OUTCOME EVALUATION OF COMMUNITY-LED TOTAL SANITATION AND HYGIENE (CLTSH) Program in Ethiopia from 2012-2015
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ACRONYMS

AW  Advocacy Workshop
BDS-CDR  BDS-Center for Development Research
BG  Benshangul Gumuz
BoFED  Bureau of Finance and Economic Development
CBW  Community Building Workshop
CF  Community Conversation
CDC  Center for Disease Control
CLTS  Community Led Total Sanitation
CLTSH  Communities Led Total Sanitation and Hygiene
CPD  Country Program Document
CSA  Central Statistics Agency
DC  Data Collector
DFID  Department of International Development
DU  Development Unit
EC  Ethiopian Calendar
EDHS  Ethiopia Demographic and Health Survey
E-SHIP  Ethiopia Sanitation and Hygiene Improvement Program
ETF  Ethiopian Bank
FD  Family Dialogue
FDS  Family Dialogue Session
FGD  Focus Group Discussion
FMG  Federal Ministry of Health
GC  Gregorian Calendar
GSR  Global Sanitation Fund
GTP  Growth and Transformation Plan
Ha  Hectare
HEE  Health Extension Program
HEW  Health Extension Workers
HHI  Household
HIV  Human Immuno-Deficiency Virus
HSOP  Health Sector Development Plan
HTWSS  Household Water Treatment and Safe Storage
IDE  International Development Enterprises
JRT  Joint Monitoring Program
KII  Key Informant Interview
MDG  Millennium Development Goal
MoWE  Ministry of Water and Energy
NGO  Non-Government Organizations
ODF  Open Defecation Free
PIE  Plan International Ethiopia
RESA  East and South Regions of Africa
SNNPR  South Nations and Nationalities People Region
SNV  Netherlands Development Organization
SSE  Small Scale Enterprise
TOR  Terms of Reference
TOT  Training of Trainers
UAP  Universal Access Plan
UN  United Nations
UNICEF  United Nations Children’s Fund
US  United States
VSLA  Village Saving and Loan Association
WASH  Water Sanitation and Hygiene
WHO  World Health Organization
WSSCC  Water Supply and Sanitation Collaborative Council
A
fter the introduction of CLTSH in Ethiopia and seeing the power it has in mobilizing the rural communities for their action to stop practicing open defecation, UNICEF, in collaboration with the Federal Ministry of Health, agreed to make CLTSH the principal approach to promote rural sanitation in its 2012-2015 Country Program Document (CPD). These interventions were targeted at 86 UNICEF’s learning woredas (districts) in all regions of the country.

The Water Supply and Sanitation Collaborative Council (WSSCC)/Global Sanitation Fund (GSF) then initiated a program termed the Ethiopia Sanitation and Hygiene Improvement Program (E-SHIP) in 2013. The program was implemented by the Ministry of Health through its Health Extension Program (HEP) and financed by the Global Sanitation Fund. Accordingly, it has been being executed in 40 woredas of Amhara, Tigray, SNNPR and Oromia regions of the country.

In order to assess outcomes of CLTSH program in general, and in the areas supported by UNICEF and WSSCC-GSF’s, and to see how far the National CLTSH Implementation Guideline is used as a major guiding document, UNICEF Ethiopia in collaboration with WSSCC-GSF and the Ministry of Health initiated this evaluation. The purpose of this evaluation was to see how the programs were effectively implemented and to draw lessons learnt from the process.

As there was no official baseline for the purpose of this evaluation, two woredas (one intervention and one control) were selected from each of UNICEF’s operation regions (Amhara, Oromia, SNNPR, Tigray, Benishangul Gumuz, Gambela, Afar and Somaliland) and two woredas of one intervention and one control were selected from each of WSSCC/GSF’s operation regions (Amhara, Oromia, SNNPR and Tigray). Intervention woredas were randomly selected from the lists of program woredas of the two implementing organizations.

The control woredas were selected purposively considering their socio-economic similarities and their proximity to the intervention woredas.

Control woredas are those woredas which do not receive financial or technical supports from either UNICEF or WSSCC/GSF but, they might or might not get any form of support from other NGOs. As CLTSH is one of the hygiene and sanitation program approach adopted by the Government of Ethiopia, and currently implemented in most of woredas in the country, the selected control woredas might or might not started implementing CLTSH.

After preparing lists of kebeles from both the intervention and control woredas, a total of 24 intervention and 24 control kebeles were selected using a lottery methods. Finally, a total of 24 intervention and 24 control development units/villages were randomly selected.

For this outcome evaluation, the study design used was Cross-Sectional, Static-Group Comparison Design. Accordingly, 1584 households from intervention areas and other 1584 households from control areas were determined using the estimated population prevalence of Open Defecation (OD) with a specified relative precision. Households for this outcome evaluation were selected using a multi-stage random cluster sampling technique, and female heads of each of the selected households were the primary respondents of this outcome evaluation.

In addition to the household level outcome evaluation, interviews were conducted with key-informants and with
the main purposes of supporting the quantitative data from households, assessing the processes of implementation of CLTSH and triangulating data obtained through different instruments. The key informants selected included hygiene and sanitation experts from offices of health, education, water, and economy and finance development at federal, regional, woreda and kebele administrative levels. Besides, a Focus Group Discussion (FGD) was conducted in each of the intervention kebeles of both UNICEF and WSSCC-GSF.

In this outcome evaluation, both quantitative and qualitative data were collected using structured interviews with households, semi-structured interviews with key-informants, and a guideline for focus group discussions. The data collection and entry was done by well-experienced and trained data collectors using smart phones uploaded with Cs-pro statistical software.

In this outcome evaluation, a great majority (82%) of the respondents were women. This was done so with the belief that more relevant information on household behavior and experience would be obtained from women since women in most Ethiopian cultures are supposed to be responsible for most, if not all, of the household chores, and so are believed to have better knowledge of the subject than men do. The average age of the respondents in the program was 36 and most (83%) of them were married.

The average household size in this evaluation was 5.35. It is interesting to note that the highest household size was found to be in developing regions of Afar, Gambela, and Somalis, all recording more than the average given above. On average, nearly a third (32.5%) of the respondents were found to have been able to read and write, but with differences among woredas.

More than four-fifth (85.3%) of the households reported to have some land for farming. The average farm land size per household was found to be 1.52 ha.

From the key informant interviews conducted, it was found out that the National CLTSH Implementation Guideline was available in almost all of the evaluated woreda health offices, except in two woreda health offices of Mereb Lehe and Jore woredas in Tigray and Gambela regions, respectively. On the other hand, very few health posts assessed in operation areas were found to have the CLTSH Implementation Guideline in their office. This finding shows that the actual implementers of CLTSH, the health extension workers, were not having and using the guideline which is believed to have strong effect on the quality, effectiveness and sufficiency of CLTSH implementation at the grass root level.

According to the findings from the key informant interview (KII), consensus building/advocacy workshops were conducted in all of the evaluated woredas. All expected outputs of consensus building/advocacy workshops were achieved only in UNICEF’s Oromia region - Babo Gambela woreda; WSSCC/GSF Tigray Asegde Tsimbia and Oromia Liben Chauqua woreda. Although all of the evaluated woredas were found to have conducted consensus building workshops, seven of them were found not to have been able to produce the expected outputs of the workshops.

The findings from the key-informant interviews with experts in woreda health offices show that trained-trainers and trained facilitators were available in all of the 8 evaluated regions to undertake responsibilities for facilitators training and community triggering, which indicates that skilled personnel to implement CLTSH was not a problem in all of the evaluated woredas.

This evaluation revealed that UNICEF’s and WSSCC/GSF’s CLTSH programs were initiated in 202 and 79 development units, respectively. Out of these development units, where CLTSH was initiated, triggering was realized in most (77%) of the development units. In some regions like Afar- Asayta, Gambela-Gog and Somali-West Imay, there were development units which were included in the CLTSH program but which were not triggered using the CLTSH approach. The findings indicated that the rate of triggering

Among those households reported to have latrine at their home, 20.7% of households in control woredas, and 19.7% in the intervention woredas had repaired their latrines in the past year

in the development units was in good shape. When we see the step ahead of triggering most of the kebeles triggered using CLTSH approach did not produce development unit level action plan, which is a key output of the processes of triggering that guides the implementers during the implementation and follow up phases of the CLTSH program.

From the KII, it was learnt that consolidation meetings with CLTSH team members and influential people in the respective development units were conducted immediately after triggering in almost all of the development units. The discussion with health extension workers revealed that all expected outputs (1. Finalizing the DU’s action plan 2. Roles and responsibilities of CLTSH team members defined 3. Development unit level Bay law developed) were achieved in UNICEF 6 of the 16; 2 of 8 WSSCC/GSF evaluated development units. Though the consolidation meetings after triggering were conducted at good rate, the outputs expected were not achieved as intended.

As a result of assessing the process in post-triggering phase of CLTSH implementation, out of the evaluated (UNICEF 8 woredas; WSSCC/GSF 4) in operation areas, training of trainers (TOT) on CC/ED was given to experts from UNICEF 5 woredas; WSSCC/GSF 4 woredas. On the other hand, health extension workers from (UNICEF 8 out of 16; WSSCC/GSF 8 out of 8) kebeles were subjected to trainings during post-triggering period. Out of these, only 6 training sessions considered community conversation and family dialogue as key contents of the trainings. This finding tells us that there were trainings of HEWs run by trained facilitators, and almost half of the training programs did not consider the key contents which characterize the post-triggering capacity building elements indicated in the National CLTSH Implementation Guideline. Training programs facilitated by untrained trainers are believed to be one of the major causes of poor outputs of CLTSH implementation.

The occurrence of regular community conversations at development unit levels was one of the variables assessed in this evaluation. As a result, respondents from eighteen development units claim to have regular community conversation sessions. In only eight of these development units, CLTSH team members were found to be facilitators of CC. In the remaining thirteen development units, CC facilitators were either HEWs, kebele administrators or teachers in which case the process of community empowerment is
affected negatively. From a total of fifteen development units which were claimed to have regular family dialogue only in seven development units discussed about progress of community action plan(s) at the household level. This result indicates that Family Dialogue sessions in these DUs were not for the purpose of community led post-triggering follow ups.

Though regular reporting is considered as one of the means of community led post-triggering follow up, the result of this evaluation shows no reporting format used by CLTSH team members to report to HEW. The absence of report format, production and submission of reports by CLTSH team members to the health extension workers shows how weak the link between community led post-triggering follow up and organization level post triggering follow up. Another modality of post-triggering follow up is organization level follow up. According to the finding of this outcome evaluation, eight evaluated woredas health offices had regular review meetings to health extension workers. On the other hand, supportive supervision was an alternative means of post triggering follow up in all evaluated woredas. Though fourteen of sixteen evaluated woredas had the reporting format prepared for the purpose of CLTSH programs, regular reporting was used as an alternative means of follow up of CLTSH implementation only in seven of twelve evaluated woredas.

Among the other process indicators of the CLTSH assessed in this evaluation, variables related to improved sanitation were considered. Among the participants in 24 focus group discussions facilitated, all the participants in 23 focus group discussions showed their willingness to improve their latrine in near future and in the same way, all the participants in 21 focus group discussions agreed that the cost of improving household latrine to be covered by the households themselves. This finding is also supported by quantitative data from the household survey for this evaluation. Though willingness to improve household latrines is universal in UNICEF’s operation areas local artisan/SSE, who are key forces to produce improved sanitation and hygiene facilities, were not present in eighteen of the 24 kebeles evaluated. Out of the six kebeles where local artisans were present, five were engaged in the production of cemented slabs and drop-hole covers but none of them were promoting for improved sanitation. Generally, only six of the 24 evaluated kebeles in UNICEF’s program areas had initiatives/program with the intention of improving household financial capacity so that households could easily purchase improved sanitation and hygiene facilities. Out of the total households in the control woredas 33% defecated in open field (under bushes, field or river), while 58% used their own latrine. Whereas, in intervention woredas 27.4% of households defecated in open field while 60.8% used their own latrine for excreta disposal. Traditional pit latrines were used by 93.2% and 85.1% of households in the control and intervention woredas, respectively. About 11.2% of households in control woredas and 14.3% in the intervention woredas shared latrine with other households. Among households having children aged 5 or below 70.5% and 63.5% in the control and intervention woredas disposed his/her child’s last stool by dropping into the toilet.

Among those households reported to have latrine at their home, 20.7% of households in control woredas, and 19.7% in the intervention woredas had repaired their latrines in the past one year. Again, 16.6% of households in the control and 18.8% in the intervention woredas had improved their latrines in the past one year. Furthermore, 57% from control and 53.6% from intervention woredas had plan to change or improve their latrines in the coming one year. The vast majority of the respondents 90.5% from control and 88.2% from intervention woredas expressed their belief that households should be responsible for the cost of improving sanitation of the village. This finding is fully supported by findings from focus group discussions done for this evaluation.

Among those households who did not have own latrine, those who showed interest to have their own latrine in the control and in the intervention woredas were almost similar at 93.4% and 91.25%, respectively.

One of the questions that household respondents were asked was about the critical times when they washed their hands. Accordingly, most of the respondents reported that before meal was the most critical time when they washed their hands. On the other hand, after defecation/urination was considered important by all with slight variation among UNICEF and WSSCOSF control areas. Hand-washing ‘before cooking/preparing food’ was reported to have been a practice by more of the respondents in the operational areas (58%) than those in the control areas (54.5%). Similarly, more respondents in operational areas than those in control areas reported hand-washing ‘after cleaning a child who has defecated’. Only very few of the households - 16.5% - in the operational areas reported hand-washing at the four critical times. However, more than four-fifths of these reported to have been doing it always.

In the operational areas, 26.5% of the interviewed households had washing stations near or inside the latrine while 18.5% in the control areas. Interestingly, 84% and 69% of these hand-washing stations in intervention and control areas, respectively, were filled with water. As to materials for hand-washing, it was observed that 30% and 42% of the hand-washing stations were with soap and 31% and 4.5% were with ash in operational and control areas, respectively.

According to this evaluation, the major sources for drinking water in most areas were public taps/stand pipes. On average, only few households (13%) said that they treated their drinking water. Slightly higher proportions of households in comparable control woredas had reportedly this experience of treating drinking water than in intervention woredas. Those households who reported to have been treating their drinking water mainly used the method of chlorination (water guard) followed by filtration using closes. Most households, (60.5%) in the sample woredas had the experience of storing drinking water separately, with no difference between intervention and control areas.

In the intervention areas, of all sampled households having children aged 5 and below, about a third (30%) had seen their children affected by diarrhea in the two weeks prior to this survey and in comparable control areas,
some (24.8%) households had seen this same problem among their children. In the last one year, children in both control and treatment areas were said to have been infected with diarrhea twice, on average. On average, 87% of the households in treatment and control areas said they took their children affected by diarrhea to health facilities for treatment. Of these children who had been taken to health facilities for diarrhea treatment, a great majority (88%) in both treatment and control areas were reported to have received some medicine.

Over one-fifth of the households (21%) in both treatment and control areas also reported that their children under 5 had got an eye infection in the last three months. Besides, some of the sample households (12%) in treatment areas said that their children had been infected with a scabies/skin infestation. Again in the last three months, a little over a tenth of the households (10.9%) in treatment areas reported that their children had caught an intestinal parasitic disease.

Availability and accessibility of improved latrine facilities for families not only helps maintain their health but it also helps keep their social dignity; this second point is especially more important for women than for men in most Ethiopian cultures as it is socially more embarrassing for the women to be seen while defecating.

In conclusion:

Low coverage of hygiene and sanitation service; the vast majority of households do not treat water before they use it; vast majority of respondents reported that they are not washing their hands at critical times and most of households do not have hand-washing facilities. Though most of the households are getting water for household use from protected sources vast majority of them do not treat water before use it. Though UNICEF and WSCO/ GSF in partnership with Ministry of Health are trying their best through their CLTSH program, people living in their program areas are still found to live in unsatisfactory sanitation and poor hygienic conditions.

On the other hand, the vast majority of respondents from households with and without having latrine showed their interest to improve and build new latrines, respectively, and again both groups of respondents agreed that cost to improve and build new latrines should be raised by the family themselves.

Despite of having highly supportive and conducive policy, strategic documents and CLTSH Implementation Guideline in the country, process assessment in this outcome evaluation clearly showed that the implementation of pre- triggering, triggering and post triggering of CLTSH phases in almost all program areas is found to be without strictly following guides listed in National CLTSH Implementation Guideline. In addition to this, the National CLTSH Implementation Guideline was not available in almost all health posts in the study area. Moreover, The National CLTSH Implementation Guideline do not include the step by step guiding components considering post ODF phase of CLTSH implementation and Community Conversation/ Family Dialogue Training Manual adopted for Hygiene and Sanitation was not prepared as it is required by the National CLTSH Implementation Guideline.

Highly designed health structure extending from federal to kebele levels and the assignment of the necessary man power at all level are part and parcel of the health system of Ethiopia. Despite of all these, instruments for effective follow up and efficient data bases for CLTSH program was found to be critical shortage in this evaluation. Above all, lack of people specifically assigned and committed to ensure the quality of CLTSH implementation at all levels of the health system is critical and decisive finding in this evaluation. Based on these knowledge acquired from this outcome evaluation, the following major points are recommended:

To Federal Level:

Improving the processes of implementation of CLTSH according to the outlines given in the National Implementation Guideline and continuing to respect its subsidy free principle; updating the National CLTSH Implementation Guideline mainly to strengthen the post triggering follow up and guide implementers in line with improving sanitation facilities to climb up the sanitation ladder; preparing users friendly training manual on CO/ FD which is adapted to sanitation and hygiene; organizing introductory workshops and trainings on CLTSH in a cascading manner to all relevant health professional and stakeholders at all administrative levels; and organizing and establishing functional, effective and efficient coordinating body within the health system which will coordinate and ensure quality implementation of CLTSH at all administrative levels.

To Woreda and Kebele Level:

Regulate the quality of CLTSH related activities (consensus building workshops, CLTSH training, community triggering, etc.) and ensure their implementations at woreda and kebele levels; to design and ensure continuing training programs for CLTSH implementers at woreda and kebele levels. Ensure regular review meetings for HEWs and CLTSH team members with the purpose of follow up on the implementation of community action plan at development unit and Ensuring continuing training program for HEWs and CLTSH team members; ensure the organization of kebele level CLTSH verification team; and support small-scale enterprise groups so that it is possible for them to promote improved sanitation, ensure demand based production of sanitation and hygiene facilities, and arrange space for product distribution center at affordable price.
Glossary of Terms
(Operational Definition)

**Advocacy**
Refers to activities undertaken to persuade and mobilize people/decision makers to take action.

**Behaviour Change**
With respect to hygiene and sanitation, behaviour change refers to practicing safe disposal of faeces through the construction and consistent use of improved latrines, hand washing with soap (or soap substitute) and water at critical times, and safe transport, treatment, storage and handling of household drinking water.

**Certification**
Certification is the official confirmation and recognition of the ODF status

**CLTSH Team;**
Also called community volunteers, these are village residents who are trusted, respected, have previously performed satisfactory services to their communities and now, selected by their neighbours to mobilize the villagers, follow the implementation of CLTSH, prepare and report the progress to the health extension workers.

**Community Conversation**
Also called community dialogue is a tool that enables communities to discuss their hygiene and sanitation behaviours and design their own action plan with clear targets and institute a follow-up mechanism through CLTSH Team/ women development armies and one to five networks.

**Community-led Development**
Communities lead their own development through issue identification and exploration, planning of action points, resource mapping, implementation of planned activities, and review of progress made and sharing of outcomes.

**Family Dialogue**
Also called Mikikir (the Amharic term). Family dialogue is an approach used to facilitate discussion among members of a family/ household about the adoption of improved hygiene and sanitation behaviour.

**Gott**
A gott (Amharic word) is the smallest sub-
administrative unit in Ethiopia. A gott comprises a group of 50-70 rural households. The term can be used interchangeably with the term ‘village/development unit.’

**Open Defecation Free (ODF)**
Refers to an environment wherein no faeces are openly exposed to the environment. ODF is a term used in CLTSH to describe the attainment of 100 percent latrine coverage and use by all families in a village, including small children by eliminating Open Defecation.

**Pre-ignition**
Preparations are made to mobilize villagers. Pre-ignition starts with a strategic selection of kebeles and villages.

**Sanitation Mapping**
A simple drawing depicting the village showing households, latrines, sites for open defecation under normal conditions and in case of emergencies. Also shown are major landmarks (churches, mosques, healthposts, etc.) and other institutions.

**Scale-up**
Expanding a tested approach and achievements over a larger area.

**Social Pressure**
The influence exerted by individuals and groups to enforce commonly agreed and accepted norms.

**Social Solidarity**
A union of interests, purposes, or sympathies among members of a group and the degree of cooperation among that group to take corrective concerted action.

**Sustainable Sanitation**
Describes a state in which sanitation facilities operate satisfactorily and generate health benefits over their life- cycle without threatening the quality of the environment.

**Total Sanitation**
A situation wherein no open defecation is practiced and in which the cycle of faecal contamination through vectors including flies, fingers, animals, feet, wind, flood and rain runoff has been broken.

**Transect (“shame”) Walk**
A transect walk entails walking with community members through a village from one end to the other, looking for clues and insight into sanitation and hygiene practices. The transect walk includes identifying sites used for open defecation and types and conditions of sanitation facilities and related health risks.

**Triggering**
Also called ‘ignition,’ refers to the process wherein an outsider facilitator mobilizes communities to take action to change their hygiene and sanitation behaviour.

**Verification**
Verification is the process of confirming the claims of communities to have met the criteria for ODF status.
1. Introduction

1.1. Description of Hygiene, Sanitation and CLTSH in Ethiopia

According to a report from the US Department of Health and Human Services, Center for Disease Control and Prevention, diarrheal diseases account for 1 in 9 child deaths worldwide, making diarrhea the second leading cause of death among children under the age of 5. For children with HIV, diarrhea is even more deadly; the death rate for these children is 11 times higher than the rate for children without HIV. Despite these sobering statistics, strides have been made over the last 20 years in diarrheal prevention rotavirus vaccination and breastfeeding have proved to be effective ways of preventing diarrheal diseases. It has also been shown that diarrhea prevention through the use of safe water and improved hygiene and sanitation. Diarrhea prevention is not only possible but cost effective: every $1 invested yields an average return of $25.50. Apart from its being a major cause of child deaths, diarrhea can have a detrimental effect on childhood growth and cognitive development.

According to the report from CDC Ethiopia (August 2013), infant mortality rate in Ethiopia is 20/1000 live births and the second from the top ten causes of child deaths in the country. Generally speaking, about 88% of diarrhea-associated deaths are attributable to unsafe water, inadequate sanitation, and insufficient hygiene. Most diarrheal germs are spread from the stool of one person to the mouth of another, through contaminated water, food, or objects.

In view of the adverse effects the impoverished national health care services had on the population in general and on children in particular, and with the objective of combating the major health threats like diarrhea and other communicable diseases the Government of the Federal Democratic Republic of Ethiopia endorsed a National Health Policy in 1993. The government, then, took the initiative of including protection of public health into the new National Constitution in 1995. It also put in place a National Hygiene and Sanitation Strategy in 2005 and a National Hygiene and ‘On-Site’ Sanitation Protocol in 2006. In addition to these policy measures, the Federal Ministry of Health adopted Community Led Total Sanitation and Hygiene (CLTSH) approach in addressing hygiene and sanitation concerns (2011). The Ministry also developed and endorsed the National CLTSH Implementation Guideline, the National CLTSH Training Manual and the National CLTSH Verification Protocol (2011).

The Hygiene and Sanitation Strategic Plan of Ethiopia, developed in 2011, clearly stated that public health system has been radically changed during the past several years in Ethiopia with the advent of the Health Extension Program and its over 34,000 Health Extension Workers (HEWs) who greatly expanded the scope and reach of Ethiopias health system, especially in rural areas. According to the Health and Health related indicators, Ethiopia (2013 - 2014), out of a total of 14923 kebeles planned for triggering, 3655 kebeles had declared the ODF status and would be assumed to adopt key health practices for improved hygiene and sanitation.

The Fourth Health Sector Development Plan (HSDP IV, 2011 - 2015), Universal Access Plan (UAP), and the country’s Growth and Transformation Plan (GTP, 2011 - 2015) target to achieve 100% access to basic sanitation and, as outlined in the Millennium Development Goals, 82% access to ‘improved sanitation’ by 2015. Furthermore, HSDP IV set out to increase the proportion of Open Defecation Free (ODF) kebeles from 15 to 80%.

In order to realize the above targets set by HSDP IV, GTP I and UAP, Ethiopia used different hygiene and sanitation program approaches. Different government and non-government organizations and UN agencies operating in Ethiopia and supporting/implementing hygiene and sanitation interventions were using different and sometimes antagonistic approaches which resulted in a slow rate of progress towards the goals and objectives of universal access which the country set as a main development strategy. Community-Led Total Sanitation and Hygiene (CLTSH) was one among other program approaches which were considered to be effective. In the last five years, the CLTSH program has been implemented in almost all regional states of Ethiopia, and many villages, kebeles and districts in these regions have reached their open defecation free status.

As reported by Joint Monitoring Program (JMP): “25 years Progress of Sanitation and Drinking Water: 2015 Update and MDG Assessment” during the MDG period, it is estimated that use of improved sanitation facilities rose from 3% to 28% in Ethiopia (54%–68% Globally). The global MDG target of 77% has therefore been missed by 49% points in Ethiopia (9% points globally). The insights provided by the JMP data have enabled the identification of specific challenges and the need to strengthen policy-making. For instance, it can be learnt from these that open defecation is still practiced by millions of people and is causing health and other problems to them and that there is a widespread need for sanitation. Open defecation is one of the clearest manifestations of extreme poverty.

2. Background:

Community Led Total Sanitation (CLTS) is an approach which is considered to be effective in triggering and mobilizing the communities at the development unit (village) level. In Ethiopia, it was adopted in 2011 and launched after two training events were organized and conducted in Arbaminch and Hawassa towns by VITA Ethiopia and Plan International Ethiopia, respectively. After these events, implementation of the approach led to visible and striking results in the direction of improving the hygiene and sanitation condition in the country. Based on this observation, a number of non-governmental organizations started to implement CLTS approach according to their understanding and implementation here and there in different parts of the country. In order to strengthen the efforts being made to address hygiene and sanitation concerns in the country and to mainstream the effectiveness and efficiency of CLTSH approach, in 2011, the Federal Ministry of Health (FMOH) organized National Hygiene Sanitation Task Force. Moreover, with the main purpose of harmonizing the implementation of Community Led Total Sanitation (CLTS) by different actors, Technical Working Group was organized in the same year by the National Hygiene Sanitation Task Force. The assigned technical working group produced the following documents and these documents were endorsed by the Ethiopian Ministry of Health.

National CLTSH Implementation Guideline (which is a combination of: Whole System in a Room, an approach used to facilitate stakeholders’ workshop mainly planned to create common understanding and to develop shared objectives and goals; Community Conversation (CC), an approach used to facilitate the community review meeting during post triggering follow up period and Family Dialogue Session (FFDS), an approach used to facilitate family level dialogue mainly on the follow up of the implementation of action plans developed during community triggering and review meetings; Community Led Total Sanitation (CLTS) training manual; and Open Defecation Free (ODF) status Verification Protocol.

These documents have been prepared to be used by all government and non-government practitioners engaged in implementing community-based hygiene and sanitation programs in the country. It is believed that they are currently being used by all hygiene and sanitation program/project implementers all over the country.

The CLTSH guideline is developed in such a way that it divides the implementation into 4 phases and 13 steps. It elaborates the purposes, processes, methods, and expected outcomes relevant to each step and identifies the parties responsible. The following figure clearly shows the conceptual framework of the process of CLTSH implementation.
Outcome Evaluation of CLTSH Program in Ethiopia from 2012-2015

Description of CLTSH Conceptual Framework:

The National CLTSH Implementation Guideline consists of the following intervention phases.

**PHASE 1: Preparation and Planning (Marked in the conceptual framework with BLUE Color)**

Whole System in a Room (WSR)

Changing hygiene and sanitation behaviors in Ethiopia must be the concern of all: government, non-governmental, private organizations, individuals, donors, communities, community institutions. All these actors should agree on implementation modalities and craft a joint action plan to tackle the challenge. Therefore, consensus building workshops, using the Whole System in a Room approach, should first be organized at national, regional, zonal and woreda levels before the actual CLTSH implementation is initiated.

Capacity Building

Following consensus building workshop, it is essential to conduct a capacity building (training on CLTSH) effort, in order to create a pool of CLTSH trainers and CLTSH facilitators at regional and woreda levels respectively. The implementation guidebook stresses on the need to give special attention to developing the skills of those frontliners responsible for facilitating community triggering for particular change at community level. A successful training program will result in an enhanced ability to conduct WSR workshops, develop plans, trigger CLTSH activities and facilitate community conversation (CC) and family dialogue to negotiate sustained behavioral change.

**PHASE 2: Community Triggering (Marked in the conceptual framework with green color)**

It is during Phase 2 that communities are triggered using CLTSH approach. Phase 2 involves a process of facilitated dialogue with communities mainly to engage communities in an examination of their sanitation and hygiene practices and empower them to improve their situation collectively. CLTSH triggering refers to the process of mobilizing villagers using a set of participatory tools to analyze their hygiene and sanitation situation and agree on a collective action for change. This process must be handled by trained facilitators and targets all households and institutions in a village.

