche town (highland urban context), (4) Girar Jarso (highland rural context), (5) Konso (representing dry rural and water insecure areas), (6) Hosanna (representing middle altitude urban context), (7) Burie (representing water secure rural context) and (8) Finoteselam (representing water secure urban context). In total, 4 rural districts and four urban towns were considered in this study.

The third stage was selection of schools from each of the eight local governments sampled above. Lot Quality Assurance Sampling method was used to select schools. Even if the LQAS proposes sampling of 19 schools using random sampling technique, WAE selected 16 schools mainly because of the shortage of resources. Three lots were considered in this specific study – urban, rural and pastoral schools. Selection of local governments (districts or towns) was made purposely to represent rural, urban and pastoral contexts. Sampling of schools was made purposely to accommodate one primary school and one secondary school from each lot. Hence, these 16 schools were distributed across these three lots (urban, rural and pastoral schools). Refer the following table.

Table 1. Sample regions, local governments and schools

Region/district/town	Descriptions	Schools sampled
Amhara region		
1. Burie	Representing water & food secure areas (highland rural context)	Ambaye full primary school; Mulugenet secondary school
2. Finoteselam	Representing water & food secure areas (highland urban context)	Bakel primary school; Damot secondary school
Oromia region		
3. Yabelo town	Representing urban context under pastoral area	Yabelo primary school; Yabelo secondary school
4. Yabelo district	Representing rural context under pastoral area	Chenedika primary school; Iddi Ale secondary school
5. Fiche town	Representing middle altitude urban area	Abiyot Fire primary school; Abdisa Aga secondary school
6. Girar Jarso	Representing middle altitude rural area	Chagel primary school; Ejersa Kawo secondary school
SNNPR		
7. Konso	Representing schools in dry areas (both rural and urban areas)	Jarso primary school; Karat secondary school
8. Hosanna	Representing schools in middle areas (urban context)	Bobico primary school; Yekatit 25 secondary school
Total	3 regions; 8 local governments	16 schools

The fourth stage was sampling students from the schools identified and included in the study. Sampling students was based on the type of the methods employed to collect the

required data (direct observation, pocket voting, interviews, and spot checks). Again, some of the methods require availability of the facilities. The following paragraphs describe the methods used to select students.

Selecting students for hand washing observation: in each of the sample schools hand washing behavior of the first 19 students were observed to use the toilet and/or eat food and recorded using the format provided in 2 schools. Since only 2 out of the 16 schools reported having hand washing facilities, the first 19 students observed in 2 schools adds up to 38 students that are observed for their behaviors against hand washing practices after using toilets. But, none of the schools have soap or its substitutes for hand washing and hence this observation might not help much if we consider hand washing practices with soap or substitute.

Selecting students for pocket voting: pocket voting as a tool was used in 4 schools selected from Burie and Finoteselam. Hence, 19 students each from 4 schools (76 students in total) were included in the pocket voting exercises using the format provided.

Selecting students for interviews and spot checks: 5 students per school were included in the interview which adds up to 80 students from the 16 schools. Spot checks of finger nails and cleanness of hand were also made as the same time when conducting interviews.

Selecting Students for Small Group Interviews

Two groups of four students each for male and female students were formed across the schools, which gives a total 128 students from 16 schools. The team conducted small group interviews using the format provided.

Selecting teachers/members of PTA: likewise teachers and members of PTA were interviewed using the tool prepared for the purpose. A school principal, 1 female teacher, 1 male teacher and 1 member of PTA were interviewed from each of the 16 schools that gave a total of 64 persons (disaggregated by gender).

Table 2. Summary of persons contacted across the schools

Category	Number contacted per school	Total number of persons contacted from all schools
Student individual interviews	5 per school	80 students
Student small group interviews	8 per school	128 students
Pocket voting	19 per school	76 students (4 schools)
Spot checks	19 per school	304 students
Direct observation for hand washing practices	19 per school	38 students (only 2 schools have hand washing facility)
Teachers interviewed	3 per school	48 teachers
Member of PTA interviewed	1 per school	16 PTA members
Total persons interviewed		690 persons

2.4 Data Collection Methods and Tools

This study used both quantitative and qualitative methods to collect data. The primary data required for this study were collected using key informant interviews, direct observation, pocket voting, interview and spot checks. Details are provided as follows.

Key informant interviews

At federal level, representatives from the House of Peoples' Representatives (Parliament), Ministries of Water, Irrigation and Energy, Ministry of Health, Ministry of Education and Ministry of Finance and Economic Development were interviewed. Besides, representatives from WASH donors and civil societies including Water and Sanitation Program of the World Bank, UNICEF, Plan International Ethiopia and SNV were interviewed. At regional level, representatives from the Bureau of Education, water and health were interviewed. Furthermore, key persons from the WASH coordination offices were interviewed to collect more relevant data on school WASH. WAE staffs identified key informants from same line offices at district or town levels and interviewed them using the tool developed for the purpose.

Direct observation

As discussed in the previous sections, observation was one of the methods used to collect evidences on the status of existing WASH facilities in schools, and to collect evidences on the hygiene practices of school communities including students, teachers and other staffs. WAE staffs used this in all the schools included in this study.

Pocket voting

The other most important method used to collect data from schools was pocket voting. This was used to collect evidences from students as it allows them to confidentially respond to questions regarding their hygiene practices.

Students /teachers interviews

Student interview was used to collect evidences on the key bottlenecks to use WASH facilities in schools. Students were identified and interviewed using the tool developed by the purpose. Also, teachers, staffs and members of PTA were identified and interviewed to collect the major bottlenecks to WASH in schools.

Spot checks




Spot checks are a common method to gain a general sense of hygiene behavior. Using the spot check method, students' hands and fingernails were observed as an indication of regular hand washing practices. It was also included as part of the student interview by casually noting student hand and nail cleanliness during the discussion. Though spot checks typically refer to hand spot checks, toilet and water facility "spot checks" were also used as general indicators of use.

Small group interviews

Small group interviews can often make students feel more comfortable and asking older students about younger children at the school promotes more honest responses than self-reporting. Hence, this study used small group interviews to collect more accurate responses on the behavior of students.

2.5 Method of data analysis

The data collected at different levels were analyzed following the bottleneck analysis tools and other qualitative analysis methods. Each of the indicators has agreed targets for the red (showing major bottlenecks), yellow (some bottlenecks) and green (no bottlenecks). Hence, evidences collected at federal, regional and local levels were analyzed on the basis of the justifications given for the scores. The following table illustrates the different colors along with their justifications.

Color	Notation	Descriptions
	No bottleneck	No need for further interventions. Existing initiatives are sufficient to achieve effective school WASH.
	Some bottlenecks	There are some bottlenecks to school WASH & stakeholders need to address or remove these bottlenecks at feasible level.
	Major bottlenecks	These are major bottlenecks to effective school WASH & the government (MoE & its line bureaus) should take the lead to remove those bottlenecks.

The decision rules for each of the indicators for green, yellow and red are annexed at the end of the report (refer annex 1). As indicated in the above table, green stands for no major bottleneck to school WASH, yellow stands for the existing some bottlenecks and red stands for the presence of major bottlenecks to school WASH.

5. MAJOR FINDINGS

3.1 National perspectives

Findings from this study has led to the conclusion that consistent sector discussions made as part of the effort to move towards the sector wide approach have recently resulted in positive development in the WASH sector. One of these developments was the fact that the challenges associated with WASH in School have been recognized and hence it is becoming a sector agenda, even if a lot has to be done to put it on track. Federal WASH ministries are largely responsible to create enabling environments for the effective delivery of WASH services in schools. Detail explanations are provided below.

3.1.1 Scanning enabling environment

Enabling environments for WASH in Schools, as considered under this study, captures issues related to policies, planning and budgeting. Results of key informant interviews clearly indicated that creating enabling environment for school WASH is the roles of the signatory ministries, especially that of the ministry of education. Regions are expected to adapt the policies and national implementation modalities and standards under their specific contexts, but mainly responsible for implementing the program through its zonal and district representatives.

Policies

Policy issues this study would like to present include (1) whether the national policy documents address WASH in Schools, (2) whether there are clarity of roles and responsibilities for WASH in Schools at national level, and (3) whether there are agreed national standards for WASH in Schools. Gaps in the national policy documents with regard to WASH in Schools have considerable effect on the quality of education. It affects program planning as it is not a policy priority; and hence school children and teachers are continuing to suffer from lack of access to WASH facilities, adversely impacting on the quality of education. Previous studies of WaterAid also show the fact that lack of access to WASH facilities in schools have caused inefficiencies in delivering the courses, contributing towards inefficiencies in the completion of universal primary education.

Despite the 1995 constitution which clearly states that all persons have the right to live in clean and healthy environments, it was only since recent years that there has been a growing interest for advancing WASH in schools. Almost all the key informants interviewed at federal level agreed that this growing interest towards school WASH has been the outcome of sustained debates among sector stakeholders to institutionalize sector wide approach. Sector policies emerge from the federal constitution that states government policies shall aim to provide all citizens basic services including access to public health, education and clean water within the capacity of the country to mobilize resources for development. This means that children and teachers have the right to water, clean and attractive school environment for the effectiveness of education and trainings programs. But, this has been recognized at policy level very recently. Education Sector Development Program, for the first time, recognized the need for

addressing WASH in schools in 2011 (ESDP IV, 2011-15). But the previous three ESDPs were found to be silent when it comes to WASH needs in Schools. The 1994 education and training policy, the 1999 water resources management policy and the 1993 health policy are found to be silent when it comes to specifying their direction with respect to WASH in Schools. But, the recent national program documents such as One WASH National Program have sufficiently addressed WASH in Schools as one component of the program (OWNP, 2013). Discussion held with the relevant expert from the Ministry of Education reveals that WASH in Schools has no separate strategy at all levels.

In previous years there was no national clarity of roles and responsibilities for WASH in Schools, as it was dispersed within in the three ministries – ministry of water, health and education. However, since recent years, as an outcome of sector wide approach, clarity of roles and responsibilities for WASH in Schools are coming up though there are a lot before us to translate these provisions into actions in the future. MoU (2012), WIF (2013) and POM (2014) provide clear roles and responsibilities for WASH in Schools by government bodies at all levels and development partners. It gives the ministry of education and its line bureaus and offices to take up the leading role in the provision of WASH in Schools. Since then the ministry of education has upgraded its School Improvement Program to the Directorate level, which shows the growing commitment of the government to address problems associated with schools including WASH. It was also stated in the manuals that the other signatory ministries, through their regional and local offices will provide the necessary technical supports for the effectiveness of WASH in Schools. Specific roles and responsibilities such as for O&M of WASH in Schools, financing, supply chain, waste disposal, toilet cleaning and emptying, etc are, however, not clearly indicated in the national policy documents. In terms of staffing, at the time of this study, only focal persons (having other responsibilities) are assigned to lead WASH in schools. PMUs are not yet established at all levels.

At the time of this study, it is clear that there is a national standard for the delivery of WASH in Schools. Signatory ministries reported that they are planning to use the design and construction manual for primary schools developed with the financial support of UNICEF (2010), as a national guiding document. Regions included in this study have also witnessed that they have adopted the manual under their respective local context and are planning to use as regional standard to provide WASH in Schools.

Planning

Under planning this study looks into three indicators, namely, (1) whether there is national regular WASH in School plan & whether there is a national WASH in School Target, (2) whether there is WASH in Schools national monitoring system, and (3) whether hygiene education is part of the national curriculum. Explanations on these indicators are provided as follows.

Within the existing situations there is no regular specific national WASH in School plan but it is part of the fourth education sector development program, which also provides five years target for water supply in schools (as it plans to increase schools' access to water from 34% in 2010 to 64% in 2015). But it lacks specific target for hygiene and sanitation, though it appreciates their underlining problems. WASH in School is also

among the six packages of school improvement program. When it comes to the One WASH National Program it provides clear plan for WASH in Schools for the coming five years, and hopefully these will be part of the upcoming education sector development program. Under the sector wide approach, a specific plan for WASH in Schools, have been prepared only starting the current Ethiopian fiscal year, which is a positive indication for the achievement of this specific indicator in the future. However, specific WASH in School plans and targets are not captured in the GTP (MoFED, 2011) that shows that it receives less priority within the education program.

Findings from the key informant interviews with key sector ministries and selected regional bureaus indicated that there is no specific national WASH in School Monitoring System (and regions also share similar gaps). But, each signatory ministry has its own monitoring system that is not specific to WASH in Schools. The ministry of education has checklists to monitor school level improvements that also partly touch water supply and sanitation. But this checklist is not comprehensive and fails to capture indicators for hand washing facilities / practices, adequacy aspects, functionalities and sustainability components of WASH facilities in schools. Again, the National WASH M&E Framework does not capture all of these indicators, and needs further revisions. Regions included in this study also share similar perspectives, and appreciate the existing gaps in the monitoring system for WASH in Schools.

Curriculum development is the responsibility of the federal ministry of education. And regions are provided with syllables that they can adjust within their regional contexts. Hence, hygiene education is part of the national syllables that regional bureau of education are provided with a space to play their roles in the development of curriculum and producing text books. Discussions with the representatives from the ministry of education and its regional bureaus in Amhara, Oromia and Southern Nations, Nationalities and Peoples regions indicated that hygiene education is partly included in the environmental science text books for the first cycle primary, and science text book for the second cycle primary schools. But, education experts were found appreciating the gaps in the existing education curriculum in terms of fully addressing issues of hygiene education in the country.

Budget

Budget is the policy instrument and is an indicator for realization of policy commitments. It is clear that if WASH in School is a priority for the government, it will be budgeted. And the budget document shows the policy priorities that the government is committed to deliver. This study tried to look into three budget indicators: (1) whether WASH in School has specific public budget line (if so the level of increase in the budget allocation to WASH in Schools), (2) availability of adequate budget to support WASH in School Improvement, and (3) whether available funding is spent on schools most in need of WASH support.

It was witnessed from the federal budget document that WASH in Schools does not have a specific public budget line and hence the government is not allocating a specific budget to WASH in Schools at national and regional levels. But, through the sector wide approach, WASH in Schools has specific funds allocated from CWA. It was also witnessed from the regional and local budget documents that WASH in Schools do not

have a specific public budget line. Under the current condition, schools are not receiving a specific budget for WASH, but from the current fiscal year those included in the first round financed from CWA are expecting a specific allocation to WASH in Schools.

Findings from the key informant interviews have shown that School Improvement Program is financed through block grants and school grants that are allocated to schools on the basis of the number of students. This is also true for the regions included in this study. These grants are used for the school improvement program (MoE, 2010). Allocations of these grants are solely based on the number of students (regardless of their WASH needs), and portions of these grants are expected to be allocated for WASH in Schools. But, data collected from the schools and districts indicated that none of the schools have allocated budget to WASH in Schools from the grants available to them. Even though schools are entitled to generate additional income for their own internal financial need, there is no evidence at the moment that shows the efforts along this line. Hence, generally schools lack access to adequate budget that support their WASH needs.

Evidences from the key informant interviews, both at federal and regional levels, reveals that only funds allocated from CWA are based on schools most in need of WASH services. Similar justifications are given at regional levels. The specific WASH in School plan started this fiscal year is believed to consider schools most in need of WASH, even though the planning is made within the budget ceiling provided by the national WASH steering committee. Budget ceiling is decided on the basis of the nationally available resources envelope – that is – the contributions of development partners through the CWA. But, allocation of budget from the block grant and school grant is at the discretion of the school administration. Since, the allocations of these grants are based on the number of children in schools its final allocation to WASH in Schools is not generally consider schools most in need of WASH. Table below showed results of bottlenecks to enabling environments for WASH in schools.

Table 3. Bottlenecks to enabling environments for WASH in Schools

Cat.	Indicator	score
Policy	Is WinS included in national policy documents? Is there separate national WinS strategy?	0.5
	Are there clear roles and responsibilities for WinS at national level?	0.5
	Are there agreed minimum national standards for WinS?	1
Planning	Are there regular plan & clear national WinS targets?	0.5
	Is there a national WinS monitoring system?	0.5
	Is hygiene education/promotion included in the national curriculum?	0.5
Budget	Is there a public sector budget line for WinS?	0
	Is there <i>adequate</i> budget to support WinS improvements?	0.5
	Is funding spent at schools most in need of WASH support?	0

3.1.2 Developing WASH in Schools: Issues of Access, Equity & Capacity

This section discusses on the existing scenarios of developing of WASH in Schools in terms achieving the theoretical access, equity and capacity required to advance WASH in Schools. Each of these categories has its indicators, which are briefly explained as follows.

Access

There are three indicators captured under access: (1) percentage of schools with access to improved water, (2) percentage of schools with access to improved sanitation, and (3) percentage of schools with access to hand washing facilities.

It is evident from the recent education abstract that there are 30,534 primary schools in the country, of which only 40.7% have access to water source within their compound. Out of the total 1912 secondary schools, 83.8% have access to water supply (MoE, 2014). This shows that there is some progress from the coverage reported by the 2011 National WASH Inventory (that reported only 31.4% of the schools have access to water supply). Again, the previous education abstract reported that only 25% of the primary schools and 63% of the secondary schools have access to water supply (MoE, 2012). Despite this low coverage of water supply in primary schools, it is reported that still the level of attention given to water supply in schools is very low. Most importantly school administration is giving very less attention to water supply while allocating the block grant and school grant.

The recent education abstract reported that 92% of the primary schools and 100% of the secondary schools have access to toilet facilities. The challenge could be the majority of the toilet facilities in schools are reported to be traditional pits that do not have public health importance and not meet the national standard. While the school toilets are predominantly traditional pits it is unfair to discuss whether the ratio standards are met or not. It is to be recalled that the results of NWI (MoWE, 2013) indicated that only 31.4% of the schools have access to improved sanitation facilities while 80% have access to basic sanitation (both improved and unimproved).

Table 4. Coverage of WASH facilities in schools as of 2013, national level

Type	Coverage for primary schools	Coverage for secondary schools
Water supply	40.7%	83.8%
Basic sanitation	92%	100%
Hand washing	0%	0%

Source: Education Abstract, MoE (2012/13)

The existing school monitoring system used by the ministry of education and its line bureaus and offices is generally lack indicators associated with hand washing (does not count hand washing facility disaggregated by gender). It doesn't count the hand washing facilities and whether there are hand washing practices at schools during critical times. Findings from the key informants also confirmed the absence of credible evidences on hand washing practices at schools. The NWI also missed

counting/monitoring hand washing facilities in schools. This gives the indication that the national school monitoring system fails to capture indicators of hand washing.

Equity

This study plans to capture three indicators under equity: (1) whether WASH in Schools addressed gender equity and MHM for adolescent girls, (2) whether WASH in Schools addressed the special needs of persons with physical disabilities and younger children, and (3) whether WASH in Schools captured geographical and socioeconomic disparities. Further explanations on each of these indicators are provided below.