**PHASE 3 POST-Triggering (Marked in the conceptual framework with gray color)**

Post-triggering is another important phase in which concerted training, coaching, support and persistent follow-up are required. During Phase 3, it becomes necessary to provide additional training and support to natural leaders, volunteer community health promoters, community resource people, faith-based/religious organizations and associations. The more people in a village and in a kebele are actively involved in promoting CLTSH, the more quickly and widely new behaviors will be adopted. Furthermore, a larger number of people involved mean a greater chance for the new behaviors to be maintained. Specific training is mandatory for natural leaders or volunteer community health promoters in methods of small group facilitation, family dialogue (mikikir), simple techniques for constructing latrines and hand-washing facilities, and household water treatment and safe storage.
2.2. Program Description

2.2.1. ONE-WASH Program
To support the further scale up of the CLTSH approach, the Government of Ethiopia has formulated ONE-WASH program. The ONE-WASH program was launched in September 2013 with the aim to achieve UNs goal of Universal Access to Water Supply and Sanitation Services in the country. The specific objectives the ONE-WASH program has outlined to achieve by 2018 are:
• Growth and Transformation Plan (GTP) targets of 98% and 100% access to safe water supply for rural and urban areas respectively,
• 100% access to basic sanitation countrywide,
• 77% of the population practice hand washing at critical times, safe water handling and water treatment at home,
• 80% of communities in the country achieve open defecation free (ODF) status.

The program is budgeted to cost USS 2.4 billion and is financed by both the Government of Ethiopia Treasury Resources, a ONE-WASH pool fund (supported by UNICEF, World Bank, African Development Bank and DFID) and off-budget financing from other development partners/NGOs/CSOs and the private sector. The ONE-WASH has established a dedicated budget line for sanitation related activities.

2.2.2. Description of UNICEF’s CLTSH Program Support
In order to support the implementation of CLTSH (initiated in 2011) and ONE-WASH program (initiated in 2013), Plan International organized the first East and South Regions of Africa (RESA) regional training of trainers on CLTS. Following this training, UNICEF, in collaboration with the Federal Ministry of Health, agreed to make CLTSH the principal approach to promote rural sanitation in its 2012-2016 Country Program Document (CPD). The CPD established two indicators to measure UNICEF’s contribution to the rural sanitation sector:
• 2,600,000 new users of household toilets (disaggregated as basic and improved) with access to hand-washing with soap/shish,
• 7,000 Open Defecation Free villages

These interventions were targeted at 84 UNICEF learning woredas (districts) in all regions of the country and included both CLTSH activities for rural agrarian and pastoralist communities. This program also encompasses the following components:
• Building governments’ capacity and systems to improve sustainable access to basic WASH services at federal, regional and woreda (district) levels with a focus on programmatic support;
• Programmatic support is available in at least 84 learning districts spanning all regions of the country mainly in the areas of the following program components:
  • Evidence-based priority setting and planning;
  • Cost-effective and integrated approaches to service delivery are in place;
  • Decision-making with a strong gender dimension is localized; and
  • Integrated refresher trainings (IRTs) for HEWs,
• Supportive supervision and follow-up of triggered communities and
• Adapting the CLTSH approach to communities.

2.2.3. Description of WSSCC/GSF’s Program Support
The Water Supply and Sanitation Collaborative Council (WSSCC) Global Sanitation Fund (GSF) then initiated a program termed the Ethiopia Sanitation and Hygiene Improvement Program (E-SHIP) in 2013 to be executed by the Ministry of Health Health Extension Program (HEP) with financial support from the Global Sanitation Fund. The program has the following five components:
• Strengthening community sanitation and hygiene promotion,
• Institutional sanitation and hygiene (school and health facility),
• Strengthening the HEP system for improved technical and delivery capacities in support of components 1, 2 and 4,
• Advocacy and IEC/BCC on sanitation and hygiene, and
• Monitoring and evaluation including operational research.

Geographically the program covers 40 woredas in Amhara, Oromia, SNNPRS and Tigray whereby about 4,000,000 people are targeted as primary beneficiaries of the project.

The general objective of E-SHIP is to complement the ongoing government and partner efforts to improve sanitation and hygiene situation in the program woredas.

The implementation strategy for E-SHIP is as follows:
• Creating demand and access through Community-Led Approaches such as CLTSH, Sanitation Marketing and Household Water Treatment and Safe Storage (HWTSS) technologies and conducting formative researches to improve the Hygiene and Sanitation in the country,
• Creating enabling conditions for schools and health institutions to enhance access to improved and separate latrine with hand-washing facilities. In addition, behavioral changes and hygiene promotion in schools and health institutions will be facilitated by way of which school children will be mobilized to be agents for behavior change in their households and communities.
• Creating the technical and delivery capacities in the Health Extension Workers (HEWs) through community mobilization, experience sharing by organizing visits benchmarking and trainings, supports, technical assistance, developing, printing and distributing the technical manuals for Health Extension Coordinators, HEWs, micro-enterprise, environmental health professionals and school WASH clubs.
• Advocating/influencing and promoting sanitation and hygiene through edutainment, mass media campaign (radio, television), student competition and print media (posters, leaflets, billboards, etc.) and organizing national and global sanitation and hygiene events.

The overall cost of this program had been USD 5,115,000 for a period of three consecutive years (July 1, 2012- June 30, 2015).

Similarities of UNICEF and WSSCC/GSF Programs
UNICEF and WSSCC/GSF are applying the CLTS-H program through the Health Extension Program. In this approach, the triggering of the communities is done by a combination of the kebele level government officials (development managers) and health extension workers. Certification and verification of the ODF status is then done by a higher government level (woreda, zonal or regional teams).

Differences of UNICEF and WSSCC/GSF Programs
Although there are some similarities in the approach supported by UNICEF and WSSCC, the following indicates the differences in the approaches:
After all these efforts of MoH, UNICEF, WSSCC/GSF, and other partners, the 2011 Hygiene and Sanitation Strategic Action Plan indicated that CLTSH had reached all 9 regions of Ethiopia and had been implemented in 439 (80%) of the country’s woredas which suggests CLTSH was about to achieve national scale. In addition to this, a large number of villages (50-70 households), kebeles (1500 households) and woredas (district) declared their ODF status in some parts of the country.

2.2.4. Challenges Observed in Implementing CLTSH

Despite of all these achievements, there were also challenges encountered and observed, mainly, during post-triggering and post-ODF periods. In areas where the post-triggering follow-up was not as strong as outlined in the National CLTSH Implementation Guideline, the time required for triggered villages to reach ODF status was unnecessarily prolonged. In addition to these, as there was no any mechanism/approach suggested by either CLTS or CLTSH approaches to be used for follow up during post-ODF period, it was common to see many villages and kebeles slipping back and people started practicing open defecation again. Finally, almost all household latrines remained at their rudimentary stage (traditional open pit latrines) carrying huge risk of disease transmission, collapsing and reversing in to open pit latrine. These concerns are further strengthened by the ODF Sustainability Study, which, was conducted by Plan International (December, 2013). This study measured the slippage rate based on indicators including ‘presence of latrine and cover for drop-hole’ and the ‘actual usage of cover for drop-hole’ as it is observed at time of interview for this study. This study was made in ODF declared villages from four African countries, Ethiopia, Uganda, Kenya and Sierra Leone. The following table shows the finding of this study in Ethiopia.

Table 1: Comparison of UNICEF and WSSCC/GSF approach

<table>
<thead>
<tr>
<th>Agency</th>
<th>Regions</th>
<th>Districts</th>
<th>Financial Modality</th>
<th>NGO partnership</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLTSH</td>
<td></td>
<td></td>
<td>Bilateral funding to</td>
<td>None</td>
<td>(None) 2 GSF Consultants</td>
</tr>
<tr>
<td>WSSCC</td>
<td>4</td>
<td>40</td>
<td>Federal Ministry of Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNICEF</td>
<td>8</td>
<td>84</td>
<td>Financing through regional annual work plans</td>
<td>SNV, PIE, IDE</td>
<td>40</td>
</tr>
</tbody>
</table>

The result from Jimma and Shebedino, without considering presence of cover for drop-hole, shows that 9% and 8%, respectively, of the households visited slipped back and did not have latrines. When the physical presence of cover for drop-hole was considered, only 65% and 90% of the households in Jimma and Shebedino, respectively, slipped back and did not have cover for drop-hole. Finally, when the interviewers visited the latrines, 83% and 91% of the latrines, having cover for drop-hole, in Jimma and Shebedino, respectively, were found uncovered with cover for drop-hole. Assuming that all households had proper latrines, all latrines had covers for drop-holes and all drop-holes were covered at the time of ODF VERIFICATION, it is possible to conclude that 83% and 91% of households in Jimma and Shebedino, respectively, slipped back and started using open pit-latrines which are far worse health risk than using open field defecation.

Considering the contents of National CLTSH Implementation Guideline; UNICEF’s and WSSCC/GSF’s modalities of Implementation of the CLTSH approach in the country and with the intention to further study the outcomes of the implementation of the CLTSH approach in 8 regional sates of Ethiopia, UNICEF Ethiopia, in collaboration with WSSCC-GSF and the Federal Ministry of Health, initiated this evaluative study entitled ‘Outcome Evaluation of Community-Led Total Sanitation and Hygiene (CLTSH) in Ethiopia from 2012 - 2015.’

2.2.5. Scope of CLTSH Implementation Outcome Evaluation

The scope of this CLTSH implementation outcome evaluation provided focus on CLTSH only and not SLTSH and gave focus on its application in agrarian communities under the WSSCC program and agrarian and pastoralist communities under the UNICEF program. The evaluation approach encompassed sampled 8 woredas from UNICEF’s program areas and four intervention woredas from WSSCC/GSF program areas. Besides, CLTSH implementation outcome evaluation has also taken an equal number of woredas from those woredas neither from UNICEF nor WSSCC intervention areas as comparison groups.
3. Purpose and Objectives

3.1. Purpose
The main purpose of the outcome evaluation was to review lessons learnt from the implementation of the UNICEF and WSSC supported CLTSH programs and use them to influence the approach to rural sanitation in the future UNICEF/CPD and HSDF-V.

1. Getting a ‘snapshot’ of current coverage of CLTSH implementation in the 8 and 4 operation regions of UNICEF and WSSC/ GSF respectively;
2. Reviewing the effectiveness of the CLTSH implementation strategy in ensuring sustained behavior change in the 8 and 4 operation regions of UNICEF and WSSC/ GSF respectively;
3. Assessing the cost comparison between UNICEF and GSF-supported woredas;
4. Evaluating the relevance of the CLTSH approach in different contexts (e.g. in agrarian compared to pastoralist rural communities);
5. Gauging the sustainability of ODF communities in the last 3 years;
6. Reviewing how equitable the CLTSH approach is in reaching the most vulnerable sections of the community in the 8 and 4 operation regions of UNICEF and WSSC/GSF respectively;
7. Assessing the factors contributing to CLTSH success and failure in the 8 and 4 operation regions of UNICEF and WSSC/ GSF respectively.

3.3. Evaluation Questions: CLTSH Implementation outcome evaluation is done to measure indicators related to the effectiveness, efficiency, relevance, sustainability, impact and equity of the implementation of Community Led Total Sanitation and Hygiene (CLTSH) program in the 8 and 4 operation regions of UNICEF and WSSC/ GSF, respectively. The following table, taken from the Term of Reference (TOR) for this assignment, shows the detail CLTSH outcome evaluation questions.

3.4. Organization of Evaluation Work
3.4.1. Field Staff Recruitment and Assignment: Data Collectors (DC) who have extensive experience in doing data collection and entry using smart phone through appropriate statistical software were recruited using selection criteria developed by the consulting firm. One supervisor for each of regional teams was also recruited using the criteria developed, again, by the consulting team. The following table shows the number of data collectors and supervisors assigned to each of the study regions.

Table 2: Evaluation Questions

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Primary evaluation questions</th>
<th>Evaluation sub-questions</th>
<th>Assumptions / Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>To what extent has CLTSH added to demand creation for sanitation facilities in ODF communities (after the certificate)?</td>
<td>How suitable the overall design and implementation of CLTSH be improved to be more effective in the specific context?</td>
<td>CLTSH has failed to create demand for sanitation facilities because the approach does not address specific technology</td>
</tr>
<tr>
<td></td>
<td>Is the CLTSH implementation strategy the most appropriate and cost effective? How could it be improved for increased effectiveness?</td>
<td>What is the added value of implementing CLTSH through the Health Extension Programmes including PMIC, Health Posts, and Health Education Workers?</td>
<td>CLTSH is implemented in phases (triggering, post-triggering, certification etc.); ODF status should be evaluated at different stages.</td>
</tr>
<tr>
<td></td>
<td>What is the added value of financial and technical support of development partners in the CLTSH process? Does CLTSH address the hygiene component sufficiently (safe water storage and hand washing)?</td>
<td>How has CLTSH been adopted in the policy arena?</td>
<td>The hygiene component of the CLTSH needs to be evaluated separately, as it may have been added following DO Certification.</td>
</tr>
<tr>
<td>Reference</td>
<td>To what extent has CLTSH power relevant and effective in the specific context (e.g. pastoral communities)?</td>
<td>What are the challenges, opportunities and successes? How could the overall design and implementation of CLTSH be improved to be more adaptive to these specific contexts?</td>
<td>CLTSH has not been applied to be successful in urban areas and pastoral zones and would require potential adaptations in specific contexts to achieve better results.</td>
</tr>
<tr>
<td></td>
<td>To what extent has ODF status been maintained in communities that have been certified over the past 3 years? For how long?</td>
<td>How many of the communities have been properly triggered, monitored and maintained by trained staff?</td>
<td>The high rate of dropouts observed in other countries is likely to be similar in Ethiopia and this may be largely due to the design and implementation of the CLTSH program.</td>
</tr>
<tr>
<td></td>
<td>Are hygiene practices such as hand washing and safe water storage maintained, in addition to latrine use?</td>
<td>How durable have the MHR latrines and hand washing facilities been in the CLTSH process?</td>
<td>Determinants may include: quality of facilitation in the triggering and post-triggering stage; quality of the certification process; appropriateness of the post-certification activities; role of natural leaders; role of school children in monitoring sustainability of ODF status; etc.</td>
</tr>
<tr>
<td></td>
<td>To what extent have the critical behavioral elements (i.e. change and disruption of ODF) remained in the ODF communities?</td>
<td>How many of the communities have been properly triggered, monitored and maintained by trained staff?</td>
<td>Other determinants need to be further examined such as environment/basin in which CLTSH is applied; criteria used to choose beneficiaries/community, etc.</td>
</tr>
<tr>
<td></td>
<td>How has the CLTSH latrine and hand washing facility been utilized without disruption?</td>
<td>How effective is the “tag system” to sustain or improve ODF status of the community?</td>
<td>Are the responses received from the communities reliable and can data be triangulated to provide more realistic data on reality?</td>
</tr>
<tr>
<td></td>
<td>How many of the CLTSH trained personnel are retained in the CLTSH workforce?</td>
<td>How sustainable and resilient are the ODF communities and the CLTSH programme?</td>
<td>The potential frequent repair and rebuilding costs faced by rural households that use non-durable sanitation facilities is a concern. The poor households have to import and rebuild latrine facilities on a fairly regular basis, particularly those living in areas with heavy rainfall and seasonal flooding.</td>
</tr>
<tr>
<td></td>
<td>To what extent does CLTSH create a new awareness of the links between sanitation, hygiene and health?</td>
<td>How can CLTSH be improved to have a more health impact?</td>
<td>Are the households receiving the benefits from the sanitation and health interventions?</td>
</tr>
</tbody>
</table>

Note: Table taken from TOR prepared for this assignment
3.4.2. Training to Data Collectors and Supervisors

Once the methodology and survey tool were finalized and translated to local language, BDS-CDR organized and conducted training to data collectors and supervisors who were responsible for the data collection in the field. Theoretical and practical training was carried out, considering feedback from client experts for three days: the training was outlined to prepare training materials; the methodology and survey tool were translated and finalized, and the training was facilitated, facilitating the preparation of training materials; the methodology and survey tool were translated and finalized.

The training methods included power point presentation, small group discussion, role playing in interviews (mock interview) and field practice. This method provided assimilation of interviewing techniques more effectively.

Points from the theoretical discussions and the feedbacks which were obtained from the plenary discussions during the training sessions were incorporated in the manuals and questionnaires as much as possible during training sessions.

Field supervisors participated in the data collectors training, but they received one additional training related to their coordination and supervisory role. In particular, they were trained on the quality control process, cross checking, editing and coding of the questions, security and confidentiality issues.

As part of the training and after familiarizing the survey team with all survey instruments, a pilot-testing of the survey instruments was carried out in communities having similar physical and social characters. The pilot-test was used to evaluate the clarity and appropriateness of certain concepts of the survey instruments. After the pilot-test, modifications were made to the instruments prior to its use in the survey. The pilot-test as part of the training served to provide actual life experiences to the survey team in administering the survey.

### Table 3: Number of data collectors and supervisors in each region

<table>
<thead>
<tr>
<th>SN</th>
<th>Regions</th>
<th># of Teams</th>
<th># of Data Collectors</th>
<th># of Supervisors</th>
<th># of Households Surveyed</th>
<th># of Informant Interviews</th>
<th># of Key Facilitated</th>
<th># of FGDs Facilitated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amhara</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>528</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tigray</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>528</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Oromia</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>528</td>
<td>14</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SNNPR</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>528</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>BG</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>187</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Gambela</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>264</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Afar</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>264</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Somali</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>264</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>44</td>
<td>8</td>
<td>3091</td>
<td>102</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

3.5. Evaluation Methods

3.5.1. Evaluation Area:

As indicated in the RFP, this evaluation was implemented in targeted Regions (Oromia, Amhara, Tigray, SNNPR, Gambela, Benishangul Gumuz, Somali, and Afar) and purposively selected 8 woredas of UNICEF and 4 woredas of WSSCC/GSF operational areas where the implementation of CLTSH was initiated. Accordingly,

- Eight intervention woredas (2 woredas per region: 1 for UNICEF and 1 for WSSCC-GSF) were selected from Amhara, Oromia, Tigray and SNNPR;
- Four comparison woredas for UNICEF’s operation areas (1 woreda per region) were selected from Somali, Afar, Benishangul Gumuz and Gambela;
- Four comparison woredas for UNICEF’s operation areas (1 woreda per region) were selected from Somali, Afar, Benishangul Gumuz and Gambela.

### Table 4: Number of Households surveyed, Kils and FGDs facilitated by Regions Evaluated

<table>
<thead>
<tr>
<th>SN</th>
<th>Regions</th>
<th># of Households Surveyed</th>
<th># of Key Informant Interviews</th>
<th># of FGDs Facilitated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amhara</td>
<td>528</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Tigray</td>
<td>528</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Oromia</td>
<td>528</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>SNNPR</td>
<td>528</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>BG</td>
<td>187</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Gambela</td>
<td>264</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Afar</td>
<td>264</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Somali</td>
<td>264</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3091</td>
<td>102</td>
<td>24</td>
</tr>
</tbody>
</table>

For detail understanding of the study areas (regions, woredas and kebeles), please, refer to Annex 2.
3.5.2. Profiles of Evaluated Areas

Amhara

Amhara is one of the nine regional states of Ethiopia and its capital is Bahir Dar. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSAs estimate in the year 2013, the Amhara region had a population of 19,212,000. With an estimated area of 159,173.66 square kilometers, this region had an estimated density of 122.2 people per square kilometer. In the entire region 5,983,768 households were counted, which would result in an average for the region of 4.8 persons per household. Moreover, the adult literacy for men was 54% and for women 25.1%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to have been 63.11%, and as it was reported by Health and Health Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was 90.6%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces from 25.4% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest of 75.6% of the children were not safe. In addition to this and according to Health and Health Related Indicators-2006 E.C. (2014/2015), in the region 1,329 kebeles were planned for ODF status/triggered, and 1076 (81%) of them have been certified for their Open Defecation Free (ODF) status. According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 54.17% and as it was reported by Health and Health Related Indicators 2006 E.C. (2014/2015), access to latrine in the region was 74.2%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces dropped by 34.7% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest of 65.3% of the children were not safe. In addition to this and according to Health and Health Related Indicators-2006 E.C. (2014/2015), in the region 111 kebeles were planned for ODF status/triggered, and 118 (>100%) of them have been certified for their Open Defecation Free (ODF) status. According to the report from Ministry of Water and Energy (MoWE) (April, 2013), household access to drinking water in Tigray rural region was 52.74%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 13.7% among children under five, of whom, only for 25.4% sought advice or diarrhea treatment from a health facility or provider.

Tigray

Tigray is one of the nine regional states of Ethiopia and its capital is Mekele. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSAs estimate in the year 2013, the Tigray region had a population of 5,062,000. With an estimated area of 41,409.95 square kilometers, this region had an estimated density of 122.2 people per square kilometer. In the entire region, 992,635 households were counted, which would result in an average of 5.1 persons per household. Moreover, the adult literacy for men was 67.5% and for women 33.7%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 54.17% and as it was reported by Health and Health Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was 46.04%. Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 13.4% among children under five, of whom, only for 34.1% sought advice or diarrhea treatment from a health facility or provider.
SNPPR

SNPPR is one of the nine regional states of Ethiopia and its capital is Hawassa. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSAs estimate in the year 2013, the SNPP region had a population of 17,887,000. With an estimated area of 105,887.18 square kilometers, this region had an estimated density of 169 people per square kilometer. In the entire region, 3,110,995 households were counted, which would result in an average of 5.7 persons per household. Moreover, the adult literacy for men was 57% and for women 22.4%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 74.25% (April, 2013), access to latrine in the region was found to be 48.5% and as in the year 2011, the region was 91.9%. According to the Ethiopia Demographic and Health Survey (EDHS- 2011), faeces dropped by 49.7% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest of 50.3% of the children were not safe. In addition to this and according to Health and Health-Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was found to have been 16.4% among children under five, of whom, only for 31.1% sought advice or diarrhea treatment from a health facility or provider.

status/triggered, and 2,168 (72%) of them have been certified for their Open Defecation Free (ODF) status. According to the report from Ministry of Water and Energy (MoWE) (April, 2013), household access to drinking water in SNPP rural region was 42.02%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 16.4% among children under five, of whom, only for 31.1% sought advice or diarrhea treatment from a health facility or provider.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 48.5% and as it was reported by Health and Health-Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was 89.2%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces dropped by 32.9% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest of 67.1% of the children were not safe. In addition to this and according to Health and Health-Related Indicators -2006 E.C. (2014/2015), in the region, 1,490,000 households were planned for ODF status/triggered, and 2,168 (72%) of them have been certified for their Open Defecation Free (ODF) status.

Oromia

Oromia is one of the nine regional states of Ethiopia and its capital is Finfine. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSAs estimate in the year 2013, the Oromia region had a population of 32,220,000. With an estimated area of 284,538 square kilometers, this region had an estimated density of 113.2 people per square kilometer. In the entire region, 5,590,530 households were counted, which would result in an average of 5.76 persons per household. Moreover, the adult literacy for men was 61.5% and for women 29.5%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), household access to drinking water in Oromia rural region was 49.8%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 11.3% among children under five, only for 35.3% sought advice or diarrhea treatment from a health facility or provider.
Somali

Somali is one of the nine regional states of Ethiopia and its capital is Jigjiga. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSA’s estimate in the year 2013, the Somali region had a population of 5,318,000 of which 53% are pastoralists. According to the report from CSA 2007, West Imay woreda had a total population of 48,104 out of which 22.5% are pastoralists while in Afder zone where Hargele woreda is located 71% of the total population is pastoralists. In the entire region, 665,397 households were counted, which would result in an average of 8 persons per household. Moreover, the adult literacy for men was 61.5% and for women 29.5%. The type of soil in Somali is more of sandy, which usually collapse during and just after digging pits for latrines and other purposes. The communities around Jigjiga Town are semi-pastorals where women and children are living in a fixed location and men are always follow their cattle to look for water and grass usually far from their permanent location.

As it was reported by Health and Health-Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was 40.9%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces dropped by 35.1% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest 64.9% of the children were not safe. In addition to this and according to Health and Health-Related Indicators-2006 E.C. (2014/2015), in the region 8,676 kebeles were planned for ODF status/triggered, and 4 (0.05%) of them have been certified for their Open Defecation Free (ODF) status. According to the CSA, as of 2004, (update) 40% of the total population had access to safe drinking water.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 19.5% of which, among children under five, of whom only for 19.7% sought advice or diarrhea treatment from a health facility or provider.
Afar

and its capital is Sermara. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSA’s estimate in the year 2013, Afar region had a population of 1,650,000 out of which 409,123 or 29.45% were pastoralist. According to the report from CSA 2007, Asayta woreda had a total population of 50,803 out of which 18.4% are pastoralists while Dubti woreda has a total population of 65342 out of which 94% own land for farming. With an estimated area of 96,707 square kilometers, this region has an estimated density of 17 people per square kilometer. In the entire region, 247,255 households were counted, which would result in an average of 6.7 persons per household. Moreover, the adult literacy for men was 27% and for women 15.6%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 51.17% and as it was reported by Health and Health-Related Indicators 2006 E.C. (2013/2014), access to latrine in the region was 9%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces dropped by 33.1% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest 66.9% of the children were not safe. In addition to this and according to Health and Health-Related Indicators-2006 E.C. (2014/2015), in the region 65 kebeles were planned for ODF status/triggered, and 4 (6.2%) of them have been certified for their Open Defecation Free (ODF) status. According to the report from Ministry of Water and Energy (MoWE) (April, 2013), drinking water access at household in Afar rural region was 34.8%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 12.7% among children under five, of whom, only for 39.9% sought advice or diarrhea treatment from a health facility or provider.

Gambela

Gambela is one of the nine regional states of Ethiopia and its capital is Gambela Town. Based on the 2007 Census conducted by the Central Statistics Agency of Ethiopia (CSA) and CSA’s estimate in the year 2013, the region had a population of 406,000. With an estimated area of 29,782.82 square kilometers, this region had an estimated density of 13.6 people per square kilometer. In the entire region, 66,467 households were counted, which would result in an average of 6.1 persons per household. Moreover, the adult literacy for men was 57.5% and for women 22.8%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013), access to latrine in the region was found to be 29.2% and as it was reported by Health and Health-Related Indicators 2006 E.C.(2013/2014), access to latrine in the region was 32.5%. According to the Ethiopia Demographic and Health Survey (EDHS-2011), faeces dropped by 24.1% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest 75.9% of the children were not safe. In addition to this and according to Health and Health-Related Indicators-2006 E.C. (2014/2015), in the region 54 kebeles were planned for ODF status/triggered, and 20 (37%) of them have been certified for their Open Defecation Free (ODF) status. According to the report from Ministry of Water and Energy (MoWE) (April, 2013), drinking water access at household in Gambela rural region was 64.73%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to have been 22.6% among children under five, of whom, only for 47.7% sought advice or diarrhea treatment from a health facility or provider.
Benishangul Gumuz

Benishangul Gumuz is one of the nine regional states of Ethiopia and its capital is Assosa. Based on the 2007 Census conducted by the Central Statistics Agency (CSA) and CSA’s estimate in the year 2013, the region had a population of 203,000 people per household. In the entire region, 174,445 households were counted, which would result in an average of 5.9 persons per household. Moreover, the adult literacy for men was 47.4% and for women 23.2%.

According to the report from Ministry of Water and Energy (MoWE) (April, 2013) access to latrine in the region was found to be 57.1%. According to the Ethiopian Demographic and Health Survey (EDHS) -2011, faeces dropped by 45.8% of the children under five was disposed in a safe manner while ways of disposing faeces from the rest 54.2% of the children were not safe.

In addition to this and according to Health and Health-Related Indicators -2006 E.C. (2014/2015), in the region 127 kebeles were planned for ODF status/triggered, and 34 (27%) of them have been certified for their Open Defecation Free (ODF) status. According to the Ministry of Water and Energy (MoWE) report, drinking water access at household level in Benishangul Gumuz rural region was 59.7%.

Despite all these achievements, EDHS-2011 reported that diarrhea prevalence within two weeks prior to the survey was found to be 22.7% among children under five, of whom, only for 50.1% sought advice or diarrhea treatment from a health facility or provider.

Figure 11: Map of Benishangul Gumuz Regional State

Table 3: Summary of Indicators by Evaluated Regions
4. Evaluation Design

Systematic and objective assessment at the completion of a program/project is vital and essential to draw lessons from the process of the intervention and measure the outcome and impacts due to the program and it gives guide to redesign the program and revisit the program guidelines, strategic documents and policies. As it is clear for all, there is no baseline survey conducted before the commencement of CLTSH program run by UNICEF or WSSCC/GSF. For this reason and for that of measuring the change brought by the program the findings of this evaluation should be compared with a comparison group.

The preferred basic evaluation design used was ‘Cross-Sectional, Static-Group Comparison Design’. In Static-Comparison Design, the intervention group received program intervention from UNICEF and WSSCC-GSF (X); followed by a measurement observation (O1) from intervention areas. Finally, the first measurement observation was compared against a second observation (O2) from a control group that did not receive the program intervention from UNICEF and/or WSSCC-GSF. In retrospect this comparison design was not ideal, as NGOs other than UNICEF and WSSCC/GSF such as WFP, ADA, UNICEF, ORDA, COWASH, ADB, IDA, DFID and Jica (not exhaustive) were found to implement CLTSH programs in areas selected for Comparison groups.

### 4.2. Sampling Procedure

Generally, multi (4) stage random cluster sampling method was used to identify the primary study units (development units (gere/got ‘village which is the smallest administrative level consisting of 50 to 70 households)) and households participating in this evaluative survey.

Since this CLTSH outcome evaluation was designed to be conducted only in UNICEF and WSSCC/GSF rural intervention areas, eight of the nine regions (Amhara, Oromia, SNNPR, Tigray, Gambela, Benishangul Gumuz, Afar and Somali) were taken for this survey.

From the list of UNICEF’s 84 intervention woredas 8 were selected using simple random sampling and again from the list of WSSCC/ GSF’s 40 intervention woredas 4 were selected using same the sampling procedure. This makes a total number of 12 woredas from the 8 regions to be evaluated.

Twelve comparison woredas, which were believed to have similar physical, social and economic characters with that of the intervention woredas and which were not supported by both UNICEF and WSSCC/GSF for CLTSH programs, were selected with the agreement of UNICEF and WSSCC/GSF using purposive sampling method. In order to realize the selection of comparison groups their proximity to the intervention woredas was considered.

Lists of all intervention kebeles in the 12 intervention woredas were prepared and two kebeles from each of the 12 woredas were randomly selected and finally one development unit/gere/got was randomly selected from a list of all development units/gere/gots prepared for each of the randomly selected control kebeles.

In Ethiopia, it is assumed that population size of a development unit/gere/got differs from 50 to 70 households and a total of 66 households per development unit/gere/got were selected using random cluster sampling methods. After reaching the central location of each of the selected development units, a bottle was spanned on a smooth surface and the nearest house to which the mouth part of the bottle was indicating was taken as the first household to be interviewed. After interviewing the first household, the data collectors move clockwise and visit all consecutive households until they reach the sample size allocated for the respective development units. Accordingly, a total of 3168 (1584 intervention and 1584 comparison groups) households were selected to be included in CLTSH outcome evaluation.

Female heads in the selected households were the primary respondents of this survey. If the female head of the household was not available at home the male head would be interviewed.

**Sample Size Determination**

Sample size for this outcome evaluation was calculated mainly to show the overtime changes in the practice of open defecation in CLTSH program areas of UNICEF and WSSCC/GSF. Therefore the sample size for this outcome evaluation was determined using the estimated population prevalence of Open Defecation (OD) with specified relative precision. The household sample size was determined based on the following formula:

\[
\begin{align*}
\text{n} &= \frac{4P(1-P)D}{e^2} \\
\end{align*}
\]

\[n = \text{the sample size (number of households to be visited)}\]

\[P = \text{Proportion (45%) of the total population in Ethiopia still defecating in open field} \]

\[e = \text{the standard error of the p-measurement [If } e = +/- 0.05, \text{ a confidence interval = 95%]} \]

\[D = \text{the design effect which represents the number of stages of cluster sampling used. In this evaluation we used 4 stage clusters (region, woreda, kebele and village (gere or got).} \]

Accordingly, a sample size of 1584 households was calculated as follows:

\[
\begin{align*}
\text{n} &= \frac{4 \times 0.45 \times (1 - 0.45) \times 4}{(0.05)^2} \\
&= 1584 \text{ households} \\
\end{align*}
\]

BDS-CDR took a sample size of 1584 households in each, intervention and comparison, of the study areas (1584 in the intervention group and 1584 in the comparison group) resulting in a total sample size of 3168 households.
4.5. Data Management and Analysis

4.5.1. Data Collection, Entry and Analysis

A crucial task for any survey is entering the data and putting them into a form that is amenable to data analysis. In BDS-CDR, most data entry is now performed using personal computers/tablets/smartphones with CS-Pro data entry software. The software was designed in such a way to check the logical consistency of the data. If errors and inconsistencies were made by data collectors, this could be checked by the software to detect and determine whether simple data entry errors were responsible.

Data were entered in the field on smart phone during data-collection phase, and the data entry process was completed by data collectors (smart phone survey teams). Data were entered simultaneously when each interview was being conducted and a list of errors, inconsistencies and missing information was produced from the data entry process on the spot. The interviewer then returned to the household to clarify, with the household members, any problems and to complete any missing information. This method avoided lengthy batch cleaning of data after the survey had terminated. Smart-phone data entry did not consume substantial time, thus prevented delay in the work. Discussions with the household members about the questionnaire were also done carefully for each household.

After collected using smart phone and entered into central data base (server), the data were exported into SPSS statistical software for further analysis. In addition to the quantitative data from household survey, qualitative data from responses of KII and focus group discussions were categorized and tabulated for further analysis.

4.6. Survey Plan for Field Level Data Management:

Each step (that is to say, making sample lists, enrolling subjects, sending out interviewer teams, carrying out daily supervisions in the field, adapting the questionnaires, and so on) was properly planned and reviewed carefully for quality. More specifically:

Each survey team prepared a central survey implementation plan and a task calendar in which the details of the survey logistics were laid out clearly. This plan identified how many interviewers were needed to cover an identified portion of the sample in a given region. Accordingly, the anticipated non-response rate and incomplete interviews, and the survey teams present in a location were taken into account.

Each survey team had a supervisor who would oversee and coordinate the work of the interviewers, as well as provide on-site training and support. Supervisors set out the daily work at the beginning of the workday with the interviewers and reviewed the results at the end of the day. In this review, interviewers briefed their supervisors about their interviews and results. Supervisors examined the completed interviews to make sure that the interviewers' selection of the respondents in the household had been done correctly and that the questionnaire was both complete and accurately coded.

A daily logbook was kept to monitor the progress of the survey work in every survey center. The elements to be recorded were:

- the number of respondents approached, interviews completed and incomplete interviews,
• the response, refusal and non-contact rates and
• the number of back-checks and their outcomes.

Information was maintained on each interviewer so that his/her work could be monitored by the supervisor on an ongoing basis. This interviewer base could then be used in order to give individual feedback and so that decisions with regard to future hiring could be made.

About 10% of the respondents were randomly checked again by supervisors. This check was done to ensure that the initial interview had been conducted properly. The rechecked interview covered the basic demographic information and any information not collected at the initial interview.

4.7. Inclusion and Exclusion Criteria

Only randomly selected development units/gere/gots in which UNICEF and WCCSS-GSF had been implementing CLTSH program from 2012 for UNICEF and 2013 for WSSCC/GSF to 2015 were considered for this evaluations.

Female heads of the households were the primary respondents to the household survey questions. In the absence of the female head, the male head of the household would be the respondent. In the absence of both, the oldest of the other family members who were aged 20 or above would be the respondent. When there is no one to be considered as respondents an appointment would be taken to come back and if this is not possible then data would be collected from the next nearest household on the right side.

4.8. Ethical Consideration

4.8.1. Consideration of Risks and Benefits:

Benefits might emerge as a result of changes made at a program or agency level – for example, findings from an evaluation may guide policy makers in improving policy and strategy documents which improves and enhances impacts from programs, leading to more positive outcomes for current or future participants. However, associated risks can come with these benefits. The survey team considered the occurrence of possible unexpected negative impacts and any harm that may result from an evaluation. With evaluations of CLTSH program, or any program, potential risks may include the followings:

• Sacrificing time and energy to participate;
• Emotional consequences;
• Social harm (Youth may disclose dangerous or unhealthy family situations, and program staff may need to report situations to authorities).

In weighing benefits relative to risks, we wanted to make sure that we maximized the resources used to conduct our evaluation (e.g., time and money) and the involvement of our participants. Strategies to do this included targeting our evaluation to the key questions we had, carefully reviewing and discussing findings, and effectively using our results.

4.8.2. Informed Consent:

Informed consent statement was prepared and attached to the household questionnaire, semi-structured questionnaire for KII and guide to FGD. If the respondents were agreed, after all points are read by the data collectors, to continue, then, data collectors sign on the consent paper indicating consent is given by the respondents. Generally, all consent statements are consists of the following points:

Everyone who participates in the CLTSH evaluation should do so willingly. In general, people participating in this program evaluation, had the right to:

- Choose whether or not to participate without penalties (e.g., participation in the evaluation should not be a mandatory requirement for program participation).
- Withdraw from the evaluation at any time, even if they previously agreed to participate.
- Refuse to complete any part of the evaluation including refusing to answer any questions.
- The word ‘informed’ is important – in addition to choosing whether or not to participate in the evaluation, people had the right to understand all implications of participating.
- To ensure that potential participants were fully informed about the process of the evaluation before they decided regarding their involvement, enumerators made sure that:
  - Provide actual and potential respondents with information about the CLTSH evaluation, including why it was being done, what we were asking them to do, how we would use the information, and how long it would take.
  - Describe both the potential benefits of participation and any foreseeable risks, including possible discomfort due to participation. All Participants were clearly informed that there was no any form (money and/or in-kind) of incentives for their participation in this evaluation.
  - Share this information using language all participants could understand – avoid jargon and translate if needed.
  - Allow the participant the opportunity to ask any questions about the evaluation.
  - When working with youth under age 18, parental consent would be required. In addition to parental consent for minors, youth would also be asked for their assent to participate. Youth who were given permission from their parents to participate in the evaluation could still decline participation.
4.8.3. Confidentiality:

It is not always possible for evaluations to be conducted anonymously, without collecting identifying information such as participant’s name or identification card. However, all information gathered was considered to be confidential and not shared with others. To ensure confidentiality, we considered the following measures:

- Youth over the age of 18 provided their own consent to participate, and therefore parental consent was not necessary.
- Kept completed surveys or interviews in a secure location where they could not be seen by other people.
- Shredded or securely disposed of completed evaluation materials when they would no longer be needed.

4.8.4. Ensuring Safety:

In some cases, we had to be concerned for the safety of our participants. We were thoughtful about participants needs and took care to protect participants as much as possible. Support letter explaining the purpose of the evaluation and the role of the survey team members was prepared by the Federal Ministry of Health and distributed to all regional health bureaus which again wrote letter with similar contents to woreda administration offices so that this could trickle down to kebeles and development units/groups. This letter secured confidence to both the survey team and the respondents and built trust between them.

4.9. Limitations/Challenges of the Evaluation

1. Absence of any baseline survey for CLTSH Program in Ethiopia made difficult comparison of outcomes before and after intervention which forced the evaluation team to include comparison groups. However, the comparison woredas received support from other partners and the government, and hence should not be considered as controls or as baseline equivalent, but rather as additional support to the overall CLTSH programme.

2. Both UNICEF and GSF had deliberately chosen to work in more challenging woredas where poverty and malnutrition rates are known to be higher. Hence, these results cannot be said to be representative of the whole region. The treatment woredas were the least well-served for sanitation and hygiene, and had relatively high diarrheal prevalence in their respective regions prior to the programme.

3. The implementation of CLTSH through the HEWs with support from multiple organizations (NGOs and/or UN agencies such as WFP, ADA, UNICEF, ORDA, COWASH, ADB, IDA, DFID and Jica) other than UNICEF and WSSCC/CSF in wider geographical areas in the country became the major confounding factor in the comparison of the intervention and comparison groups in this evaluation. The only difference between many of the intervention and comparison groups was that the intervention groups were getting financial and technical support from UNICEF and WSSCC/CSF.

4. Generally, the evaluation areas (regions, woredas, kebeles and development units) selected for this study can be divided into agrarian, agro-pastoralist and pastoralist areas. Accordingly, almost all our evaluated areas were either agrarian or agro-pastoralist because it was difficult to get respondents from pastoralist areas. Since Somali and Afar regional states consisted of 53% and 29%, respectively, of the pastoralist community in Ethiopia, we took our respondents from Somali and Afar as pastoralist and those from others as agrarian. With this understanding, this evaluation tried to compare few selected variables between pastoralist and agrarian set up.

5. This CLTSH outcome evaluation was done in regions, woredas, kebeles and development units where UNICEF Ethiopia and WSSCC/CSF were implementing hygiene and sanitation programmes (purposive selection). Because all the findings were determined using samples and data collected from these purposively selected geographical areas, it might be difficult to generalize the results from this study to the other non-supported areas.

5. Evaluation Findings:

**UNICEF Programme Areas**

### 5.1. Household Socio-Economic Characters

The survey covered a total of 2035 households in 16 woredas. Two woredas (one treatment and one control) were taken from each of the evaluated 8 regional states of the country. Eight of these woredas (Mereb Lehe/Tigray, Asayta/Afar, Awabel/Amhara, Babo Gambela/Oromia, West Imray/Somali, Assosa/Benshangul Gumuz, Aleta Chako/SNNPR, and Gog/Gambela) had been receiving various kinds of support from UNICEF (hence, they were treatment woredas). The other eight woredas (Adwa Geter/Tigray, Dubti/Afar, Ameda/Amhara, Konso/Oromia, Hargele/Afar, Mengo/Benshangul Gumuz, Dale/SNNPR, and Joro/Gambela) had not been receiving any support from the donating organization (hence they were comparison control woredas). Two kebeles from each of these woredas were considered for the survey.

The highest proportions of respondents (79%) were women. This was because, in line with the nature of household division of labour in most Ethiopian cultures (where the role of women is dominant on tasks related to water, sanitation and hygiene) the survey sought, as much as possible, to gather the relevant data from female respondents, who were believed to have the best information regarding household behaviours and experiences on these issues. The average age of the respondents was 36.5 years, and about 88% of them were married.

The average household size was 5.4 in the treatment areas and 5.7 in the control areas. It is interesting to note that the household sizes recorded in the developing regions of Afar, Gambela, and Somali were higher than those recorded in any of the other regions as well as the average given above. Especially woredas from Somali recorded the highest household sizes, with the two woredas, West Imray and Hargele, recording an average size of 6.4 and 6.7 respectively. On average, some 31.5% of the respondents (29.2% in treatment area, and 33.9% in control area) were found to be able to read and write, but with differences among woredas.
On average, some 54.1% of the households (59.8% in the treatment areas, and 48.6% in the control areas) lived in same house for more than a decade. There were variations among regions and woredas, however, in terms of the mobility nature of households. In woredas like Gog and Jore (Gambela), the proportions of the households who lived in same house for 10 years were found to be only 32.6% and 3.8%, respectively, and the figures in West-Imay and Hargele (Somali) woredas were only 23.5% and 21.2%, respectively.

About 40.5% of the sampled households (32.5% in the treatment areas, and 48.4% in the control areas) owned houses with corrugated-iron roofs, which is one indicator of wealth status in many rural communities of Ethiopia. The data clearly indicated differences in the number of households owning houses with corrugated-iron roofs (either because of poverty or mobility nature of communities, or a combination of both factors) among the regions in this study. Fewer households from the less developed regions than those from the relatively developed ones were found to own houses with corrugated-iron roofs. From the sampled households in the selected woredas from the four developing regions, particularly from Afar, Somali and Gambela, only less than 7% owned houses with corrugated-iron roofs.

Household income is one of the most sensitive data in most surveys, partly because of respondents memory levels (often with no book of accounts) and partly because of their tendencies to underestimate levels of income to avoid possible taxation. The available data, however, indicated the average annual incomes to have been ETB 12,481.50 in the treatment areas and ETB 14,872.80 in the control areas, with substantial variations among the woredas.

Some 80.7% of the households (87.2% in the treatment areas and 74.4% in the control areas) were found to have farm lands.

The average farm land sizes per household were found to be 1.52 ha in the treatment areas and 1.48 ha in the control areas, with substantial variations among woredas. Land fertility is a significant factor determining the productivity, and hence, the value attached to the land, but this could not be observed from the available data. Regarding ownership of television and radio, some of the essential means of accessing news and information, the data from the sampled households indicate that on average some 20.8% in the treatment areas and 23.6% in the control areas owned radios, and far fewer households (only 0.7% in the treatment areas and 7.1% in the control areas) owned televisions.

5.2. Findings Related to Pre-triggering Phase

Under the CLTSH outcome evaluation in UNICEF's operational areas, heads of 16 health posts from 16 kebeles and environmental health experts from 8 woreda health, education, water and finance and economy development offices were subjected for the key informant interviews. In addition to the key informant interviews, sixteen focus group discussions in 16 development units were facilitated by trained facilitators.

Presence of National CLTSH Implementation Guideline in the woreda health offices; consensus building/advocacy workshop organized by health offices to all CLTSH stakeholders; and CLTSH trainers and facilitators training conducted at woreda level before development units in the respective woredas were subjected for triggering were taken as key variables to be discussed in the pre-triggering part of this report.

Presence of National Community-Led Total Sanitation and Hygiene Implementation Guideline in woreda health offices (WHO) and health posts (HP) was also assessed. As it is indicated in Table 6, National CLTSH Implementation Guideline was found in all UNICEF’s evaluated woreda health offices but it was not available in Tigray Mereb Lehe woreda and Gambela Jore woreda. The presence of this guideline in the woreda health offices would give support to service providers as reference to their day to day activities related to CLTSH.

As it is clearly seen in Table 6, only 1 out of 16 health posts assessed in UNICEF's operation areas was found to have the CLTSH Implementation Guideline in their office. This finding shows that the actual implementers of CLTSH, the health extension workers, were not having and using the guide, which is believed to have strong effect on the quality, effectiveness and sufficiency of CLTSH implementation at the grass root level.

According to the National CLTSH Implementation Guideline, a consensus building/advocacy workshop at a woreda level is a one-day workshop under the leadership of the Woreda Health Office and supported by all other CLTSH stakeholders in the respective woreda. The purpose of this workshop was to create a supportive environment within woredas for CLTSH implementation; to advocate for the need to address problems in environmental health

Table 6: Presence of CLTSH Implementation Guideline at WHO and HP Levels

<table>
<thead>
<tr>
<th>Region</th>
<th>Do you have the national guide in your office?</th>
<th>CLTSH Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Woredas Health Office</td>
<td>Kebele 1</td>
</tr>
<tr>
<td>Tigray</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Afar</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Amhara</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>BG</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Gambela</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Somali</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>SNNPR</td>
<td>y</td>
<td>n</td>
</tr>
</tbody>
</table>
Outcomes Evaluation of CLTSH Program in Ethiopia from 2012

arising from lack of proper sanitation and hygiene; to reflect collectively on the state of hygiene and sanitation; to agree on a way forward; and to strengthen networks and partnerships for implementing CLTSH at woreda, kebele and village levels.

According to the findings of the key informant interview respondents, consensus building/advocacy workshops were conducted in all 8 UNICEF’s evaluated woredas. These workshops were organized by, mainly, woreda health offices with the participation of water, education and finance and economy development offices. As it is clearly seen from the above Table, all expected outputs of consensus building/advocacy workshops were achieved only in Oromia region, Babo Gambela woreda. In the Awabel woreda of Amhara region, consensus was reached that hygiene and sanitation was a real health concern for the woreda; joint CLTSH plan of action was developed; and coordination structure at woreda and kebele levels was established. Plan for efficient use of resource was not addressed in this woreda. All outcomes of CBWA/W were joint action plan of CLTSH, which is important output of CBWA/W to guide the process of follow up during post triggering phase. However, this finding shows that CLTSH trainers and trained facilitators were available in all woredas of the 8 evaluated regions, which indicates that skilled personnel to implement CLTSH were not a problem.

5.3. Findings Related to the Triggering Phase

After ensuring the presence of the National CLTSH Implementation Guideline at all levels; preparing partnership and networking through consensus building workshops/advocacy workshops; and ensuring pool of skilled personnel through training of trainers and facilitators on CLTS, the next phase of the community led total sanitation and hygiene implementation was triggering communities using CLTSH approach. To trigger a village, using Community-Led Total Sanitation tools, trained facilitators called all representatives of every household in a development unit for a meeting where they would mobilize/inspire villagers to analyze the sanitation and hygiene condition of their village and decide to take action to stop open defecation and related behaviors. The purposes of triggering people in a development unit were to enable them to identify, analyze and recognize their hygiene and sanitation status; identify solutions and map resources required to address their hygiene and sanitation problems; share responsibility and draw up an action plan and plan for regular participatory review meetings.

Kebeles and development units where UNICEF’s CLTSH program was initiated and triggered, outcomes of the triggering; occurrence of community meetings immediately after the triggering and its outputs were key variables to be addressed under the triggering phase of this evaluation. This evaluation revealed that UNICEF’s CLTSH program was initiated in total of 202 development units in kebeles where key informant interviews were conducted to health extension workers. Out of these development units, where CLTSH was initiated, triggering was realized in 167 (82.7%) development units.

As it is clearly seen in Table 8, Afar-Asyaya, Gambela-Gog and Somali-West Imay were UNICEF’s program areas where triggering of their development units was not performed to the maximum.

Table 7: Responses from KII respondents from woreda health offices

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>Y</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afar</td>
<td>Asyaya</td>
<td>Y</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oromia</td>
<td>B a m b o</td>
<td>Y</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gambela</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>Y</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gambela</td>
<td>Jore</td>
<td>Y</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>Y</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>Y</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Kebeles and development units where CLTSH is initiated and triggered

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>How many DU where CLTSH initiated?</th>
<th>How many DU triggered?</th>
<th>Total Initiates</th>
<th>Total Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>20</td>
<td>20</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afar</td>
<td>Asyaya</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>7</td>
<td>10</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>18</td>
<td>12</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>36</td>
<td>32</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>105</td>
<td>97</td>
<td>83</td>
<td>202</td>
</tr>
</tbody>
</table>

As is clearly seen in Table 8, Afar-Asyaya, Gambela-Gog and Somali-West Imay were UNICEF’s program areas where triggering of their development units was not performed to the maximum.
Organizing and conducting meetings with CLTSH team members and influential people in the respective development units immediately after triggering helped the CLTSH facilitators to consolidate, document and share the key outputs of the process of triggering. According to the finding of KII under this evaluation, meetings with CLTSH team members and influential people in the respective development units were conducted immediately after triggering in order to: 1. Finalizing the CAP, 2. Roles and responsibilities of the team members defined. 3. By law development.

The key informant interviews with health extension workers revealed that, out of a total number of 167 development units triggered using the CLTSH approach, 159 (95%) development units had reached their ODF status. As it is shown in Table 9, there were no development units that reached their ODF status in Afar-Asayta and Gambela-Gog woredas.

As it is indicated in Table 11 above, all development units that reached their ODF status stages before they were verified. The verification team verified that these development units were not organized uniformly according to the National CLTSH Verification Protocol. Some of them were verified by a combination of team members from CLTSH team, HP, Kebele Administration, kebele and woreda verification team some by only health extension workers and others by a verification team from woreda.

Accordingly, the time length between the triggering and the collection of data for this outcome evaluation ranged from one month in Gambela-Gog woreda to 3 months in Benishangul Gumuz-Assosa woreda. This finding revealed that all development units reached more than 6 months old (the maximum time length when triggered development units should reach at ODF status).

The key informant interviews with health extension workers revealed that, out of a total number of 167 development units triggered using the CLTSH approach, 159 (95%) development units had reached their ODF status. As it is shown in Table 10, there were no development units that reached their ODF status in Afar-Asayta and Gambela-Gog woredas.

As it is indicated in Table 11 above, all development units that reached their ODF status stages before they were verified. The verification team verified that these development units were not organized uniformly according to the National CLTSH Verification Protocol. Some of them were verified by a combination of team members from CLTSH team, HP, Kebele Administration, kebele and woreda verification team some by only health extension workers and others by a verification team from woreda.

### Table 9: Key outputs of triggering and meetings immediately after triggering

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>What was Output of triggering?</th>
<th>Did you conduct community Meeting after triggering?</th>
<th>What were issues discussed?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Community decision made</td>
<td></td>
<td>1. Finalizing the CAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Community action plan</td>
<td></td>
<td>2. Roles and responsibilities defined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. CLTSH team formed</td>
<td></td>
<td>3. By law development</td>
</tr>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Afar</td>
<td>Asayta</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>y</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>BG</td>
<td>Assosa</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Somali</td>
<td>West Imay</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>

### Table 10: Time length since development unit level triggering was conducted

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>When did you have the triggering conducted in your DN? (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>11</td>
</tr>
<tr>
<td>Afar</td>
<td>Asayta</td>
<td>18</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>13</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>24</td>
</tr>
<tr>
<td>BG</td>
<td>Assosa</td>
<td>36</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>2</td>
</tr>
<tr>
<td>Somali</td>
<td>West Imay</td>
<td>9</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>24</td>
</tr>
</tbody>
</table>

### Table 11: Open Defecation Free Status of Program kebeles

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>How many DU's became ODF</th>
<th>Did you do verification?</th>
<th>Who verified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>20</td>
<td>y</td>
<td>1. CLTSH Team</td>
</tr>
<tr>
<td>Afar</td>
<td>Asayta</td>
<td>0</td>
<td>NA</td>
<td>2. Health Extension Workers</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>7</td>
<td>y</td>
<td>3. Kebele Administrator</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>3</td>
<td>y</td>
<td>4. Kebele verification team</td>
</tr>
<tr>
<td>BG</td>
<td>Assosa</td>
<td>9</td>
<td>y</td>
<td>5. Woreda verification team</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Somali</td>
<td>West Imay</td>
<td>6</td>
<td>y</td>
<td>NA</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>36</td>
<td>y</td>
<td>1,2,3,5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>81</td>
<td>78</td>
<td>2,3,5</td>
</tr>
</tbody>
</table>
5.4. Findings Related to Post-triggering Phase

5.4.1. Post-triggering Capacity Building

In implementing CLTSH, people at grass root level were expected to identify and analyze their hygiene and sanitation related problems; develop a workable action plan; implement their plan; follow the implementation of their action plan; review and utilize the outcome in an equitable manner; enjoy the positive impact; and learn from their weaknesses and failures. In order to realize empowerment of people at grass root level and strengthen the post-triggering community led follow-up, organizing and conducting training of trainers (TOT) and training of facilitators (CLTSH team members) on community conversation (CC) and family dialogue (FD) was among other key activities expected to be produced during post-triggering period.

Assessment was conducted to find out if the respondents in the key informant interviews at health posts had received TOT on CC/FD, if the CLTSH team members were trained by trained trainers and what the training to the CLTSH team members was about? These are some of the key variables to be addressed in this section of the report.

Health extension workers from 8 evaluated kebeles had been training of trainers (TOT) on community conversation and family dialogue. On the other hand, seven trained health extension workers were able to train CLTSH team members from triggered development units. This result tells us that 9 out of the 16 triggered development units in UNICEF’s operation areas did not have CLTSH team members trained on CC/FD which was one of the decisive factors to realize the empowerment of people at the grass root level and the community led post-triggering follow-up. Community conversation (CC) and family dialogue were contents of training only in 5 training events provided to CLTSH team members. This is to say that among the 7 trained CLTSH team members only 5 had received the proper training supposed to be given.

Out of the 8 evaluated woredas in UNICEF’s operation areas, training of trainers (TOT) on CC/FD was given to experts from 5 woredas. Though all experts from all 8 evaluated woredas had not been trained as trainers, all of them claimed that they had facilitated training to health extension workers in their respective kebeles.

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you Received TOT on CC?</th>
<th>Did you ever train CLTSH Team?</th>
<th>What was the training on?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 3</td>
<td>Kebele 4</td>
</tr>
<tr>
<td>Tigray</td>
<td>Merb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Asaya</td>
<td>n</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Oromia</td>
<td>Bobo Gambela</td>
<td>y</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>Awabel</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Gamba</td>
<td>y</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Aleta Chuko</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

5.4.2. Post-triggering Follow-up

5.4.2.1. Community Led Follow-up: Community Conversation

According to the National CLTSH Implementation Guideline, post-triggering follow-up has been designed in such a way that the follow-up shall be done from two directions. The first is community-led follow-up in which residents of development units arrange regular community conversation sessions and CLTSH team members also do regular house-to-house visits and conduct family dialogue sessions mainly to follow the progress made in the implementation of community action plans. The second follow-up modality is organization level follow-up in which sector offices at all levels and other non-government bodies initiate capacity building programs to the front line CLTSH implementers and CLTSH team members and follow the progress and quality of CLTSH implementation. In this outcome evaluation, issues and concerns related to community led follow up through community conversation; family dialogue and development unit level reporting were addressed through development unit level focus-group discussions.

Table 13: Woreda Level TOT and Facilitator’s Training on CC/FD

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you Received TOT on CC?</th>
<th>Did you ever train HEWs and/or Teachers?</th>
<th>What was the training on?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 3</td>
<td>Kebele 4</td>
</tr>
<tr>
<td>Tigray</td>
<td>Merb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Asaya</td>
<td>n</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Oromia</td>
<td>Bobo Gambela</td>
<td>y</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>Awabel</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Gamba</td>
<td>Gog</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Aleta Chuko</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

Table 14: Community-Led Follow-up: Community Conversation

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have regular community Conversation in your DU?</th>
<th>Who facilitates you regular meetings?</th>
<th>What are the usual agendas during your regular meetings?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 3</td>
<td>Kebele 4</td>
</tr>
<tr>
<td>Tigray</td>
<td>Merb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Asaya</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Oromia</td>
<td>Bobo Gambela</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Awabel</td>
<td>y</td>
<td>y</td>
<td>2,4</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>y</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Gamba</td>
<td>Gog</td>
<td>y</td>
<td>y</td>
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<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Aleta Chuko</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

Table 12: Kebele Level TOT and Facilitator’s Training on CC/FD

### Table 13: Woreda Level TOT and Facilitator’s Training on CC/FD

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you Received TOT on CC?</th>
<th>Did you ever train HEWs and/or Teachers?</th>
<th>What was the training on?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 3</td>
<td>Kebele 4</td>
</tr>
<tr>
<td>Tigray</td>
<td>Merb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Asaya</td>
<td>n</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Oromia</td>
<td>Bobo Gambela</td>
<td>y</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>Awabel</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>Gamba</td>
<td>Gog</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Aleta Chuko</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

### Table 14: Community-Led Follow-up: Community Conversation

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have regular community Conversation in your DU?</th>
<th>Who facilitates you regular meetings?</th>
<th>What are the usual agendas during your regular meetings?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 3</td>
<td>Kebele 4</td>
</tr>
<tr>
<td>Tigray</td>
<td>Merb Lehe</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Asaya</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Oromia</td>
<td>Bobo Gambela</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Awabel</td>
<td>y</td>
<td>y</td>
<td>2,4</td>
</tr>
<tr>
<td></td>
<td>Assosa</td>
<td>y</td>
<td>y</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Gamba</td>
<td>Gog</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
<td>y</td>
</tr>
<tr>
<td></td>
<td>Aleta Chuko</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>
According to the finding of this outcome evaluation, out of all 16 development units where FGD was conducted in UNICEF’s operational areas 13 claimed to have had regular community conversation sessions. CLTSH team members were found to have been facilitators of CC in only 7 development units. In the remaining 6 development units, CC facilitators were found to have been either HEWs, kebele administrators or teachers in which case the process of community empowerment was affected negatively. Follow-up of the progress of community action plan(s), discussions on new concerns and preparation of new action plans were found to have been the usual agendas for CC sessions in 5 DUs.