Findings from the key informant interviews showed that there is lack of evidences at national and regional levels to suggest whether gender equity are fully addressed in the provision of WASH services in schools. But it is undeniable fact that most schools have separate toilet facilities for boys and girls regardless of the quality and quantity standards set at national level. Gender equity in respect of WASH in schools is not sufficiently understood mainly because of lack of credible evidences on the percentage of schools with separate facilities for boys and girls. The existing monitoring system fails to capture equity issues as the checklists used to collect school data on annual basis only captures availability of water supply and sanitation facilities. Experts consulted during the study reported that Ethiopia is lagging behind in terms of addressing the special needs of adolescent girls. It can be generally understood that schools with MHM facilities and started to practice would be very much insignificant. Very few schools supported by NGOs might have some awareness on MHM (private sanitation facilities for adolescent girls; affordable sanitary pads, changing rooms).

The problem with the national monitoring system also applies here. Only few evidences are available on whether school WASH facilities are designed to improve access for all including persons with physical disabilities or younger children. Discussions with experts indicated that there might be schools supported by NGOs that WASH in schools are designed to address the special needs of persons with disabilities. But generally it can be concluded that majority of WASH facilities in schools do not address the special needs of persons with physical disabilities or that of younger children attending schools. It was reported in the Social Assessment of One WASH National Program that previous designs failed to link WASH in Schools with inclusive developments.

There is general lack of evidences on whether geographic and socioeconomic disparities might have affected the provision of WASH in schools. Existing school monitoring system does not disaggregate WASH access figures across geographical areas (pastoral, agrarian, urban and rural). Findings from key informant interviews however indicated that in previous year expansion of schools followed population settlements – e.g. population settlement in Amhara follows hilly and peak mountains – which created difficulties in the provision of water supply. It is very costly to pump water to the peak mountain.

Capacity

Indicators of capacity include evidence of local capacities to provide WASH in Schools, whether hygiene promotion is a priority in the country, and whether students are engaged in WASH promotion in Schools. Explanations are provided as follows.

Findings of key informant interviews indicated that from the government structures or institutional arrangements it is very clear that there is local capacity to deliver WASH in Schools. Most of the schools require small water supply schemes including hand dug well, shallow well and spring developments, which are within the capacity of districts or towns. And school improvement program is financed through block grant and school grant that are allocated on the basis of the number of students. Construction costs of this small water supply schemes are within the school budget if schools prioritize water supply services. It is in rare cases that water supply provision might be above the capacity of schools, that is, where schools are located in water scare areas or on top of the mountains, as the costs could be very high. If the standards for sanitation and hygiene facilities have to be followed, the costs could be above the capacity of schools and even above the capacity of local governments (woredas or towns). At the time of this study there is no specific budget allocated to WASH in schools at all levels and hence no need for further investigation with regard to the adequacy parameters. Even though community contributions are considered as the major source for financing WASH in schools, the existing efforts to realize this is difficult to understand. Table below showed existing bottlenecks to developing WASH in schools.

Table 5. Bottlenecks to developing WASH in Schools

Cat	Indicator	scoring
Access	% of schools with improved water source (1 faucet for 100 students)	0
	% of schools with adequate access to improved sanitation (1 cubicle per 100 girls; 1 cubical for 150 boys; 1 urinal for 150 girls and 200 boys)	0.5
	% of schools with adequate access to hand washing facilities (adequate hand washing means 1 tap for 100 girls & 150 boys)	0
Equity	Is gender equity & MHM addressed for WinS?	0
	Is accessibility for children with physical disabilities addressed for WinS?	0
	Is geographic or socio-economic disparity addressed for WinS? (access to water similar for urban & rural)	0
Capacity	Is there evidence of capacities of schools, district/town education offices, other actors to ensure effective WinS? (% of schools with functional WASH facilities?)	0
	Is hygiene education / WinS promotion a priority in the country? (Are teachers, students & PTA trained in hygiene education / WinS promotion?)	0.5
	Are students engaged in WinS? (through health clubs; WASH clubs)	0

Even though there is a growing concern on hygiene education in recent years it has not found to receive the priority it deserves. There is lack of evidences at national level whether teachers and members of PTA are trained to advance WASH in Schools in general and hygiene promotion in particular. Hence, it can be generalized from the findings of the key informant interviews that hygiene education is not a priority in the country today. But, there are indications that the government is committed to revise the existing curriculum to ensure that hygiene education are part of the national curriculum.

This is clearly articulated in the One WASH National Program and Program Operational Manual.

The other capacity indicator was whether students have such capacity to involve in the provision of WASH in Schools. At national level, no sufficient evidences exist on the number of schools practicing different modalities of engaging students in WASH and there are still few schools that formed WASH clubs, and use mini-media to promote improved hygiene practices.

3.1.3 Sustainable WASH in Schools: a national perspective

O&M inputs

Operation and maintenance inputs refers to: (1) how essential commodities for O&M are readily available to schools, (2) a local body that supports WASH O&M in schools, and (3) whether adequate and reliable funding is available for financing WASH O&M in schools.

At national level, evidences of how schools are accessing spare parts and local artesian to maintain WASH facilities is lacking. Findings of the key informant interviews indicated that schools located in the remote areas and pastoral areas would face sever challenges in accessing essential commodities for WASH O&M. at the time of this study, no credible evidences exists that shows spare part supply chain for schools & how schools access repairing services from local artesian or district WWT.

The next indicator for O&M inputs was whether there is a local body that supports O&M of WASH facilities in schools. Even though the ministry of education assumes full responsibility to lead WASH in Schools, there are still some elusiveness as to who should be responsible to establish supply chain for WASH O&M in schools. Findings from the key informant interviews indicated that schools should be responsible for WASH O&M in schools. Local signatory offices (WWT) should provide the necessary technical support while schools should cover the costs of O&M of WASH facilities.

The last indicator for O&M inputs was whether schools have adequate and reliable funding that support WASH O&M. It is evident that all schools regardless of their WASH status are entitled to receive block grant and school grants on the basis of the number of students that serves improvement of the schools. And allocation of these grants is at the discretion of the school administration. As WASH is among the six packages of the School Improvement Program, schools are entitled to allocate some funds for WASH O&M. But, the current challenge is that school does not prioritize WASH to other education materials. Hence it could be concluded that there is no adequate and reliable funding for WASH O&M in schools.

Ownership and maintenance

This checks (1) whether WASH in Schools are regularly maintained, (2) whether schools provide soap or its substitute for hand washing on sustainable basis, and (3) where schools are treating unsafe water source. Justifications for each indicator are provided below.

At present evidences of whether WASH in Schools are regularly maintained or otherwise is lacking at national level, because the existing monitoring system fails to

capture indicators that measure sustainability of WASH in Schools. Besides, there is lack of ownerships of WASH facilities in schools. Schools do not fully own WASH facilities and there are lack of clarity within school as to who should do what. This has been manifesting in terms of the differences in the practices of cleaning school toilets. In some regions, students late to come to school are cleaning the toilet. That means that if students are not late toilets are not cleaned. In some regions students coming from the poor families are cleaning the toilet and receive some pocket money. This is inhuman and not in accordance with the constitution. It is common in most schools that students are cleaning the toilet but they are not adequately trained on how to clean without making any direct contact with human excreta or provided with protective mechanisms (hand glove, etc), health risk. While in some schools Janitors (cleaners) are employed to clean the toilets. This should be appreciated and scaled up in other schools. Responses from experts further indicated that issues associated with the maintenance of water supply in schools also take different faces. In some schools with strong administration, water facilities are regularly maintained, while in some others where there are weak school administrations minor maintenance might take longer time to fix and bring back to services or totally abandoned.

The other indicator of ownership and maintenance of WASH in Schools is whether schools provide soap or its substitute for hand washing during critical times on sustainable basis. Though there are no credible evidences available at national level, discussions made with government experts indicated that this is the most neglected area and still there is the problem of ownership as to who should provide soap or its substitute for hand washing practices during critical times at schools. As witnessed from the recent education abstract more than 60% of primary schools have no water source within their compound which could be another cause for no hand washing practices during critical times. Where there are water source within the school, low awareness of the health risks of not washing hands after using toilets or before eating, and lack of access to soap or its substitute on sustainable basis are reported to be the major bottleneck for hand washing at schools during critical times.

The last indicator was whether the schools treat unsafe water and if so whether they have specific guideline to treat water source. But evidences are lacking at national level on the percentage of schools that have access to unsafe water (unimproved water source) and what percentages of these schools are treating the water source. This means that school monitoring system should be revised to capture indicators of treating water sources and availability of guiding documents.

Use

This study checks three indicators under use of WASH facilities in schools: (1) whether there is WASH in School promotions to encourage students to use improved toilets, (2) whether students are washing their hands at school during critical times, and (3) whether students follow safe water practices at school. Details are provided below.

At federal level no credible evidences exist that shows whether schools are promoting WASH to encourage students to use improved facilities. But findings from key informant interviews indicated that promotion of WASH in schools is just starting and there are tendencies of schools to incline more on the teaching courses but giving less

emphasize on the promotion of improved WASH practices. Such promotion works with the purpose of changing behavior of students to use the school toilets is not strong and students defecate in the open areas rather than using the toilet because they are not properly managed and hence not clean to use. Results also showed that there are schools that falls under the ODF declared kebeles, and hence using the toilet facilities because of the strong promotion supported by health experts. Similar justifications are shared by regional bureaus of Amhara, Oromia and SNNPR. Table below shows the existing bottlenecks to sustainability of WASH in schools.

Table 6. Bottlenecks to sustainability of WASH in schools

Cat.	Indicator	score
O&M inputs	Are essential commodities for O&M readily available? (e.g. spare parts; repair services, etc)	0
	Is there a local body that supports O&M for WinS services?	0.5
	Is there adequate & reliable funding available for WinS O&M costs?	0
Ownership & Maintenance	Are school WASH facilities regularly maintained? Who owns responsibility for WASH maintenance? Manage solid & liquid waste? <i>e.g. pit emptying, cleanliness, functionality (proxy: % of schools with clean toilets)</i>	0
	Do schools provide soap/ash? Who owns responsibility for provision of soap/ash?	0
	Do schools treat unsafe water? Is there specific guideline for treating unsafe water in schools? Who is responsible? <i>(proxy: % of schools with functional water supply)</i>	0
Use	Are there WASH in School Promotion to encourage students to use improved toilets at school?	0.5
	Are students washing their hands with soap/ash at critical times at school?	0
	Are safe water practices being followed by students? <i>(e.g. proper storage and handling, accessing from safe source)</i>	0

The other indicator was whether students wash their hands at school during critical times. Similar to the previous explanations there is no written evidence that shows the extent to which students practice hand washing at critical times. But, findings from the key informant interviews indicated that hand washing practices are almost none at schools mainly because only few schools have hand washing facility or water supply and no school is providing soap for hand washing. It is uncertain whether these 40.7% of primary schools that have access to water also have hand washing facilities. The fourth ESDP stated that no school has hand washing facility. There might be some schools supported by NGOs that might have hand washing facility but they might not provide soap or its substitutes available at reasonable location for hand washing.

The last indicator for use of WASH facilities in schools is whether students follow safe water practices at school. Just like others there is no credible evidence at federal level that shows whether students are following safe water practices. However, discussions made with the key staffs of signatory ministries and/or bureaus, however, indicated that there is no such practices even in the schools located in the capital, Addis Ababa. They also shared their personal observations while conducting monitoring visits which

confirms that students are not generally following safe water practices, and they do not have adequate understanding on what safe water practice means as well. Regions included in this study also share the same problems with regard to students not following safe water practices.

3.2 Regional perspectives

3.2.1 Understanding enabling environments

Regional policy documents guiding WASH in Schools

Regions are adapting the national policy documents and follow similar procedures with the federal level. Findings of key informant interviews confirmed that regions adapted federal policy documents under their respective contexts, though some gaps might be observed in terms of incorporating WASH in Schools in respective sector development program of the signatory bureaus.

WIF (2013), OWNP (2013) and POM (2014) are the main policy documents that are guiding regional implementation of the WASH sector including WASH in Schools. Similar to the federal level, regions also lack separate WASH in Schools strategy. Unlike the past years, Education Sector Development Program is the main reference document for the provision of WASH in Schools. Again, WASH in School is one of the six packages of the School Improvement Program. During previous years it was the water and health bureaus development plan that is expected to guide provision of WASH in Schools.

Roles and responsibilities for WASH in Schools are clear at regional level. Similar to the federal level, regional clarity of roles for WASH in Schools are articulated in the Memorandum of Understanding signed between respective bureaus, Program Operation Manual and WASH Implementation Framework. Accordingly, Education Bureau has received full responsibility to lead on WASH in Schools in their respective regions. Findings from the key informant interviews at regional level indicated that despite the overall clarity of roles for WASH in Schools there are still long ways to bring more understanding as to who should be responsible for WASH O&M – supply chain of spare parts, waste disposal, procuring repair services, planning for cleaning toilets, emptying toilets, financing costs of O&M, etc. This shows that the BoE has further assignments to mainstream and restructure roles and responsibilities for WASH in Schools within itself. In terms of staffing, PMUs are not yet established, and only focal persons are assigned to play this role.

Similar to the federal ministries regional WASH bureaus reported that, at this point in time, they have agreed minimum standard for WASH in Schools that they adapted from the federal government. The same design and construction manual developed with the support of UNICEF is planned to be used as a guiding document for the regional level implementation of WASH in Schools. But, in previous years, there was no agreed minimum standard that guide construction of WASH in Schools. As a result, school expansions were not fully considering WASH services and hence, most primary schools lack WASH facilities. However, in the future, regions are committed to construct schools based on the agreed minimum standard, as clearly articulated in the adapted design

and construction manual. Table below illustrated regional level bottlenecks to enabling environments for WASH in schools.

Table 7. Regional enabling environment for WASH in Schools

Category		Indicator	Oromia	Amhara	SNNPR
Enabling Environment	Policy	Is WinS included in regional policy documents?			
		Are there clear roles & responsibilities for WinS at regional level?			
		Are there agreed minimum regional standards for WinS?			
	Planning	Are there regular plan & clear regional WinS targets?			
		Is there a regional WinS monitoring system?			
		Is hygiene education included in the regional curriculum?			
	Budget	Is there a public sector budget line for WinS?			
		Is there adequate budget to support WinS improvements?			
		Is funding spent at schools most in need of WASH support?			

Planning

Similar to the case at federal level, there is no regional target for WASH in Schools. But, WASH in Schools is one the six packages of SIP within the fourth ESDP. A specific regular plan doesn't exist for WASH in Schools at regional level. WASH in schools was not a sector agenda in the past, but during the fourth ESDP it happens to be one of the areas that should be given attention. In all the three regions visited WASH in Schools have not put specific targets for the five years. One WASH National Program, which also guides regional implementation, has however indicated specific targets for WASH in Schools that covers 140 woredas in Oromia, 89 woredas in Amhara and 76 woredas in SNNPR. It is expected that specific targets for WASH in Schools will be clearly articulated in the upcoming ESDP V. Findings from the key informant interviews have shown that there are differences in the perceptions as to who should set regional target for WASH in Schools, as reflected in SNNPR (BoE feel that they are not responsible for setting targets for WASH in Schools but districts). Regional education bureau is, however, responsible to lead on the planning of WASH in Schools, including setting targets.

Regional monitoring system faces the same bottlenecks as that of the national monitoring system for schools. Regional BoE has similar checklists to collect school level data on annual basis, which predominantly lacking basic indicators that measures performance of schools in terms of WASH services. Findings from the interviews made with regional experts in the three regions revealed that the checklists are not comprehensive to capture key indicators for WASH in Schools. Hand washing facilities as well as practices at schools during critical times is not fully addressed in the annual monitoring of schools. Besides, indicators of adequacy and sustainability of WASH in Schools are totally lacking from the checklists. The checklists only incorporated availability of water and latrines in the school regardless of their quality and quantity standards. And annual monitoring reports are not sufficiently informing regional planning

and setting of targets for WASH in Schools. Even if there are steps being taken towards advancing sector wide approach at regional level, presently, there is no clear mechanism for joint monitoring by WASH bureaus, which can be used for planning purposes. At the time of this study, each bureau has its own monitoring system and reports are not shared among themselves, and hence there are different figures reported on the same school by different bureaus. Reports from the three regions indicated that there is weak coordination among the WASH bureaus in terms of sharing monitoring reports. This can be linked with the national WASH Inventory which was not yet updated since its first release of results in 2013.

Curriculum development is the responsibility of the federal ministry of education, not decentralized, while regional bureaus are entitled to adapt the curriculum within their respective regional contexts on the basis of the syllables provided by the federal ministry of education. But, there are gaps with the existing syllables as reported by the regional bureaus of education. Regional BoE in the three regions reported that they feel overcrowded with the request from NGOs and donors to include different issues in the curriculum. Comparing the three regions, Amhara BoE is making considerable efforts to include WASH in regional syllables. Responses from the three regions, however, leads to summarize the fact that curriculum development is central (not decentralized) and hence inclusion of important WASH related issues should be done at federal level.

Budget

A specific public budget line for WASH in schools doesn't exist at regional level, similar to the federal level. This was witnessed by looking into the official budget documents at federal and regional level. Findings from the key informant interviews showed that WASH in School has no specific public budget line, but under the sector wide approach, specific funds are allocated to WASH in Schools on the basis of the specific plan prepared jointly by signatory sector bureaus and approved by the regional WASH steering committee.

The second budget indicator for WASH in Schools was whether schools have adequate funding for WASH in School improvements. Results of interviews with regional experts indicated that schools are financed through block grant, school grant and sector wide approach. Besides, schools are entitled to generate their income and spend on their development priorities. From the results of the interviews there are variations in the modality of allocations among regions. In Oromia, allocations of block grants are reported to vary from district to district (some districts allocate block grants to schools in kind whereas others in money). This is in conformity with the report released by the MoE (2008) on the general education quality improvement package. In other regions, schools are provided with budget, on the basis of the number of students, which is under the best discretion of the school administration. Unit cost per student for both the block grant and school grant are the same in every region. Despite this regions reported that schools are not allocating specific budget to WASH improvements in schools, which means that they lack adequate budget for WASH improvement in schools. Discussion made with experts from the WASH bureaus in SNNPR indicated that schools have the capacity to finance WASH services; they, on average, generate ETB 200,000 per year, which can be allocated for WASH.

The third budget indicator was whether available funding is spent in schools most in need of WASH services. Findings from the key informant interviews indicated that block grant and school grant are spent in all schools regardless of the need for WASH. It is meant to support school improvement program, where WASH in school is one of the packages. But all experts agreed that the funding flowing through sector wide approach (CWA) are based on the joint annual action plan, which is believed to address schools most in need of WASH services. This is true in the three regions included in this study.

3.2.2 Access, Equity and Capacity: a regional overview

Access

Regions use access figures reported by the ministry of education, that is, an education abstract, which is produced on annual basis. But they are not publishing their own regional education abstract. In accordance with the education abstract, published during 2012/13 (EFY 2005), only 35.7%, 37% and 40.6%% of the primary schools in Amhara, Oromia and SNNP regions have access to water supply. Conversely, 64.3%, 63% and 59.4% of the primary schools in respective regions lack access to water source. Where there are water source in schools, regions were found to lack credible evidences on the adequacy of water supply mainly because their checklists are not comprehensive.