5.4.2.2. Community-Led Follow-up: Family Dialogue

Family dialogue sessions facilitated by CLTSH team members is the second mechanism of community-led post-triggering follow-up suggested in the National CLTSH Implementation Guideline.

Table 15: Community-Led Follow-up: Family Dialogue

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do CLTSH teams have regular family dialogue sessions in your DU?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
</tr>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
</tr>
<tr>
<td>Afar</td>
<td>Assayta</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>y</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>y</td>
</tr>
<tr>
<td>BG</td>
<td>Assosa</td>
<td>y</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>n</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>y</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>y</td>
</tr>
</tbody>
</table>

As to the findings of this outcome evaluation, 11 development units where FGDs had been conducted were found to have had regular family dialogue sessions facilitated at household level. Progress of community action plan(s) at household level was found to have been the usual agendas discussed during FD sessions in 7 of 16 development units. In the remaining 4 development units where FD was found to have been conducted regularly, progress of community action plan(s) at household level was found not to have been discussed, which indicates that FD sessions in these DUs were not used for the purpose of community-led post-triggering follow-up.

5.4.2.3. Community-Led Follow-up: Reporting

Report produced by CLTSH team members and submitted to health extension workers were the other modality of community-led post-triggering follow-up suggested in the National CLTSH Implementation Guideline.

Table 16: Community-Led Follow-up: Reporting

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do CLTSH team members have a registration book (data store)?</th>
<th>Do CLTSH team members have a reporting format?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
</tr>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Afar</td>
<td>Assayta</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Amhara</td>
<td>Awabel</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>BG</td>
<td>Assosa</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gog</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Aleta Chuko</td>
<td>y</td>
<td>n</td>
</tr>
</tbody>
</table>

In this outcome evaluation, FGDs participants in only 2 of the 16 evaluated development units claimed that CLTSH team members had a registration book which served as a data store and only participants of only 1 FGD claimed that CLTSH team members had a reporting format to be submitted to the health extension workers. The absence of report format, production and submission of reports by CLTSH team members to the health extension workers shows how weak was the link between community led post-triggering follow up and organization level post-triggering follow up.

5.4.2.4. Post-triggering Follow-up: Organization Level

The second follow up modality is organization level follow-up in which sector offices at all levels and other non-government bodies initiate capacity building programs to the front line CLTSH implementers and CLTSH team members and follow the progress and quality of CLTSH implementation. In this outcome evaluation, issues and concerns related to organization level follow-up through regular review meetings, supportive supervision and regular reporting were addressed through the key informant interviews with at woreda health offices.
According to the finding of this outcome evaluation, 6 out of the 8 evaluated woreda health offices in UNICEF's operation areas had regular review meetings with health extension workers from the respective health posts. Gambela-Gog and Benishangul Gumuz-Assosa woredas did not use regular review meetings as a means of post-triggering follow-up. On the other hand, supportive supervision was used as an alternative means of post-triggering follow-up in all evaluated woredas. Though 6 of the 8 evaluated woredas had a reporting format prepared for the purpose of CLTSH programs, regular reporting was used as an alternative means of follow-up only in 3 of the 8 evaluated woredas. Box file was the most common way of data storage used by the 7 of the 8 evaluated woredas. On the other hand, computerized data storage was used in 4 of the 8 evaluated woredas.

Issues and concerns related to organization level follow-up through regular review meetings, supportive supervision and regular reporting obtained through the key informant interviews at kebele health post are addressed in this section of outcome evaluation report.

The finding of this outcome evaluation revealed that 11 health posts of the 16 evaluated health posts claimed that they had had regular review meetings at health post level with CLTSH team members. Eleven of the 16 health posts evaluated reported that they had been using supportive supervision as an alternative way of post-triggering follow-up to CLTSH programs. Reporting format prepared for CLTSH program was available in 6 of the 16 health posts and 7 of the 16 health posts evaluated reported that they used regular reporting as a way of post-triggering follow-up.

### Improved Sanitation

#### 5.4.3.1. Improved Sanitation: Kebele level

From our field observations of the CLTSH implementations, we learnt that many villages and kebeles were skipping back, after achieving ODF, and that people started practicing open defecation again. It was also realized that almost all household latrines constructed immediately after the triggering remained at their rudimentary stage (traditional open pit latrines), carrying a huge risk of disease transmission, collapsing and reversing into open pit latrines. This is true mainly due to the fact that the National CLTSH Implementation Guideline does not have a section addressing the post ODF phase of CLTSH implementation. After identifying this gap of the guideline, this CLTSH outcome evaluation is designed to assess variables related to improved sanitation. These variables were addressed in this evaluation through focus-group discussions at the development unit level and key informant interviews at the kebele and woreda levels.

#### Table 18: Organization Level Follow-up-Kebele level

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have regular review meeting with CLTSH team?</th>
<th>How do you conduct the review meeting?</th>
<th>What other methods of follow up you use for CLTSH program?</th>
<th>Is there reporting format prepared for CLTSH program?</th>
<th>How do you store your data?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
<td>1. Every week</td>
<td>1. Registration book</td>
<td>1. Registration book</td>
<td>1,2,3</td>
</tr>
<tr>
<td></td>
<td>Asayta</td>
<td>n</td>
<td>2. Two weeks</td>
<td>2. Box file</td>
<td>2. Box file</td>
<td>1,2,3</td>
</tr>
<tr>
<td></td>
<td>Oromia</td>
<td>3. Three to four weeks</td>
<td>3. Computerized data base</td>
<td>3. Computerized data base</td>
<td>1,2,3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>y</td>
<td>4. Five to six weeks</td>
<td>4. Media:</td>
<td>4. Media:</td>
<td>1,2,3</td>
</tr>
<tr>
<td></td>
<td>Gog</td>
<td>y</td>
<td>5. Whenever we have time</td>
<td></td>
<td></td>
<td>1,2,3</td>
</tr>
</tbody>
</table>

#### Table 19: Improved Sanitation: Willingness for Improved Sanitation

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you want to improve quality of latrines you have?</th>
<th>Who, do you think, will cover the cost for improving latrine?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
<td>1,2</td>
</tr>
<tr>
<td></td>
<td>Asayta</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Oromia</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Gog</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>SNDR</td>
<td>Oromia</td>
<td>n</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### Table 20: Improved Sanitation: Kebele level Supply Side

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Are there local artisans or small scale enterprises organized in your area for sanitation marketing?</th>
<th>What sanitation facilities are produced by small scale enterprises?</th>
<th>Do small scale enterprises mobilize the community for improved sanitation facilities?</th>
<th>What methods are used?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Mereb Lehe</td>
<td>y</td>
<td>1. Slab</td>
<td>1. Community meetings;</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Asayta</td>
<td>n</td>
<td>2. Drop-hole covers</td>
<td>2. Family dialogue;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Oromia</td>
<td>n</td>
<td>3. Hand washing facility</td>
<td>3. Printed material;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>n</td>
<td>4. Other;</td>
<td>4. Media;</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Gog</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The question of willingness to improve the conditions of the present household latrines and of responsibility to cover the cost of improving household latrines were discussed during focus-group discussions at all evaluated development units. Accordingly, all the participants in all focus-group discussions expressed their willingness to improve their own latrines. Furthermore, they agreed with the idea that the cost of improving household latrines to be covered by the households themselves. Despite the unanimous agreement by all participants in all FGDs, participants in one FGD from Afar-Asayta woreda refused to improve their household latrines.

### 5.4.3.2. Improved Sanitation: Kebele-Supply Side

Occurrence of local artisans and/or small scale enterprises, products of local artisans/ SSE, presence of distribution centers, initiatives for and community mobilization methods for improved sanitation are variables discussed in this section of the report.

The findings from the key-informant interviews with health extension workers at kebele level revealed that 5 of the 16 respondents in KIIIs reported the presence of local artisans/SSEs organized for sanitation marketing. Although willingness to improve household latrines was expressed unanimously in all UNICEF’s operation areas, local artisans/SSEs, the key forces to produce improved sanitation and hygiene facilities, were not present in 11 of the 16 kebeles.

Out of the 5 kebeles, where artisans/SSEs were reportedly present, four of them were engaged in the production of improved sanitation facilities but slabs and drop-hole covers were the only products reported. In addition to these, none of the artisans/SSEs were involved in promoting improved sanitation to the residents of the respective development units.

### 5.4.3.3. Improved Sanitation: Kebele-Demand Side

Presence of initiatives/programs with the intention of improving household level financial capacity to enable them to improve their sanitation facilities to the higher level of sanitation ladder, approaches to improve household level financial capacity and methods of scaling up of promising practices are variables addressed in this section of the report.

Accordingly, only 4 of the 16 evaluated kebeles in UNICEF’s program area had initiatives/program with the intention of improving household financial capacity and saving in general and equiv (Amharic word which stands for a kind of self-help group usually established as a traditional coping mechanism during financial shortage) are the approaches used in the initiatives. This finding clearly indicates that there is high level of willingness to have improved sanitation facilities which is highly compromised by lack of improved sanitation facilities supply.

Key informant interview to environmental health experts at woreda level on the presence of initiatives/programs with the intention of improving household level financial capacity to enable them to improve their sanitation facilities to the higher level of sanitation ladder and approaches used to improve household level financial capacity, revealed similar finding as that of the finding from kebele level.

### Table 21: Improved Sanitation: Kebele level Demand Side

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have program which enable households financially?</th>
<th>What approaches are you using to empower households financially?</th>
<th>What methods are you using to scale up your promising practices?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A (n)</td>
<td>B (n)</td>
<td>C (n)</td>
</tr>
<tr>
<td>Tigray</td>
<td>Mereb Leha</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Afar</td>
<td>Asayta</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Oromia</td>
<td>Babo Gambela</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Amhara</td>
<td>Wolaita</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>BS</td>
<td>Assosa</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Gambela</td>
<td>Gisg</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Somali</td>
<td>West-Imay</td>
<td>y</td>
<td>y</td>
<td>1,2</td>
</tr>
<tr>
<td>SNPN</td>
<td>Alema Chuko</td>
<td>y</td>
<td>n</td>
<td>1,2</td>
</tr>
</tbody>
</table>

### Table 22: Family Members Usually Used Defecate Location

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Bush, field, river, or pond</th>
<th>Dig and bury</th>
<th>Latrine at their own household</th>
<th>Neighbours household</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNICEF Treatment</td>
<td>24.5%</td>
<td>3.2%</td>
<td>64.1%</td>
<td>6.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>UNICEF Control</td>
<td>47.0%</td>
<td>1.6%</td>
<td>44.5%</td>
<td>5.5%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>
The path to the latrine been walked on recently

The path to latrines in the treatment and control areas were observed to check out whether the path to latrines has been walked on recently or not. Of the total of 454 latrines in the control woredas, 98.9% of paths were walked on recently. Whereas in the treatment woredas, 96.1% of the households the path to latrine was walked recently.

Latrines build in the last one year

Out of the total toilets assessed in the control and treatment areas of UNICEF, 44.8% of latrines in the control area were built in the last one year but 55.2% were not built in the same year. Besides, 39.6% of toilets in the treatment area were built in the past one year and 60.4% were not. 

Average amount of money spend to build the latrine

The average amount of money required to build/construct a latrine in the treatment and control woredas of UNICEF was assessed in this study. The data shows that, the mean of 251.9 ETB with SD + 749.9 was spent to construct a latrine in the control woredas; and 336.1 ETB with SD + 774.1 were spent in the treatment areas.

Materials bought for construction of the latrine

Different materials such as: cement, pre-made slab/squat plate, wood and sheet metal (for walls or roof, etc.) were used to construct latrines by households of both in the treatment and control woredas of UNICEF. The result shows that, majority of households did not buy any material (i.e. they used locally available materials to construct their latrine). In the control woredas, for example, only 4.6% of households bought cement, 8.8% pre-made slab/squat plate and 32.7% bought wood while constructing their latrine. Similarly in the treatment woredas, only 8.0% bought cement, 5.7% pre-made slab/squat plate and 34.3% bought wood to construct their latrine.

Average hours spent to build latrine

The average time required to build a latrine was assessed in the control and treatment woredas of the study. Accordingly, the average time spent was found to be 24.8 hours with SD + 15 for the control woredas, while 33.8 hours with SD + 36.9 was spent in the intervention woredas. The overall average time, spent to construct latrine in the study area was 29.3 hours with SD + 25.9.

Repair Latrine in the last one year

Households were asked whether they repaired their latrine in the past one year; and from the total households of UNICEF intervention and control woredas only 24.2% had repaired in the past one year. Out of these 28.4% of households in control woredas, and 20.0% in the intervention woredas had repaired their latrine in the past one year.

Latrine Improvements in the last year

Regarding latrine improvement in the past one year, 24.2% of households in the control and 18.0% in the intervention woredas of UNICEF had improved their latrine in the past one year. From the total households in control and intervention woredas latrine improvement was made in only 21.1% of households.

Latrine Improvements type in the last year

For the total households, in control and intervention woredas, who improved their latrine in the past one year, majority of households 66.3% made the improvement on the wall of their latrine. Similarly, 69.1% and 64.1% of households in the control and intervention woredas made improvement on the wall of their latrine, respectively.

Plan to Changing or improve latrine, within the coming one year

A total of 1104 study participants from UNICEF intervention and control woredas were asked about their plan to change or improve their latrine in the coming one year; accordingly, 61.5% from control and 51.0% from intervention woredas had plan to change or improve their latrine in the coming one year.

Plan to Changing or improve latrine, within the coming one year

Out of the total households who had planned to change or improve their latrine in the coming year, 72.6% proposed to change or improve their latrine. In the control woredas, 73.2% and 7.5% planned to change the wall of their latrine and replace the pit, respectively. Similarly, 72.6% and 9.1% of households planned to change the wall of their latrine and replace the pit, respectively.

Figure 14: Commonly Used Latrine Type by Households

<table>
<thead>
<tr>
<th>Latrine Type</th>
<th>Control (SD 15)</th>
<th>Treatment (SD 36.9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket toilet</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Traditional pit latrine</td>
<td>95%</td>
<td>88%</td>
</tr>
<tr>
<td>Standard Pit</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Ventilated improved</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Septic tank</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

 Responsible for the cost of improving sanitation of the village

Respondents in the control and intervention woredas have different opinion regarding responsibility of individuals and organizations to improve sanitation status of their village. The vast majority of respondents in (96.7%) from control and (94.9%) from intervention woredas believe that households are responsible for the cost of improving sanitation of the village.

Commonly Used Latrine Type Usually Used by Household

Traditional pit latrine was widely used type of latrine in the study area; whereas, latrine connected with septic tank and ventilation improved pit latrines were used by less than 3% of the population under this study. Traditional pit latrines were used by 94.9% and 88.3% of households in the control and intervention woredas, respectively.
Latrine Sharing with Other Households
In the study area, only 12.3% of households share their latrine with others. About 9.9% of households in control woredas, and 14.6% in the intervention woredas share latrine with other households.

Average Number of Households Share the Latrine
Households who share their latrine were asked the average number of hours they share the latrine. The average hour in the control woredas was found to be 2.7 hours with SD of + 2.5 hours; while in the intervention woredas it was 2.2 with SD of + 1.7 hours.

Relative Households Share the Latrine
In the control and intervention woredas, 80.1% of households share latrine with relative households. Households who share their latrine with relative households were 84.4% in the control area and 75.8% in the intervention woredas of UNICEF.

Latrine facility usage at all hours of the day and night
Regarding to latrine facility usage in all hours of the day and night was similar, 98.5% and 96.8% respectively, which means almost all of the respondents use their latrine all the time.

Average time to get to the latrine in minutes
The average time to get to the latrine was also assessed in this study; the total average minute to get to the latrine was 1.9 minutes with SD+ 2.2 minutes. In the control and intervention woredas, the average time to get latrine was 1.9 (SD= 1.9) and 1.9 (SD= 2.5) minutes, respectively.

Queueing or waiting to use latrine
Very small proportion of respondents, 7%, reported that there is a queue or waiting to use latrine. In the control and intervention woredas about 34(7.5%) and 40(6.2%) reported the need to queue to use latrine, respectively.

Average queueing or waiting duration in minutes to use the toilet
The average waiting time for the queue to use the latrine was also assessed in this study, the aggregate average of control and intervention woredas was 4.5 minutes with (SD= 2.1); while for the intervention woredas it was 3.3 (SD+ 2.4) minutes.

Latrine un-usability in the last one year
Regarding to latrine un-usability in the last one year, 4% and 6% of respondents were not using their latrine in the last one year in the control and intervention woredas respectively.

Generally, the result showed that latrine utilization in the last one year were 95%, which means 95% of the respondents were using their latrine in the last one year.

Reasons for latrine un-usability in the last one year
Respondents were asked about the reason for not using the latrine; roof and slab problems were major reason for latrine un-usability in the control and intervention woredas. In the control Woredas, 11(65%) and 5(25%) do not used latrine due to roof and slab problem, respectively. In the intervention woredas, 12(30.8%) and 22(56.4%) of respondents do not used latrine due to roof and slab problems, respectively.

Average number of weeks latrine unusable in the last one year
Of the two categories of woredas, on average 4.8 and 3.9 weeks latrines were not in use in control and intervention woredas respectively. The maximum weeks the latrines not in use in the control and intervention woredas were 27 and 14 weeks, respectively. The weeks variations among the control and intervention woredas were 5.7 and 3.8 (SD), respectively. The average number of weeks latrine unusable in the last one year was higher in the control woredas.

Family members defecate in the bush, field, or nearby river when away from home
About 10(23%) and 13(21%) respondent reported that family members defecate in the bush, field, or nearby river when away from home, in the control and intervention woredas, respectively. Generally, the result revealed that 22% of the respondent family members defecate in the bush, field, or nearby river when away from home.

A child 5 years or younger passed stool, location of faeces disposed (last time)
This study also assessed the place where the respondent disposed a child last time stool/ feces and most of the respondents, 171(94%) and 222(87%) in the control and intervention woredas disposed the child last time stool through being dropped into the toilet facility. Most 393(91%) of the respondents in the control and intervention woredas of UNICEF reported that disposed the child last time stool through being dropped into the toilet facility.

Household without Latrine
Average time to reach place of defecation in Minutes
Average time the community walks to reach place of defecation in UNICEF control and intervention woredas were 7.5 and 4.8 minutes, respectively. When we compare the two target woredas the community spend more time in

Table 23: Latrine facility usage at all hours - day and night

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Latrine facility usage at all hours of the day and night</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Count</td>
</tr>
<tr>
<td>UNICEF Control</td>
<td>448</td>
</tr>
<tr>
<td>UNICEF Treatment</td>
<td>628</td>
</tr>
</tbody>
</table>
Table 24: Reasons for not having a latrine

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Reasons for not having a latrine</th>
<th>Expensive</th>
<th>Latrine slabs are not there</th>
<th>Same one with</th>
<th>Does not see any benefits</th>
<th>There are higher benefits</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNICEF Treatment</td>
<td>Yes (%)</td>
<td>63.4%</td>
<td>28.4%</td>
<td>22.9%</td>
<td>32.2%</td>
<td>18.7%</td>
<td>22.6%</td>
</tr>
<tr>
<td>UNICEF Control</td>
<td>Yes (%)</td>
<td>64.1%</td>
<td>34.0%</td>
<td>23.2%</td>
<td>29.2%</td>
<td>16.2%</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Generally, the result showed that the average time spent was 5.8 minutes to reach to the latrine where they defecate, the maximum time taken were 45 minute and the time variation among woredas were6.3(SD).

### Interest to have own latrine

Regarding to households interest to have own latrine, in the control and intervention woredas were almost similar with93% and 92%, respectively. About 92.4% of the study respondent in the two categories reported that, interest to have own latrine.

### Reasons for not interested to have own latrine

Respondents who are not interested to have own latrines were asked about the reasons for not interested to have own latrine. The evaluation result revealed a similar finding in the control and intervention woredas that is: 65% due to expense, 43% due to not see benefit in having a latrine and 55% due to materials not available in the control woredas. In addition, 67% of respondent reported that due to satisfied with neighbor or shared latrine in the intervention woredas.

### Reasons to have own latrine

Regarding specific reasons to have own latrine in both woredas were almost similar, the main reason mentioned were health related reasons, and dignity, appearance, or social status, 89% and 90% and 51% and 65.8%, in the control and intervention woredas, respectively. Safety from others when walking to a shared latrine or the bush was mentioned.

**Generally, the respondent future plan to build a latrine in the coming one year was found be 75%.

Future plan to build a latrine in the coming one year

Generally, the respondent future plan to build a latrine in the coming one year was found to be 75%; which was 72% and 78.5% in the control and intervention woredas, respectively.

### Financial sources for the construction of latrine

Respondents were asked about the financial sources for the construction of latrine, and almost all 95% and 99% in the control and treatment woredas households were paid for the construction of their own latrine.

**the control woredas, the time variation also high among woredas with (SD=7.8 and 4.9) and the maximum time taken (45 Min) were higher in the control than intervention woredas.**

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5.4.5. Household Characters related to Hand-washing

![Hand-washing Characters of HHs](chart.png)

**Figure 15: Hand-washing Characters of HHs**

Household Characters Related to Hand Washing (UNICEF)

<table>
<thead>
<tr>
<th>Activity</th>
<th>UNICEF Control</th>
<th>UNICEF Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before eating</td>
<td>97.10%</td>
<td>95.00%</td>
</tr>
<tr>
<td>Before cooking or preparing food</td>
<td>56.20%</td>
<td>61.30%</td>
</tr>
<tr>
<td>After defecation/urination</td>
<td>45.70%</td>
<td>50.30%</td>
</tr>
<tr>
<td>After cleaning Child’s Bottom</td>
<td>27.10%</td>
<td>30.00%</td>
</tr>
</tbody>
</table>

However, if we compare UNICEF operational areas with the control areas, the percentage of households responded to ‘before eating’ is higher in control areas at 97% than in operational areas at 95%. After eating also received high percentage of responses from the interviewed households. About 91% of households in UNICEF operational areas responded that hand-washing ‘after eating’ are necessary while the corresponding figure in the control areas is 94%. In the morning is the third occasion where higher percentage of households reported to. About 67% of households from UNICEF operational areas reported that ‘in the morning’ is an important occasion for hand-washing where as 64% of households reported the same from the control areas.

On the other hand, ‘after defecation/urination’ was considered important by higher percentage of respondents in UNICEF operational areas at 50% than from control areas at 45%. Similarly, hand-washing ‘before cooking/preparing food’ received consideration by 61% of respondents from UNICEF operational areas as compared to the control areas at 56%. The percentage of households that responded hand-washing ‘after eating a child that has defecated’ as an important occasion is also higher from UNICEF operational areas at 30% as compared to the control areas at 27%. As shown in the Chart below, considering these four critical times at a time, UNICEF operational areas performed better than control except at hand-washing before eating where control area is better.

These could be due to the sanitation and hygiene education provided by the health extension workers. However, when we take all the four critical times simultaneously, almost the same percentage of households from UNICEF operational and control areas responded, 23 and 24%, respectively. In this regard, Asayta woreda performed the best at 48% while Awabel woreda performed the least at 0%. If comparison is to be made between agrarian and pastoralist areas, Asayta from Afar and West-
households were with washing stations near or inside the latrine while in the control areas only 26% of the surveyed households were with washing stations near or inside the latrine. The field team also noted interestingly that 86 and 88% of these hand-washing stations in UNICEF and control areas, respectively were with water. Water containing devices in these hand-washing stations were mostly tippy tap followed by bucket and wash basin in both areas. As to materials for hand washing, it was observed that 27 and 53% of the hand-washing stations were with soap and 31 and 6% were with ash in operational and control areas, respectively. The field team also made an observation at the hand-washing stations if they look like recently used. This was made to ensure if the stations are being used by household members. The observation witnessed that 83 and 79% of the hand-washing stations in the operational and control areas, respectively were used by family members recently. Use of hand-washing stations is higher in UNICEF operational areas as compared to control areas. It seems, in general that, though the presence of hand-washing station near or inside the latrine is very low, the already available hand-washing stations are well used by household members. So, there is a need to mobilize households for the establishment of hand washing stations.

Interaction:
The surveyed households were asked if they have visited kebele health posts during the last two months preceding the survey. The result shows that 51 and 43% of respondent from UNICEF operational and control areas, respectively, have visited kebele health posts during the last two months. Higher percentage of respondents visited health posts from UNICEF operational areas at 51% than control areas at 43%. Respondents were also asked if they were visited by health extension workers during the last two months. The result indicates that 66 and 48% of households from UNICEF operational and control areas, respectively reported to have been visited by health extension workers in the two months preceding the survey. The finding indicates that health extension workers paid more visits to households in UNICEF operational areas as compared to control areas. Further respondents were asked if somebody else visited and talked to them about sanitation and hygiene. The result again shows that higher percentage of households was visited by somebody in UNICEF operational areas at 34% as compared to 27% in the control areas to talk about sanitation and hygiene.

In relation to sharing information and discussion with neighbours, households were asked if they have discussed on sanitation or hand-washing issues with any of their neighbours in the last 2 months preceding the survey. The data shows that discussion with neighbours is higher in control area at 69% than in UNICEF operational areas at 50%. Apart from discussing on sanitation and hygiene issues with their neighbours, 30% of households in UNICEF operational areas helped other households in building or repairing their latrine during the last one year while only 19% did the same in the control areas.

Households were asked if their village is free from open defecation. Higher percentage of households from UNICEF project areas (54%) responded that their village is free from open defecation while the corresponding figure in the control areas is 23%. Households who responded that their village is free from open defecation were further asked when their village became open defecation free. In the operational areas, responses were six months (27.5%), one year (24.6%), two years (15%) and three years (27.2%).

On the contrary to their village, the vast majority (76%) of the interviewed households in the UNICEF operational areas claimed that their kebeles are free from open defecation while in the control area the percentage is lower at 68%. Given lower level ODF coverage at village level, higher coverage at kebele level is not expected as village is a sub-set of kebele. Hence, the high level ODF at kebele level might be due to misunderstanding of the question.

5.4.6. Household Characters related to Water Source and Safe Water Handling

The major sources for drinking water in UNICEF areas are public tapstand pipes, surface water and protected wells, jointly providing access to drinking water to nearly 72% of the population in both the intervention and control areas. Very negligible portion of the community has access to piped water, with some 7.5% in the control areas, and less than 1% in the intervention areas.

Main sources of water are shared with other households for 91% of cases, quite similar in both the intervention and control areas. The data suggests a significant difference in terms of practice of payment to main source of water by the population. While only 28.6% of the population in the treatment areas do pay for their main source of water, a higher portion of some 54.2% do in the control areas. The location of drinking water is out of their yard for the dominant majority (90%) of sampled households. The data also suggests that the very high portion of households in...
the treatment group (96.3%) have their water source out of their yard, than those in the control group (which is 85.4%). The average time required for a round trip to fetch water from main source is about half an hour (36 minutes), and is quite similar in both the treatment and control areas.

About 61% of sampled households do queue to get water at main source of water, with only slight difference on the averages between intervention and control woredas. However, the proportions of the population that have to wait to access water vary among woredas. The waiting time is about 37 minutes in average.

For some 83% of sampled households, the main source of water is usable year round. While the averages for the treatment and control areas demonstrate only slight differences from this figure, differences among woredas are quite high. Households facing difficulties using their main source of drinking water resort to other sources, dominantly to surface water.

On average, only few households (some 15%) do treat their drinking water. Slightly higher proportions of households in comparable control woredas have this experience of treating drinking water than in intervention woredas.

Those households who do treat their drinking water mainly use the method of chlorination (water guard) in 80.7% of cases in the control group and 45.5% of cases in the treatment group, followed by far by filtration using cloths. Most households (nearly 61%) in the sample woredas do have the experience of storing drinking water separately, with no difference between the intervention and control areas.

The idea is that without the intervention, the situation in the intervention areas would have been similar to the situation in the control group. Women have been the primary targets for information collection, since, given the local contexts and responsibilities related to sanitation and hygiene issues, they tend to have the best knowledge and recall memory of diarrhea and other health issues in the household or community. The study also used both qualitative and quantitative (including Focus Group Discussions, and Key Informant Interviews) tools of information gathering, and triangulating such information before arriving at certain conclusions on health outcomes.

In the UNICEF intervention areas, of all sampled households having children 5 years of age and below, about 29.1% have their children affected by diarrhea in two weeks of time prior this survey, compared to some 31.6% households facing this problem in comparable control areas. Some woredas in the intervention and control areas have had serious challenges than indicated in this average figure. The data suggests that problems are aggravated in woredas of the developing regions, particularly in Dubbi (Afar) and Menge (Benishangul Gumuz), with over 50% of cases, as well as Asayta (Afar) where nearly 72% of households face this challenge. From sampled households who have children with diarrhea, on average, children are affected 2.1 times in the last one year in the treatment areas, compared to only 2.3 times in the control areas.

On average, 88.8% households in the treatment areas took their children affected by diarrhea to health facilities for treatment, compared to some 86.6% households in the control areas. In 88.8% of cases in the treatment areas, children affected by diarrhea and taken to health facilities have been given some medicine, compared to some 95.5% in the control areas. Some variations are observable among woredas.