NWI results were not updated yet. And the only source of evidence for the schools' access to improved sanitation facilities is the education abstract. But, it fails to provide disaggregated data on the regional access to basic sanitation or improved sanitation. Reports from the regions indicated that 86% and 77.4% of primary schools in Oromia and Amhara, respectively, have access to basic sanitation, which are predominantly traditional pits. But, SNNPR BoE lacks credible evidences on schools' access to basic or improved sanitation. The fact that the existing monitoring system does not fully address indicators of adequacy of sanitation facilities in schools implicate the need for further research to put more light on whether the existing WASH facilities are adequate or revise the existing checklists to make it more comprehensive.

Table 8. Coverage of WASH facilities in primary schools, regional levels

Type	Amhara	Oromia	SNNP
Water supply	35.7%	37%	40.6%
Basic sanitation	77.4%	86%	ND
Hand washing	0%	0%	0%

Source: Education abstract and BoE in three regions

Furthermore, it becomes apparent that the existing monitoring system fails to measure indicators associated with hand washing facilities and practices in schools. Hence, regional BoE is not counting hand washing facilities in school, and measure progress on the performance of schools in terms of hand washing practices. Not only this but also the previous NWI fails to capture indicators of hand washing in schools.

Equity

Equity issues are largely associated with the overall system of WASH provisions in schools. Hence, equity perspectives discussed at national level holds true for the regions. It is part of standardizing service provision, which should come from the federal government. It is apparent that existing WASH facilities in schools may not fully address gender equity, menstrual hygiene management and special needs of persons with physical disabilities. Regions agree on the fact that schools with NGO interventions have some kind of services struggling more likely to address gender equity, special needs of persons with physical disabilities and special needs of adolescent girls. But schools with NGO interventions might be very few. Whereas government interventions are based on universal access to WASH that undermines the special needs of persons with disabilities, adolescent girls (for the first time experiencing menstruation in schools) and younger children. But, there is a growing concern by regions to adapt the design and construction manual developed with the support of UNICEF that is believed to address issues associated with equitable access to WASH in Schools.

Other bottlenecks to equitable access to WASH in schools are associated with the geographic and socioeconomic disparities. Findings from the key informant interviews in Amhara revealed that expansions of schools are following population settlements on hilly and peak mountains where it is costly to provide improved water. Oromia region is expanding access to primary schools in pastoral and agrarian; and in urban and rural settings. In areas with food insecurity, UNICEF financed school WASH projects have components of school feeding and home-take programs, addressing socioeconomic related problems hindering students from poor household from going to schools. Discussions made with WASH Team in SNNPR indicated that there is lack of evidences at regional level that shows whether geographic or socioeconomic disparities are addressed in the provision of WASH in Schools.

Capacities

Regions have different perceptions on the capacities of schools, districts/towns and local artesian in developing WASH in Schools. Oromia BoE reported that schools may face financial shortages to achieve effective WASH in Schools. Whereas SNNPR BoE has the perception that schools have sufficient resources to cover construction costs associated with WASH facilities in Schools. But, they doubted the capacity of districts/towns in terms of using the design and construction manual for developing WASH in the primary schools. Perception of experts from the Amhara BoE is not different from this. Weak coordination between the signatory bureaus couples with low priority for WASH in Schools might have affected capacities of local stakeholders in the delivery WASH in Schools.

The second capacity indicator was whether hygiene education is a priority in the regions. Similar perspectives have been observed across the regions considered under this study. Oromia BoE responded that they have just started providing training for zonal experts on sanitation and hygiene; so that they will provide similar training in the future for districts staffs (140 One WASH Program districts are planned for similar training). Signatory WASH bureaus came to realize the need for advancing knowledge on hygiene among communities, as part of implementing One WASH Program. But it

should be noted that hygiene education is not yet considered as a priority in schools. Discussions with focal persons in SNNPR and Amhara also justify similar practices; and hygiene education has not yet won the priority it deserves in schools that adversely affected change of behaviors. They provided training for representatives invited from 143 districts using World Bank Training Manual that covers three areas – hand washing, open defecation and safe water practices. Generally hygiene education is not a priority in the region. The following table illustrates the regional level bottlenecks to developing WASH in schools.

Table 9. Regional level bottlenecks to develop WASH in Schools

Category		Indicator	Oromia	Amhara	SNNPR
Developing	Access	% of schools with improved water source (1 faucet for 100 students)			
		% of schools with adequate access to improved sanitation (1 cubicle per 100 girls; 1 cubical for 150 boys; 1 urinal for 150 girls and 200 boys)			
		% of schools with adequate access to hand washing facilities (adequate hand washing means 1 tap for 100 girls & 150 boys)			
	Equity	Is gender equity & MHM addressed for WinS?			
		Is accessibility for children with physical disabilities addressed for WinS?			
		Is geographic or socio-economic disparity addressed for WinS? (access to water similar for urban & rural)			
	Capacity	Is there evidence of capacities of schools, district/town education offices, other actors to ensure effective WinS? (% of schools with functional WASH facilities?)			
		Is hygiene education a priority in the region (Are teachers, students & PTA trained in hygiene education / WinS promotion?)			
		Are students engaged in WinS? (through health clubs; WASH clubs)			

The third capacity indicator is whether students are proactively engaging in the promotion of WASH in Schools. Findings from the key informant interviews indicated that there is a general lack of evidences that shows the level of engagements of students in the promotion of WASH in Schools. Discussion made with experts from Oromia BoE indicated that BoH has established WASH clubs in some schools that aims at enabling proactive participation of students in activities related to school WASH. But, absence of ownership and commitment by school administrations have stagnated its likely progress, which BoE is now on top to make it work. A different perspective has been observed in SNNPR. Discussions made with the experts from SNNP BoE passes responsibilities of engaging students in the WASH promotion activities to schools most likely because they lack credible evidences on how students are being engaged in the promotion of WASH in schools. Similarly, responses of experts from Amhara BoE clearly showed that there are huge progresses in terms of establishing WASH club in schools to engage students in the promotion of WASH.

3.2.3 Sustaining WASH in Schools: regional perspective

O&M inputs

Accessibility of schools to basic operation and maintenance inputs is one of the bottlenecks to ensure sustainability of WASH services. Results of key informant interviews with the regional BoE in three regions indicated that there are lack of evidences on how the schools workout under the existing situations and how the schools are planning to establish supply chain including spare parts supply, repair services (from nearby local artesian or others), and how they are financing costs of O&M. Issues of how the supply chain works for schools and how they are sustainably financed are not very clear at regional level. Generally speaking under developed spare part supply and difficulty to access local artisans by schools are reported to be the common challenge for all the three regions. Experts from Oromia BoE reported that there is lack of technicians or artisans nearest to schools to make repairs of WASH facilities. SNNPR BoE reported that spare parts supply for major maintenances can only be available in the regional capital or zone which is not easy for schools. Discussions made with experts from Amhara BoE indicated that education office will support schools in the establishment of supply chains with the technical support from the water and health offices as appropriate.

The second O&M indicator is whether there is a local body that supports WASH O&M in schools. As witnessed from the discussions made with regional experts, there is lack of clarity as to who should support WASH O&M in Schools at local level; but responses were found to vary across the three regions. In Oromia, under the COWASH program, WASH committees are being formed and trained in schools to support O&M of WASH in Schools whereas in Amhara districts/towns are responsible to support O&M of WASH in Schools. But in SNNPR it was reported that care takers are trained from communities, and they are expected to support O&M of WASH in Schools. This signifies the fact that there is a need to bring greater clarity on the specific local body that is responsible to support WASH O&M in Schools. It is, however, crystal clear that BoE is responsible to lead WASH developments in schools at regional level including O&M; similarly, education office is expected to lead WASH developments in schools at local level whereas schools are responsible for the overall management of WASH O&M within their compound.

The third O&M indicator is whether schools have adequate and reliable funding for WASH O&M. Similar to the case at federal level, findings from the key informant interview revealed that regional government is not allocating a specific budget for WASH O&M in Schools. This means that there is no reliable funding available for WASH O&M in Schools. Experts further reported that schools receive block grant and school grant based on the number of students for the purpose of improving the school. Allocation of these grants is left to the school administration or school board. Since WASH is one of the six SIP packages, school administrations (school boards) are expected to allocate some budget from these grants – but this depends on the level of awareness of school administrations and the level of priority they attach to WASH in schools. Also, under the sector wide approach, schools included in the One WASH National Program, will receive funds for WASH development (could be for new construction, rehabilitation or Operation and Maintenance). But this might not be reliable

and sustainable funding for WASH O&M in schools (as this funding might phase out with the project). Besides, regional experts reported that schools are entitled to generate income by producing cash crops within their compound to complement their financial needs for school improvement.

Ownership and maintenances

This section discusses on three ownership & maintenance indicators for WASH in Schools: whether schools show ownership of WASH facilities and are regularly maintaining them, whether schools feel ownership to provide soap or its substitute for hand washing on sustainable basis, and whether schools show ownership of the water source and are treating regularly.

Findings from the key informant interviews in the three regions indicated that ownership of WASH in School was a great challenge mainly because of lack of clarity as to who should do what and the low priority attached to it. And regions lack evidences on whether WASH facilities in Schools are regularly maintained, and if so, who owns this roles. Experts reported that the case for sanitation facilities in schools is the worst. It is not very clear about who, within the school, is accountable to keep toilets clean and friendly to use. They have also shared their personal observations during the monitoring visits that if the existing scenario of poor management & misuse of school toilets continue as they are, these could be causing major health risks (toilets are very dirty and full of human excreta all around the toilets). Experts from Oromia BoE reported that there are still lacks of clarity as to who should be responsible to maintain WASH facilities in schools; more specifically no clarity on the specific person within the school that is accountable to keep school toilets clean and friendly. Responses to this issue were found to vary across regions. In Amhara, it was reported that there are practices in some schools that students coming from poor households are paid pocket money to clean the school toilet, which is inhuman. In all the regions, students are cleaning the toilet but they are not provided with protective hand-gloves or any other protective sanitary supplies - to reduce associated health risks. In SNNPR, it was reported that schools should work with communities to ensure sustainable repair and maintenances. Further, even if HEW are largely responsible to advance health extension program among communities, schools should establish working relationship with the them to receive the required technical support especially on improved hygiene and sanitation practices. Low awareness on the use of WASH facilities in schools is causing sanitation facilities unhygienic and high health risks (in most cases missing its objective of improving health). In terms of dry waste management, some schools use pits to burn dry wastes while others dump on open fields (and are exposed to wind blowing that spreads dry wastes everywhere). But, in all the three regions, there is lack of evidences at regional level that shows what percentage of schools practice which methods of solid waste management.

The second indicator measures performances of schools in providing soap or its substitute on sustainable basis for hand washing. This indicator is valid only in schools where there is water source and hand washing facilities are installed at nearest distance from the toilet. It is reported from all the three regions that there are generally no such practices in all the schools for many reasons. One reason could be lack of hand washing facilities in most of the schools; second, where there is hand washing facility

schools might not be aware of the need for providing soap or its substitute for hand washing. Experts from Oromia BoE reported that there is no clarity as to who should provide soap/substitute for students to wash their hands on sustainable basis. Similar responses have been given by WASH experts in SNNPR and Amhara. This signifies the fact that national policy documents and guidelines are not providing specific roles and responsibilities for WASH in Schools, especially for O&M, toilet cleaning and emptying, etc.

Similar to the case at federal level regions reported that there is lack of evidences that shows the percentage of schools having water source not safe for drinking and what percent of them practice treating the water. Regional BoE lack inventory of water sources in schools and lists of the sources requiring treatment before use. The existing school monitoring system captures only availability of water source in the schools.

Use

Indicators of use include: (1) whether schools promote WASH to encourage use of the facilities, (2) whether students wash their hands during critical times, and (3) whether students follow safe water practices at schools.

It was witnessed from the key informant interviews in three regions that BoE has received overall responsibility for WASH in schools as the effort to implement One WASH National Program under the sector wide approach. BoE has started promotion of WASH in schools to encourage students to use the facilities. At the time of data collection regional BoE reported that they lack standard materials for hygiene education and/or promotion in schools. In Amhara they have started establishing WASH clubs in schools to encourage students use sanitation facilities and wash their hands during critical times. Where there is water facility, the major bottlenecks to hand washing practices during critical times is reported to be unavailability of soap or its substitutes as there is lack of clarity as to who should provide soap or its substitutes on sustainable basis. In SNNP health offices in collaboration with school directors has provided health education to mini-media services in primary schools and members of WASH club. Also, they are putting efforts to involve students through school WASH competition and dramas.

The second indicator of use was whether students wash their hands during critical times. Reports from the three regions showed that the existing school monitoring checklist does not capture hand washing facilities, and hence they lack evidence on hand washing practices at schools. In Oromia, it was reported that there is no hand washing practices in primary schools mainly because of lack of water in most schools, low awareness on improved hygienic practices and lack of clarity as to who should provide soap or its substitutes. If schools are to provide soap there might be shortage of budget for sustainable supply of soaps or other detergents. Similar responses were provided in SNNPR and Amhara.

The last indicator for use was whether students follow safe water practices. Regions lack tangible evidence to report on whether students follow safe water practices within schools. Where there is access to water supply, low awareness on the use of improved water is largely reported as a major challenge. In all the three regions, it was reported that most schools (especially primary schools) lack access to improved water supply.

Much is expected to achieve change of behaviors among students for them to practice safe water use. The tables below indicated regional level bottlenecks to sustainable WASH in schools.

Table 10. Bottlenecks to sustainable WASH in Schools at regional level

Category		Indicator	Oromia	Amhara	SNNPR
Sustaining	O&M inputs	Are essential commodities for O&M readily available? (e.g. spare parts; repair services, etc)			
		Is there a local body that supports O&M for WinS services?			
		Is there adequate & reliable funding available for WinS O&M costs?			
	Ownership & maintenance	Are school WASH facilities regularly maintained? Who is responsible for WASH maintenance? Solid & liquid waste? e.g. pit emptying, cleanliness, functionality (proxy: % of schools with clean toilets)			
		Do schools provide soap/ash? Who owns responsibility for provision of soap/ash?			
		Do schools treat unsafe water? Is there specific guideline? Who is responsible? (proxy: % of schools with functional water supply)			
	Use	Are there WASH in School Promotion to encourage students to use improved toilets at school?			
		Are students washing their hands with soap/ash at critical times at school?			
		Are safe water practices being followed by students? (e.g. proper storage and handling, accessing from safe source)			

3.3 Local level analysis

3.3.1 Enabling environments

Which policies guide WASH in Schools? As clearly articulated in the methodology part, eight local governments have been considered to understand the extent to which national policy documents are cascaded down and serving the purpose at local level. It is expected that national policy documents are adapted by regions and regions further cascade down to their respective local governments. It was evident from the following table that only Girar Jarso woreda has received guideline for the construction of water and sanitation facilities in primary schools.

Gaps with local development plans

Local development plans are not sufficiently addressing the delivery of WASH in Schools. Findings from the key informant interviews with experts from the local governments indicated that there are two scenarios at the time of this specific study. In some of the local governments (districts or towns) WASH in School has been part of either local development plan or sector operational plans (education or health sector plans). Reports from Konso and Yabelo Town indicated that WASH in School has been partly included in the local development plan and operational plans of health offices. In Girar Jarso, Hossaena and Fiche Town (only for sanitation in schools), WASH in Schools have been partly included in the education sector operational plan. But in other

local governments (Yabelo district, Burie district and Finoteselam Town) WASH in Schools are not part of the local development plan or specific sector operational plans.

The other policy indicator that this study looked into was whether there is clarity of roles and responsibilities for WASH in Schools at local level. This is very important for the effectiveness of WASH in schools. Findings from the local analysis showed that there is no clarity as to who should be responsible for the delivery of WASH in Schools. it was only in Burie district that the lead agency for WASH in Schools is reported to be partly known. This means that the national level policy documents are not sufficiently cascaded down to the local level. The following table provides local level bottlenecks to enabling environments for WASH in schools.

Table 11. Local level traffic lights that shows the status of enabling environments for WASH in Schools

Cat.	Indicator	Burie W	FinotS W	Yabelo W	Yabelo T	Fitch T	GirarJ W	Konso T	Hosana T
3.3.1 Enabling environment		0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2
Policy	Is WinS included in district/town development plan or strategies? (Availability of <i>district/town WinS strategy</i> ?)	0	0	0	0.5	0.5	0.5	0.5	0.5
	Are there clear roles and responsibilities for WinS at district/town level?	0.5	0	0	0	0	0	0	0
	Are there agreed minimum district/town standards for WinS?	0	0	0	0	0.5	1	0	0
Planning	Are there clear district/town WinS targets? (Availability of <i>district/town WinS operational plan</i> ?)	0	0	0.5	0.5	0.5	0	0.5	0.5
	Is there a district/town WinS monitoring system?	0	0	0.5	0.5	0.5	0.5	0.5	0.5
	Is hygiene education/promotion part of the curriculum?	0.5	0.5	0	0.5	0	0.5	0.5	0.5
Budget	Is there a public sector budget line for WinS? If yes, is WinS budget increasing?	0	0		0	0	0	0	0
	Is there <i>adequate</i> budget to support WinS improvements?	0	0		0	0	0	0	0
	Is funding spent at schools most in need of WASH support?	0	0		0	0	0	0	0

The third policy indicator was whether the nationally agreed minimum standard for WASH in Schools is cascaded down to the local government in such a way that they can use in the proper implementation of WASH in Schools. From the data collected from the local governments included in this study it is evident that only Girar Jarso and Fiche Town reported that they have received the minimum standard sent from the regional bureau of education but not yet started to implement. All other local governments reported that they don't have specific minimum standard for the delivery of WASH in Schools. This means that the nationally agreed minimum standard for WASH in Schools has not yet been adapted by their respective regions and cascaded down to local implementers to guide their implementations. Again, the design & construction manual for primary schools that was developed with the support of UNICEF has not been sufficiently cascaded down to local governments. Refer to the following table for further details.

Constraints in planning WASH in Schools

One of the local planning indicators for this study was whether local governments have regular WASH in School plan and whether they have set specific target for WASH in Schools. Results from local level analysis showed that setting specific target for WASH in schools is not common in all the local governments included in the study. And there is no specific WASH in School plans across the local governments. But, there are some practices of putting lists of activities associated with WASH in Schools reflected in either the operational plan of education offices or health offices as appropriate. Some of the activities related to WASH in Schools include, among others, strengthening school clubs and creating clean and conducive environment, as indicated in the education sector operational plans of Yabelo Town, Yabelo districts, Fiche Town, Konso Town and Hosana Town. But no specific WASH activities are indicated in the education sector operational plans for Burie district, Finoteselam & Girar Jarso.

The second local planning indicator that this study checked was whether local governments have comprehensive monitoring system for WASH in Schools. Findings from the study revealed that few indicators of WASH in Schools are part of the cluster supervisor checklists in almost all local governments excluding Burie & Finoteselam. Experts consulted from those local governments further reported that the checklists are not comprehensive and fails to capture major indicators of WASH in Schools. it should however be noted that no local government has specific WASH in School monitoring system.