The average distance of a health facility from patients home is 6.1 kms in the treatment areas, compared to 4.1 kms in the control areas. This trend is also fairly reflected in the transportation costs to health facility centers. The average meal cost for the child and care-taker is estimated to be about ETB 24.5 per day in the treatment areas, compared to ETB 17.7 per day in the control areas; while the average accommodation (hotel/rent) cost per day is just ETB 2.5 in the treatment areas, compared to ETB 5.0 in the control areas with some difference among woredas. It should be noted that such costs can be underestimated if households do not spend in actual monetary values for such items (e.g. if households use their own food, travel on foot, and do not stay in standard hotels). The average number of days for treatment in health facilities is 3.7 in the treatment areas, compared to 4.5 in the control areas.

By far the highest cost related to diarrhea appear to be costs of medicine, which on average is ETB 34.4 in the treatment areas, compared to ETB 43.1 in control areas. It is followed by payments for health center for admitted child, laboratory, and consultation costs. It is noteworthy that such costs are relatively higher in the treatment areas than in the control areas (except for payment for medicine). There are variations among woredas.

Some 22.2% of households in the treatment areas have their children under 5 had eye infection in the last three months compared to 26% in the control areas. In 83.9% cases, under 5 children affected by eye infection were taken to health facilities in the treatment areas, compared to only 76.4% in the control areas.

Some 15.2% of sample households in the treatment areas have children affected by scabies/skin infection in the
last 3 months, compared to some 14.4% in the control areas. About 85.2% households have the experience of taking children infected by scabies to health facilities, compared to only 62.2% in the control areas.

Some 11.7% of households in the treatment areas have children having intestinal parasitic disease in last three months, compared to 8.8% in control areas. In 90.3% of cases in treatment areas, children affected by intestinal parasitic disease were taken to health facilities, and similar picture is observed in control areas.

The evidence suggests that overall nearly 96.0% of households in the treatment group and 94.4% in control group believe that people not using latrine are a health risk to their village. Fairly similar trends are observed in the case of household perception of not washing hands as a health risk to individual and family.

5.4.8. Socio-Economic Benefits
Time and Money Saving

Given that specially water and sanitation interventions often result in both health and non-health-related outcomes, benefits other than reducing the prevalence of diarrhea should be investigated in detail to present the full impact of intervention. Additional tools can reveal real (social) benefits of such interventions. These includes, for example, time and money saving if there was no incidence of diarrhea as a result of efficient implementation of recommended preventive WASH measures.

A simple exercise towards this is presented below. The exercise considers the potential money and time that could be saved if there was no diarrhea incidence. The data suggested that as a result of repeated incidence of diarrhea, patients and care takers have to travel to health centers, sometimes located at distant places, and incur costs related to transportation, hotel, meal, consultation/laboratory/medicine/hospital admission, and time (or opportunity cost). Considering such real costs, as well as translating the opportunity cost of time spent while visiting such distant health centers into monetary values (using minimum wage rates), one can arrive at the cost per diarrhea incidence per household. Multiplying this by the number of incidents an average family faces diarrhea cases per year; one can conclude that a household faces a total of ETB 403.45 per annum in UNICEF treatment areas, and ETB 457.93 per annum in the comparable control areas. That is, if there was no incidence of diarrhea as a result of efficient implementation of recommended preventive WASH measures, on average; households can save this resource, which could then be used to meet other livelihood needs. The details of the simple exercise are given on Annex 4.

It should be noted that such costs faced by households who visited health facilities (meal, transport, accommodation, etc.) can be an underestimation if households do not spend in actual monetary values for such items (e.g. if households use their own food, travel on foot, and do not stay in standard hotels). Also only the days spent at health facilities by one care taker are converted into opportunity costs, assuming that the child does not face any opportunity cost while in the treatment at health facility (i.e. the child does not perform any income generating activities). In reality, particularly in rural areas, very young children can also generate income, supporting their families, or getting employed by someone (shepherding, etc.). Furthermore, it should also be noted that since such calculation is based on actual costs of households who sought treatment at health facilities, this cannot reflect the full and real cost of households who did not seek to go to such treatments, resort to traditional means, and faced severe consequences of elongated illness, or even death.

1. The monthly minimum Wage Rate is ETB 420, for labourers and guards, who are expected to work for a maximum of 39 hours per week. The hourly minimum wage is thus calculated to be ETB 2.70 (http://www.wageindicator.org/main/salary/minimum-wage/ethiopia) (Information last updated on this page: 6-09-2014)

Economic and Social Empowerment of Women

In addition to such monetary valuations, we can consider other social benefits, with great implication on the gender dimension. Since in most cultures treating such health problems of children are faced by women, all the timing and monetary benefits would potentially accrue to women, thus there is a huge potential economic empowerment. Moreover, saving women’s time would mean availing some space where women can engage themselves in some income generating activities. Indeed, such time poverty faced by women has been one of the real challenges limiting women from taking full advantage of the microfinance and business opportunities now available to them throughout the country supported by government and NGOs. Improved Latrine facilities, not only improve the health situations of families, but also provide the most valuable social benefit of dignity, both for men and women, but may be more to the later.

5.5. Evaluation Criteria/Judgment Matrix
5.5.1. Relevance of CLTSH Program

Diarrhea is the second from the top ten causes of infant mortality in Ethiopia, CDC, 2013. About 88% of diarrhea-associated deaths are attributable to unsafe water, inadequate sanitation, and insufficient hygiene.

Most diarrheal germs are spread from the stool of one person to the mouth of another. These germs are usually spread through contaminated water, food, or objects. Considering this challenge as a priority, the Federal Ministry of Health adopted Community-Led Total Sanitation and Hygiene (CLTSH) approach in addressing hygiene and sanitation concerns; developed and endorsed the National CLTSH Implementation Guideline, National CLTSH Training Manual and National CLTSH Verification Protocol. CLTSH has been implemented with the support of UNICEF and GSF in eight regional states of the country.

According to the evaluation finding, 68% of the interviewed households accessed their drinking water from safe sources, 95% wash their hands before eating, 50% wash their hands after defecation and 61% wash their hands before preparing food. It is also encouraging that 64% of the interviewed households use their own latrine. Among those who do not have their own latrine, 93% are interested to have their own latrine in the near future, this will bring about universal latrine coverage in the very near future and a great potential to reduce diarrheal diseases and related infant and child mortality. The prevailing high coverage in latrine use and hand-washing is the result of CLTSH intervention. The fact that CLTSH is integrated in the health extension package, implemented by health extension workers, and health extension workers are working both in the UNICEF intervention and control areas, no significant difference was observed between the two. However, CLTSH is highly relevant not only for UNICEF project areas, but also for control areas in addressing the priority health problem of the communities.

The unique feature of CLTSH is its ability to empower community. CLTSH brought community members sit together and discuss on their own hygiene and sanitation problem, identify local resources, develop plan of action, implement and monitor results. It involves communities from the design to implementation and celebrating
5.5.2. Sustainability of CLTSH Program

Sustainability was considered both in the project design and implementation stage. The TOT training delivery approach can be considered an appropriate strategy to sustain the intervention results. The training approach implemented by the project where TOT was provided to government experts who in turn cascaded and provided the training to health extension workers and then to households. The project has built strong local implementation capacity particularly at woreda and kebele levels. The project also trained larger number of health extension workers that could teach, support and influence households in an effort to change hygiene and sanitation behaviour, build and use latrines. However, follow support supervision is still needed to health extension workers to maintain the quality of the community conversation and family dialog training as per the CLTSH implementation guideline. The evaluation pointed out that un trained facilitators are giving training to health extension works, and CLTSH implementation guideline is missed from health post, this will compromise the capacity of health extension workers and in turn the quality of CLTSH implementation.

Community participation and involvement is the focus of CLTSH approach. Communities identified their own hygiene and sanitation problems, developed plan of action, implement and monitor their implementation. Latrine construction was mainly from local materials, low labour, time and financial cost as it took on the average 34 hours to construct, mainly constructed by household members and neighbours and costs on the average only ETB 336. Though, 88% of households used traditional pit latrine, over 50% of the households with latrine to improve their latrine over the coming one year. 97% of respondents believed that the cost of the improving sanitation needs to be covered by the household or family members. This shows that CLTSH is a suitable intervention which will be handled and continued by the family members.

5.5.3. Effectiveness of CLTSH Program

As per the evaluation criteria outlined in the terms of reference, the effectiveness of the CLTSH project is determined based on the following two points:

**Demand creation for sanitation facilities**

Discussion at different (households, kebele and woreda) levels indicated that willingness to improve the quality of the present household latrine is very high and all discussion participants agreed that the cost of improving household latrine is to be covered by the households themselves. On the contrary, only few small scale enterprises are organized for sanitation marking. Though willingness to improve household latrine is almost universal in UNICEF operation areas, small scale enterprises to produce and promote sanitation and hygiene facilities are not available in 69% of the kebeles. So far, only 8% of the interviewed households in UNICEF operation areas have purchased cement and improve their latrines. This shows that the demand is already created but the supply is not adequate. So, the ability of the project in meeting the already created demand for improved sanitation materials was not effective.

**The appropriateness of CLTSH Program**

Improving hygiene and sanitation is one the priority agenda for government. The fact that CLTSH is implemented through the existing government structure and experts including health extension workers, resource utilization was in an efficient and integrated manner. CLTSH approach for example, utilized health extension workers at community level to train and mentor large number of households within a short period of time. Woreda level health professionals were also provided the necessary support to all health extension workers regardless of intervention and non-intervention areas. Even at federal and regional level, health professionals were supporting and providing technical support with no additional benefit for them. So, resource utilization was at minimal level due to the design and nature of CLTSH approach. CLTSH did not have separate project staff at woreda and region level, the project has been operated within the existing government structure and resource utilization was so minimal.

Furthermore, latrine construction, repair and improvement were done by household members and from locally available materials. The fund from donors was spent mainly on training; mentoring, experience sharing and media message transmission, capacity building and knowledge sharing. The cost of CLTSH implementation could have been huge if households were supported with latrine construction materials. The fact that CLTSH has been community led and integrated with health extension package, was also considered an important source of efficiency.

5.5.5. Impact of CLTSH Program

The impact of the project is mainly determined in term of diarrhea-associated under-5 child mortality. This will be assessed from the on-going EDHS 2016 survey. However, the survey results indicated that 30.2% children in the surveyed households were sick of diarrhea in within two weeks prior the survey, by far higher than EDHS-2005 at 18%. The difference between the UNICEF's control (31.6%) and intervention (30.2%) area is minimal which suggests that the UNICEF supported program didn't bring show any better result compared to that of comparison groups.

5.5.6. Equity in CLTSH Program

Community led total sanitation and hygiene (CLTSH) is designed in such a way that, its application amongst people living in the smallest, appropriate and manageable administrative units, like, development units in Ethiopia is expected to produce collective action to realize jointly developed community action plan; social pressure to ensure community led follow up of the progress through the implementation of community action plan; and social solidarity which it is possible to support and strengthen the participation of elders, children, women, men, people with disability, economically weak and strong residents and all marginalized people to take part in the process of triggering when major decisions are taking place and strengthening and development of culture of supporting each other among neighborhood. This nature of CLTSH ensures equitable service provision among all section of community at different level. In this particular evaluation the methodology used to select respondents to be interviewed at household level is random cluster sampling which allow the participation of all section of development unit residents and minimize biases due to selection.

Land fertility is a significant factor determining the productivity, and therefore the value attached to the land, but this cannot be observed from the available data. Regarding ownership of television and radio, some of the essential means of accessing news and information, the data from the sampled households indicate that on average some 16.1% in the treatment areas and 29.4% in the control areas own radios, and much fewer portion of the households (only about 3% in both the treatment and control areas) own television.
6. Evaluation Findings: GSF Programme Areas

6.1. Household Socio-Economic Characters

The survey covered a total of 1056 households in 8 woredas, 2 woredas (one treatment and one control) from each of the four regional state of the country (Tigray, Amhara, Oromia and SNNPR). Four of these woredas (Asgde Tsimbila/Tigray, Boloso Sore/SNNPR, Liben Chaquala/Oromia and Metema/Amhara) were getting various supports from GSF (hence, they are treatment woredas). The other four woredas (Damot Sore/SNNPR, Dembiya/Amhara, Gimbiuchu/Oromia and Laelay Adiyabo/Tigray) were not getting direct support from the donating organization, hence the title comparison Control woredas). Two kebeles from each of these woredas were considered for the survey.

The highest proportion of respondents (85.2%) was women. This is because, in line with the nature of household division of labor in most Ethiopian cultures where the role of women is dominant in tasks related to water, sanitation and hygiene, the survey sought, as much as possible, to gather the relevant data from female respondents, who tend to have the best information on household's behavior and experience on these issues. The average age of respondents is 36 years, and over 78% of them (80.7%) in the treatment areas and 76.3% in the control areas are married.

The average household size is 5.3, quite similar in the treatment and control areas. On average, some 33.5% of the respondents (30.5% in the treatment areas, and 36.6% in the control areas) are literate but with differences among woredas.

On average some 58.6% of the households (51.5% in the treatment areas, and 65.7% in the control areas) live in houses for more than a decade. There are variations among regions and woredas, though. It is interesting to note the mobility nature of households in woredas like Metema where the proportion of the households who lived in the same houses for 10 years is 23.5%.

About 74% of sampled households own houses with corrugated iron roof, which is one indicator of wealth status in many rural communities of Ethiopia. Some woredas like Liben Chaquala have relatively fewer households (less than 30%) owning houses with corrugated iron roof.

Households income is one of the most sensitive data in most surveys, partly because of respondents memory levels (often with no book of accounts) and partly because they tend to underestimate levels of income to avoid possible taxation. The available data indicate the average annual income to be ETB 13,244.7 in the treatment areas and 14,841.7 in the control areas, with substantial variations among woredas.

Some 90% of the households (84.8% in the treatment areas and 95.1% in the control areas) have their own land. The average farm land size is 2.18 ha in the treatment areas and 1.37 ha in the control areas, with considerable variations among woredas.

6.2. Findings Related to Pre-triggering Phase

Under the CLTSH outcome evaluation in WSSCC/GSF operational areas, heads of 8 health posts from 16 kebeles and environmental health experts from 4 woreda health offices were subjected for key informant interview. In addition to the key informant interview, 8 focus group discussions in 8 development units were facilitated by trained facilitators.

Presence of National CLTSH Implementation Guideline in the woreda health offices, consensus Building/advocacy workshop organized by health offices to all CLTSH stakeholders and CLTSH trainers and facilitators training conducted at woreda level prior to development units in the respective woredas subjected for triggering were taken as key variable to be discussed in the pre-triggering part of this report.

Presence of National Community Led Total Sanitation

Table 25: Presence of CLTSH Implementation Guideline at WHO and HP Levels

<table>
<thead>
<tr>
<th>Region</th>
<th>Do you have national CLTSH implementation guideline in your office?</th>
<th>WHO</th>
<th>Health Post</th>
<th>Kebele 1</th>
<th>Kebele 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td></td>
<td>y</td>
<td></td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td></td>
<td>y</td>
<td></td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Amhara</td>
<td></td>
<td>y</td>
<td></td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>SNNPR</td>
<td></td>
<td>y</td>
<td></td>
<td>y</td>
<td>n</td>
</tr>
</tbody>
</table>
to have the CLTSH implementation guideline in their offices. This finding shows that the actual implementers of CLTSH, the health extension workers, are not having and using the guide which is believed to have strong effect on the quality, effectiveness and sufficiency of CLTSH implementation at grassroots level.

According to the National CLTSH Implementation Guideline, consensus building/advocacy workshop at woreda level is a one-day workshop under the leadership of Woreda Health Offices and the support of all other CLTSH stakeholders in the respective woreda. The purposes of this workshop are to create a supportive environment within woredas for CLTSH implementation; to advocate for the need to address problems in environmental health arising from lack of proper sanitation and hygiene; to reflect collectively on the state of hygiene and sanitation; to agree on a way forward and to strengthen networks and partnerships to implement CLTSH at woreda, kebele and village levels.

According to the findings from the key informant interview respondents, consensus building/advocacy workshops were conducted in all 4 WSSCO/GSF’s evaluated woredas. These workshops were organized by mainly, woreda health offices in collaboration with water, education and finance and economy development offices. As it is clearly seen from Table 26, all expected outputs of consensus building/advocacy workshops were achieved only in Tigray-Asgede Tsimbla and Oromia-Liben Chuaquala woredas. Reaching a consensus that hygiene and sanitation as concern for the woreda; developing Joint CLTSH plan of action and establishing plan for efficient use of resources at woreda and kebele levels was achieved in SNNPR-Boloso Sore woreda. Through consensus building/advocacy workshop was conducted in Amhara-Metema woreda, the only output from this workshop was reaching consensus that hygiene and sanitation status as concern for the woreda.

The other key output of pre-triggering phase is receiving training of trainers (TOT) by region/ woreda service providers and facilitators training on community led total sanitation and hygiene implementation. Generally, there are 15 TOT facilitators and 63 trained facilitators in all woredas. According to the National CLTSH Implementation Guideline, TOT is not conducted at woreda level. Table 26, this study revealed that Tigray-Asgede Tsimbla, Oromia-Liben Chuaquala, and SNNPR-Boloso Sore woredas had at least one TOT and one Facilitators training. On the other hand, there was no TOT on CLTSH organized in Amhara-Metema woreda. Generally, there are 15 TOT facilitators and 63 trained CLTSH facilitators in WSSCO/GSF operation areas. This finding shows that CLTSH trainers and trained facilitators are available in all woredas, except in Metema, of the 4 evaluated regions which indicates that skilled personnel to implement CLTSH are not a problem.

6.3. Findings Related to Triggering Phase
After ensuring the presence of National CLTSH Implementation Guideline at all levels, preparing partnership and networking through consensus building workshop/advocacy workshop, ensuring pool of skilled personnel through training of trainers and facilitators on CLTSH, the next phase of community led total sanitation and hygiene implementation is triggering communities using CLTSH approach. To trigger a village, using Community-Led Total Sanitation tools, trained facilitators conduct TOT to all representatives of every household in a village for a meeting where they mobilize/inspire villagers to analyse the sanitation and hygiene condition of their village and decide to take action to stop open defecation and related behaviours. The purposes of triggering people living in a village are to enable them to identify, analyze and recognize their hygiene and sanitation conditions; find out solutions and map resources required to address their hygiene and sanitation problems; share responsibilities and draw up an action plan and plan for regular participatory review meetings.

Kebeles and development units where WSSCO/GSF’s CLTSH program is initiated and triggered, outputs of triggering, occurrence of community meetings immediately after triggering and its outputs were key variables to be addressed under the triggering phase part of this evaluation. This evaluation revealed that WSSCO/GSF’s CLTSH program is initiated in a total of 79 development units. Out of these development units where CLTSH is initiated, triggering was realized in 57 (72%) development units.

Following the process of triggering, all the expected outputs of triggering (1. Decisions made by participants, 2. Development unit level action plan prepared and 3. CLTSH Team formed by participants) were achieved in Amhara-Metema and SNNPR-Boloso Sore woredas. Following triggering, all the outputs of triggering were achieved in Oromia-Liben Chuaquala and Amhara-Metema woredas. Development unit level action plan was prepared in all evaluated woredas of WSSCO/GSF operation areas.

Having development unit level action plan, which is the key output of the processes of triggering, provide guidance to service providers during implementation and follow-up of CLTSH program.

Organizing and conducting meeting with CLTSH

Table 27: Kebeles and development units where CLTSH is initiated and triggered

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>How many DU where CLTSH initiated?</th>
<th>How many DU were triggered?</th>
<th>Total Initiated</th>
<th>Total Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
</tr>
<tr>
<td>Tigray</td>
<td>Asgede Tsimbla</td>
<td>33</td>
<td>3</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuaquala</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>5</td>
<td>12</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Boloso Sore</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 26: Findings from KII respondents from woreda health offices

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you organized CBW/AW?</th>
<th>What were the outcomes of CBW/AW?</th>
<th>Were there TOT on CLTSH</th>
<th># of trainers you have in your</th>
<th>Was there CLTSH</th>
<th># of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Asgede Tsimbla</td>
<td>1,2,3,4</td>
<td>1. Consensus was reached of hygiene and sanitation as concern for the woreda</td>
<td>y</td>
<td>6</td>
<td>y</td>
<td>21</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuaquala</td>
<td>1,2,3,4</td>
<td>2. Joint plan was developed jointly</td>
<td>y</td>
<td>3</td>
<td>y</td>
<td>24</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>1</td>
<td>3. Plan for efficient use of resource was planned</td>
<td>n</td>
<td>NA</td>
<td>y</td>
<td>4</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Boloso Sore</td>
<td>1,2,3</td>
<td>4. Coordination structure was established</td>
<td>y</td>
<td>6</td>
<td>y</td>
<td>14</td>
</tr>
</tbody>
</table>
team members and influential people in the respective development units immediately after triggering helps the CLTSH facilitators to consolidate, document and share the key outputs of the process of triggering. According to the finding of KII under this evaluation, meeting with CLTSH team members and influential people in the respective development units were conducted immediately after triggering in all WSSCC/GSF’s development units. Finalizing DU level action plan was achieved in Tigray-Asgede Tsimbla, Oromia-Liben Chuquala, and SNNPR-Bolooso sore. Roles and responsibilities of CLTSH team members were defined only in Oromia-Liben Chuquala and SNNPR-Bolooso sore. By-law was drafted only in Amhara-Metema woreda. The other hand, DU level action plan was not finalized in Amhara-Metema woreda which indicates that the meeting conducted was ended without any output.

Under this outcome evaluation, it was possible to organize and facilitate 8 focus group discussions at DU level in WSSCC/GSF operation areas. The time length between development unit level triggering and this survey was one of the key variables addressed with this outcome evaluation.

Table 29: Time length between development unit level triggering and this outcome survey

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>When did you have the triggering conducted in your DU? (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Development Unit 1</td>
</tr>
<tr>
<td>Tigray</td>
<td>Asgede Tsimbla</td>
<td>22</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuquala</td>
<td>NA</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>30</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Bolooso Sore</td>
<td>36</td>
</tr>
</tbody>
</table>

Accordingly, the time length since the time triggering was conducted and prior to the time of data collection for this outcome evaluation ranges from ten months in Amhara-Metema to 36 months in Tigray-Asgede Tsimbla and SNNPR-Aleta Chuko woreda. This finding revealed that all development units triggered are more than 6 months old (the maximum time length when triggered development units should reach ODF status is 6 months).

**Outputs from Triggered Development Units**

Out of total 57 development units, in WSSCC/GSF’s operation area, triggered using CHTSH approach, key informant interview with health extension workers revealed that 49(86%) development units have reached their ODF status.

Table 30: Open Defecation Free Status of program kebeles

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>How many DUs became ODF</th>
<th>Did you do verification?</th>
<th>Who verified?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,2,3,4,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tigray</td>
<td>Asgede Tsimbla</td>
<td>3</td>
<td>15</td>
<td>y</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuquala</td>
<td>8</td>
<td>0</td>
<td>y</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>12</td>
<td>5</td>
<td>y</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Bolooso Sore</td>
<td>5</td>
<td>1</td>
<td>y</td>
</tr>
</tbody>
</table>

According to the finding of this evaluation and as it is indicated in Table 30, all development units that reach to their ODF statuses were verified before they had been certified. The verification team verified these development units were not organized uniformly as it is indicated in the National CLTSH Verification Protocol. Some of them use combination of team members from CLTSH team, HP, Kebele Administration, kebele and woreda verification team and some were verified by only health extension workers others by a verification team from woreda.

**6.4. Findings Related to Post-triggering Phase**

**6.4.1. Post-triggering Capacity Building**

In implementing CLTSH, people at grass root level are expected to identify and analyze their hygiene and sanitation related problems; develop workable action plan; implement and follow the implementation of their action plan; review and utilize the outcome in equitable manner and enjoy the positive impact and learn from their weaknesses and failure. In order to realize empowerment of people at grass root level
and strengthen the post-triggering community led follow-up, organizing and conducting training of trainers (TOT) and training of facilitators (CLTSH Team members) on community conversation (CC) and family dialogue (FD) are among other key activities expected to be produced during post-triggering period. Variables related to, if the respondents of key informant interview at health posts have got TOT on CC/FD, CLTSH team members trained by trained trainers and if CLTSH team members are trained what were the trainings about? These are some of the key variables to be addressed in this section of the report. 

Among all 8 evaluated kebeles in WSSCGSF’s operation areas, health extension workers from 7 out of 8 health posts have got training of trainers (TOT) on community conversation and family dialogue. On the other hand, all, but one, health extension workers (including those who are not trained as trainer) were able to train CLTSH team members from their respective triggered development units. This result tells us that 7 of the 8 triggered development units in WSSCGSF’s operation areas have CLTSH team members trained on CC/FD which is key instrument for post-triggering community led follow-up. Out of the evaluated 4 woredas in WSSCGSF’s operation areas, training of trainers (TOT) on CC/FD was received by experts from all 4 woredas. All experts from all 4 evaluated woredas claim that they have facilitated training to health extension workers in their respective kebeles.

As it is observed from Table 32, out of the 4 training sessions organized for health extension workers only 3 of them considered community conversation and 2 of them considered family dialogue as key contents of the trainings. Training session in SNNPR - Boloso Sore woreda did not address both community conversation (CC) and family dialogue (FD). This finding tells us that some of the training sessions did not consider the key contents which characterize the post triggering capacity building elements indicated in the National CLTSH Implementation Guideline.

Table 32: Woreda Level TOT and Facilitators’ training on CC/FD

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Have you received TOT on CC?</th>
<th>Received TOT on CC in Kebele?</th>
<th>Did you ever train HEWs and/or Teachers?</th>
<th>What was the training on?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Aseged Tambi</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>1,2,3,4</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuquaila</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>1,2,3,4</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>1,4</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Boloso Sore</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 33: Community Led Follow up: Community Conversation

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have regular community conversation in your DUT?</th>
<th>Who facilitates your regular meetings?</th>
<th>What are the usual agendas during your regular meetings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Aseged Tambi</td>
<td>y</td>
<td>1. CLTSH team members</td>
<td>1. Follow up of the progress of community action plan(s)</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuquaila</td>
<td>y</td>
<td>2. Health extension workers</td>
<td>2. Discussions on new concerns</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>3. Teachers</td>
<td>3. Preparing new action plan</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Boloso Sore</td>
<td>y</td>
<td>4. Kebele Administrator</td>
<td></td>
</tr>
</tbody>
</table>

6.4.2. Post-triggering Follow-up

6.4.2.1. Community-Led Follow-up: Community Conversation

According to the National CLTSH implementation Guideline, post-triggering follow-up is designed in such a way that the follow up shall be done from two directions. The first is community led follow-up in which residents of development units arrange regular community conversation sessions and CLTSH team members also do regular house to house visit and conduct family dialogue sessions mainly to follow the progress made in the implementation of community action plans. The second follow-up modality is organization level follow-up in which sector offices at all levels and other non-government bodies initiate capacity building programs to the front line CLTSH implementers and CLTSH team members and follow the progress and quality of CLTSH implementation. Issues and concerns related to community-led follow-up through community conversation; family dialogue and development unit level reporting are addressed in this outcome evaluation through development unit level focus group discussion.

According to the finding of this outcome evaluation, out of all 8 development units where FGD was conducted in WSSCGSF’s operational areas 5 claim to have regular community conversation sessions. CLTSH team members are found to be facilitators of CC in only 1 development units. In the remaining 7 development units CC facilitators are either HEWs, kebele administrators or teachers which affects the process of community empowerment negatively. Follow-up of the progress of community action plan(s), discussions on new concerns and preparing new action plan were found to be the usual agendas for CC sessions in 2 DUs and in most of the other DUs, follow-up of the progress of community action plan(s) was found to be the usual agenda.

6.4.2.2. Community Led Follow up: Family Dialogue

Family dialogue sessions facilitated by CLTSH team members are the second mechanism of community led post-triggering follow-up suggested in the National CLTSH Implementation Guideline.

Table 33: Community Led Follow-up: Community Conversation

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do you have regular community conversation in your DUT?</th>
<th>Who facilitates your regular meetings?</th>
<th>What are the usual agendas during your regular meetings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Aseged Tambi</td>
<td>y</td>
<td>1. CLTSH team members</td>
<td>1. Follow up of the progress of community action plan(s)</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuquaila</td>
<td>y</td>
<td>2. Health extension workers</td>
<td>2. Discussions on new concerns</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>3. Teachers</td>
<td>3. Preparing new action plan</td>
</tr>
<tr>
<td>SNNPR</td>
<td>Boloso Sore</td>
<td>y</td>
<td>4. Kebele Administrator</td>
<td></td>
</tr>
</tbody>
</table>
As to the findings of this outcome evaluation, 4 out of 8 development units where FGDs were conducted are found to have regular family dialogue sessions facilitated at household level. Discussing progress made in implementing community action plan at household level was not found to be agendas for discussion during FGD sessions in any of development units. This finding indicates that CC sessions in these DUs were not used for the purpose of community led post-triggering follow-up. Household and compound cleanliness and hand-washing were found to be common agendas during family dialogue session.

6.4.2.3. Community-Led Follow-up: Reporting

Report produced by CLTSH team members and submitted to health extension workers are the other modality of community-led post-triggering follow-up suggested in the National CLTSH Implementation Guideline.

According to the finding of this outcome evaluation, 2 out of the 4 evaluated woreda health offices in WSSCCGSFs operation areas have regular review meetings to health extension workers from the respective health posts. Amhara-Metema and SNNPR-BoloSo Sore woredas are not using regular review meetings as a means of post-triggering follow-up. On the other hand, supportive supervision and regular reporting are found to be alternative means of post-triggering follow-up in all evaluated woredas. All of evaluated woredas have reporting format prepared for the purpose of CLTSH programs and box file is the commonest way of data storage used by all of evaluated woredas. On the other hand computerized data storage is used in 2 out of 4 evaluated woredas.

Issues and concerns related to organization level follow-up through regular review meetings; supportive supervision and regular reporting obtained through key informant interview at kebele health post are addressed in this section of outcome evaluation report.

In this outcome evaluation, FGDs participant in only 2 of the 6 evaluated development units claim that CLTSH team members have registration book which serves as data store and participants of only 1 FGD claim that CLTSH team members have reporting format to be submitted to the health extension workers. The absence of report format, production and submission of reports by CLTSH team members to the health extension workers show the weakness in community led post-triggering follow-up and organization level post-triggering follow-up.

6.4.2.4. Post-triggering Follow-up: Organization Level

The second follow-up modality is organization level follow up in which sector offices at all levels and other non-government bodies initiate capacity building programs to the front line CLTSH implementers and CLTSH team members and follow the progress and quality of CLTSH implementation. Issues and concerns related to organization level follow up through regular review meetings; supportive supervision and regular reporting are addressed in this section of outcome evaluation report through key informant interview at woreda health offices.

### Table 34: Community Led Follow-up: Family Dialogue

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do CLTSH teams have regular family dialogue sessions in your DU?</th>
<th>Kebele 1</th>
<th>Kebele 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Asgode Tumbla</td>
<td>n</td>
<td>y</td>
<td>NA</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuqala</td>
<td>n</td>
<td>n</td>
<td>NA</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>y</td>
<td>4,5</td>
</tr>
<tr>
<td>SNNPR</td>
<td>BoloSo Sore</td>
<td>y</td>
<td>n</td>
<td>2,3,4,5</td>
</tr>
</tbody>
</table>

### Table 35: Community Led Follow-up: Reporting

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>Do CLTSH team members have registration book (data store)?</th>
<th>Do CLTSH team members have reporting format?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
</tr>
<tr>
<td>Tigray</td>
<td>Asgode Tumbla</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuqala</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>n</td>
</tr>
<tr>
<td>SNNPR</td>
<td>BoloSo Sore</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

### Table 36: Organization Level Follow-up - Woreda Level

<table>
<thead>
<tr>
<th>Region</th>
<th>Woreda</th>
<th>How do you conduct the review meetings?</th>
<th>What other methods of follow up do you use for CLTSH program?</th>
<th>How do you store your data?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Asgode Tumbla</td>
<td>1. Every week</td>
<td>Supportive supervision</td>
<td>1. Registration book</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Every two weeks</td>
<td>Regular reporting</td>
<td>2. Box file</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Three to four weeks</td>
<td></td>
<td>3. Computerized data base</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben Chuqala</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNNPR</td>
<td>BoloSo Sore</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As to the findings of this outcome evaluation, 4 out of 8 development units where FGDs were conducted are found to have regular family dialogue sessions facilitated at household level. Discussing progress made in implementing community action plan at household level was not found to be agendas for discussion during FGD sessions in any of development units. This finding indicates that CC sessions in these DUs were not used for the purpose of community led post-triggering follow-up. Household and compound cleanliness and hand-washing were found to be common agendas during family dialogue session.
Outcome Evaluation of CLTSH Program in Ethiopia from 2012-2015

Table 37: Organization Level Follow up - Kebele Level

<table>
<thead>
<tr>
<th>Region</th>
<th>Woroda</th>
<th>Do you have regular review meetings with CLTSH team?</th>
<th>How often do you conduct the review meetings?</th>
<th>What other methods of follow up do you use for CLTSH program?</th>
<th>Is there reporting format prepared for CLTSH program?</th>
<th>How do you store your data?</th>
<th>Table 38: Improved Sanitation: Willingness for Improved Sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
<td>Kebele 2</td>
<td>Kebele 1</td>
</tr>
<tr>
<td>Tigray</td>
<td>y</td>
<td>y</td>
<td>3</td>
<td>4</td>
<td>1,2</td>
<td>1,2</td>
<td>n</td>
</tr>
<tr>
<td>Oromia</td>
<td>L i b e n</td>
<td>Choukula</td>
<td>y</td>
<td>NA</td>
<td>3</td>
<td>1,2</td>
<td>1,2</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>n</td>
<td>2</td>
<td>NA</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SNPP</td>
<td>So lo to</td>
<td>Sore</td>
<td>y</td>
<td>n</td>
<td>2</td>
<td>NA</td>
<td>1,2</td>
</tr>
</tbody>
</table>

Accordingly, the finding of this outcome evaluation revealed that 5 health posts out of 8 evaluated health posts claim that they have regular review meetings at health post level for CLTSH team members. All of the health posts evaluated reported that they are using supportive supervision as an alternative way of post-triggering follow-up to CLTSH programs. Five out of 8 health posts evaluated reported to use regular reporting as a way of post-triggering follow-up. Reporting format prepared for CLTSH program is available in 5 of the 8 health posts. Registration book is found to be the commonest means of data store at health post level.

6.4.3. Improved Sanitation

6.4.3.1. Improved Sanitation: Kebele

From practice and observation, our experience in implementing CLTSH showed us that it is common to see many villages and kebeles slipping back, after achieving ODF, and people started practicing open defecation again. It is also a reality that almost all household latrines constructed immediately after triggering remained at their rudimentary stage (traditional open pit latrines) carrying huge risk of disease transmission, collapsing and reversing in to open pit latrine. This is true mainly due to the fact that the National CLTSH Implementation Guideline does not have a part in addressing the post ODF phase of CLTSH implementation. After identifying this gap of the guideline, this CLTSH outcome evaluation is designed to assess variables related to improved sanitation. These variables were addressed in this evaluation through focus group discussion at development unit level and key informant interviews at kebele and woreda levels.

Williness to improve the quality of present household latrine and whose responsibility it is to cover the cost of improving household latrine were variables discussed during focus group discussion at all evaluated development units. Accordingly, all participants in 7 of the 8 focus group discussions showed their willingness to improve their latrine and in the same way, all participants in 5 focus group discussion agreed that the cost of improving household latrine to be covered by the households themselves. Despite the unanimous agreement by all participants of all FGDs, participants of one FGD from Tigray - Asgede Tsimba woreda refused to improve their household latrines.

Occurrence of local artisans and/or small scale enterprises; products of local artisans/SSEs; presence of distribution centers; initiatives for and methods of community mobilization for improved sanitation were variables to be addressed in this section of the report.

As to the finding of key informant interview to health extension workers at kebele level, respondents of 1 out of 8 KIIs reported that there is local artisans/SSEs organized for sanitation marketing. Though willingness to improve household latrines is unanimous in WSSC/OWP’s operation areas local artisan/SSEs, key factors to produce improved sanitation and hygiene facilities, are not present in 7 out of 8 kebeles.

Local artisans/SSEs present in one of evaluated kebele are engaged in the production of slab and drop-hole covers. In addition to these, those artisans/SSEs are not involved in promoting improved sanitation to the residents of the respective development units.
6.4.3.2. Improved Sanitation: Kebele-Supply Side

6.4.3.3. Improved Sanitation: Kebele-Demand Side

Presence of initiatives/programs with the intention of improving household level financial capacity to enable them to improve their sanitation facilities to the higher level of sanitation ladder; approaches to improve household level financial capacity and methods of scaling up of promising practices are variables addressed in this section of this report.

Table 39: Improved Sanitation: Kebele Level Supply Side

<table>
<thead>
<tr>
<th>Region</th>
<th>Wolde</th>
<th>Are there local artisans or small scale enterprises organized in your area for sanitation marketing?</th>
<th>What sanitation facilities are produced by small scale enterprises?</th>
<th>Do small scale enterprises have distribution centers?</th>
<th>Do small scale enterprises mobilize the community for improved sanitation facilities?</th>
<th>What methods are used?</th>
</tr>
</thead>
</table>

Table 40: Improved Sanitation: Kebele Level Demand Side

<table>
<thead>
<tr>
<th>Region</th>
<th>Wolde</th>
<th>Do you have programs which empower households financially?</th>
<th>What approaches are you using to empower households financially?</th>
<th>What methods are you using to scale up your promising practices?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Asgede</td>
<td>n</td>
<td>1. Saving</td>
<td>1. Saving</td>
</tr>
<tr>
<td>Oromia</td>
<td>Liben</td>
<td>n</td>
<td>1. Dig</td>
<td>2. Family dialogue</td>
</tr>
<tr>
<td>Amhara</td>
<td>Metema</td>
<td>y</td>
<td>1. Latrine</td>
<td>3. Media promotion and Advocacy</td>
</tr>
</tbody>
</table>

As can be observed from Table 40 above, only 2 out of 8 evaluated kebeles in WSSCCGFS’s program areas have initiatives/program with the intention of improving household financial capacity and saving in general and equi (traditional coping mechanism during financial shortage through self-help groups) are the approaches used in the two initiatives. This finding clearly indicates that there is high level of willingness to have improved sanitation facilities which is highly compromised by lack of improved sanitation facilities supply and absence of initiatives to improve households financial capacity for improved sanitation.

Key informant interview to environmental health experts at woreda level on the presence of initiatives/programs with the intention of improving household level financial capacity to enable them to improve their sanitation facilities to the higher level of sanitation ladder and approaches used to improve household level financial capacity, revealed similar finding as that of the finding from kebele level.

6.4.4. Household Characters Related to Sanitation Family Members Usually Used Defecate Location

This study assessed places of defecation for both GSF intervention and control woredas. Out of the total households in the control woredas, 18.8% defecate in open field (under bushes, field or river); whereas, 72.5% use their own latrine. Whereas, in the intervention woredas 30.3% of households defecate in an open field and 57.6% use their own latrine for excreta disposal. The remaining households use latrine from their neighbour, dig and bury or use communal latrine for defecation. The findings of this evaluation are similar to that of findings from National WASH Inventory (April; 2013) 60% use any type of latrine and with the report from JMP 2015 (MDG Assessment) 34% of Ethiopian rural community are still using open field for defecation.

The path to the latrine has been walked on recently

The path to latrines in the treatment and control areas were observed to check whether the path to latrines has been walked on recently or not. Out of the total 304 latrines in the control woredas, 96.6% of paths have been walked on recently. Whereas, in the treatment woredas, 93.1% of the households the path to the latrine have walked recently.

Latrines build in the last one year

Out of the total toilets assessed both in the control and treatment areas of GSF, 32.9% of latrines in the control area were built in the last one year; whereas, 36.8% of latrines in the treatment area were built in the past year.

Average amount of money spent to build the latrine

The average amount of money required for the construction latrine in the treatment and control woredas of GSF was assessed in this study. The data show that, the mean of 188.7 ETB with SD + 440.1 was spent to construct a latrine in the control woredas; and 279.1 ETB with SD + 771.6 were spent in the treatment areas.

Materials bought for construction of the latrine

Different materials such: cement, pre-made slab/squat plate, wood and sheet metal (for walls or roof, etc.) were used to construct latrines by households of both in the control and treatment woredas of GSF. The result shows that, majority of households did not buy any material (i.e. they used locally available materials to construct their latrine).

In the control woredas, for example, only 3.7% of households bought cement, 4.4% pre-made slab/squat plate and 21.9% bought wood while constructing their latrine. Similarly, in the treatment woredas, only 6.9% bought cement, 7.6% pre-made slab/squat plate and 25.3% bought wood to construct their latrine.

Table 41: Defecation Sites Usually Used by Family Members

As can be observed from Table 41 above, only 2 out of 8 evaluated kebeles in WSSCCGFS’s program areas have initiatives/program with the intention of improving household financial capacity and saving in general and equi (traditional coping mechanism during financial shortage through self-help groups) are the approaches used in the two initiatives. This finding clearly indicates that there is high level of willingness to have improved sanitation facilities which is highly compromised by lack of improved sanitation facilities supply and absence of initiatives to improve households financial capacity for improved sanitation.

Key informant interview to environmental health experts at woreda level on the presence of initiatives/programs...
Average hours spent to build latrine

The average time required to build a latrine was assessed in the control and treatment woredas of the study. Accordingly, the average time spent was found to be 32.1 hours with SD + 32.5 for the control woredas, while 34.5 hours with SD + 33.5 was spent in the intervention woredas. The overall average time, spent to construct latrine in the study area was 33.3 hours with SD + 33.0 hours.

Repair Latrine in the last one year

Households were asked whether they repaired their latrine in the past one year; and from the total households of GSF intervention and control woredas only 16.3% had repaired their latrine in the past one year. Out of these, 13.1% of households in control woredas, and 19.4% in the intervention woredas repaired their latrine in the past one year.

Latrine Improvements in the last one year

Regarding latrine improvement in the past one year, 9.1% of the households in the control and 19.7% in the intervention woredas of GSF improved their latrine in the past one year. From the total households in the control and intervention woredas latrine improvement was made in only 14.4% of the households.

Latrine Improvements type in the last year

From the total households, in control and intervention woredas, that improved their latrine in the past one year, majorly 76.1% made the improvement on the wall of their latrine. Similarly, 77.1% and 75.0% of the households in the control and intervention woredas made improvement on the wall of their latrine, respectively.

Plan to change or improve latrine, within the coming one year

A total of 1104 study participants from GSF intervention and control woredas were asked about their plan to change or improve their latrine in the coming one year; accordingly, 52.5% from control and 56.3% intervention woredas had a plan to change or improve their latrine in the coming one year.

Plan to change or improve latrine, within the coming one year

Out of the total households that had planned to change or improve their latrine in the coming one year, 67.8% of them proposed to change the wall of their latrine. In the control woredas, 70.1% and 9.5% planned to change the wall of their latrine and replace the pit, respectively. Similarly, 65.5% and 4.7% of households planned to change the wall of their latrine and replace the pit, respectively.

Responsible for the cost of improving sanitation of the village

Respondents in the controlled and intervention woredas have different opinion regarding responsibility of individuals and organizations to improve sanitation status of their village. The vast majority of respondents in 84.3% from control and 81.6% from intervention woredas believe that households are responsible for the cost of improving sanitation of the village.

Commonly Used Latrine Type by Household

Traditional pit latrine was a widely used type of latrine in the study area; whereas, latrine connected with septic tank and ventilation improved pit latrines were used by less than 3% of the population under this study. Traditional pit latrines were used by 91.6% and 81.9% of households in the control and intervention woredas, respectively.

Latrine Sharing with Other Households

In the study area, only 13.3% of households share their latrine with others. About 12.5% of the households in the control woredas, and 14.1% in the intervention woredas share latrine with other households.

Average Number of Households that Share the Latrine

Households that share their latrine were asked about the average number of hours they share the latrine. The average hour in the control woredas was found to be 1.8 hour with SD of +1.2 hours; while in the intervention woredas, it was found to be 1.8 with SD of +0.9 hours.

Relative Households Share the Latrine

In the control and intervention woredas, 79.9% of the households share latrine with relative households. Households that share their latrine with relative households were 85.4% in the control area and 79.9% in the intervention woredas of GSF.

Latrine facility usage at all hours of the day and night

About 97.0% of the respondents from the control and intervention woredas of GSF use latrine during all hours of the day and night. In the control and intervention woredas, latrine usage in all hours of the day and night was 98.2% and 92.2%, respectively.

Latrine facility usage at all hours of the day and night

About 376(98.2%) and 291(95.7%) of the households in the control and intervention woredas , use latrine all hours of the day and night, respectively, which means almost all of the respondents use their latrine all the time. Generally, 97% of the respondents use their latrine at all time.
Outcome Evaluation of CLTSH Program in Ethiopia from 2012

Table 42: Latrine Facility Usage at all Hours - Day and Night

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Latrine facility usage at all hours of the day and night</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>GSF Control</td>
<td>376</td>
<td>98.2%</td>
</tr>
<tr>
<td>GSF Treatment</td>
<td>291</td>
<td>95.7%</td>
</tr>
</tbody>
</table>

Average time take to get to the latrine in minutes

The average time to get to the latrine was also assessed in this study; the total average minute to get to the latrine was 1.7 minutes with SD+ 1.4 minutes. In the control and intervention areas the average minute to get to the latrine was similar 1.7 minutes (SD+ 1.2) and 1.6 minutes (SD+ 1.5), respectively.

Queuing or waiting to use latrine

Very small proportion of respondents, 5.5%, reported that there is a queue or waiting to use latrine. Likewise, 7% and 3.9% of the respondents in the control and intervention woredas reported the presence of queue to use latrine, respectively.

Average Queuing or waiting duration in minutes to use the toilet

The average queuing for the queue to use the latrine was also assessed in this study; the aggregate average of control and intervention woredas was 4.5 (SD+ 1.4) minutes. There is variation among the control and intervention woredas. For instance, the average queuing time for the control woredas was 4.7 minutes with (SD+ 1.8); while for the intervention woredas it was 4.3 (SD+ 1.1) minutes.

Latrine un-usability in the last one year

Regarding latrine un-usability in the last one year, 2.6% and 5% of the respondents did not use their latrine in the last one year in the control and intervention woredas, respectively.

Generally, the result showed that latrine utilization in the last one year was 96% which means, 96% of the respondents used their latrine in the last one year.

Reasons for Latrine un-usability in the last one year

Respondents were asked about the reason for not using the latrine; slab and roof problem were most frequently stated as reasons for not using the latrine. In the control woredas, 6(66%) and 3(30%) of the respondents mentioned roof and slab, respectively, as problems for not using latrine.

In the intervention woredas, slab 4(25%) and roof problems 15(93.8%) were major reasons for not using latrine.

Average Number of Weeks Latrine Unusable in the last one year

On average, 8.3 weeks latrine was not in use in the intervention and control woredas, the maximum number of weeks the latrines not in use were 40 weeks. The weeks variations among woredas were 6.5 (SD).

Family members defecate in the bush, field, or nearby river when they go away from home

Regarding the place of defecation when the family members go away from home, generally the result revealed that 36% of the respondents reported that family members defecate in the bush, field, or nearby river.

A child 5 years of age or younger passed stool, location of defecation (last time)

The respondents were asked about the place where a child 5 years of age or younger in the household last time defecated. Accordingly, about 72 (43%) of the respondent reports that children went in house/yards for defecation.

A child 5 of age or younger passed stool, location of faeces disposed (last time)

Respondents were asked about the place where the respondent disposed a child’s last time stool/faeces. Most respondents 115(81.5%) in the surveyed woredas disposed the child last time stool through being dropped into toilet facility.

Household without Latrine

Average time to reach a place of defecation in Minutes

Community members of households without latrine walk on average 4 min both in the control and intervention woredas to get to the latrine where they defecate, and the average maximum time taken was 25 min in the surveyed woredas which is lower. When the two study woredas are compared, the communities spend almost similar time in both target Woredas. The time variation is also similar among woredas.

The overall result showed that the average time spent was 5.8 minute to get to the latrine where they defecate.

Reasons for not being interested to have their own latrine

Respondents were asked about the reasons for not being interested to have their own latrine. The evaluation result revealed that 50% of the respondents reasons for not having the interest to have their own latrine in the control woredas and 31% in the intervention woredas were expensive.

Reasons to have own latrine

Regarding specific reasons to have one’s latrine in both woredas were similar; the main reason mentioned were health related reasons, and dignity, appearance, or social status, 97% and 83%, and 50.7% and 62.2% in the control
Table 43: Reasons for not Having a Latrine

<table>
<thead>
<tr>
<th>Type</th>
<th>Reasons for not having a latrine</th>
<th>Expensive</th>
<th>Latrine slabs are not</th>
<th>There is no one with technical capacity</th>
<th>Does not see any benefits in having their own latrine</th>
<th>There are higher</th>
<th>Culturally</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Yes (%)</td>
<td>40.4%</td>
<td>1.9%</td>
<td>0.0%</td>
<td>1.9%</td>
<td>51.9%</td>
<td>0.0%</td>
<td>19.2%</td>
</tr>
<tr>
<td>G</td>
<td>Yes (%)</td>
<td>38.2%</td>
<td>13.2%</td>
<td>0.0%</td>
<td>14.7%</td>
<td>2.9%</td>
<td>26.5%</td>
<td>33.8%</td>
</tr>
<tr>
<td>S</td>
<td>Yes (%)</td>
<td>40%</td>
<td>1.9%</td>
<td>0.0%</td>
<td>1.9%</td>
<td>51.9%</td>
<td>0.0%</td>
<td>19.2%</td>
</tr>
<tr>
<td>F</td>
<td>Yes (%)</td>
<td>38.2%</td>
<td>13.2%</td>
<td>0.0%</td>
<td>14.7%</td>
<td>2.9%</td>
<td>26.5%</td>
<td>33.8%</td>
</tr>
</tbody>
</table>

6.4.5. Household Characters Related to Hand-washing

The hand-washing characteristics of GSF operational and control areas are discussed below. Among the listed occasions, nearly 100% of the households in the control areas agree that hand-washing “before eating” are important while 98% do so in the GFS operational areas. This shows that hand-washing before eating is a widely accepted character of the households. Hand-washing “after eating” is also commonly accepted where 93 and 95% of households in GSF operational and control areas responded positively, respectively. In the morning is the third occasion where higher percentage of households reported to. About 73% of the households from GSF operational areas reported that ‘in the morning’ is an important occasion for hand washing and 75% of households reported the same from the control areas.

Considering the most critical times for hand-washing, as shown in the Chart above, 55 and 53% of the surveyed households in GSF and control areas, respectively, agreed that hand-washing before cooking/preparing food is important. Similarly, 42% of the households in the control areas agreed hand-washing after defecation while, 36% do so in GSF areas. However, the percentage of households agreed hand-washing after cleaning a child is very low both in the GSF and control areas at 16 and 12%, respectively.

When we consider all the four minimum critical times (before eating, after defecation, before preparing food and after cleaning a child) set out by sanitation and hygiene strategic documents together, the percentage of households confirming that hand-washing at these four times is low at 10 and 8.9% in GSF and control areas, respectively.

As to the frequency of hand washing, among those who have already started hand-washing, 84 and 94% in the GSF and control areas, respectively do it always while the rest 16 and 6% do it sometimes.

Figure 21: HHs Hand-washing Characteristics in GSF Operational and Control Areas
Hand-washing facility observation in GSF operational areas

The field hand-washing facility observation in GSF operational and control areas indicated that in the GSF operational areas, 15% of the interviewed households were with washing stations near or inside the latrine while in the control areas only 11% of the surveyed households were with washing stations near or inside the latrine. Although field observation witnessed that only 15% and 11% of the households in GSF operational areas and control areas do have hand-washing facility near or inside the latrine, the field team interestingly noted that 82 and 50% of these hand-washing stations, respectively were with water. The devices used for water in these hand-washing stations were mostly tap installed by bucket and wash basin in both areas. As to materials for hand-washing, it was observed that 33% of the hand-washing stations were with soap and 31% were with ash in operational area and none of the hand-washing stations was with soap but 3% were with ash in the control areas. The team also made an observation at the hand-washing stations if they had been recently used. The observation witnessed that 69 and 37% of the hand-washing stations in the operational and control areas, respectively, have been used by family members. So, there is a need to mobilize household members for the establishment of hand-washing stations.

Interaction:

The surveyed households were asked if they had visited kebele health posts during the last two months preceding the survey. The result shows that 37 and 50% of the respondents from GSF operational and control areas, respectively, have visited kebele health posts during the last two months. Higher percentage of respondents visited health posts from the control areas at 50% than GSF operational areas at 37%. Respondents were also asked if they were visited by health extension workers during the last two months. The result indicates that 39 and 69% of the households from GSF operational and control areas, respectively reported to have been visited by health extension workers in the two months preceding the survey. The finding indicates that health extension workers paid more visits to households in the control areas than the operational areas. Furthermore, respondents were asked if somebody else visited and talked to them about sanitation and hygiene. The result again shows that higher percentages of households were visited by somebody in the control areas at 27% than GSF operational areas at 26% to talk about sanitation and hygiene.

In relation to sharing information and discussion with neighbours, households were asked if they had discussed on sanitation or hand-washing issues with any of their neighbours in the last 2 months preceding the survey. The data show that discussion with neighbours is higher in the control areas at 34% than in GSF operational areas at 23%. Apart from discussing on sanitation and hygiene issues with their neighbours, 9% of households in GSF operational areas helped other households in building or repairing their latrine during the last one year while 12% did the same in the control areas.

Households were asked if their village was free from open defecation. Higher percentage of households from GSF project areas (41%) responded that their village was free from open defecation while the corresponding figure in the control areas was 34%. Households that responded their village was free from open defecation were further asked if their village became open defecation free. In the operational areas, responses were six months (23%), one year (26%), two years (18%) and three years (27%).

Contrary to their village, the vast majority (81%) of the interviewed households in the GSF operational areas claimed that their kebele was free from open defecation while in the control area the percentage is higher at 90%. Given lower level of ODF coverage at village level, higher coverage at kebele level is not expected as village is a subset of kebele. Hence, the high level ODF at kebele level might be due to misunderstanding of the question.

6.4.6. Household Characters Related to Water Source and Safe Water Handling

The major sources of drinking water in GSF areas are public tap/stand pipes, surface water and protected wells, jointly providing access to nearly 67 and 79% of the population in the intervention and control areas, respectively. Very negligible portion of the community uses pipe water (piped into dwelling, yard, or from neighbours), with some 7% in the control areas, and nearly zero% in the treatment areas.

Main sources of water are shared with other households for 93% cases, quite similar in both the treatment and control areas. Some 45.6% in the treatment areas and 48.1% in the control areas do pay for their main source of water. The location of drinking water is out of their yard for the dominant majority (95%) of sampled households, with no major difference between the treatment and control areas. The average time required for a round trip to fetch water from main source is about half an hour (36 minutes), and is quite similar in both the treatment and control areas.

About 62% of the sampled households do queue to get water at main source of water, with only slight difference on the averages between the interventions and control woredas. However, there are significant differences between woredas in terms of the proportion of the population that have to wait to access water at main source, ranging from 24% in Dendiya (Amhara) to 96% in Gimbichu (Oromia) - both in the control areas. Such waiting time is 45 minutes on average.

For some 86% of sampled households, the main source of water is usable year round, on average, with no major observable difference between intervention and control areas. Households facing difficulties using their main source of drinking water resort to other sources, dominantly to surface water (43.4% cases) as well as unprotected spring (39%).

On average, only few households (some 11%) do treat their drinking water. The data suggest that higher proportions of households in the comparable control woredas have this experience of treating drinking water than in the intervention woredas.

Those households that do treat their drinking water mainly use the method of chlorination (water guard), followed by filtration using closes, and also boiling.

Most households (nearly 60%) in the sample Woredas do have the experience of storing drinking water separately, with slight difference between the intervention and control areas.

Figure 22: Main water sources in WSSCC/GSF operation area

Main Water Sources in WSSCC/GSF’s Operation Areas
In the dominant majority of cases, (over 97%) households water container is used only for storing drinking water, with no major difference between the interventions and comparable control Woredas. Households in sample woredas use different types of water container, with different mouth type (dominantly narrow mouth, less than 10 cm across).

### 6.4.7. Health Benefits

As highlighted earlier, the absence of a baseline data has been one limitation for analyzing the health benefits as a result of the intervention. One strategy the study utilized is to use control areas, with similar socio-economic realities, as a comparison group. The idea is that without the intervention, the situation in the intervention areas would have been similar to the situation in the control group. Women have been the primary targets for information collection, since, given the local contexts and responsibilities related to sanitation and hygiene issues, they tend to have the best knowledge and recall memories of diarrhoea and other health issues in the household or community. The study also used both quantitative and qualitative (including Focus Group Discussions, and Key Informant Interviews) tools of information gathering, and triangulating such information before arriving at certain conclusions on health outcomes.

In the GSF intervention areas, of all sampled households having children 5 years of age and below, about 30.8% of them said that their children were affected by diarrhea in two weeks time prior to this survey, compared to some 18% households in the comparable control areas. Some woredas in the intervention areas have had more serious challenges than indicated in this average figure, including Asgede Tsimbila (Tigray), where nearly 40% of households faced this problem. From the sampled households who have children with diarrhea, on average, children are affected 2.3 times in the last one year in treatment areas, compared to only 1.9 times in the control areas.

On average, 74.1% of the households in the treatment areas took their children affected by diarrhea to health facilities for treatment, compared to some 80.5% households in the control areas. In 94% of cases, in both the treatment and control areas, children affected by diarrhea and taken to health facilities have been given some medicine. Some variations are observable among woredas.

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The data suggest that health facilities in GSF intervention woredas are comparatively farther (on average 12.5 kms) from patients home than those in control group (5.8 kms). Realities among woredas are different from this average, with some villages facing worse scenario (e.g. Liben Chauquala, Oromia GSF treatment area where facilities are 24.0 kms away). This trend is also fairly reflected in the transportation costs to health facility centers.

The average meal cost for a child and a care-taker is estimated to be about ETB 21.6 per day in the treatment areas, compared to ETB 6.6 per day in the control areas, while the average accommodation (hotel/rent) cost per day is ETB 6.0 in the treatment areas, compared to nil in control areas with some differences among woredas. It should be noted that such costs can be an understimation if households do not spend in actual monetary values for such items (e.g. if households use their own food, travel on foot, and do not stay in standard hotels). The average number of days for treatment in health facilities is 2.2 in the treatment areas, compared to 1.1 in the control areas.

By far the highest cost related to diarrhea appears to be the cost of medicine, which on average is ETB 78.6 in the treatment areas, compared to ETB 34.4 in the control areas. This is followed by payments for health center for an admitted child, laboratory, and consultation costs. It is noteworthy that such costs are relatively higher in treatment areas than in control areas. There are variations among woredas.