The third local planning indicator was whether local governments have captured hygiene education in the local curriculum. Issues associated with hygiene education are found to be common across the local governments. Curriculum development is not decentralized, and is centrally managed. Local governments have no role in the development curriculum but are responsible to implement the curriculum adapted by its respective regional bureau of education. It is the federal MoE that develops education curriculum, & syllables are provided to regional BoE to adapt under their specific contexts. Local government education experts reported that, though not sufficiently addressed, hygiene education is part of the curriculum for primary schools (part of environmental science & science text books, respectively, for the first & second cycle primary schools).

Budget constraints for WASH in Schools

This study plans to check three budget indicators. One is whether there is a specific budget line for WASH in Schools. Results of key informant interviews with education offices revealed that none of the local governments has specific budget line for WASH in Schools. But local governments are responsible to deliver WASH in Schools. And local governments are not currently allocating specific budget for WASH in Schools. This shows the risk level for advancing WASH in Schools.

The second budget indicator is whether there is adequate budget to support WASH in School improvements. At the time of this study it was found out that none of the local governments are allocating a specific budget for the delivery of WASH in Schools. They

only allocate budget for the salary of staffs and operating costs including stationery. Block grant allocated based on the number of students is not enough to cover stationery costs.

The third budget indicator is whether local government is spending available budget on schools most in need of WASH support. It was found out that Local Governments are not allocating any budget for WASH in Schools, and hence issues of local spending on schools most in need of WASH may not be applicable.

3.3.2 Bottlenecks to developing WASH in Schools

Challenges of local government to achieve access

Access indicators check whether schools located in that specific local government have adequate access to improved water source, sanitation and hygiene services. Responses from selected local governments indicated that schools' access to water source within the compound is less than 50%. On the basis of the data collected from the local governments only Hosanna town was able to create access for 50% of the schools with water supply while all the other local governments achieved less than 40% access to water supply. Refer the following table for details.

Table 12. Local level traffic lights for the status of developing WASH in Schools

Cat.		Burie W	FinotS W	Yabelo W	Yabelo T	Fitcha T	GirarJ W	Konso T	Hosana T
3.3.2	Developing	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.4
Access	Do schools have access to an improved water source?	0.5	0.5	0	0.5	0.5	0.5	0.5	0.5
	Do schools have access to <i>improved</i> sanitation?	0.5	0	0.5	0.5	0.5	0.5	0.5	0.5
	Do schools have access to hand washing facilities?	0	0	0	0	0	0	0	0
Equity	Is gender equity and MHM addressed for WinS?	0	0	0.5	0.5	0	0.5	0	0.5
	Is accessibility for children/persons with physical disabilities addressed for WinS?	0	0	0	0	0	0	0	0
	Is geographic or socio-economic disparity addressed for WinS?	0.5	0	0.5	0	0.5	0.5	0	0.5
Capacity	Are there capacities with schools, district/town sector offices for effective WASH in schools	0	0	0	0.5	0	0	0	1
	Is hygiene education a priority for the district/town? (Availability of WinS training manual for teachers)	0	0	0	0	0	0	0	0
	Are students engaged in WinS? If yes, how?	0.5	0	0.5	0.5	0.5	0.5	0.5	0.5

Similar findings were obtained in terms of access to sanitation facilities. Local governments included in this study achieved less than 50% access to basic sanitation (improved and unimproved). From the eight local governments considered in this study only Hosanna was able to create access for 50% schools to basic sanitation facilities. All other local governments achieved below 40% access to basic sanitation.

The other access indicator was whether local governments achieved reasonable access to hand washing facilities to schools. It was evident from the findings that all the local governments are found to be off track in terms of achieving access to hand washing facilities in schools. It is clear that if schools have no hand washing facility it is not possible to bring the required behavioral changes on hand washing practices at schools during the critical times.

Bottlenecks to equitable access to WASH in Schools

Equity indicators included under this category are gender equity and menstrual hygiene management, special needs of persons with physical disabilities or younger children, and geographic and socioeconomic disparities that need to be considered in the provision of WASH in Schools.

Results of the key informant interviews with relevant experts indicated that there are some efforts being made to enhance gender equity in terms of constructing separate toilets for boys and girls regardless of their quality but local governments are not making any attempt to address the problems of adolescent girls that are for the first time starting their menstruation at schools or have already started and because of lack of separate facility along with other necessities they are forced to drop their education. Lack of private facilities with affordable sanitary pads and changing rooms are the major bottlenecks for adolescent girls to perform well and complete their education. Education experts consulted in Yabelo, Girar Jarso & Hosanna reported that there are some good starts in few schools with the support of NGOs or small donors, but it is not sufficient. In some other local governments it was found out that local staffs lack basic knowledge on the concept of gender equity & menstrual hygiene management itself indicating capacity gaps that needs to be addressed.

The second equity indicator discusses on issues associated with the special needs of persons with physical disabilities or younger children. It is evident from the responses given by local staffs that the existing WASH facilities do not address special needs because old design fails to capture issues of inclusion. In other words, previous WASH facilities are conventional types and local governments couldn't reach all schools under their jurisdictions. For most local government staffs issues associated with special needs of persons with physical disabilities and younger children for WASH in schools are reported to be a new area and lack the required skills and experience to achieve this.

The last equity indicator looks into the geographical and socioeconomic disparities and how this is affecting the delivery of equitable WASH services in schools. Findings from the key informant interviews with the local staffs indicated that there is no evidence on the coverage of WASH in schools disaggregated by pastoral areas, agrarian rural setting and the urban. Conventionally schools nearby the city, accessible, nearby water source & got special supports from NGOs get more access to WASH, compared to those located in remote & inaccessible areas, and in complex topographic settings. This indirectly indicates that geographic or socioeconomic disparities are not fully addressed in all the local governments included in this study, mainly because of low financial capacities.

Capacity constraints

Specific indicators under this section includes whether there are local capacity to deliver WASH in schools, whether hygiene education is a priority for the local government and whether students are involving in the promotion of WASH in schools.

Findings from consultations made with local staffs indicated that there is low capacity at local level to effectively deliver WASH in schools. It is evident from the discussions made with the local staffs that, except Hosanna that is currently supported by NGO (WaterAid), all other local governments reported that there is no adequate capacity to deliver WASH services in their respective schools, mainly because of low planning & budgeting skill, poor management skills, inadequate financial resources and difficult topographic settings in which the schools are constructed. Hosanna Town is presently supported by WaterAid and hence they are being capacitated to effectively deliver WASH in schools. Also, WaterAid has trained key staffs to lead WASH interventions in schools. Discussions made with local experts from Yabelo Town indicated that there are some staffs actively working on WASH in Schools, showing the existence of some capacities or experiences even if it is not sufficient.

The other capacity indicator was whether hygiene education is a priority for the local government and to what extent the local government is putting effort to enhance capacity of staffs to promote hygiene in schools. From the responses of local government staffs, it is evident that hygiene education is not a priority. Local governments are not allocating a specific budget for hygiene education and no training is being given to key staffs to lead on hygiene education in schools.

The last capacity indicator was whether local government is playing a role to help engagement of students in the promotion of WASH in schools. From the responses of almost all of the local government staffs, it was evident that engaging students in the promotion of WASH in schools is common where there are NGO interventions. In schools supported by NGOs, students involve in the WASH clubs or sanitation clubs to promote WASH in schools. But, this practice of involving students in the promotion of WASH in schools is not sufficiently mainstreamed in the government supported schools. Only in Finoteselam it was reported that there is no practice of involving students in the promotion of WASH in schools.

3.3.3 Sustainability of WASH in Schools

Bottlenecks to access O&M inputs

Indicators for O&M inputs include whether local governments are playing their roles in establishing supply chain for spare parts and repair services for WASH in schools, whether there is specific local body that supports WASH O&M in schools and whether there is adequate and reliable funding for WASH O&M in schools.

Findings from the consultations with local staffs indicated that there is no clear mechanism on how to ensure schools' access to essential commodities for WASH O&M in schools. Supply chain related issues including spare part supply and repair services are not well captured (risk areas for sustaining WASH in Schools).

Similarly, the discussions made with local staffs revealed that there is no specific local body that supports WASH O&M in schools. Even if it is not crystal clear as to who should be accountable to support WASH O&M in schools, experts consulted from Burie, Konso & Hossana local governments suggested that water office/utility can provide technical support for WASH O&M if schools cover the costs. But, all local staffs interviewed from other local governments reported that there is no specific local body responsible to support WASH O&M in schools.

The other most series bottleneck to sustainable WASH in Schools is the lack of adequate and reliable funding for O&M costs. All local governments included in this study reported that there is no adequate funding for WASH O&M in schools. The budget allocated for school improvement related activities are not even sufficient to cover stationery costs.

Ownership and maintenance constraints

Indicators under this category check whether there is specific local body that is responsible to oversee maintenance of WASH in schools, whether WASH in schools are regularly maintained, whether local governments have evidences on who provide soap or its substitute for hand washing in schools, whether local government has evidences on who should treat unsafe water in schools.

Results from consultations made with local staffs it is evident that regular maintenance of WASH in schools is not common or does not exist. There is no clear system at local level for regular maintenance of WASH facilities in schools. Besides, there is no specific local body that takes ownership of WASH maintenance in schools. But, in few of the local governments included in this study (such as Yabelo and Fiche) it was reported that cluster supervisors, school management or clubs sometimes monitor WASH facilities. This is another major risk factor for sustainability of WASH in Schools.

Provision of soap or its substitute for hand washing at schools on sustainable basis is also another major risk factor promoting hand washing practices at schools during critical time. Under the existing conditions schools are not providing any soap or its substitute for hand washing and there is no clarity as to who should provide soap or its substitute for hand washing on sustainable basis. This is true in every school.

Similarly treating unsafe water in schools is not commonly known at local government level. It is apparent from the responses of local staffs that under the town contexts it is the water utility that disinfect water centrally (as reported by education experts from Hosanna, Yabelo and Fiche). Besides, where there are NGO interventions schools are advised to practice some disinfection (as reported by Yabelo district). But, generally, the idea of treating unsafe water in schools is not clearly understood at local government levels. It is important to identify whose role it is to disinfect unsafe water in schools. Details of local government level bottlenecks to sustainability of WASH in schools are indicated in the following table.

Table 13. Bottlenecks to sustaining WASH in Schools

Cat.		Burie W	FinotS W	Yabelo W	Yabelo T	Fitcha T	GirarJ W	Konso T	Hosana T
3.3.3 Sustaining WASH in Schools		0.2	0.0	0.2	0.1	0.1	0	0	0
O&M inputs	Are essential commodities for O&M readily available? Roles of district / town sector offices, schools & PTA?	0.5	0	0	0	0	0	0	0
	Is there a local body that supports O&M for WinS services?	0.5	0	0	0	0	0	0.5	0.5
	Is there adequate and reliable funding available for WinS O&M costs?	0	0	0	0	0	0	0	0
Ownership & Maintenance	Are school WASH facilities regularly maintained? Who owns responsibility for WASH maintenance in schools? Who owns responsibility to manage solid & liquid waste management in schools?	0	0	0.5	0.5	0.5	0	0	0
	Do schools provide soap/ash? Who owns responsibility for provision of soap/ash?	0	0	0	0	0	0	0	0
	Do schools treat unsafe water? Is there specific guideline for treating unsafe water in schools? Who is responsible for treating unsafe water in schools?	0	0	0.5	0	0	0	0	0
Use	Are there WASH in School Promotion to encourage students to use improved toilets at school?	0.5	0	0.5	0.5	0.5	0.5	0.5	0.5
	Are students washing their hands with soap/ash at critical times at school?	0	0	0	0	0	0	0	0
	Are safe water practices being followed by students?	0	0	0	0	0	0	0	0

Bottlenecks to Use of WASH in Schools

Use indicators check whether local governments support schools to promote WASH to encourage students use the facilities, encourage students wash their hands with soap at critical time and help students follow safe water practices at schools.

Local governments are largely promoting use of WASH facilities among communities through health extension workers, but rarely supporting schools to encourage students use WASH facilities. It is apparent from the consultations made with local staffs that WASH promotion in Schools is common where there are NGO interventions but local governments are not sufficiently supporting schools to encourage students use the facilities, especially sanitation facilities. Even if there are WASH promotions in schools supported by NGOs, it is not strong enough to bring change in the behaviors of students to use improved facilities in schools. In Finoteselam town WASH promotion in schools that aims at encouraging students to use latrine facilities is not yet started.

It is clear from the consultations made with local staffs that local governments have invested less in terms of cultivating changes of behaviors among students to wash their hands during critical times at schools. Under the existing conditions students are not washing their hands at schools during critical times. One basic reason could be because of the low level of knowledge on the health risks associated with not washing hands at critical times. Besides, lack of hand washing facilities nearby the toilet, lack of water in the tap or in hand washing facility and lack of access to soap or its substitutes

are adversely affecting hand washing practices in schools. It is apparent from the traffic light tables that no local government is found to progress in achieving this indicator.

Similar to hand washing practices, students in all the eight local governments are reported not to follow safe water practices. Some of the local government experts are found to lack sufficient understanding of what safe water practices constitute (such as in Fiche town and Girar Jarso district). And in some others local governments, it was reported that students do not follow safe water practices as there is no sufficient water in the school or because the water is not flowing in the tap most of the time (such as in Yabelo as the water source is roof harvesting).

3.4 School level bottlenecks

3.4.1 Problems with access to water supply in schools

Five indicators were identified to analyze bottlenecks to provision of water supply in schools. Each of these indicators is discussed under this section on the basis of the findings of the school survey.

The first indicator was whether the school has improved water source in the compound. It came out from the findings of the survey that only 7 out of 16 schools have access to water source within the compound (44% of the schools have access; 56% lack access to water supply). Findings of the survey indicated that schools' access to water supply varies from place to place (geographical differences go with schools' access to water supply). Schools located in pastoral and dry areas were found to have roof water harvesting as a seasonal source for water (such as Chene Dika primary school, Yabelo Primary & Jarso Primary schools have roof water harvesting which is seasonal). Besides, other school in pastoral areas like Iddi Ale has plastic water tankers (but not functioning at time of data collection). Yabelo secondary and preparatory school has no water source within its compound. Some schools located in the urban areas including Karat secondary and preparatory school, Yekatit 25 secondary and preparatory school and Bobico primary school have water sources but not properly managed and as a result some of the faucets are not functional (not maintained at the time of data collection). Abiyot Fire primary school (located in Fiche Town) has connected water from the main line of the town water source but it was not functional at the time of data collection; whereas Abdisa Aga secondary school (located in Fiche Town) has functional water source but has only 1 faucet for 1509 students, which is not sufficient. Schools located in the rural areas (in Girar Jarso district) such as Chagel primary and Ejersa Kawo secondary schools have no water supply facilities in their compound.

The second indicator checks functionality of the water sources throughout the year with the maximum down time of 10 days. Almost 70% of the schools reported that the water source is not functional during the time of data collection, whereas all the schools with water source reported that the down time is by far more than 10 days. As discussed in the previous paragraphs schools with roof water harvesting are likely to have water only during the rainy season, constrained largely by scarcity of water during the dry season. In the pastoral and dry areas, water insecurity is the major bottleneck for the schools to have functional water supply throughout the year. Roof water harvesting is functioning during the rainy season and dries up when the rain stops. Where there is water supply

such as Karat secondary, Yekatit 25 secondary Bobico primary schools, some of the faucets are not functioning at the time of data collection, mainly because of lack of ownership and finance. In those schools the key bottlenecks to functional water supply is that local governments are not allocating specific budget for WASH in schools, and schools are not showing strong ownership to fix problem causing non-functionalities so that they have continuous access to water supply throughout the year. This is manifested by a minor breakdown of faucets that stays for longer time before getting fixed and sometimes abandoned at all – not giving any attachment to the value of money. In some schools located in the town, there is negligence to follow up water supply system in the school. For example, Abiyot Fire primary school has connected to the main line of the town water supply system, but water was not flowing in the tap at the time of data collection; whereas the town has functional water supply. None of the schools included in this study that has water source reported that the water supply system functions throughout the year; and the down times are estimated to be by far more than 10 days in a year (the down times extends to over six months in a year). Refer the following table for details.

Table 14. Status of water supply in schools

Indicator	Total YES	Sample size	Percent said YES
A school has improved water source within the compound	7	16	44%
Water source available in the compound is functional during data collection	5	16	31%
Water source available in the compound functions throughout the year with the maximum down time of 10 days	0	16	0%
A school has adequate water supply (meets national standard of 5 liters per day per capita or 1 faucet for 100 students with a pipe system)	0	16	0%
A school maintains national water quality standard (specify)	1	16	6%
Water source is accessible to all school communities including younger children & students with disabilities	0	16	0%

The third indicator checks if the water source in the school meets the minimum quantity standard or whether the school has adequate water supply that meets the national standard. It is evident from the survey that none of the water sources in the sample schools meet national standards. Some schools like Abdisa Aga secondary school has water supply with 1 faucet for 1509 students which is by far lower than the minimum standard (1 faucet for 100 students). The same is true for other schools that have water supply but some of their faucets are none functional for many reasons stated above. Especially schools located in the pastoral areas or dry areas like Yabelo and Konso have roof water harvesting as their major source of water, which are seasonal and not functioning for most of the days in a year.

The fourth indicator was whether schools having water supply maintain national water quality standards. Findings of the survey showed that only Yekatit 25 secondary school reported that it meets the national water quality standard because the school water is connected to Hosanna town water supply system, which as per their response is

believed to meet the national water quality standard. But, all the remaining schools with water supply reported that they are not sure whether the water meets national quality standard or not because of lack of evidences. Even there is not clarity as to who should check whether the water source is safe to use for domestic purposes and much is expected to clarify this and ensure that water supply in schools meets national standards.

The fifth indicator was whether the water source in schools accommodates the special needs of persons with disabilities or younger children. It is very clear from the findings of the survey that none of the water sources in the schools are friendly with persons with physical disabilities or with those younger children. Water sources in schools are conventional types and do not address the special needs mainly because the previous design failed to include the special needs of persons with disabilities.

3.4.2 Challenges with sanitation facilities in schools

Ten indicators were used to analyze the bottlenecks to sanitation facilities in schools. One is whether schools have access to improved sanitation facilities. Survey findings revealed that most of the schools have access to basic sanitation but not improved. Only 44% of the schools reported that they have access to improved latrine (VIP latrine). Chene Dika primary school has one partial VIP latrine with four seats, which is not improved. Iddi Ale secondary school has one VIP and one TPL. Yabelo primary school has latrine with urinal. Abiyot Fire primary, Abdisa Aga secondary, Chagel primary and Ejersa Kawo secondary schools have VIP latrines. Yabelo secondary, Jarso primary, Karat secondary, Bobico primary, Yekatit 25 secondary schools have partial VIP latrines which are not improved.