Some 21% of households in treatment areas have their children under 5 had eye infection in the last three months, compared to 15.4% in control areas. In 60% cases, children under 5 affected by eye infection were taken to health facilities in the treatment areas, compared to only 48.6% in control areas.

Some 8.7% of sample households in the treatment areas have children affected by scabies/skin infection in the last 3 months, compared to some 5.3% in the control areas. About 60% households have the experience of taking children infected by scabies to health facilities, with more or less similar picture in the treatment and control areas.

Some 10.1% of households in treatment areas have children having intestinal parasitic disease in last three months, compared to 7.9% in control areas. In 71.4% of cases in treatment areas, children affected by intestinal parasitic disease were taken to health facilities compared to 77.8% in control areas.

The evidence suggests that overall nearly 93.6% of the households in the treatment group and (95.6% in the control group) believe that people not using latrine are a health risk to their village. Fairly similar trends are observed in the case of household perception of not washing hands as a health risk to individual and family.

### 6.4.8. Socio-Economic Benefits

#### Time and Money Saving

Given that especially water and sanitation interventions often result in both health and non-health-related outcomes, benefits other than reducing the prevalence of diarrhea should be investigated in detail to present the full impact of intervention. Additional tools can reveal real (social) benefits of such interventions. These include, for example, time & money saving if there was no incidence of diarrhoea as a result of efficient implementation of recommended preventive WASH measures.

A simple exercise towards this is presented below. The exercise considers the potential money and time that could be saved if there was no diarrhea incidence. The data suggested as a result of repeated incidence of diarrhoea, patients and care takers have to travel to health centers, sometimes located at distant places, and incur costs related to transportation, hotel, meal, consultation/laboratory/medicine/hospital admission, and time (or opportunity cost). Considering such real costs, as well as translating the opportunity cost of time spent while visiting such distant health centers into monetary values (using minimum wage rates), one can arrive at the cost per diarrhea incidence per household. Multiplying this by the number of incidents an average family faces diarrhoea cases per year, one can conclude that a household faces an average of 331.4 ETB per annum in GSF surveyed areas. That is, if there was no incidence of diarrhoea, a household would save 331.4 ETB per annum.

The monthly minimum Wage Rate is ETB 420, for labourers and guards, who are expected to work for a maximum of 39 hours per week. The hourly minimum wage is thus calculated to be ETB 2.70 (http://www.wageindicator.org/main/salary/minimum-wage/ethiopia) (Information last updated on this page: 16-09-2014).
of recommended preventive WASH measures, on average, households can save this resource, which could then be used to meet other livelihood needs. The details of the simple exercise are given on Annex 4.

It should be noted that such costs faced by households that visited health facilities (meal, transport, accommodation, etc.) can be an underestimation if households do not spend in actual monetary values for such items (e.g., if households use their own food, travel on foot, and do not stay in standard hotels). Only the days spent at health facilities by one care taker are converted into opportunity costs, assuming that the child does not face any opportunity cost while in treatment at health facility (i.e. the child does not perform any income generating activities). In reality, particularly in rural areas, very young children can also generate income, supporting their families, or getting employed by someone (shepherding, etc.). Furthermore, it should also be noted that since such calculation is based on actual costs of households that sought treatment at health facilities, this cannot reflect the full and real cost of households that did not seek to go to such treatments, resorted to traditional means, and faced severe consequences of elongated illness, or even death.

Improved latrine facilities, not only improve the health situations of families, but also provide the most valuable social benefit of dignity, both for men and women, but may be more to the latter.

### 6.5. Evaluation Criteria/Judgment Matrix

#### 6.5.1. Relevance of CLTSH Program

Diarrhea is the second from the top ten causes of infant mortality in Ethiopia, CDC, 2013. About 88% of diarrhea-associated deaths are attributable to unsafe water, inadequate sanitation, and insufficient hygiene. Most diarrheal germs are spread from the stool of one person to the mouth of another. These germs are usually spread through contaminated water, food, or objects. Considering this challenge as a priority, the Federal Ministry of Health adopted Community-Led Total Sanitation and Hygiene (CLTSH) approach in addressing hygiene and sanitation concerns; developed and endorsed the National CLTSH Implementation Guideline, National CLTSH Training Manual and National CLTSH Verification Protocol. CLTSH has been implemented with the support of WSSCC/GSF in four regional states of the country.

After three years of programme implementation, the evaluation finding indicated that 99%, 39% and 65% of interviewed households wash their hand before eating, after defecation and use their own latrine in the WSSCC/ GSF surveyed areas. Among those who do not have their own latrine, 94 and 87% are interested to have their own latrine in the near future, in the control and intervention areas, respectively. The prevailing high coverage of latrine use and hand washing practice signifies the relevance of the support and its clear contribution to changing the situation prior to the programme.

The unique feature of CLTSH is its ability to empower community. CLTSH brought community members to sit together and discuss on their own hygiene and sanitation problem, identify local resources, develop plan of action, implement and monitor results. It involves communities from the design to implementation and celebrating results. However, communities need well trained facilitators equipped with the necessary knowledge and guideline to facilitate community discussion and further empower the communities to full fill their responsibilities. The evaluation pointed out that only two out of the eight assessed health posts do have the CLTSH implementation guideline in their office. Further health extension workers who are the actual implementers and community trainers do not have and use the CLTSH implementation guideline. In fact, health extension workers in seven of the assessed eight kebeles, received training of trainers on community conversation and family dialogue, which was one step to capacity building of these frontline implementers, but lack or absence of implementation guideline with health extension workers questioned the capacity of these implementers to fully internalize CLTSH approach. Hence, the relevance of CLTSH in building the capacity of the health extension workers and then communities has been compromised during the process of implementation.

#### 6.5.2. Sustainability of CLTSH Program

Sustainability was considered both in the project design and implementation stages of CLTSH intervention. The TOT training delivery approach can be considered an appropriate strategy to sustain the intervention results. The training approach implemented by the project where TOT was provided to government experts who in turn cascaded and provided the training to health extension workers and then to communities. CLTSH project trained larger number of health extension workers that could reach, support and influence households in an effort to change hygiene and sanitation behaviour, build and use latrines. However, follow up and supportive supervision is still needed to health extension workers to maintain the quality of the community conversation and family dialog training as per the CLTSH implementation guideline. The evaluation pointed out that untrained facilitators are giving training to health extension works, and CLTSH implementation guideline is missing from health post. This will compromise the capacity of health extension
workers and in turn the quality of CLTSH implementation, sustainability of CLTSH as well.

Community participation and involvement is the focus of CLTSH approach. Communities identified their own hygiene and sanitation problems; developed plan of action; implement and monitor their implementation. Latrine construction was mainly from local materials, low labor, time and financial cost as it took on the average 32 hours to construct, mainly constructed by household members and neighbours and costs on the average only ETB 279. Over 56% of the households with latrine planned to improve their latrine over the coming one year and 97% of the respondents believed that the cost of the improving sanitation needs to be covered by the household or family members. This shows that CLTSH is a suitable intervention which can be managed and continued by the households. But, lack of improved sanitation materials supply tends to affect households motivation to use improved latrine and then sustainability of CLTSH intervention.

6.5.3. Effectiveness of CLTSH Program

As per the evaluation criteria outlined in the terms of reference, the effectiveness of the CLTSH project is determined based on the following two points.

Demand creation for sanitation facilities

Discussions at different (households, kebele and woreda) levels, indicated that willingness to improve the quality of the present household latrine is very high and all discussion participants agreed that the cost of improving household latrine is to be covered by the households themselves. On the contrary, only in one of the eight evaluated kebeles small scale enterprise that engaged in the production of slab and drop-hole cover was organized. Even this small scale enterprise is not involved in promoting improved sanitation materials to the residents of the kebele. So far, only 6.9% of the interviewed households bought cement and 7.6% bought pre-made slab/squat plate to improve their latrines. This shows that though the demand and willingness to improve household latrine is very high in GSF operation areas, the supply of improved sanitation materials is very limited. So, the ability of the project in meeting the already created demand for improved sanitation materials was not effective.

The appropriateness of CLTSH Program

Improving hygiene and sanitation is one of the priority agenda for government. The fact that CLTSH is implemented through the existing government structure, it has enhanced ownership among beneficiaries and government offices at different levels. The different training sessions for government staff and health extension workers, the different implementation guidelines developed by partners and government were to enhance the implementation capacity of government staff. CLTSH implementation guideline is available in all woreda health offices; however, CLTSH guideline is missing from health posts, indicating that health extension workers do not have access to the guideline, though they are the foremost implementers of CLTSH and are closer to communities where actual implementation is taking place. As a result, hand-washing at critical times increased from 7% to only 10% at the end of 2015.

6.5.4. Efficiency of CLTSH Program

As to the efficiency of the CLTSH approach, the fact that the project was implemented through the existing government structure and experts including health extension workers, resource utilization was an in efficient and integrated manner. CLTSH approach, for example, utilized health extension workers at community level to train and mentor; large number of households within a short period of time. Woreda level health professionals provided supportive supervision to all health extension workers. So, resources utilization was at minimal level due to the design and nature of CLTSH approach.

Latrine construction, repair and improvement were done by household members and from locally available materials. The fund from donor was spent mainly on educational material production, training, mentoring, experience sharing and media message transmission; more of capacity building and knowledge sharing. The cost of CLTSH implementation could have been huge if households had not supported with latrine construction materials. The fact that CLTSH has been community led and integrated with health extension package, is also considered an important source of efficiency.

6.5.5. Impact of CLTSH Program

The impact of the programme is mainly determined in terms of diarrhea-associated under-5 child mortality. This will be assessed from the on-going EDHS 2016 survey and the evaluation needs to look back the data or recollect.

6.5.6. Equity in CLTSH Program

Community led total sanitation and hygiene (CLTSH) is designed in such a way that its application among people living in the smallest, appropriate and manageable administrative units, like, development units in Ethiopia is expected to produce collective action to realize jointly developed community action plan; social pressure to ensure community led follow up of the progress through the implementation of community action plan; and social solidarity which is possible to support and strengthen the participation of elders, children, women, men, people with disability, economically weak and strong residents and all marginalized people to take part in the process of triggering when major decisions are taking place and strengthening and development of culture of supporting each other among neighborhood. This nature of CLTSH ensures equitable service provision among all section of residents in development. In this particular evaluation the methodology used to select respondents to be interviewed at household level is random cluster sampling which allows the participation of all section of development unit residents and minimize biases due to selection.
7. Overall Evaluation Findings

7.1. Household Socio-Economic Character

The survey covered a total of 3,091 households, in 24 woredas, distributed in 8 regions (4 big: Tigray, Amhara, Oromia, and SNNP, and 4 developing regions: Afar, Benishangul Gumuz, Gambela and Somali). Twelve (8 UNICEF; 4 GSF) of these woredas were getting various support from either UNICEF or GSF (hence, they are treatment woredas) while the other 12 (8 UNICEF; 4 GSF) were not getting direct support from these donating organizations (hence the title comparison woredas).

The highest proportions of respondents (81.2%) were women. This is because, in line with the nature of household division of labor in most Ethiopian cultures where the role of women is dominant on tasks related to water, sanitation and hygiene, the survey sought, as much as possible, to gather the relevant data from female respondents who tend to have the best information on households' behaviour and experience on these issues. The average age of respondents is 36.7 years, and about 84.6% are married.

The average household size is 5.6. It is interesting to note that the highest household size is recorded in developing regions of Afar, Gambela, and Somali, all recording above the average given above. Especially woredas from Somali recorded highest household size, with the two woredas, West-Imjay and Hargele, recording an average size of 6.4 and 6.7, respectively. Other woredas with relatively high household size include Jore (Gambela) 6.3, and Menge (Benishangul Gumuz) 6.1.

On average, some 52% of the households have children below 5 years of age. It is worth-noting that the highest figures are reported from woredas of developing regions. Woredas reporting the highest portion of households who have 5 years and below members include from Afar, Dubti (85.6%), Asayta (83.3), from Somali, Hargele (71.2%), and West-Imjay (72.7%) and from Benishangul Gumuz, Menge (76.8%).

On average, some 32.5% of the respondents are literate, but with differences among woredas. Some woredas recorded the highest on these basic skills (with Dale and Aleta Chuko /SNNP at 59.1% and 47%, respectively, Adwa Gente/Tigray, at 50.8%, and Melemu/Amhara at 51.5%, while other woredas are a very low level, with Liben Chuquala/Oromia at 18.9%, Asayta/Afar at 18.9%. The maximum achievement of over 70% of those who can read and write is only up to primary education.

On average, most households (55.7%) lived in same house for more than a decade. There are variations among regions and woredas, however. It is interesting to note the mobility nature of households in regions like Gambela (Gog and Jore woredas) where the proportion of the households who lived in same house for 10 years is only 32.6% and 3.8%, respectively, as well as Somali (West-Imjay and Hargele) where it is only 23.5% and 21.2%, respectively.

About 57% of the sampled households own houses with corrugated iron roof, which is one indicator of wealth status in many rural communities of Ethiopia. The data clearly indicate a different context (either because of poverty or mobility nature of communities, or a combination of both factors) from communities in woredas from the four developing regions, particularly that of Afar, Somali, and Gambela, where from the sampled households in the selected woredas less than 7% own a house with corrugated-iron roof.

Table 44: Distribution of Literacy Rate by Types of Woredas

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<th>Woreda Type</th>
<th>Count</th>
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<td>CLTSH</td>
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<td>Total</td>
<td>997</td>
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<td>1997</td>
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</table>

Table 45: Distribution of Type of Roof by Types of Woredas

<table>
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<th>Woreda Type</th>
<th>Count</th>
<th>Yes</th>
<th>%</th>
<th>House with Corrugated Roof</th>
<th>Count</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLTSH</td>
<td>642</td>
<td>45.9%</td>
<td></td>
<td>898</td>
<td>54.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>965</td>
<td>68.7%</td>
<td></td>
<td>586</td>
<td>31.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1607</td>
<td>57.3%</td>
<td></td>
<td>1484</td>
<td>42.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Households income is one of the most sensitive data in most surveys, partly because of respondents memory levels (often with no book of accounts) and partly because they tend to underestimate levels of income to avoid possible taxation. The available data indicate average annual income to be ETB 13,806. Based on the given data, one can observe little difference in average household income level between intervention and comparable control woredas. However, there are some interesting observations. Of particular interest can be Dale, a coffee growing woreda in SNNP, which otherwise reported the highest percentages of households in terms of ownership of assets like TV, Radio and corrugated iron roof, recorded the least in terms of average annual income.
83.9% of all households have their own land. The average farm land size is 1.59 ha, with substantial variations among woredas. Land fertility is a significant factor determining the productivity, and therefore the value attached to the land, but this cannot be observed from the available data. As can be expected, in the relatively less populated developing regions, the size of land owned by households tends to be higher than the average figure indicated above. Regarding ownership of television and radio, some of the essential means of accessing news and information, the data from the sampled households indicate that on average few households (22.4%) own radios, and much less percent (3.7%) own television. While there is no major difference between control and treatment woredas, there are observable differences between big regions and developing regions, with households in the latter group owning relatively low levels of these household assets.

### 7.2. Findings Related to Pre-triggering at National Level

Changing hygiene and sanitation behaviours in Ethiopia must be the concern of all: government, non-governmental and private organizations, donors, communities, community institutions and private individuals. All actors should agree on implementation modalities and craft a common action agenda to tackle the challenge. Following the development of common action agenda, it is essential to conduct a capacity building effort in order to create a pool of CLTSH trainers and facilitators at all levels. The main vehicles for building capacity are training of trainers, training of facilitators and supportive field visits. It is also equally important to give special attention to developing the skills of those responsible bodies and individuals at all levels in the health system of the country.

In order to realize the above key efforts at all level in the health system, including the grass root level, The Federal Democratic Republic of Ethiopia set the working environment conducive through the development of the following policy and strategic documents and public health system. These progresses made by Ethiopia Government are parts and parcels of the activities to be included in pre-triggering phase of CLTSH implementation in the country.

#### Policy and Strategic Documents

1. In order to facilitate the provision of health services, including hygiene and sanitation programs, in the country, the Federal Democratic Republic of Ethiopia endorsed the National Health Policy in 1993;
2. After the development and endorsement of health policy, the government took the initiative of including protection of public health in the 1995 National Constitution;
3. In order to realize the implantation of quality hygiene and sanitation related services at grass root level, The government of Ethiopia put in place the National Hygiene and Sanitation Strategy of 2005 and National Hygiene and ‘On-Site’ Sanitation Protocol (2006).
4. In order to boost the effectiveness and efficiency of the implementation of hygiene and sanitation programs in the country, The Federal Ministry of Health adopted Community Led Total Sanitation and Hygiene (CLTSH) approach, (2011), following this endorsement, National CLTSH Implementation Guideline, National CLTS Training Manual and National CLTSH Verification Protocol documents were developed and endorsed by Federal Ministry of Health (2011).
5. Following the development and endorsement of CLTSH Implementation Guideline, National CLTS Training Manual and National CLTSH Verification Protocol documents the following action oriented documents were endorsed at national level. These action oriented documents are Hygiene and Sanitation Strategic Plan of Ethiopia, developed in 2011; the Fourth Health Sector Development Plan (HSDP-IV) (2011-2015); Universal Access Plan; One-WASH program and the country’s Growth and Transformation Plan (GTP-2011-2015) in which all target to achieve 100% access to basic sanitation and as it was outlined in the Millennium Development Goals, 82% access to ‘improved sanitation’, by 2015 and furthermore, calls for increasing the proportion of Open Defecation Free (ODF) Kebeles from 15 to 80 per cent.

#### Public Health System

The health policy and strategic documents developed and endorsed by the Ethiopia Government should be put in practice in order to implement hygiene and sanitation programs at all levels including at grass root level. In order to ensure the realization of the policy, strategic documents and implementation of hygiene and sanitation programs, effective and efficient public health system is a requirement. Accordingly, the public health system in Ethiopia organized a structural arrangement including Federal Ministry of Health, Regional Health Bureaus, Zonal Health Desks, Woreda Health Offices and Health Posts which trickle down to kebele level.

The public health system, in Ethiopia, has been radically changed during the past several years in Ethiopia with the advent of the Health Extension Program and its over 34,000 Health Extension Workers (HEWs) who have greatly expanded the scope and reach of Ethiopias health system, especially in rural areas.

The presence of health policy, strategic and other action oriented documents and the realization of the present public health system are government measures which create conducive and supportive environment for the initiation and implementation of CLTSH programs in the country.

#### Pre-triggering Capacity Building

According to the respondent, representing F-MOH, key informant interview, the Federal Ministry of Health has organized and conducted training of trainers to hygiene and sanitation experts in all regional states. The same respondent disclosed the fact that he himself did not get any TOT on CLTSH but involved as trainer of regional level CLTSH trainings in all regional states of the country.

The report from this interview revealed that F-MOH is implementing CLTSH in all woredas of Ethiopia. Despite to such widely distributed implementation of CLTSH in the country, the respondent reported that none of the woredas became open defecation free.

A respondent from UNICEF Ethiopia reported that he himself had received TOT on CLTSH in which CC/FD was part of it. As a result of similar trainings provided at all levels, the organization has 15 master CLTSH trainers at head office and regional level. The 12 master trainers at regional level have provided training to hygiene and sanitation experts at woreda level. Implementation of CLTSH, CC/FC; facilitation skills and basic concepts of hygiene and sanitation were some of the topics addressed during regional trainings given by UNICEF Ethiopia.

A respondent from WSSC/OGS reported that the organization had organized and conducted trainings on CLTSH, including CC/FD, facilitation skills and basic concepts of hygiene and sanitation, to hygiene and sanitation experts from regions, zones and the implementing woredas. According to the report from the respondent, the interviewee himself did not receive any TOT on CLTSH and the good thing was he had never been engaged in any of trainings sessions on CLTSH.

#### 7.3. Findings Related to Post-triggering Follow-up

Annual review meeting to regional offices, supportive supervisions, experience sharing visit to implementing kebeles, and regular (quarterly) reports are some of the methods followed by federal ministry of health for post-triggering follow-up. The reporting format of health management information system (HMIS) which contains sections/indicators regarding CLTSH is the available reporting format in F-MOH. From experience this kind of broad based reporting formats may fail to meet their purposes for reasons like using such format may not able to show the full picture of the process (indicators related to pre-triggering, triggering, post-triggering and post-ODF phases) of CLTSH implementation in the country and
Indicators contained in such reporting formats might be considered by the reporting person (body) that these are the only areas where the person is responsible. This interview revealed that computerised data base system is used by F-MoH as data store for CLTSH program. KII respondent from F-MoH reported that there are no training sessions provided by F-MoH on issues and concerns related to post-triggering follow-up.

The respondent from UNICEF Ethiopia reported that CC/FD training manual for CLTSH was available in UNICEF’s Head Office. Monthly at woreda and quarterly at central level review meetings, regular supportive supervisions and reporting are some of methods used by UNICEF Ethiopia for post-triggering follow-up. Reporting format modified for CLTSH is developed by the organization and computerised data system is the means to store data related to CLTSH in UNICEF’s Offices.

KII respondent from WSSCC/GSF reported that training manual modified for CLTSH was available in communication and health education case teams office. Irregular review meetings at woreda level, supportive supervision visits and bi-annual reporting are some of the methods followed by the organization for post-triggering follow-up. Reporting format modified for CLTSH is available in WSSCC/GSF’s office. Box files and computerised data base are the means to store data related to CLTSH.

Respondents of KII in iDE reported that field offices staffs are expected to make daily visit and provide support to households. Regional coordinators in iDE are expected to do supportive supervision to woreda field offices.

According to the report from representative of Plan International Ethiopia, monthly supportive visit is made by regional WASH team to woreda WASH team and woreda WASH team to households. In addition to these Plan International Ethiopia country office jointly with UNICEF and other implementing partners make annual monitoring visit, Plan International Ethiopia regional offices jointly with regional health and water offices make bi-annual monitoring visit and plan international Ethiopia regional office make monitoring visit to woreda WASH offices. In addition to monitoring visits, Plan International Ethiopia is using quarterly reports as means to post-triggering follow-up of CLTSH implementation.

According to the report from respondent representing SNV, regular review meetings, supportive field visits and regular reports are some ways to post-triggering follow-up of CLTSH implementation, SNV has developed on line data submission system called project monitoring and evaluation system (PME) to store, monitor and evaluate progress of project implementation.

7.3.1. Improved Sanitation

According to the report by a respondent from F-MoH, recently TVET has been providing training to youth on sanitation marketing; trained youth are organized by SSE into sanitation groups and link is made to micro finance organizations for getting loan for the production of improved sanitation facilities. MOH and other partners implementing CLTSH believe that this system will enable households to access improved sanitation facilities with affordable price. These organized and trained sanitation groups which get loan from micro finance organizations are producing improved slabs and hand washing facilities. The respondent to this interview reported that these sanitation groups do not have distribution centers at local or peripheral locations.

According to a respondent of KII from UNICEF Ethiopia, assessment of demand for improved sanitation was made by iDE with a support from UNICEF and accordingly UNICEF is supporting organization of people into small-scale enterprises (SSEs) in CLTSH implementing woredas for production of improved sanitation. These SSE groups are producing cemented slab and plastic made hand washing facilities and they promote and sell their products in the distribution centers established at woreda level. UNICEF is using government’s 1 to 5 group meetings, printed materials produced by IDE supported by UNICEF and local radio sessions as means to mobilize people for improved sanitation facilities and promote products produced by SSEs. UNICEF also supports establishment of saving and loan associations so that it is possible for households to purchase locally produced improved sanitation facilities.

A key informant interview respondent from WSSCC/GSF reported that GSF is supporting SSEs which produce and distribute improved sanitation facilities. In addition to the SSEs, some health development armies in Tigray region are producing and distributing improved sanitation facilities to households with affordable price. These SSE and HAD groups are producing slab made of cement. GSF is using governments 1 to 30 groups, printed materials and school mini-media to mobilize people for improved sanitation and introduce the products made by SSE. WSSCC/GSF

For every new customer the agent promoted, they enjoy ETB 30 as a commission for their service. The masons, most of whom have shops at woreda centres, earn an estimated ETB 80 per slab sold to households.

also supports establishment of saving associations and equip (self-help groups) so that it is possible for households to purchase locally produced improved sanitation facilities. As to the report from the KII respondent from WSSCC/GSF, community meetings, house level dialogue forums at kebele, health posts level, and market places, brochures, posters, banners and T-shirts as ways to mobilize people for improved sanitation. After doing extensive market assessment iDE established low cost improved slab (about 350ETB each, other costs like superstructure to be managed separately).

iDE supports local masons to be organized and train on production and quality maintenance of sanitation facilities. In order to mobilize people for improved sanitation facilities and sell their products, masons use sales agents who work on commission base. For every new customer, the agent promoted, they enjoy ETB 30 as a commission for their service. The masons most of whom have shops at woreda centres, earn an estimated ETB 80 per slab sold to households.

According to a report from Plan International Ethiopia, for an average target household in rural context, the estimated cost (including shelter) can range between ETB 1000 and 1500. Accordingly, there appears to be a need to financially empower households through village saving and Loan Associations (VSLA) supported by Plan International Ethiopia.

A respondent from SNV reported that after extensive action research done to choose locally acceptable improved sanitation facilities. Accordingly SNV organized six small scale enterprises (SSEs) for six woredas in Waghemata zone. It is provided 15 days training and donated 30,000ETB per woreda as loan to start producing improved sanitation facilities like slab and drop-cover made of cement and hand washing facility made of plastics. These SSEs supported by SNV have distribution centers at woreda level. SNV also use governments 1 to 5 group, printed material and awarding model households to mobilize people for improved sanitation and introduce their products. In order to enable households get loan and empower them financially, SNV uses Amhara Loan and Saving Association.

7.3.2. Findings Related to Sanitation

This study assessed places of defecation for both the intervention and control woredas of CLTSH programme. Out of the total households in the control woredas, 32.9%
of them defecate in open field (under bushes, field or river), while 58.5% use their own latrine. Whereas, in the intervention woredas 27.4% of households defecate in an open field, while 60.8% use their own latrine for excreta disposal.

A total of 1688 latrines in the CLTSH and control areas were observed to check whether the path to latrine been walked on recently or not. Of these latrines, 1625, 96.4% of path of them have been walked on recently while the remaining 63(3.6%) have not.

Out of the total toilets assessed in this study, 676(40.0%) were built in the last one year. Distribution of toilets which were built in the last one year was similar in the control (38.85%) and intervention (38.2%) woredas of CLTSH. The average amount of money required to construct latrines in the CLTSH and control woredas were assessed in this study. Accordingly, the average amount (CLTSH and control woredas) show that 270.0 ETB with a SD + 710.8 ETB is required to construct one latrine that could serve a household.

Different materials such as cement, pre-made slab/squat plate, wood and sheet metal (for walls or roof, etc.) were used to construct latrines by households of intervention and control woredas included in this study. The result shows that majority of households did not buy any material i.e. they used locally available materials) to construct their latrine.

In control woredas, 233(27.3%) of the households bought wood, while 350(48.25%) bought nothing or used locally available materials to construct their latrine. On the other hand, in CLTSH woredas, 298(29.7%) bought wood to construct their latrine, and proportion of those who bought cement was 73(7.45%); while 440(48.6%) did not buy any material to construct their latrine.

Households were asked whether they repaired their latrine in the past one year; and from the total households surveyed only 367(21.6%) had repaired their latrine in the past one year. Proportion of households who repaired their latrine were 179(20.75%) and 189(19.7%) in the control and intervention woredas, respectively.

Regarding latrine improvement, 145(16.65%) latrines in the control woredas and 177(18.85%) latrines in the intervention woredas were improved in the past one year. For those latrines improved in the past one year, different types of improvements were made. In general, majority of the households improved the wall, roof and door of their latrines.

Households were asked whether they repaired their latrine in the past one year; and from the total households surveyed only 367(21.6%) had repaired their latrine in the past one year. Proportion of households who repaired their latrine were 50(13.1%) and 59(19.4%) in the control and intervention woredas of GSF, respectively. In the UNICEF control woredas 129(28.4%) and 130(20.0%) households in the intervention woredas had repaired their latrine in the past one year, prior to this survey. This result showed that there is no significant difference among UNICEF and GSF intervention areas.

Regarding latrine improvement in the past one year, 35(9.1%) in the control and 60(19.7%) latrines in the intervention woredas of GSF were improved in the past one year. The proportion of latrines improved in the past one year were 110(24.2%) and 117(18.0%) in the UNICEF control and intervention woredas, respectively. The above result showed that more households improved their latrines in the past year in the GSF intervention woredas compared with the control ones, but no significant differences were observed among UNICEF and GSF intervention woredas. For those latrines improved in the past one year, different types of improvements were made. In general, majority of the households improved the wall, roof and door of their latrines.

A total of 1689 study participants were asked about their plan to change or improve their latrine in the coming year; accordingly, majority 947(56.1%) from CLTSH intervention and control woredas had plan to change or improve their latrine. In the control and intervention woredas, 481(57.4%) and 502(52.7%) of households have a plan to change or improve their latrine within the coming year, respectively.

Majority of the households have planned to change the wall (70.8%) and the door (53.7%) of their latrine in the coming one year in both the intervention and control woredas.

The responsible body or person to cover the cost of improving sanitation of the village was assessed in the control and treatment woredas. The vast majority (90.8%) of respondents in CLTSH intervention and control woredas agreed that the household or family members are responsible to cover the cost.