The second indicator is whether school sanitation facilities meet national standards. In all the eight schools, the latrine stances to student ratios are by far exceeding the national standard. On the basis of the data collected from schools, latrine stance to boys' ratio ranged between 1:19 Ejersa Kawo and 1:585 in Yabelo secondary schools. Besides, latrine stance to boys' ratios are 1:308 in Bobico, 1:313 in Abiyot Fire and 1:340 in Yekatit 25 secondary schools. Similarly, the latrine stance to girls' ratio ranged from 1:11 in Ejersa Kawo to 1:459 in Yabelo secondary school. The next higher ratios are recorded in Yekatit 25 secondary school (1 latrine stance for 305 girls on average) and Bobico primary school in which one latrine stance serves 373 girls, on average. These ratios are very big compared to the national standard, which says 1 latrine stance should serve 50 boys or 40 girls, on average. This means that all sanitation facilities in most of the sample schools fail to meet national standards.

The third indicator checks whether school sanitation facilities are clean, friendly to use and have urinals. It is apparent from the findings of the survey that only three out of the sixteen schools (such as Abiyot Fire, Chagel and Ejersa Kawo) reported that they have sanitation facilities that are clean and friendly to use. In general only 19% of the schools included in this study reported that they have clean toilets. Other schools reported that sanitation facilities are not clean and hence not friendly to use.

The fourth indicator was whether schools have separate sanitation facilities for boys and girls, and whether they are located in the opposite directions. Out of the 16 schools only 3 schools lack separate sanitation facilities for boys and girls (such as Chene Dika,

Ejersa Kawo and Jarso primary school). In other words, 81% of the schools have separate latrine facilities for boys and girls regardless of their quality and quantity standards. Most importantly, it is evident from the findings of the survey that all the remaining schools have separate sanitation facilities for boys and girls regardless of their quality and quantity standards. But, most of the schools have access to basic sanitation (both improved and unimproved). There are also schools with traditional pit latrines, but counted as if the schools have access to sanitation facilities.

The fifth indicator checks whether the school sanitation facilities are inclusive of all the needs of persons in schools. It is apparent from the findings of the survey that almost all of the schools included in this study reported that the existing sanitation facilities in schools are not fully addressing the special needs of persons with disabilities or that of younger children. Existing sanitation facilities are all conventional types aimed at addressing the needs of ordinary person, not considering persons with physical disabilities and younger children. It should therefore be noted that the existing sanitation facilities in schools are not inclusive and persons with disabilities and younger children attending the schools are not actually using them at ease.

The six indicator was whether existing sanitation facilities are lockable from inside to ensure security and safety of students. Findings of the survey showed that only 3 out of 16 schools visited during this study have sanitation facilities that are lockable from the inside (these are Iddi Ale, Yabelo primary, Fiche secondary & Ejersa Kawo secondary schools). Whereas, the remaining schools lack lockable doors from the inside of the compartments; and hence existing sanitation facilities in schools are not safe especially for girls.

The seventh indicator was whether schools have private facilities for menstrual hygiene management and whether they are providing affordable sanitary pads and changing rooms. Findings of the survey indicated that none of the schools included in this study has private toilet facilities, affordable sanitary pads & changing rooms for adolescent girls that are for the first time starting experiencing menstruation at schools. It was reported that only few schools with NGO interventions have some information of menstrual hygiene management though they lack the facilities specified above.

The eighth indicator checks whether schools have soakage pits, garbage pits, drainage and containers for solid and liquid waste management. It is apparent from the survey that all schools lack solid and liquid waste management. Only 6 out of the 16 schools visited during this study have open pits for solid waste disposals (such as Iddi Ale, Yabelo primary, Bobico, Abiyot Fire, Chagel and Ejersa Kawo schools). But, these solid waste disposal pits are not properly utilized. All the remaining schools reported that they lack soakage pits, drainage and garbage pits that are used in the management of solid and liquid wastes.

The ninth indicator was whether the schools have a system for emptying the toilets when they fill and whether there are clarity of roles as to who should take the lead in emptying the toilets in schools. Findings from the survey revealed that all the schools lack a system for emptying the toilets and there is no clarity of roles as to who from within the school should be responsible to oversee the toilets and does emptying when it fills. This is another bottleneck to use sanitation facilities in schools.

The tenth indicator was whether school compounds are free of solid wastes and open defecation. Clean school compound including classrooms is among the indicators of good sanitation practices in schools. Findings showed that 5 out of the 16 schools included in this study have achieved clean compound free of solid wastes and open defecations – these schools include Abiyot Fire primary school, Abdisa Aga secondary school, Chagel primary school, Ejersa Kawo secondary school and Bobico primary school. All the other 11 schools fail to achieve this indicator, which means that the school compounds are filled with solid wastes and open defecations. Refer the following table for details.

Table 15. Status of sanitation facilities in schools

Indicator	Total YES	Sample Size	Percent said YES
A school has improved toilets & urinals that are functional during the time of data collection	7	16	44%
Number of functional toilets & urinals meet national standards (1 latrine stance per 40 girls; 1 separate cubicle for female staffs; 1 latrine stance for 75 boys; 1 urinal for 75 boys; 1 cubicle & urinal for male staffs)	0	16	0%
Functioning toilets & urinals are clean & friendly to use during the time of data collection	3	16	19%
A school has separate blocks of different direction toilets for boys & girls	13	16	81%
Functional toilets & urinals are accessible to all school communities including younger children & students with physical disabilities	0	16	0%
Individual toilet compartments are lockable from the inside & are safe	5	16	31%
Private facilities are available for girls to use during menstruation	0	16	0%
A school has soakage pits, garbage pits, drainage, containers, etc	5	16	31%
A school has a system for emptying the toilets when it fills	0	16	0%
A school has a compound free of wastes & open defecation; & has clean classrooms that are friendly with school communities including children	6	16	38%

3.4.3 Challenges with hygiene promotion in schools

Fifteen indicators were identified to analyze the bottlenecks to hygiene promotion in schools. This study, however, found out that almost all schools lack hand washing facilities and hence most of the indicators cannot be evaluated as they are not applicable where there is no facility. The following paragraphs only discuss those indicators that are not associated with hand washing practices.

From the findings of the survey it was apparent that only 2 out of 16 schools (Iddi Ale and Yabelo primary schools) reported that they have hand washing facility, but in both schools, the hand washing facilities are not functioning at the time of data collection because of lack of water. Bobico primary school also reported that there is piped water source in the compound which can also serve hand washing but the tap is closed most of the time including during the critical times for hand washing and it was not being used at the time of data collection. The guard is closing and opening the taps on his will, and the water source is not even accessible for drinking, which signifies the poor management of water source in the schools. All other schools (14 out of 16 schools) lack hand washing facilities. Refer the following table for details.

Table 16. Status of hygiene practices in schools

Indicator	Total YES	Sample size	Percent said YES
A school has functional hand washing facility	2	16	13%
Sufficient water hand washing during critical time	1	16	6%
Soap (substitute) is available for use	0	16	0%
A system exist to monitor student personal hygiene	7	16	44%
Majority of students are aware & practice improved hygiene	6	16	38%
Equal access exist for hand washing in schools	0	16	0%
Adequate IEC materials are available for hygiene promotion in school	0	16	0%
A school has girls friendly WASH facilities	0	16	0%
Hygiene is taught at the school or hygiene is part of the curriculum	9	16	56%
Designated time for hand washing before lunch	1	16	6%
Students have heard about WASH topics in class in the past month	4	16	25%
At least 1 teacher trained on hygiene education in the past year	3	16	19%
Use of mini-media & clubs to promote WASH	2	16	13%

In these three schools with hand washing facilities, lack of water either because water is not flowing in the tap or purposely closed by the guard is the major bottleneck for hand washing practices in schools during critical times. As discussed in the previous paragraph, in Bobico primary school, the guard is opening and closing the water source on his will, and there is no designated time for opening the water source for use by students in the school. Consequently, students cannot wash their hands during critical time because the water taps are closed. This indicates the level of ownership of the water source by the school and the level of awareness on hand washing during critical times.

The other most important bottleneck to hand washing practices in schools with hand washing facilities is lack of soap or its substitutes. It is evident from the survey that none of the schools included in this study provide soap or its substitute for hand washing

mainly because they lack clarity as to who should provide soap or its substitutes on sustainable basis for students to wash their hands during critical times. Even if no one is reported to practice hand washing at schools, use of soap or its substitute is the most important problem. Experience with some schools was that if they put soap for hand washing students take it away for their own personal motives.

Checking whether the school has a system for monitoring student personal hygiene was one of the indicators this study verified through survey. It is clear from the findings that most of the schools included in this study reported that there is a weekly monitoring of students personal hygiene. Every Monday teachers check the student's personal hygiene. But no further system exists to monitor students' personal hygiene.

In 4 out of 16 schools visited during this study such as Abiyot Fire primary school, Abdisa Aga secondary school, Chagel primary school & Ejersa Kawo secondary school, it was reported that students are somehow aware of improved hygiene practices but the level of behavioral change is very low or nil. Their level of awareness cannot change their hygiene behaviors at school. But, in the other remaining schools, it was reported that students lack awareness on the improved hygiene practices; they also lack hand washing facilities as well.

Schools covered under the survey reported that though it is not strong enough, hygiene education is part of the curriculum for the primary schools. It is part of environmental science text book for the first cycle primary school, and science text books for the second primary schools. It was also reported that in few schools with NGO interventions, there are also additional hygiene promotion activities aimed at changing the students' hygiene behavior.

The other indicator was whether schools have designated time for hand washing before lunch. Findings of this study showed that some schools have feeding program whereas others have cafeteria where there is possibilities to have something to eat. But, all the schools included in this study reported that there is no designated time for hand washing before lunch. And hand washing has not been a practice by students at schools. Some of the reasons include lack of water with soap or its substitute for hand washing and also hand washing practices have not been acculturated among school community in general or students in particular.

The other indicator was whether schools use different approaches to promote WASH. Findings from the survey indicated that 4 out of 16 schools are using different approach to promote WASH. Yabelo primary school, Abdisa Aga secondary school, Chagel primary school and Ejersa Kawo secondary school reported that they various ways to promote WASH including sanitation campaigns. But, other schools reported that students not heard about WASH in the last month.

Whether schools have trained teachers on hygiene education was one of the indicators for assessing hygiene promotion in schools. The survey indicated that only 3 out of 16 schools reported that they teachers trained on hygiene education in the recent year; these include Iddi Ale primary school, Bobico primary school and Yekatit 25 secondary school. But, in all the remaining schools (13 out 16 schools) it was reported that they have no trained teachers on hygiene education.

The last indicator was whether schools use mini-media or WASH clubs to promote WASH. From the findings of the survey it was apparent that only 2 out of 16 schools (such as Karat secondary school and Bobico primary school) reported that they have some experience of using mini-media and clubs to promote WASH in schools. Whereas all the other schools reported that they have no experience of using mini-media or clubs to promote WASH.

3.4.4 Systemic constraints to sustain WASH in schools

Seven indicators have been identified to identify systemic bottlenecks to sustainability of WASH in schools. The first indicator was whether schools have rules and regulations that guide WASH in schools and are being implemented. But, survey findings showed that none of the schools included in this study have rules and regulations that guide management of WASH facilities in schools. As a result, schools are facing major challenge in terms of managing the facilities as appropriate. This means that there is no ground for accountability relations for fallacies that can happen in terms of managing the facilities leading to poor ownerships of WASH in schools.

The second indicator was whether schools have a system for managing WASH facilities in schools. This has strong linkage with the first indicator; if it doesn't exist, it puts the second indicator at risk. Findings indicated that there is no specific system for managing WASH facilities in schools. Respondents from Karat secondary school suggested that the administration wing should be responsible to manage WASH facilities in schools; whereas in Bobico primary school, it was reported that the guard should be responsible to manage water source in school; as the guard can report any misuse of the facilities and report to the administration wing of the school. In other schools it was reported that there is no system for managing WASH facilities at all, which is the major bottleneck to sustain WASH facilities in schools.

The third indicator checks whether schools have specific plan for WASH in schools. Findings from the survey indicated that only in 1 out of the 16 schools, that is, Jarso primary school, there is a specific plan for WASH. But in all of the remaining schools there is no specific plan for WASH in school. However, Karat secondary school has maintenance plan for the school which is not specifically for WASH O&M that partly include WASH. Bobico primary school has a school plan that has a component of WASH but not specifically for WASH O&M. whereas other schools either has no specific plan or general plan that guides O&M for WASH. This means that most of the schools lack a plan for WASH including specific activities for O&M which also further indicate the lack of clarity as to who should be responsible for WASH O&M in schools.

The fourth indicator was whether schools have specific budget for WASH. This is very much associated with availability of specific plan approved by the local government or by the school board. It is however apparent from the findings that none of the schools considered under this study has a specific budget for WASH or generate funds for WASH. And Iddi Ale primary school, Yabelo secondary school, Jarso primary school and Yekatiit 25 secondary school reported that they have block grant and school grant allocated by the local government but it is not sufficient even to cover stationery costs. This means that schools are not in a financial position that supports O&M of the facilities

which is a major bottleneck to sustainability of WASH in schools. Refer the following table for details.

Table 17. Status of WASH O&M in schools

Indicators	Total YES	Sample size	Percent said YES
A school has rules & regulation that guides WASH services in school; & are being implemented	0	16	0%
A school has a system for managing WASH services (WASH committee; WASH O&M guideline; etc)	1	16	6%
A school has a specific plan for WASH including O&M, person(s) responsible for ensuring the repairs (& providing soap & other consumables)	1	16	6%
A school has a specific budget for WASH (generate funds through community mobilization; allocated by the government or other sources)	0	16	0%
A school has sufficient funds available to cover a large repair (if needed)	0	16	0%
A school has a specific plan for toilet cleaning, including clear roles & responsibilities	2	16	13%
A school promotes WASH through teaching; has trained WASH club, teachers, members of SMC & PTA	1	16	6%

The fifth indicator was whether schools have sufficient funds to cover major repairs if any. Findings from the survey indicated that none of the schools included in this study have adequate funds supporting large repairs. Schools even lack budget to cover minor maintenance of WASH facilities like maintenance of faucets. And resources available to schools were reported that they cannot cover academic related costs and hence schools are currently not allocating budget for WASH.

The sixth indicator was whether the schools produce specific plan for cleaning the toilets, and whether there is clarity as to who should be responsible for overseeing toilet cleaning. It was evident from this study that none of the schools is currently producing a specific plan for toilet cleaning. But, in some schools they reported that they are using Janitors to clean the toilets. For example, Yabelo primary school use Janitors to clean the toilets but they reported that Janitors could not cover even the classrooms. Besides, schools lack of clarity of roles as to who within the school staffs should take clear accountability to oversee toilet cleaning. Schools sometimes assume that Janitors are responsible for planning to clean the toilets.

The last indicator was whether schools promote WASH in schools through teaching, training teachers, students or members of PTA. Under the existing conditions, it was reported that almost all schools are not promoting WASH through teaching, training WASH club, teachers and members of SMC & PTA. But, there is one-time training on hygiene practices in two schools. ORBIS international has provided one time training for members of club members, teachers and students in Karat secondary school; and Bobico primary & Yekatit 25 secondary schools have also received one time training.

3.5 Student level bottlenecks

3.5.1 Hygiene behaviors of students

Students in primary and secondary schools are expected to have basic information or knowledge on the health risks of not washing hands during critical times. They are introduced to personal hygiene through the environmental science course that is given at the first cycle primary schools. They have also the second chance to upgrade their knowledge on personal hygiene in the second cycle primary schools through attending the science course. This hygiene education through the formal education program is expected to create the basic understanding of the health risks associated with poor hygienic practices. Unless there is a problem with the curriculum, this formal intervention should have caused change in the behaviors of the students. But this is not happening under the existing situation, which leads to the conclusion that something should be wrong either with the students or with the curriculum.

Table below illustrated the existing situations of the behavior of the students as collected from 16 sample schools. Pocket voting exercises were conducted with 132 students selected from 16 schools on the basis of quality assurance sampling method. It is evident from the results that out of the 56% that use toilet facilities at school, only 10% of the students practice hand washing after using the toilet. And only 7% of the students reported that they wash their hands before lunch. Whereas only 27% of the students interviewed reported that they drink school water if they are thirsty. Refer the following table for more details.

Table 18. Results of pocket voting exercises made at each school

Descriptions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	average	sample
Students wash their hands with soap or substitutes after using toilet in school	0%	0%	0%	0%		0%	33%	20%	0%	10%	0%	0%	0%	0%	80%	0%	10%	132
Students wash their hands with soap or substitute before lunch	0%	0%	0%	0%		17%	17%	0%	0%	0%	0%	0%	0%	0%	30%	44%	7%	132
Students used toilets at school last week	50%	40%	0%	40%		33%	33%	40%	60%	70%	100%	88%	100%	25%	100%	67%	56%	132
Students drink water at school if they are thirsty	0%	0%	50%	50%		17%	17%	0%	30%	10%	30%	50%	0%	0%	100%	56%	27%	132

Hand washing practices, however, varies across schools for many reasons – the school might have no hand washing facility, not water supply and no soap or its substitute. It is apparent from the findings of this study that only 4 out of 16 schools reported that they have hand wash facility (namely, Yabelo primary & secondary schools, Abdisa Aga secondary school and Bobico primary school). The percentage of students practicing hand washing after using toilet at school was 33% in Yabelo primary school, 20% in Yabelo secondary school, 10% in Abdisa Aga secondary school and 80% in Bobico primary school. The percentage of students practicing hand washing before lunch also

varied across schools; it was 17% each in Iddi Ale and Yabelo primary schools, 30% in Bobico primary school and 44% in Yekatit 25 secondary school.

Not all students involved in the pocket voting exercises use school toilet or water supply. Some prefer to use toilets at their home even if when they would like to use at schools for many reasons, which among others include uncleanness of the toilet facilities, issues associated with privacy and safety. Results of the pocket voting exercises in Bakel primary school indicated that 0% of the students are using the toilet facilities in the school because the toilets are not clean and safe. In Mulugenet secondary school only 40% use the toilet at school mainly because of the fear of their friends (cultural influence). Where there is water source in schools students would like to use but limited by different factors. In some schools the water tap is locked most of the time and the students cannot access water for drinking; whereas the school uses the water for gardening. In some schools water tap is locked all the time because of the fear of monthly water fees.

Spot checks were used to collect evidences of students' personal hygiene and evidences of whether water and sanitation facilities are being used by students at schools during the study. From the evidences collected through spot checks only 21% of the students have clean hands and nails, which varied across the three schools; students with clean hand & nails were as low as 6% in Ambaye primary and Mulugenet secondary schools, and 53% in Bakel primary school. But there was no evidence of students using water source in Bakel primary schools. Look into the following table for details.

Table 19. Results of spot checks for student's personal hygiene and use of water and sanitation facilities at schools.

Indicator	1	2	3	Average
Hands & nails are clean	6%	6%	53%	21%
There is evidence of regular toilet use such as wiping material in the hole or trash bin, absence of spider webs in the doorway, etc.	100%	50%	100%	83%
There is evidence that the safe water source is being used by students such as wet cups near the water point, etc.	NA	NA	0%	0%

Despite the fact that students receive information on improved personal hygiene and environmental sanitation – either through formal course, NGO interventions or health extension works – students are found to be resistance to change. Students' hand washing practices at school is very insignificant because of the low awareness on the one hand and lack of hand washing facilities nearby the toilets on the other.

3.5.2 Constraints to use water in schools

Students interviewed in different schools reported that there are many constraints in the use of water source in schools. As stated in the previous sections some schools lock the water tap because of the fear of monthly water fees. Whereas in some other schools, the guard who oversee the water tap lock it for long time out of ignorance and students cannot access the water supply.

3.5.3 Constraints to use sanitation facilities in School

From the findings of the interviews made with selected students it was evident that different factors are adversely affecting the use of sanitation facilities in schools. Some of these include: uncleanness, lack of privacy, lack of safety, cultural influence and inadequacy of sanitation facilities. Details are provided in the following sections.

6. KEY BOTTLENECKS TO WASH IN SCHOOLS

This section summarizes key bottlenecks to WASH in Schools from the findings of the study. It is structured in such a way that it reflects bottlenecks associated with the policy and support structures, implementation and management of WASH in schools. Details are provided as follows.

6.1. Bottlenecks associated with policies and practices

As clearly discussed the previous sections, lack of national strategy, absence of specific plan and targets, lack specific budget, lack of clarity of roles and responsibilities, lack of clear standards, lack of specific system for monitoring and reporting, lack of strong system for managing facilities are among the key bottlenecks associated with policy and practice. Details are provided in the following table.

Table 20. Bottlenecks associated with policies and practices.

Type	Key bottlenecks identified
Policy level or institutional bottlenecks	<ul style="list-style-type: none">• No national strategy for WASH in schools at all level• Absence of regular specific planning and targeting of WASH in schools at all levels• Absence of specific budget for WASH in schools at all levels• Lack of clarity of roles and responsibilities for WASH in schools at local level• Low understanding of the standard for the delivery of WASH in schools at local level• Lack of specific system for monitoring WASH in schools at all levels; existing school monitoring checklists lack major indicators of WASH in schools
Bottlenecks to implementation of WASH in Schools	<ul style="list-style-type: none">• Low implementation capacity (especially private contractors not follow the standard design)• Health extension workers are largely focusing on communities but less on schools• Schools not sufficiently involving parents in the development of WASH in schools (both in cash and kind contributions)• Lack of materials on hygiene promotion in schools, and low level of skills and knowledge on hygiene

Type	Key bottlenecks identified
Bottlenecks to management of WASH facilities in Schools	<ul style="list-style-type: none"> • Shortage of resources for achieving universal access to school WASH
	<ul style="list-style-type: none"> • Lack of WASH facility management guideline at school level (hence lack of clarity of roles within school)
	<ul style="list-style-type: none"> • Low capacity to manage WASH facilities at school level (lack of leadership skill; technical skill; shortage of finances for O&M)
	<ul style="list-style-type: none"> • Low level of awareness on the impact of WASH on education that adversely affected the capacity to mobilize resources
	<ul style="list-style-type: none"> • Weak link between schools and service providers including WWT, artesian and suppliers of spare parts or suction trucks for emptying latrines
	<ul style="list-style-type: none"> • Supply chain not developed for maintaining WASH facilities in schools

Source: summarized from the findings of desk review and key informant interviews

6.2. School level bottlenecks

6.2.1 Bottlenecks to water supply in schools

This study identified four major bottlenecks associated with water supply in schools. These include unavailability or lack of access to water supply in school, fear of monthly water fees, selling water to neighbors, and lack of specific budget for water supply in schools. The following table illustrates the analysis of bottlenecks to water supply in schools.

It is apparent from findings that 81% of the schools lack access to water supply within their compound. That means water source does not exist in the schools and hence school communities should either bring water with them from home or look for water from their neighbors. Where there is water supply in schools, factors like fear of water fees is affecting the use of water source in schools. Though it was not rightly reported in most of the schools (6% of the schools, that is, 1 out the 16 schools), fear of monthly water fees stood among the key bottlenecks to water services in schools. Because schools cannot pay the monthly water fees, they prefer to lock the water source and hence students cannot access water for either drinking or washing their hands. Similarly, 1 out of 16 schools reported that the school is connected with the town water supply but closed most of the time. But they sell water to the neighbors whereas the students cannot access for drinking or hand washing during critical times.

Table 21. Bottlenecks to water supply in schools

Bottlenecks to use of water	Total YES	Sample size	Percent said YES
Not available (does not exist)	13	16	81%
Locked in fear of water charges	1	16	6%
Locked for students but sold to neighbors	1	16	6%
Lack of specific budget for water supply	16	16	100%

6.2.2 Bottlenecks to sanitation in schools

This study identified five biggest bottlenecks to school sanitation facilities that hamper the degree to which they can be utilized by students; boys, girls, younger children and persons living with disabilities. Table below provides the percentages of school that reported the challenges associated with the use of school sanitation facilities.

Inadequacy of sanitation facilities

In all the schools included under this study sanitation facilities are reported to be insufficient compared to the number of students. In other words, school sanitation facilities do not meet the national minimum standards in terms of the ratio of latrine stance to students. The ratio of latrine stance to students goes far beyond the national standard. It was as high as 1 latrine stance for 522 students in Yabelo secondary school, which was 1:585 for boys and 1:459 for girls. Similarly, the latrine stance to students' ratio was 1:341 in Bobico primary and secondary school, 1:319 in Yekatit 25 secondary school and 1:242 in Abiyot Fire primary school. Inadequacy of sanitation facilities in schools was reported as a major challenge by 100% of the schools visited during the study.

Sanitation facilities are not inclusive

The second bottleneck to the use of school sanitation was exclusiveness of the sanitation facilities. Persons with disabilities are present in most of the schools visited (teachers, students, boys & girls). But none of the schools reported having inclusive sanitation facilities that address the special needs. Schools reported that the previous design used for the construction school toilets does not address the special needs, and as a result, existing toilet facilities in schools are not inclusive. In other words, teachers or students with physical disabilities and younger children cannot access sanitation facilities in schools and hence they have to hold back their need for toilet while at school.

Table 22. Bottlenecks to school sanitation facilities

Bottlenecks to use of sanitation facilities	Total YES	Sample size	Percent said YES
Fear of friends (cultural influence)	1	16	6%
Toilets are not clean	13	16	81%
Toilets are not safe (un-lockable from inside)	12	16	75%
Toilets are not adequate	16	16	100%
Toilets are not inclusive	16	16	100%

Uncleanness of sanitation facilities

The third most important bottleneck to school sanitation was the uncleanness of the latrine facilities. Uncleanness or dirtiness of the latrine facilities was reported by 81% of the schools included in this study. One of the basic reasons behind this problem is the low awareness of students in the use of latrine facilities in schools; even if some of the students reported that they aware of hygiene practices it doesn't change the behavior of students in terms of genuine utilization sanitation facilities in schools. This problem was aggravated by the poor management of sanitation facilities in schools. There is no

clarity as to who should be responsible to teach the students on how to use the latrine facilities and oversee whether the latrines are properly used and cleaned.

Sanitation facilities are not safe

The fourth bottleneck to school sanitation was associated with safety and privacy. About 75% of the schools reported that school latrine facilities are not lockable from the inside and not safe to use, especially for girls students. Besides, in some of the schools it was reported that the doors of toilet facilities were taken away and not replaced. This is partly associated with lack responsible body to manage sanitation facilities at schools.

Fear of friends (cultural influence)

The fifth bottleneck to the use of school sanitation was fear of friends which comes out of the local traditions or culture of the society. Students, especially girls, fear their friends to use the school toilet. As a result, they hold back when they want to go to the toilet. This problem was reported by 6% of the schools or in 1 out of the 16 schools visited during the study.

6.2.3 Bottlenecks to hygiene practices in schools

This study found out that the case of the existing hygiene practices at schools is the worst. It was apparent from the findings of survey that hand washing is not the practice among the school community during critical times, including teachers and students. This is true even in schools with water supply. Schools reported four basic bottlenecks to hand washing practices during critical times.

Lack of hand washing facility nearby toilets

One of the bottlenecks to hand washing practices at school is lack of hand washing facilities nearby the toilet. It is evident from the findings of the survey that 13 out 16 schools visited during this study or 81% of the schools visited lack hand washing facilities near the toilet. This indicates that hand washing is not a common practice in most of the schools.

Lack of water and soap

Where there are hand washing facilities or taps of water lack of water and soap or its substitutes are reported to be the major bottleneck to hand washing practices at schools. Lack of access to water and unavailability of soap or its substitutes nearby the hand washing facilities or taps is reported as the major problem in all of the schools visited during this study.

Low awareness

The other most important bottleneck to hand washing practices in schools is the low awareness of students on its health risks. In all the schools, it was reported that, the level of awareness on the health risks of not washing hands during critical times is very low among the students. Even if they have some understanding, that understanding is not to the level that it can trigger change in the behavior of students to practice hand washing during critical times.

Table 23. Bottlenecks to hand washing practices at school

Bottlenecks to hand washing practices	Total YES	Sample size	Percent said YES
No HW facility nearby toilets	13	16	81%
No water & soap nearby toilets	16	16	100%
Low level of awareness (no practice)	16	16	100%
No designated time for HW before lunch	15	16	94%

No designated time for hand washing

Feeding program is not available in most of the schools, and carrying lunch to schools is not a common practice among children in rural areas. But there are cafeterias within the schools and hence there are possibilities for having something to eat. Nevertheless, 95% of the schools have no designated time for hand washing, which also adversely influenced hand washing practices.

6.2.4 Bottlenecks to effective management of WASH in Schools

Once WASH in schools are developed; the next most important priority for the schools should be sustaining the facilities to provide lasting serves. In order to ensure sustainability of WASH in schools, it is required to have at least three things such as (1) a specific rules and regulations that guide management of WASH facilities; (2) a specific plan for WASH in school, and (3) a specific budget for WASH in school. These things are expected to be guided by the national and regional policies, strategies and programs. Findings showed that most schools visited during this study lack these things which are adversely affecting sustainable use of WASH facilities in schools. Table below illustrates the bottlenecks to sustainable WASH in schools.

Lack of specific rules and regulations

Schools should have specific rules and regulations for managing WASH facilities. If schools have this rules and regulations they are more likely to have clear understanding on how to manage water supply, sanitation and hygiene facilities. In other words, there would be greater clarity of roles and responsibilities with regard to WASH facilities, and puts more light on solid and liquid waste management, including identification appropriate sites for safe disposal of wastes. But it is evident from the findings that none of the schools visited during this study have specific rules and regulations that guide management of WASH facilities. And hence all the schools lack clarity of roles and responsibilities as to who should do what in terms of managing WASH in schools. Besides, 94% of the schools lack system for solid waste management whereas only 1 out of 16 schools practice disposing solid wastes in open pits.

Lack of specific plan for WASH in schools

If schools have to sustain WASH facilities, they need to have a specific plan for WASH. But, as it is apparent from the findings only 1 out 16 schools have specific plan for WASH. In other words, about 94% of the schools visited during this study lack a specific plan for WASH. Besides, 88% of the schools lack a specific plan for toilet cleaning. Even if 2 out of 16 schools (12%) employed Janitors to clean the toilets, it was reported that they couldn't satisfy the needs.

Table 24. School level bottlenecks to sustainability of WASH in Schools

Bottlenecks to sustainability of WinS	Total YES	Sample size	Percent said YES
Lack of specific rules & regulations	16	16	100%
Lack of specific plan for WinS O&M	15	16	94%
Lack of specific plan for toilet cleaning	14	16	88%
Lack of specific budget for WinS	16	16	100%
Lack of clarity on roles & responsibilities	16	16	100%
Lack of system for waste management	15	16	94%

Lack of specific budget for WASH in schools

Budget is the policy instrument. It is clear that government is allocating budget to its policy and development priorities at all levels and vice versa. This study however found out that none of the schools have specific budget for WASH in schools, which means that WASH is not a priority for schools. Schools are receiving block grant and school grant, which are allocated based on the number of students, and allocation of these grants, among the competing needs, are left to the school administration or school board. Nevertheless, none of the schools visited under this study allocated any budget for WASH. If schools do not allocate specific budget for WASH, it is not possible to maintain the facilities on regular basis and hence their sustainability is highly questioned. It seems that schools lack sufficient understanding on the impact of WASH on education, and gives priority for other educational materials.

No clear supply chain

Schools lack clear supply chain. Minor break downs including faucets take longer time to get fixed mainly because of lack of clarity on how to procure goods and services from nearby market. It seems that linkage of schools with WWT is weak. None of the schools visited practice pit emptying when it fills, mainly because they have no system.

7. ROOT CAUSE ANALYSIS: Using Problem Tree and Fishbone Analysis

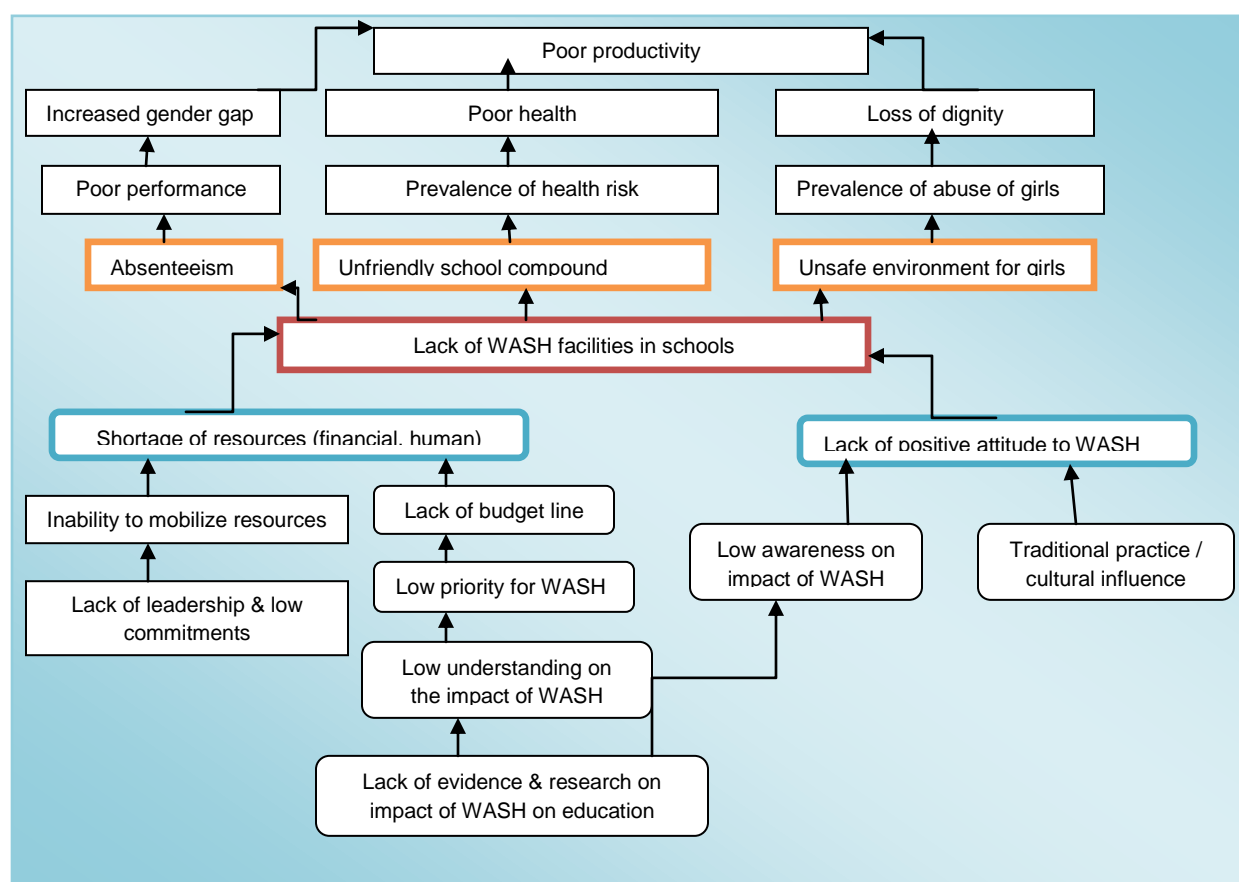
One day workshop was organized by WaterAid on 24th of February 2015 at Bishoftu Town. The purpose of the workshop was of two-folds; collecting feedbacks on the major findings and use participants of the workshop to carryout problem tree and fishbone analysis on the core problems (bottlenecks). Participants of this workshop were represented from the federal WASH ministries, and WASH bureaus of all the regions. To bring all participants on the same page a brief presentation was made on the concept of school WASH (by WaterAid staff), which was followed by the presentation on major findings by the consultant. Facilitators purposely spent sufficient time to give space for the participants to raise their concerns, discuss and reach consensus on the core problems (bottlenecks) to school WASH. Following the prolonged discussions among the participants, all the bottlenecks presented by the consultant were endorsed on the basis of their respective regional contexts and the sector at large.

Following this, facilitators encouraged the participants to get into groups to further analyze the cause-effect relationships for each of the core problems using problem tree and fishbone analysis tools. The following sections discuss the outputs of problem analysis.

7.1. Using problem tree

Before participants get into groups, a brief presentation was made to guide the group on how the problem tree tool can be used for problem analysis. This presentation covered the concept behind the use of problem tree as a tool to make cause-effect relationships and the steps to carry out the analysis. Four groups were formed: Group 1 worked on the core problems associated with the enabling environment; Group 2 on the core problems associated with the demand; Group 3 on the core problems on the supply side; and Group 4 on the core problem associated with sustainability of WASH in Schools. The following were the major findings from the exercises.

Figure 5. Problem tree for lack of WASH facilities in schools



Cause-effect relationships for the core problem “lack of WASH facilities in schools” are summarized in the above diagram. It is clear from the diagram that schools lack WASH facilities because of two major factors – lack of resources (financial, human) and lack of

positive attitude to WASH. Lack of resources is driven by inability to mobilize resources (because of lack of leadership skill and low commitment) from communities, and lack of specific budget line for WASH in schools because of low priority attached to it. Low understanding on the impact of WASH on education is reported to be the major cause for the low priority attached to WASH in schools, which is in turn caused by lack of evidences and researches on WASH and education. The other immediate cause for lack of WASH facilities in schools is lack of positive attitude towards WASH which is further driven by the low level of awareness and traditional practices or cultural influences.

If the core problem “lack of WASH facilities in schools” is not solved, it will continue to result in an increased absenteeism, unfriendly school compound, and unsafe environment for girls. Absenteeism results in poor education performances and widening gender gaps whereas unfriendly school compound results in prevalence of health risks due to wide spread open defecation and poor system for waste disposals which further results in the poor health. The immediate effect of poor health could be poor education performances. Unsafe environment for girls results in prevalence of abuses on girls which further results in the loss of dignity. These all factors cumulatively results in the low level of productivity.

Summaries of the cause-effect relationships for the other core problems are provided as follows. Some of the core problems are roughly touched in the above problem tree, and hence the following explanations are only for those not totally addressed in the above analysis.

Cause – effect relationships for “existing WASH facilities in schools does not address equity and inclusion”

Results of problem analysis indicated that lack of appropriate design, low awareness and lack of resources are the major driving factors for the inequitable and exclusiveness of existing WASH facilities in schools. Low capacity (financial, human) and low level of priority attached to WASH in schools are reported to be the secondary causes for the core problem. It was boldly came out of the discussion that if equity and inclusions are not addressed in terms of ensuring access of persons with special needs to WASH facilities in schools, it automatically results in increased absenteeism (especially girls) which further results in increased drop outs. This will further affect the performance of students that negatively impacting on the quality of education.

Cause – effect relationships for the core problem “low capacity for effective WASH in schools”

Lack of trained manpower and limited resources are identified as the immediate causes for the low capacity for WASH in schools. Low capacity to raise funds and lack of system to allocate specific budget to WASH in schools are the secondary causes driven by the low level of priority attached to WASH by the education sector due to lack awareness on the impacts of WASH on education. If this low capacity for WASH in schools continue to exist, the problem of access to WASH persists and poor planning prevails at school level, which further results in increased absenteeism leading to drop outs, widening gender gap, poor implementation that further results in the low quality of education.

Cause – effect relationships for the core problem “no system for O&M”

Results of problem tree analysis on the core problem “no system for O&M” revealed that lack of directives / manuals and cultural barriers are the immediate causes for lack of system for WASH O&M in schools. There is no policy direction on WASH O&M in schools, and open defecation is a common practice in the rural areas. These are adversely affecting efforts towards O&M of WASH in schools. The low level of priority attached to WASH, driven by the low awareness on the impact of WASH on education, is reported to be the immediate cause for the lack of directives or manuals for O&M. It was clearly come out from the discussions that if immediate solution is not given to this core problem, it is very difficult to achieve sustainable WASH services in schools. If there is no system for O&M, there is no clarity of roles and responsibilities, no specific plan and budget for O&M that results in unhygienic school environment not suitable for teaching and learning. If school is not hygienic, it widens opportunity for the disease outbreak risking the human health that further results in increased absenteeism and drop outs directly affecting the quality of education.

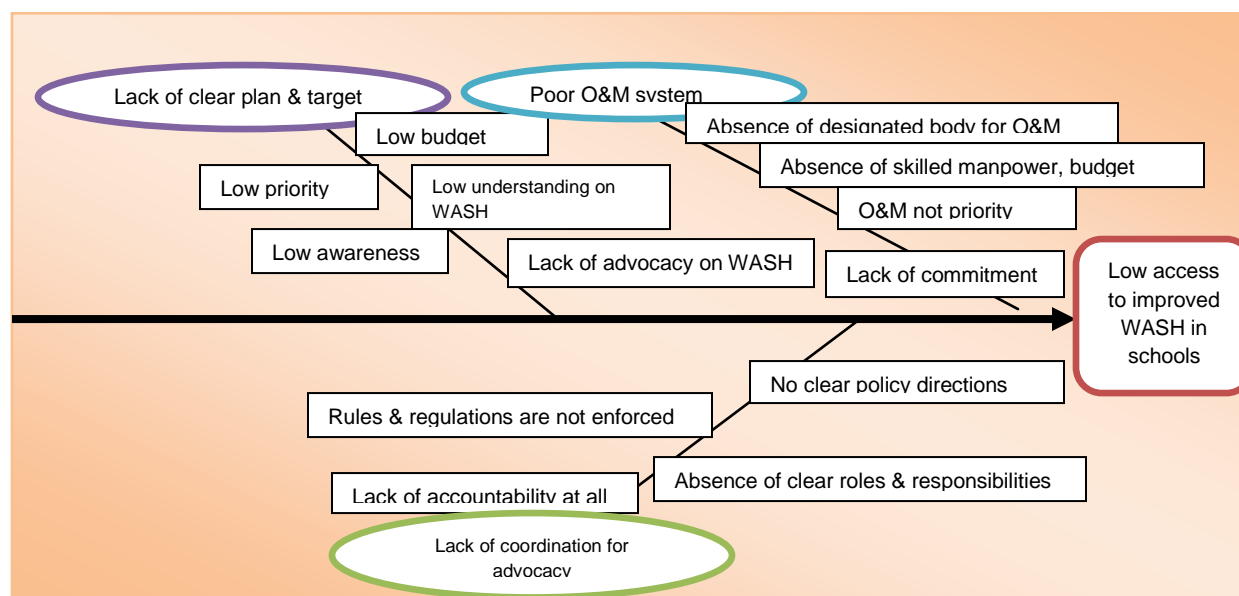
7.2. Fishbone analysis

Following the problem analysis using problem tree as a tool, the consultant facilitated the participants to select two core problems. Accordingly, low access to improved WASH in schools and poor sustainability of WASH facilities in schools were identified for the fishbone analysis. The consultant then briefed the participants on the concepts of fishbone analysis tool and the procedures to be followed in using the fishbone analysis. Hence, participants were grouped into two and analyzed the root causes for the selected core problems using fishbone analysis. The following discuss the major findings on the root causes for each of the core problems.

Root causes for the low Access to Improved WASH

Fishbone analysis identified three factors as major causes for low access to improved WASH facilities, which include: (i) lack of clear plan and target, (ii) poor O&M system and (iii) lack of coordination for advocacy on school WASH. Each of these three causes have also sub causes as shown in the following diagram.

Figure 6. Fishbone diagram for low access to improved WASH in schools, findings from stakeholder workshops



It is clear from the above fishbone diagram that lack of advocacy on school WASH is the root cause for the absence of clear plan and targets at all levels. Low awareness on the impact of WASH on education is contributing towards the low priority attached to WASH in schools which is manifested in terms of absence of specific public budget allocation to school WASH.

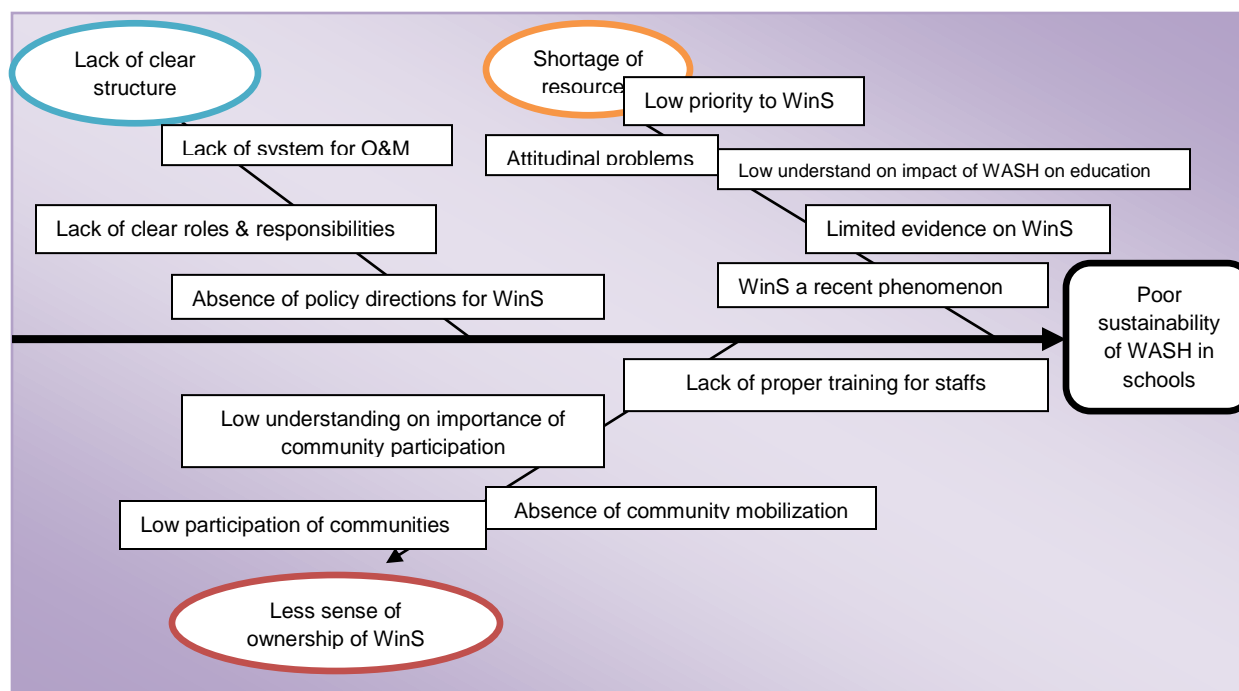
Similarly, lack of commitment from the school administration is reported to be the root cause for poor O&M for WASH facilities. It immediately contributed to the low priority attached to O&M which further affects budget allocation and access to trained personnel for O&M. lack of commitment further affected assigning designated body for O&M.

Lack of coordination for advocacy is driven by lack of clear policy directions for WASH in schools. Since there is no clear policy direction it is not possible to enforce rules and regulations. Consequently, there is no clarity of roles and responsibilities and hence no accountability mechanism for WASH in schools.

Root causes for the Poor Sustainability of WASH facilities

Fishbone analysis on poor sustainability of WASH facilities in schools is illustrated in the following diagram. As can be witnessed from the diagram, lack of clear structure, shortage of resources and less sense of ownership for WASH in schools are found to be the immediate causes for poor sustainability of WASH facilities.

Figure 7. Fishbone diagram for poor sustainability of WASH in schools



Absence of clear policy direction on WASH in Schools is reported to be the root cause for the lack of clear structure for WASH management at schools. Absence of policy

direction resulted in lack of clarity of roles and responsibilities which in turn contributed to lack of system for O&M of WASH facilities in schools. Less sense of ownership of WASH in schools by communities is driven by low participation of communities that emerges from low understanding on the importance of community participation. School community lack proper training on the importance of community participation to ensure sustainability of WASH facilities. The other equally important cause for the poor sustainability of WASH facilities in schools is shortage of resources (financial and human resources). Education sector lack technical persons to plan for O&M in particular and it is not a practice to allocate specific budget for O&M of WASH facilities in schools mainly because of the low priority attached to WASH compared to other education related activities. As reported during the fishbone analysis low priority of WASH is driven by the lack of awareness on the negative impact of lack of WASH on the quality of education. Lack of evidences and researches on WASH and education is reported to be the immediate cause for lack of awareness on the impacts of WASH, which is because of the fact that WASH in schools is of a recent phenomenon.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1. Conclusions

This study has led to draw the following conclusions, which among others, include:

- As outputs of the sector wide approach One WASH National Program, WASH Implementation Framework, Memorandum of Understanding, and the Program Operation Manual have clear directions for WASH in schools. These documents highlighted existing situations, clarity of roles and responsibilities, specific areas to be addressed during the program period and the tentative budget for WASH in schools.
- But, other sector specific policies such as education, health and water sector policies are silent with respect to WASH in schools. These policies do not provide specific directions for WASH in schools.
- WASH in Schools lack a specific strategy or guideline at all levels. It has also been housed in every ministry and hence lacks full ownership in previous years. Very recently WASH in schools is housed within the education sector, and therefore the MoE has not taught of having separate strategy for WASH in schools.
- On the basis of Memorandum of Understanding signed between the WASH ministries and/or regional WASH bureaus, it can be concluded that there is greater clarity of roles and responsibilities for WASH in Schools at national and regional levels. But, this consensus reached at national and regional levels does not yet reached local governments. Regions not yet cascaded down national policy documents produced as an outcome of the sector wide approach.
- Even if there is an agreed minimum national standard for WASH in schools, regions not yet cascaded down the adapted design and construction manual down to local

governments, the ultimate service provider for schools. Almost all local governments included in this study lack the minimum standard for WASH in schools.

- A specific regular WASH in school plan does not exist at all levels. But, during the current year, joint action plan was prepared by signatory ministries which will be financed under the channel 1b that flows through consolidated WASH Account. A specific water supply target was indicated in the fourth education sector development program (planned to increase access to water supply from 34% to 64% by 2015). But, no specific targets are indicated for sanitation and hygiene in schools at all levels.
- There is no system for monitoring WASH in schools at all levels. The existing school monitoring checklists only captures availability of water supply and sanitation facilities in schools, but it doesn't capture indicators associated with hand washing facilities & practices, adequacy, functionality, O&M, sustainability, solid & liquid waste management, etc.
- It is the ministry of education that is responsible to develop educational curriculum. Findings revealed that hygiene education is partly included in the national curriculum for primary schools. It is part of the environmental science and science text books for the first and second cycle primary schools. But this is not sufficient to bring change in the behavior of students.
- WASH in school has no specific public budget line. And government is not allocating any specific budget for WASH in schools at all levels. However, schools receive block grant and school grant for school improvement activities including WASH. Either because of the insufficiency of the grants or the low priority attached to WASH, school administration or school board is not allocating specific budget for WASH improvement activities (as evidenced from the school survey).
- As it evident from education abstract, 59.3% of the primary schools and 16.2% of secondary schools lack access to water supply, which shows a long way to go to reach these schools. Similarly, 92% of primary schools and 100% of secondary schools have access to basic sanitation facilities (both improved and unimproved), whereas access to improved sanitation facilities is very small (NWI results indicated that only 32% of the schools have access to improved sanitation). Almost all schools lack hand washing facilities, even though it was not counted yet by any of the previous monitoring systems.
- Equitable access to WASH facilities in schools is still a bigger challenge. Some efforts are being made in terms of constructing separate toilet blocks for boys and girls, and for teachers and students regardless of their quality and quantity standards. But, almost all schools lack separate sanitation facilities for adolescent girls for the first time starting their menstruation at schools. Besides, existing WASH facilities in schools are conventional types and fail to address the special needs of persons with physical disabilities or younger children. And shortages of finance and availability of water source are adversely affecting the efforts to reducing disparities among the schools due to geographical and/or socioeconomic variables.

- Capacities to develop and sustain WASH in schools is lacking at local level. Local governments have access to limited resources which may not be sufficient to cover salaries and operating costs. They lack capacity to allocate specific budget for WASH in schools. Hence, developing and sustaining WASH in schools is the major challenge at local level. Schools also lack sufficient knowledge on the health risks associated with lack of improved WASH; and hence they are not in a position to educate or promote improved WASH practices to school children.
- Schools lack specific rules and regulation that guides management of WASH facilities. In other words, there is no system for managing WASH in schools. WASH in schools is not regularly maintained because there is lack of clarity as to who should be responsible to maintain the facilities. More specifically, there is no supply chain for spare parts and repair services for water supply in schools and hence timely fixing of simple non-functionality problems like breakdown of faucets takes longer time. Similarly, no one is responsible for solid and liquid waste management in schools; no clear plan and no clear responsibility for cleaning school toilets. In schools with water supply and hand washing facilities un-clarity of roles and responsibilities in supplying soap or its substitutes is adversely affecting hand washing practices during critical times. Lack of specific budget for WASH in schools was also reported as major challenge for sustainability.
- In schools with water supply, it is not common to treat unsafe water before use. Findings showed that water is not treated at school level. The concept of safe water practices is not known at school level and students are not practicing the same. Even at local government level there is considerable knowledge gaps on safe water practices. Hand washing practices during critical times is adversely affected by lack of the facility near the toilet, low level of awareness, lack of water and absence of soap or its substitutes.

8.2. Recommendations

For the benefit of setting priorities for interventions recommendations have been provided as short, medium and long term. It is clear that recommendations listed under the short term need immediate actions or interventions.

Short term actions

- MoE to lead the development of WASH in School Strategy and regional BoE to adapt and disseminate down to local governments and schools. [policy]
- MoE to institutionalize annual regular planning and setting specific targets for WASH in Schools; and regions to fully engage in the planning process. Performances on the implementation of WASH plans in schools should also be reported on regular basis. [planning]
- MoE to institutionalize specific budgeting for the regular annual WASH in School plans and reporting of expenditures performances on annual basis. Regional and local governments shall adopt the same scenario. [budget]

- MoE to lead revision of existing school monitoring system by addressing missing indicators for WASH in Schools. Regions should fully engage in making this revision. [planning]
- Local governments, supported by the zonal offices, shall support schools to establish strong system for safe disposal of solid and liquid wastes. Besides, assigning specific person or unit responsible for supervising waste disposal, cleaning toilet and cleaning school compound.
- BoEs, through their zonal and local government education offices, shall provide support to schools in developing specific rules and regulations that guides WASH management and directs O&M of WASH facilities. [O&M inputs]

Medium term actions

- MoE should have specific WASH in School monitoring system; and regions should engage in the process adapt the same as well. [Planning]
- MoE to commission research that generates evidences on the impacts of WASH on education. Findings shall be used to increase awareness of school communities especially those giving budget decisions. [Budget]
- BoEs, through their zonal offices, to lead cascading down of the minimum national standard for the construction of WASH in schools to local governments; the ultimate service provider for schools. They shall also provide technical support as required by the local governments. [Policy]
- BoEs, through their zonal offices, shall lead the signing of the MoU among key sector offices at local level, and bring greater clarity of roles and responsibilities of local governments and schools in managing WASH in schools. [Policy]
- Schools shall be capacitated to mobilize resources from communities or by engaging in income generating activities to finance WASH in schools. [Budget]

Long term actions

- MoE to revise its education and training policy to accommodated recent changes and provide clear direction on WASH in schools. [Policy]
- MoE shall revise its regulations and proclamations to accommodate additional roles and responsibilities for WASH in schools. Regional BoE and Education Office of Local Governments shall also adapt under their contexts. [Policy]

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Annex 1. Decision rule for indicators of enabling environment

Cat		Indicator	Green (1)	Yellow (0.5)	Red (0)
Enabling Environment	Policy	Is WinS included in national policy documents? Is there separate national WinS strategy?	No policy gaps at national level; major national policy documents included WinS; & there is separate WinS strategy at national level.	Some policy gaps exist for WinS; not yet included in major national policy documents; no separate national WinS strategy.	Major policy gaps for WinS; national policy documents are not addressing WinS; no separate national WinS strategy.
		Are there clear roles and responsibilities for WinS at national level?	There is a lead agency at national level for WinS; 100% clarity of roles and responsibilities for WinS; major national policy documents addressed this. PMU exists.	Lead agency for WinS is not clearly known at national level; needs further work to fully clarify roles and responsibilities for WinS. Focal persons are assigned.	No lead agency for WinS at national level; this is a major problem at national level.
		Are there agreed minimum national standards for WinS?	There is a minimum national standard for WinS; no problem associated with minimum standards for WinS.	The document is available, but not fully known by signatory ministries or other key stakeholders. It needs further work.	Lack of minimum national standards for WinS. This is creating much ambiguity.
	Planning	Are there regular plan & clear national WinS targets?	A specific regular plan for WinS exists at national level and has specific national WinS targets.	No specific regular plan for WinS but is part of ESDP; WinS stated as one packages of SIP but has no national targets.	No specific regular plan for WinS at national level or not part of any other sector plan; and has no national targets.
		Is there a national WinS monitoring system?	A specific national monitoring system exists for WinS; and it being implemented on regular basis.	No specific national monitoring system for WinS; but is part of the school monitoring system and may not be comprehensive.	No national monitoring system for WinS and hence no evidences informing planning & budgeting.
		Is hygiene education/promotion included in the national curriculum?	Hygiene education is part of the national curriculum for primary and secondary schools. No problem with the curriculum.	Hygiene education is part of the national curriculum but not comprehensive enough to enhance promotion of hygiene at school level.	Hygiene education is not completely addressed by the national curriculum. It is a major bottleneck for hygiene promotion.
	Budget	Is there a public sector budget line for WinS? If so, budget increasing over years?	A specific public budget line exists for WinS; and the government has been increasingly allocating a specific budget to WinS at national level.	A specific budget exists for WinS for the action plan financed under the sector wide approach (CWA); but no specific WinS budget line for the public budget allocations.	No specific budget line for WinS for any of the source of finance; a major bottleneck for WinS.
		Is there <i>adequate</i> budget to support WinS improvements?	Adequate budget exists for WinS improvement at national level. No problem of budget regarding WinS.	There is some budget for WinS but not adequate in terms of improving WinS (not adequate but there is some budget)	No budget for WinS improvements at all at national level (a major bottleneck for WinS)
		Is funding spent at schools most in need of WASH support?	All funding allocated to WinS are spent on the schools most in need of WASH support. No blanket funding to schools.	Only funding allocated through sector wide approach (CWA) are spent on schools most in need of WASH support; but other types of funds are allocated based on number of students.	All funding are not spent on schools most in need of WASH support; just blanket funding based on number of students not on most need for WASH.

Annex 2. Decision rules for indicators under the developing category

Cat		Indicator	Green (1)	Yellow (0.5)	Red (0)
Developing WASH in Schools	Access	% of schools with improved water source (1 faucet for 100 students)	More than 80% of primary and secondary schools have access to water source within the school compound; and 1 faucet at most serves 100 students.	50% to 79% of primary and secondary schools have access to water source within the school compound; and 1 faucet at most serves 100 students.	Less than 50% of the primary and secondary schools have access to water within the school compound (major issue)
		% of schools with adequate access to sanitation	More than 90% of primary and secondary schools have access to basic sanitation; 1 cubicle for 100 girls or 150 boys; 1 urinal for 150 girls or 200 boys.	60% to 89% of primary and secondary schools have access to basic sanitation; 1 cubicle for 100 girls or 150 boys; 1 urinal for 150 girls or 200 boys.	Less than 60% of the primary and secondary schools have access to basic sanitation (major problem in schools)
		% of schools with adequate access to hand washing facilities)	100% of primary and secondary schools having access to water supply & basic sanitation has access to hand washing facilities; 1 tap for 100 girls or 150 boys.	More than 70% of the schools with water supply & basic sanitation facilities have access to hand washing facilities; 1 tap for 100 girls or 150 boys.	Less than 70% of the primary and secondary schools having access to water supply & basic sanitation has access to hand washing facilities.
	Equity	Is gender equity & MHM addressed for WinS?	WinS fully addressed gender equity & MHM; all schools with water supply & sanitation facilities also have standard private facilities for girls with affordable sanitary pads & changing rooms.	Some schools having access to water supply & basic sanitation has a private facility for girls with sanitary pads & changing rooms.	WinS not totally address gender equity & MHM; no evidence that shows a private facility with sanitary pads & changing rooms exist.
		Is accessibility for children with physical disabilities addressed for WinS?	WinS fully addressed the special needs of persons with physical disabilities; all schools with WASH facilities do have at least 1 inclusive WASH facility for persons with physical disabilities.	Some schools having access to WASH facilities do have at least 1 WASH facility for persons with physical disabilities. But no data to support this.	Existing WinS does not completely address the special needs of persons with physical disabilities. Again, no data to support this.
		Is geographic or socio-economic disparity addressed for WinS? (access to water similar for urban & rural)	WinS interventions fully address geographical & socioeconomic disparities; hence no variation between urban and rural as well as pastoral schools in terms of access to WASH.	WinS somehow experienced disparities between urban & rural as well as pastoral schools in terms of access to WASH. No data to support this.	Huge disparities between schools located in urban & rural as well as pastoral areas in terms of access to WASH facilities.
	Capacity	Is there evidence of capacities of schools, district/town education offices to ensure effective WinS	Strong evidence of capacities of schools, districts / towns or other actors to ensure effective WinS; more than 90% of the WinS are functional.	Some evidences exist that shows between 60% & 90% of WinS are functional..	Very limited evidences that show whether there are capacities at local levels.
		Is hygiene education / WinS promotion a priority?)	Hygiene education is a priority in Ethiopia; it is part of the curriculum; and teachers, students & PTA are capacitated to promote WinS..	There are some steps in cascading training on hygiene education, but not fully done.	Hygiene education is not a priority for the country.
		Are students engaged in WinS? (through health clubs; WASH clubs)	Strong evidences that students are engaged in WinS promotion activities. WASH clubs, health clubs & mini-media are used to engage students.	Some evidences that students are engaged in WinS promotion. But no data is available that shows % of schools engaging students in WinS.	Very limited evidences that students are engaged in WinS promotion.

Annex 3. Decision rules for indicators under the sustainability category

Cat		Indicator	Green (1)	Yellow (0.5)	Red (0)
Sustaining WASH in Schools	O&M inputs	Are essential commodities for O&M readily available?	Strong evidence that essential commodities for O&M for WinS are readily accessible for schools. Spare parts & repair services are available nearby schools.	There are some evidences at national level that essential commodities for WinS O&M are readily available.	Very limited evidences on whether essential commodities are available nearby schools.
		Is there a local body that supports O&M for WinS services?	Strong evidences are available at national level on whether there is local body that support WinS O&M.	Some evidences exist on whether there is local body that supports WinS O&M; but not fully supported.	Lack of clarity as to who is accountable local body that support WinS O&M.
		Is there adequate & reliable funding available for WinS O&M costs?	Strong evidence at national level on availability of adequate and reliable funding for WinS O&M.	Some evidence at national level on availability of funding for WinS O&M; but some suggestions.	Very limited evidence on availability of adequate & reliable funding for WinS O&M.
	Ownership & Maintenance	Are school WASH facilities regularly maintained? Who owns responsibility for WASH maintenance? Manage solid & liquid waste	Strong evidence on who owns responsibility for WinS maintenance, pit emptying, cleanliness of toilets & waste management; & WinS are regularly maintained; % of schools with clean toilet known.	Some evidences on who owns responsibility for maintenance of WinS, managing wastes, pit emptying & cleaning toilets; but % of schools with clean toilet & functional water source is not known.	A general lack of evidence on who owns responsibility for maintenance of WinS, managing wastes, pit emptying and cleaning toilets.
		Do schools provide soap/ash? Who owns responsibility for provision of soap/ash?	Strong evidence on who owns responsibility for providing soap or its substitutes and is being provided on sustainable basis for hand washing.	Some evidences on who owns responsibility for providing soap or its substitutes and whether schools are providing on sustainable basis.	A general lack of evidence on who should be responsible to provide soap or its substitute on sustainable basis.
		Do schools treat unsafe water? Is there specific guideline for treating unsafe water in schools? Who is responsible?	Strong evidence at national level on whether schools are treating unsafe water and that they have a specific guideline for treating unsafe water. And % of schools with functional water supply is known.	An indication that schools treat unsafe water before using, but there is no evidence of whether they use a specific guideline; and % of schools with functional water supply is not known.	No clear evidence on whether schools are treating unsafe water; and if so, whether they have specific guideline to do so.
	Use	Are there WASH in School Promotion to encourage students to use improved toilets at school?	Strong evidence that there is WASH in Schools promotion to encourage school communities to use WASH facilities in school.	Some indications that there is WinS promotion to encourage school communities to use the facilities available to them.	No evidence that shows whether there is WinS promotion to encourage them use the facilities.
		Are students washing their hands with soap/ash at critical times at school?	Strong evidence at national level that students wash their hands during critical times at schools.	Some indications that in schools where there are WASH facilities students wash their hands; but no clarity on whether there are visible changes in behaviors.	No evidence that shows whether students wash their hand during critical time (major problem in schools)
		Are safe water practices being followed by students?	Strong evidence that safe water practices are being followed by students where there is access to water source in school compound.	Some indications that students somehow follow safe water practices; but no full information that supports this.	No evidence whether students follow safe water practice at schools.

Annex 4. Lists of peoples contacted during the study

No	Person interviewed	Name of Institution/organization	Position	Date
1	Ato Fisseha Abera	Ministry of Finance & Economic Development, International Financial Institutions Cooperation Directorate	Directorate Director	1/1/2015
2	Ato Mezgebu Biazen	Ministry of Education, Curriculum Development	Focal Person, WASH in School	1/1/2015
3	Ato Nuredin Mohammed	Ministry of Water, Irrigation & Energy, Water Supply & Sanitation Directorate	Directorate Director	1/1/2015
4	Ato Abiy Girma	Ministry of Water, Irrigation & Energy, National WASH Coordination Office	National WASH Coordinator	1/1/2015
5	Ato Tibebe Terefe	Oromia National Regional State, UNICEF WASH Coordination	UNICEF WASH Coordinator	2/1/2015
6	Ato Dagnachew	Ministry of Health, Hygiene and Sanitation Case Team	WASH focal person	2/1/2015
7	Ato Samuel Tolassa	Oromia Water & Energy Bureau, Regional WASH Coordination Office	Regional WASH Coordinator	5/1/2015
8	Ato Oli Kasho	Oromia Bureau of Education, UNICEF WASH Project Coordinator	Focal Person for WASH in School	5/1/2015
9	Ato Diriba	Oromia Bureau of Education, WASH Team	Expert	15/1/2015
10	Ato Mulugeta Dantew	Social Affairs Standing Committee, House of People's Representatives	Member	5/1/2015
11	Ato Karayu Banata	Social Affairs Standing Committee, House of People's Representatives	Member	5/1/2015
12	Ato Kedir Gobana	Oromia Bureau of Health, WASH Team	Expert	6/1/2015
13	Ato Fetene Sisay	Oromia Bureau of Health, WASH Team	Expert	6/1/2015
14	Ato Umata Negassa	Oromia Bureau of Health, WASH Team	Expert	6/1/2015
15	Mr. Kitka Goyol	UNICEF Representative	WASH Specialist	6/1/2015
16	Ato Yared Legesse	Water and Sanitation Program (WSP/ World Bank)	Sanitation and Hygiene Advisor	6/1/2015
17	Ato Bekele Kassaye	SNNPR, Regional WASH Coordination Office	Regional WASH Coordinator	8/1/2015
18	Ato Gashew	SNNPR, Bureau of Education	Focal person for WASH in school	8/1/2015
19	Urago Hussein	Shebedino District, Water office	Head of Water Office	9/1/2015
20	Ato Melke Kifle	Amhara region, Bureau of Education, Curriculum development unit	WASH in School Focal Person	12/1/2015
21	Ato Muluken Taye	Amhara Bureau of Education, plan and budget unit	Planner	12/1/2015

No	Person interviewed	Name of Institution/organization	Position	Date
22	Ato Asrat Kasaye	Amhara regional WASH Coordination office	Regional WASH Coordinator	12/1/2015
23	Ato Dagne Aweke	Amhara regional Health Bureau, WASH unit	WASH focal person	12/1/2015
24	Ato Abiyot Dereje	Plan International Ethiopia (International NGO)	Sanitation and Hygiene Officer	15/1/2015
25	Kuribachew Mamo	SNV (International NGO)	Senior Sanitation & Hygiene officer	16/1/2015
		Woreda level??		
		Workshop participants??		

Annex 5. Term of reference for the study



Term of Reference for Consultancy Services

Analyzing Policy and Implementation Blockages to School WASH

November, 2014

Title: Analyzing Policy and Implementation Blockages to School WASH

INTRODUCTION

WaterAid is an International Non-Governmental Organization established in 1981. Its vision is a world where everyone has access to safe water, sanitation and hygiene. Its mission is to transform lives by providing safe water, sanitation and hygiene. WaterAid works with partners to effectively contribute towards the achievement of its vision and mission. WaterAid started its mission in Ethiopia during 1983 by financing small projects through Ethiopian Red Cross Society, but established its country office in 1991. So far, it served more than 2 million people with safe water, sanitation and hygiene.

WaterAid has developed its five year's strategic plan (2010/11-2015/16) and aims at addressing not only the basic needs of communities, but also tackling root causes of the problems. For effective and sustainable changes WaterAid supports projects that focus on the integration of water supply, sanitation and hygiene education, community management and empowerment, use of technologies appropriate to local conditions – affordable and easy to maintain, linkage with governments, equity and inclusion of the marginalized groups, social accountability, and 100% sanitation coverage approach. WaterAid also encourages innovation, learning and documentation to improve the impact and sustainability of interventions, as well as promoting greater influencing capacity through partnership and alliances.

Background

WAE implement integrated water supply, sanitation and hygiene education with an emphasis on technologies that are appropriate to local conditions and conducive to community management and empowerment – affordable and easy to maintain. WaterAid together with its partners intervene in addressing the critical needs of both community and schools through demonstrating service delivery WASH projects as well as influence the sector actors through researches and documentation and sharing of best practices. WASH in schools provides safe drinking water, improves access to clean sanitation facilities and promotes lifelong health. WASH in Schools enhances the well-being of children and their families, and paves the way for new generations of healthy children. WASH in Schools significantly reduces hygiene-related disease; increases student attendance, learning achievements, quality of education and contributes to dignity, inclusion and equity. These attributes serve as a base for ongoing development and economic growth. WASH in schools have special significance for girl students in ensuring privacy, dignity and security which boosts their educational achievements.

Looking at the current situation in Ethiopia there is a remarkable progress in children enrollment (with more than 19 million in primary and secondary schools) as well as number of schools. Even though this is the case only 31% and 33% have access to safe

water and improved sanitation respectively. The student ratio is also very high that is 1:170. Some of the contributing factors for the insufficient WASH coverage in schools are school WASH being less priority, weak coordination between ministries of education, water and health, weak monitoring system, insufficient policy provision, inadequate budget, low awareness and so on. WaterAid Ethiopia showed great commitment in incorporating WASH in schools in all WaterAid supported projects in its 2010/11-2015/16 strategic plan document. In order to ensure the rights of WASH and Education to children WAE commissioned this consultancy to further investigate school WASH policy and practice blockage and opportunities. The result is expected to inform and improve school WASH policy and practice at the national, regional and local levels. Input from this study will be used in the development of WAE school WASH framework/guideline and contribute in the development of a national school WASH strategy lead by Ministry of Education.

Purpose and objectives

The purpose of this consultancy is to analyze the key barriers hampering effective WASH in School services and education. The results of the analysis will generate evidences on the key policy and implementation barriers for school WASH and create understanding resulting in changes in the existing policies and practices. More specifically, this consultancy is intended to achieve the following objectives.

- Produce evidences on the major policy or institutional barriers to school WASH;
- Produce evidences on the major implementation barriers to school WASH;
- Identify challenges and available opportunities to integrate school WASH in the overall WASH and education sector programming;
- Make recommendations and practical proposals on how best WaterAid can implement school WASH and influence the government and other development actors to mainstream School WASH and achieve universal access;

Scope of the Task

This consultancy is expected (but not limited) to the following major tasks.

- Collate relevant policy documents available with WASH ministries (Ministry of Water, Irrigation and Energy, Ministry of Health, Ministry of Education) as well as other CSOs giving special focus on school WASH and reporting mechanisms;
- Collate relevant policy and implementation documents available in the three (Amhara, Oromia and SNPPR) and Regional WASH bureaus (Water, Health and Education);
- Make critical reviews of the policies, strategies, program and other relevant documents related to school WASH and come up with both macro and micro level gaps and barriers to sustainable, inclusive and equitable school WASH in Ethiopia;

- Support in shaping the process and areas of focus for data collection and analysis
- Identify opportunities and incentives for the implementation of school WASH;
- After the analysis the consultant in collaboration with the WaterAid Ethiopia focal Persons will facilitate the validation workshop and make presentations of the findings on status of WinS, gather inputs from stakeholders in order to address the identified bottlenecks, develop a collective plan of action to start addressing bottlenecks with the aim to increase the efficiency of WASH in School sector resources to achieve more sustainable and equitable outcomes.
- On the basis of the comments provided by workshop participants and WaterAid Ethiopia staff finalize the report and submit final copies;

Methodology

It is expected that the consultant will come up with more detail methodologies and approaches to implement this analysis. But, WaterAid Ethiopia requests the consultant to adopt the following methods:

- Application of **WASH in School Bottleneck Analysis Tools** (Internal guidance and tools will be provided by WAE);
- Desk review of WASH policies and strategies and of education sector policies and strategies as they may or may not relate to WASH
- Key informant Interviews with relevant sector stakeholders: key government officials at federal and regional levels (Ministry of Education; Ministry of Water, Irrigation and Energy; Ministry of Health, Regional Education, Health and Water Bureaus), 3 CSOs, 2 policy makers, 2 planners, and 3 key education and WASH sector donors.
- Analysis of existing data on Ethiopia WinS;

Documents to be reviewed

The consultant should review the following documents, but not limited to:

- WaterAid Ethiopia's Country Strategic Paper
- Various researches conducted on the links between WASH and School
- Water Resources Management Policy and proclamations
- WASH implementation framework and MOU
- One WASH National Plan
- Health Policy, and HSDP
- National Hygiene and Sanitation Strategic Action Plan
- National Sanitation and Hygiene Strategy and Protocol
- Education Policy
- Education Sector Development Program (EMIS, SIP,)
- School WASH design manual
- School WASH faculties management guideline;
- Baseline survey report conducted in the 26 schools H&M WinS programme;

- UNICEF Ethiopia WASH in School Bottleneck Analysis;
- Existing national design principles and standards for school WASH;
- Design and Construction Manual for Water Supply and Sanitary Facilities in Primary Schools;
- Existing Situation analysis document on WinS;
- Education Statistics Abstract 2012/2013, MoE;
- JMP for Water Supply and Sanitation monitoring data;
- EMIS and other CENSUS School WASH data;
- Data on School enrolment, children out of school;
- Country Status Overview (World Bank);
- Etc.

Out puts

- Study report (Inception, draft and final)
- Presentation during validation workshop
- reference materials on School WASH in Ethiopia

Qualification and experiences

a. Qualifications

For this consultancy service a team of professionals will be required having the following qualifications:

- Advanced degree in sociology/ economics
- Advanced degree in Educational planning
- Advanced degree in public health with background of Environmental health

b. Experiences

Competencies and at least 10 years of experience on the following areas are required

- Research and policy formulation
- Education and WASH sectors
- School WASH

Budget and Timeframe

The consultant will be expected to come up with detail financial and technical proposals for this analysis. This consultancy service is expected to be accomplished within a month's time from the time of signing of the agreement with WaterAid. The dead line to submit proposals will be 10 days from the date of the announcement.

For more information and clarification you can contact the focal persons (Mahider Tesfu and Michael Negash) with 0115 576790.