Traditional pit latrine was a widely used type of latrine (89.6%) in the study area; whereas, latrine connected with septic tank and ventilated improved pit latrines were used by less than 1% of the population under this study. In

### Table 46: Family Members Usually Used Defecate Location

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Family Members Usually Used Defecate Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bush, field, river, pond</td>
</tr>
<tr>
<td>CLTSH</td>
<td>27.4%</td>
</tr>
<tr>
<td>Control</td>
<td>32.9%</td>
</tr>
<tr>
<td>Total</td>
<td>30.15%</td>
</tr>
</tbody>
</table>

### Table 47: Types of Latrine Improvement made by Households in the last one year

<table>
<thead>
<tr>
<th>Woreda Type</th>
<th>Improvement Types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slab/squat plate</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>CLTSH</td>
<td>20.6%</td>
</tr>
<tr>
<td>Control</td>
<td>21.1%</td>
</tr>
<tr>
<td>Total</td>
<td>20.85%</td>
</tr>
</tbody>
</table>

### Figure 24: Average amount of money spend to build the latrine (ETB)

Average amount of money spend to build the latrine (ET birr)

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>CLTSH</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>223</td>
<td>318</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>50</td>
<td>50</td>
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<tr>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>150</td>
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<td>200</td>
<td>200</td>
<td>200</td>
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<td>250</td>
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<td>1000</td>
<td>1000</td>
<td>1000</td>
<td></td>
</tr>
</tbody>
</table>

Outcome Evaluation of CLTSH Program in Ethiopia from 2012-2015

Final Report

112
CLTSH intervention woredas, about 822 (86.3%) of the households use traditional pit latrines while 783 (93.4%) households use in the control woredas.

Majority of the studied households, 1645 (97%) responded that they could use their latrine at all hours of the day and night. About 726 (98%) and 919 (96%) in the control and intervention woredas, respectively, use latrine all hours of the day and night.

Regarding latrine usability in the last one year, 3.3% and 5.5% of the respondents did not use their latrine in the last one year in control and intervention woredas, respectively. Generally, the result showed that latrine utilization in the last one year was 95% which means the 95% of the respondent used their latrine in the last one year.

Respondents were asked about reasons for not using the latrine; slab and roof problem were the most frequently stated reasons for not using latrine. On average, latrines were not in use for 5.8 weeks. Those respondents responded that latrines were unused for some times in the past one year. And the maximum weeks the latrine that were not used were 40 weeks and the weeks variation among woredas were 6.9 (SD).

Generally, a quarter of the respondents responded that, family members defecate in the bush, field, or nearby river when they go away from home. About 268 (53%) and 232 (47%) of the respondents said that family members defecate in the bush, field, or nearby river when away from home.

The respondent asked about the last time a child 5 years of age or younger where did he/she defecate. Accordingly, 198 (50.5%) and 205 (42%) of respondents children defecated their stool went in house/yard in CLTSH control and intervention woredas, respectively.

Totally, the result showed that 382 (46%) of respondent a 5 years or younger child were defecate their stool went in house/yard in CLTSH control and intervention woredas, respectively.
yard. Respondents were assessed for sanitation, the place where his/her child last time stool/faces disposed and most respondents 292(89.6%) and 331(83.2%) in CLTSH control and intervention woredas, respectively. Majority of the respondents in CLTSH and control woredas responded that 596(87%) disposed his/her child last time stool/through dropped into toilet facility.

For households without their own latrine, the average time it takes to reach a place of defecation was assessed in CLTSH intervention and control woredas. The survey result showed that the average time spent was 5.8 minutes to get to the site where they defecate, the maximum time taken were 45 minutes and the time variation among woredas was 6.3(SD).

Respondents without their own latrine in CLTSH and control woredas were asked about their interest to have their own household latrine. 93.4% and 89.4% of respondents were interested to have their own household latrine in the control and intervention woredas, respectively. Respondents were asked about the reasons for not being interested to have their own latrine. The evaluation result revealed that 49.15% and 47% in CLTSH control and treatment woredas of respondent reasons were expenses (cost of latrine construction), respectively. Reasons mentioned for not being interested to have their own latrine varied among CLTSH treatment woredas. 47% of the respondents reason was due to the cost and 33.25% said that their reason was that they did not see the benefit of having a latrine. Generally, the reason mentioned for not interested to have own latrine were 57(54%) due to expensive, 47(45%) due to materials not available and 46(44%) due to satisfied with neighbour or shared latrine.

Regarding specific reasons to have own latrine in CLTSH woredas were almost similar, the main reason mentioned were health related reasons, 90% and 87.3% in CLTSH control and treatment woredas, respectively.

Figure 28: Family members defecate in the bush, field or nearby river when away from home

Family members defecate in the bush, field, or nearby river when away from home (Yes) %

![Figure 28](image)

<table>
<thead>
<tr>
<th>Woredo Type</th>
<th>Interest to have own latrine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Count</td>
</tr>
<tr>
<td>CLTSH</td>
<td>528</td>
</tr>
<tr>
<td>Control</td>
<td>664</td>
</tr>
<tr>
<td>Total</td>
<td>1192</td>
</tr>
</tbody>
</table>

Table 48: Households without Latrine, interest to have own latrine

Generally, the respondents future plan was to build a latrine in the coming one year was found to be 74%; 76.25% and 74% in the control and treatment woredas, respectively. Respondents were asked about the financial sources for the construction of latrine, almost 97% of them in the control and 99% in the intervention woredas of households were claiming to be paid for the construction of their own latrine, respectively, by themselves. In general, 920 (97.5%) of the respondents reported that household financial sources for the construction of latrine were the respondent themselves, respondent family, or household members.

7.3.3. Household Characters Related to Hand-washing in the CLTSH areas

Information on occasions when hand-washing is important is summarized by CLTSH the intervention and control areas. The findings show that overall the vast majority of the surveyed households (97%) indicated that ‘before eating’ is an important occasion for hand-washing. If we compare CLTSH intervention and control areas, 98% of households from the control areas reported that ‘before eating’ is an important occasion while the corresponding figures from the intervention areas is 96%.

After eating also received higher percentage of responses from the interviewed households. Overall, 93% of the interviewed households labelled after eating as an important occasion for hand washing. However, the percentage of households indicated after eating as an important occasion is higher in the control areas at 94% than in the intervention areas at 91%. In the morning is the third occasion where higher percentage of households reported to be an important time for washing hands. Across the survey areas, about 69% of the households reported that in the morning is an important occasion for hand-washing. However, no big difference is observed between control and inversion areas.

As it is evidenced from the summary Table above, across the survey areas, only less than half of the households responded that ‘after defecation/urination’ is an occasion that requires hand-washing. In the intervention and control areas equally, 46% indicated that hand-washing after defecation/urination is important. Hand-washing ‘before cooking/preparing food’ received consideration by 59% of the overall surveyed households. The percentage of households responded to hand-washing ‘before cooking/preparing food’ is higher in the intervention areas 59% than control areas at 58%.

Hand-washing ‘after cleaning a child that has defecated’ has received much lower response by surveyed households. Overall, only 24% of the surveyed households agreed that hand-washing after cleaning a child that has defecated is important. In the CLTSH areas the response is higher at 25% than control areas at 23%.

Considering the four minimum critical hand washing times that the National in Hygiene and Sanitation
Figure 29: Households without latrine reason to have own latrine

Households without latrine reason to have own latrine

Action Plan, 2011-2015 outlined: ‘before eating’, ‘before preparing food’, ‘after defecation’ and ‘after cleaning a child that has defecated’ simultaneously, the percentage of HHs responded for all the four critical times is about 19%. As shown in the Chart above, the percentage is similar in control and CLTSH areas. In fact this is a big improvement over the National Hygiene and Sanitation Action Plan 2011-2015 document which put the figure at 7.1%. However, these are critical times when hand-washing is a must if one wants to prevent transmission of infectious diseases.

Hand-washing facility observation in the surveyed areas:

As per the observation of the survey team, across the survey areas, only 27% of the households do have hand-washing station near or inside the latrine. When we compare the two groups, 31 and 23% of households in the CLTSH and control areas do have hand-washing facilities, respectively. Field team also interestingly noted that among those who have the hand-washing facilities, 86 and 80% of the hand-washing facilities in the CLTSH and control areas were with water, respectively. Water container devices in these hand-washing stations were mostly tippy tap (54%) followed by bucket (10%) and jerrycan (14%). Whereas in the control areas, water devices are tippy tap (42%) followed by bucket (21%) and wash basin (20%). As to materials for hand-washing, in CLTSH areas, 49% of the hand-washing stations were with no hand-washing materials, while 28% with soap and 31% with ash. In the control group, it was observed that 54% of the hand-washing stations were with no hand-washing materials, 40% with soap and 4% with ash. This shows that ash, locally available material, as hand-washing material is better used in the CLTSH areas as compared to control areas, on the other hand, soap is better used in the control areas than in the CLTSH areas.

The field team also made an observation at the hand-washing stations if they have been used recently. The observation witnessed that across the survey areas, 77% of the hand-washing stations has been used by family members recently. Use of hand-washing stations is higher in the CLTSH areas at 81% as compared control areas at 71%. It seems, in general, that though the presence of hand-washing station near or inside the latrine is very low at 27%, the already available hand-washing stations are well used by household members. So, there is a need to mobilize households for the establishment of hand-washing stations.

Interaction:
The surveyed households were asked if they had visited kebele health posts during the last two months preceding the survey. Across the surveyed areas, 47% of the respondent reported to have visited kebele health posts during the last two months. About the same percentage of respondents visited health posts in the CLTSH and control areas at 46 and 47%, respectively. Respondents were also asked if they were visited by health extension workers.

Table 49: Occasions when Hand-washing is important

<table>
<thead>
<tr>
<th>Area</th>
<th>Before eating</th>
<th>After eating</th>
<th>Before cooking</th>
<th>After preparing food</th>
<th>Before defecating</th>
<th>After cleaning a child that has defecated</th>
<th>After cleaning the toilet or potty</th>
<th>In the Morning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>97.7%</td>
<td>94.4%</td>
<td>27.8%</td>
<td>37.8%</td>
<td>45.5%</td>
<td>22.0%</td>
<td>22.4%</td>
<td>69.0%</td>
</tr>
<tr>
<td>CLTSH</td>
<td>95.8%</td>
<td>91.1%</td>
<td>28.2%</td>
<td>59.1%</td>
<td>45.5%</td>
<td>25.3%</td>
<td>25.7%</td>
<td>68.2%</td>
</tr>
<tr>
<td>Total</td>
<td>96.8%</td>
<td>92.8%</td>
<td>28.0%</td>
<td>58.5%</td>
<td>45.6%</td>
<td>24.2%</td>
<td>24.1%</td>
<td>68.6%</td>
</tr>
</tbody>
</table>
during the last two months. The result shows that overall, 56% of the households reported to have been visited by health extension workers in the two months preceding the survey. The percentage of households that were visited by health extension works was about the same in the CLTSH and control areas at 57 and 56%, respectively. The finding indicates that health extension workers paid almost equal visits to households in the intervention and control areas. Furthermore, respondents were asked if somebody else visited them to talk about sanitation and hygiene. Overall, 33% of respondents indicated that they were visited by somebody to talk about sanitation and hygiene. However, higher percentages of households (37%) from CLTSH areas were visited by somebody else to discuss sanitation and hygiene as compared to control areas at 28%.

In relation to sharing information and discussion with neighbours, households were asked if they had discussed on sanitation or hand-washing issues with any of their neighbours in the last 2 months preceding the survey. Overall, 36% of surveyed households reported that they had discussed with their neighbours sanitation and hand-washing. Discussion with neighbours is higher in CLTSH areas at 41% as compared to control area at 37%. This could be due to the fact that the nature of CLTSH facilitates dialogue with neighbours and community members. Apart from discussing sanitation and hygiene issues with their neighbours, 23% of households in the CLTSH areas helped other households in building or repairing their latrine during the last one year while only 16% did the same in the control areas. Discussion with neighbours on sanitation and hygiene and helping other households in building or repairing latrine is better in the intervention areas as compared to control areas.

Households were asked if their village was free from open defecation. Overall, 38% of respondents said that their village was free from open defecation while 20% did not know their village status. If comparison was to be made between CLTSH and control areas, 50% of the households in the CLTSH areas reported that their village was ‘free from open defecation village’ as compared to 27% in the control areas. Households who responded ‘not open defecation free village’ were further asked when their village became open defecation free. Responses were six months (27%), one year (23%), two years (15%) and three years (26%).

7.3.4. Findings Related to Water

The major source for drinking water for sample households is public tap/stand pipes (33.0%) followed by surface water (22.0%), protected well (17.8%) and protected spring (12.7%). Very negligible portion of the community use pipe water, i.e. piped into dwelling (0.4%), pipe to yard/plot (2.7%), pipe to neighbour (0.9%). Only few woredas (e.g. Adwa Getat/Tigray, Dembia/Amhara) have a significant portion of their population using such sources. On average, higher portion of households in the control areas use these sources compared to those in treatment areas. The evidence also indicate heavy reliance of some communities especially in Afar and Somali on surface water with large majority of their population being dependent on such sources: Asayta and Dubti (Afar) 80.3% and 75%, respectively (with some 16% of households in Dubti also supported from Tanker Truck), and West-Imay (Somali) 98.5%. Water from major sources was also unreliable in 16.2% of cases, that is, water being unavailable from main sources for a day or longer, in two weeks prior to this survey.

Main sources of water are shared with other households for 92% of cases, and this sharing is quite common in almost all sampled woredas, with different cultural contexts. This is in line with the evidence in the previous Table which demonstrated that most households were using public taps and surface water, and very negligible portion use piped water (pipet into dwelling or yard).

Payments for water can be a proxy indicator for general water shortage, or of accessing improved water, either piped, public taps, protected sources, etc., as naturally available, unprotected sources of water are normally free, and do not require payments. The overall picture is that some 43.3% of the sampled households are paying for their main source of water. The data suggest a significant difference in terms of practice of payment to main source of water by the population. Higher proportion of households (52.1%) in control areas pay for main water source, compared to only 34.4% in treatment areas. From the available data, it is also difficult to make clear conclusions on impacts by CLTSH, or differences in outcome between...
intervention and comparable control areas, as there are significant variations among woredas even within same category (intervention/control) or within same region. For example, in Jore (Gambela, UNICEF control) 99.2% of households are paying, while in Gog (Gambela, UNICEF intervention) only 0.8% do. In Hargele (Somali, UNICEF control) 84.8% of households are paying, while in West Imay (Somali, UNICEF treatment) only 11.4% are. In West Wellega, in Kondala Woreda (UNICEF control) 6.8% of the households are paying, and so are in Babo Gambela (UNICEF intervention) 3.0% are paying.

The location of drinking water is out of their yard for the dominant majority (92.4%) of sampled households. This is consistent with the previous analysis which showed that most households are using public taps and surface water. Only in few woredas do significant portion of households have drinking water sources located in their yard, notable case being Adwa Getu Tigray), where for nearly 44% of households main source of drinking water is located in their yard.

The average time required for a round trip to fetch water from main source (regardless of quality of such sources) is about half an hour (36 minutes). There are some woredas where this timing can be as high as 2 hours, like Aleta Chuoko (SNNP, UNICEF intervention woreda) and also West Imay (Somali, UNICEF control woreda) where, as noted earlier, the main source of drinking water for some 98.5% of the sampled population in the woreda is surface water (see earlier Tables).

On average, some 61.3% of households in sampled households queue to get water at main source of water (59.3% in treatment areas, and 63.3% in control areas). The data suggest that there are significant variations between woredas in terms of the proportion of population that have to queue. The waiting time is 40 minutes on average.

For some 84% of sampled households, the main source of water is usable year round. Higher portion of households in treatment areas (88.1%) enjoy water availability year round in treatment areas compared to those in control areas (80.7%). However, the data also suggest that some woredas in developing regions (e.g. Hargele/Somali, Menge/Benishangul) have serious challenges of accessing their main water sources year round. Households facing difficulties using their main source of drinking water resort to other sources, dominantly to surface water (33.1% cases).

Only few households (some 14%) treat their drinking water. Higher proportions of households in comparable control woredas have this experience of treating drinking water than in intervention woredas. It is also noteworthy that relatively higher portion of households in woredas of Somali region have such good experience, with Hargele (62.1%) and West Imay 40.2%.

Those households that treat their drinking water mainly use the method of chlorination (water guard) in 56.4% of cases, followed by filter use in the form of bags (24.7% of cases). Higher portion of households in control areas use chlorination than in treatment areas. It is noteworthy that all sampled households (100%) in woredas of developing regions of Afar (Asayta, Dubit) and Benishangul Gumuz (Menge and Assosa) have this experience of chlorination of their drinking water.

Most households (nearly 61%) in the sample woredas have the experience of storing drinking water separately, with quite similar picture in both CLTSH treatment and control areas. It is noteworthy that some woredas of developing regions like Gambela reported highest portion of households with this good experience, with Gog 90.2%, and Jore 96.2%.

In the dominant majority of cases (over 96.4%) households water container is used only for storing drinking water, similar in both the treatment and control areas. Households in sample woredas use different types of water container, with different mouth type, dominantly narrow mouth, less than 10 cm across, and partly reflecting local cultural context. The evidence suggests that for most households (over 92.2%) such water container has a lid or fitted cover.

Figure 32: Main Water Sources

![Main Water Sources (Overall Result)](chart.png)

### Table: Main Water Sources (Overall Result)

<table>
<thead>
<tr>
<th>Source Type</th>
<th>GSF Control</th>
<th>GSF Treatment</th>
<th>UNICEF Control</th>
<th>UNICEF Treatment</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Protected %</td>
<td>79</td>
<td>56</td>
<td>67</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>Total Unprotected %</td>
<td>20</td>
<td>44</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Other (specify): %</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

7.3.5. Health Benefits

As highlighted earlier, the absence of a baseline data has been one limitation for analyzing the health benefits as a result of the intervention. One strategy the study utilized is to use control areas, with similar socio-economic realities, as a comparison group. The idea is that without the intervention, the situation in the intervention areas would have been similar to the situation in the control group. Women have been the primary targets for information collection, since, given the local contexts and responsibilities related to sanitation and hygiene issues, they tend to have the best knowledge and recall memory of diarrhea and other health issues in the household or community. The study also used both quantitative and qualitative (including Focus Group Discussions, and Key Informant Interviews) tools of information gathering, and triangulating such information before arriving at certain conclusions on health outcomes.

Of all sampled households having children 5 years and below, nearly 30% have their children affected by diarrhea in two weeks of time prior to this survey, compared to some 27.7% in control areas. The data also reveal that in both intervention and comparable control areas, the problem is aggravated in woredas of the developing regions, particularly in Dubit (Afar) and Menge (Benishangul), both with over 56% of cases, as well as Asayta (Afar) where nearly 72% of households face this challenge. From the total sampled households who have children with diarrhea, on average, children are affected 2.2 times in the last one year, quite similar in both intervention and control areas. It should be added that CLTSH programme had deliberately chosen to work in more challenging woredas where poverty and malnutrition rates are known to be higher. Hence, these results cannot be said to be representative of the whole region.

On average, in 84.6% of cases, children affected by diarrhea have been taken to health facilities for treatment...
Overall, the average distance of a health facility from patients' home is 6.3 kms (8.1 kms in treatment areas, and 4.4 in control areas). Health facilities in comparable control woredas are nearer to patients' home than in intervention woredas. This trend is also fairly reflected in the transportation costs to health facility centers.

The cost for meal and accommodation for children and care-taker reflect the regional differences of cost of living, as well as individuals ability and willingness to pay. The average meal cost for the child and care-taker is estimated to be about ETB 19.9 per day (24.5 in treatment areas, compared to ETB 15.8 in control areas); while the average accommodation (hotel/rent) cost per day is just ETB 3.9 (ETB 3.6 in treatment areas, compared to ETB 4.3 in control areas). It should be noted that such costs can be an underestimation if households do not spend in actual monetary values for such items (e.g. if households use their own food, travel on foot, and do not stay in standard hotels). The average number of days for treatment in health facilities is 3.6 days (3.3 days in treatment areas and 3.9 in control areas).

Overall, by far the highest cost related to diarrhea appear to be costs of medicine, which on average is ETB 45.3 (ETB in 48.6 in treatment areas, and ETB 41.8 in control areas), followed by payment for health center for admitted child, laboratory, and consultation costs. The data also reveal some exceptionally high costs of medicine in some woredas, especially Hargele (Somali) and Metema (Amhara) both relatively high temperature areas, and the latter especially prone to Malaria and related diseases.

Some woredas in developing regions have the highest cases, like Gog and Jore (Gambela with 36.8% and 47.6% cases respectively, as well as Asayta and Dubbi (Afar) at 64.5% and 61.9%, respectively. In 73.0% cases, under 5 children affected by eye infection were taken to health facilities.

Some 12.4% of cases (13.0% in treatment areas and 11.8% in control areas) of households have children affected by scabies/skin infection in the last 3 month. Cases are higher in treatment areas than control areas. Some woredas in developing regions recorded highest figures: Dubbi/Afar; 19.5%; Mengen/Benishangul Gumuz, 28.9%; Asayta/Afar; 30.9%, Gog/Gambela, 30.9%. In 71.4% cases, children affected by scabies/skin infection were taken to health facilities. CLTSH intervention areas fared better than their counterparts in control areas in having highest portion of household who took children infected by scabies to health facilities.

Some 9.8% (11.1% in treatment area and 8.5% in control areas) of households have children having intestinal parasitic disease in last three months. Some woredas exhibited exceptionally highest cases; with Dubbi and Asayta (Afar) 15.9% and 26.4% respectively, and Metema (Amhara) 17.5%. In 85.4% of cases, children affected by intestinal parasitic disease were taken to health facilities.

The evidence suggests that overall nearly 95.0% of households, quite similarly in treatment and control group believe that people not using latrine are a health risk to their village. Similarly similar trends are observed in the case of household perception of not washing hands as a health risk to individual and family. It looks like there is a general awareness (not necessarily practice) on this issue as the evidence is quite consistent between their intervention and comparable control areas. Yet, there are indicators that the proportion of households with such awareness is relatively low in some ‘Woredas of developing’ regions, like Mengen (Benishangul) and West-Imay (Somalia) where the proportion of the population with this general belief is just 80.8% and 82.6%, respectively.

### 7.3.6 Socio-Economic Benefits

#### Time and Money Saving

Given that especially water and sanitation interventions often result in both health and non-health-related outcomes, benefits other than reducing the prevalence of diarrhea should be investigated in detail to present the full impact of intervention. Additional tools can reveal real (social) benefits of such interventions. These include, for example, time and money saving if there was no incidence of diarrhea as a result of efficient implementation of recommended preventive WASH measures.

A simple exercise towards this is presented below. The exercise considers the potential money and time that could be saved if there was no diarrhea incidence. The data suggested that as a result of repeated incidence of diarrhea, patients and care takers have to travel to health centres, sometimes located at distant places, and incur costs related to transportation, hotel, meal, consultation/laboratory, medicine/hospital admission, and time (or opportunity cost). Considering such real costs, as well as translating the opportunity cost of time spent while visiting such distant health centres into monetary values (using minimum wage rates), one can arrive at the cost per diarrhea incidence per household. Multiplying this by the number of incidents an average family faces diarrhea cases per year, one can conclude that a household faces a total of ETB 436.44 per annum in treatment areas, and ETB 406.27 per annum in comparable control areas. That is, if there was no incidence of diarrhea as a result of efficient implementation of recommended preventive WASH measures, on average, households could save this resource, which could then be used to meet other livelihood needs. The details of the simple exercise are given on Annex 1.

It should be noted that such costs faced by households who visited health facilities (meal, transport, accommodation, etc.) can be an underestimation if households do not spend in actual monetary values for such items (e.g. if households use their own food, travel on foot, and do not stay in standard hotels). Also only the days spent at health facilities by one care taker are converted into opportunity costs, assuming that the child does not face any opportunity cost while in treatment at health facility (i.e. the child does not perform any income generating activities). In reality, particularly in rural areas, very young children can also generate income, supporting their families, or getting employed by someone (shepherding, etc.). Furthermore, it should also be noted that since such calculation is based on actual costs of households who sought treatment at health facilities, this cannot reflect the full and real cost of households who did not seek to go to such treatments, resort to traditional means, and faced severe consequences of elongated illness, or even death.

#### Economic and Social Empowerment of Women

In addition to such monetary valuations, we can consider other social benefits, with great implication on the gender dimension. Since in most cultures treating such health problems of children are faced by women, all the timing and monetary benefits would potentially accrue to women, thus there is a huge potential economic empowerment. Moreover, saving women’s time would mean availing some space where women can engage themselves in some income generating activities. Indeed, such time poverty faced by women has been one of the real challenges limiting women from taking full advantage of the microfinance and...
business opportunities now available to them throughout the country supported by government and NGOs.

Improved latrine facilities, not only improve the health situations of families, but also provides the most valuable social benefit of dignity, both for men and women, but may be more to the latter.

### 7.4. Evaluation Criteria/Judgment Matrix

#### 7.4.1. The relevance of the CLTSH approach

According to the report from CDC, 2013, diarrhea is the second from the top ten causes of infant mortality in Ethiopia. About 88% of diarrhea-associated deaths are attributable to unsafe water, inadequate sanitation, and insufficient hygiene. Most diarrheal germs are spread from the stool of one person to the mouth of another. These germs are usually spread through contaminated water, food, or objects. Considering this challenge as a priority, the Federal Ministry of Health adopted Community-Led Total Sanitation and Hygiene (CLTSH) approach to addressing hygiene and sanitation concerns; developed and endorsed the National CLTSH Implementation Guideline, National CLTSH Training Manual and National CLTSH Verification Protocol. CLTSH also has been implemented with the support of UNICEF and WSSCC/GSF in eight regional states of the country.

According to the evaluation finding, over 68% of households accessed their drinking water from safe sources, 46% wash their hands after defecation and about 60% of households use their own latrine. This shows that CLTSH contributed a lot towards changing the behaviour of household members towards sanitation and hygiene. This is a great potential to reduce diarrhoeal and associated deaths, which the upcoming EDHS in 2016 will point out. So, CLTSH is highly relevant in the Ethiopian context where traditionally latrine use and hand washing after defecation was nearly negligible. Moreover, CLTSH brought together communities to discuss their sanitation and hygiene problems and developed plans to address them. In the course of implementing the three phases of CLTSH, communities met three times and celebrated also their successes. Hence CLTSH was able to capacitate communities in identifying their major problems, and also partners in addressing any problems. So, CLTSH is highly relevant in building the capacity of communities. The health seeking behaviour of communities was also increased as compared to 2005 EDHS. According to EDHS 2005, 22% of children with diarrhoea in the last two weeks before the survey were taken to the health provider, but this evaluation pointed out that 84% of children with diarrhoea were taken to the health facility.

#### 7.4.2. Sustainability of CLTSH Program

Sustainability was considered both in the project design and implementation stage. The TOT training delivery approach can be considered an appropriate strategy to sustain the intervention results. The training approach implemented by the project where ToT was provided to government experts who in turn cascaded and provided the training to health extension workers and then to households. The project has built strong local capacity particularly at woreda and kebele levels. Besides, the project trained larger number of health extension workers that could teach, support and influence households in an effort to change hygiene and sanitation behaviour, build and use latrines.

Community ownership and involvement is the focus of CLTSH approach. Communities identified their own hygiene and sanitation problems, developed plan of action, implement and monitor their implementation. Latrine construction was mainly from local materials, low labor, time and financial cost as it took on the average 18 hours to construct, mainly constructed by household members and neighbours and costs on the average only ETB 278. Though 99% of households used traditional pit latrine, 71% of households planned to change the wall and 54% to change the door in the coming year. 91% of respondents believed that the cost of the improving sanitation needs to be covered by the household or family members. This shows that CLTSH is a suitable intervention which will be handled and continued by the family members.

The fact that the project was implemented in a participatory manner has also enhanced ownership among beneficiaries and government counterparts. This has increased their ownership and desire to sustain project activities and outcomes.

In addition, strong commitment of the Government of Ethiopia is ensured and reflected by the presence of supportive environment (presence of appropriate health policy, hygiene and sanitation strategic documents, implementation guidelines for step by step guidance of the implementation of CLTSH and the health system including structural arrangement of health development armies, 1 to 30 social structure, model family approach, health extension workers, etc.).

#### 7.4.3. Effectiveness of CLTSH approach

As per the evaluation criteria outlined in the terms of reference, the effectiveness of the CLTSH project is determined as follows:

As part of CLTSH implementation approach, a demand study was conducted on improved sanitation facilities. Based on the study findings, it was decided to organize small scale enterprises (SSE) in CLTSH implementing woredas to produce and avail sanitation facilities such as slab for latrine and plastic hand washing materials. To capacitate these small scale enterprises, partners organized training and provided them with start-up capital. These small scale enterprises were also linked to micro finance institutions to access loan and expand their production and distribution of sanitation facilities. Accordingly, these SSE groups produced cemented slab and plastic made hand washing facilities. They also promoted their products and established sell shops at woreda level and started to sell their products. Side by side with supporting these SSEs, UNICEF, IDE, GSF and PIE developed educational materials on hygiene and sanitation and distributed through government local structures. Local radio sessions were also used to mobilize people for improved sanitation facilities. Furthermore, UNICEF and Plan International supported the establishment of saving and loan associations so that it is possible for households to take loan and purchase locally produced improved sanitation facilities.

However, given all these efforts, only 7.5% of the interviewed households, in CLTSH intervention areas purchased cement to improve their latrines. About 85% of the interviewed households in CLTSH intervention areas used traditional pit latrines. This indicates that the demand was not fully created for sanitation facilities. On the other hand, 19.5% of the interviewed households in CLTSH intervention areas improved their latrines during the last one year preceding the survey, but none of them used improved sanitation materials either to repair or improve the latrine. So, the ability of the project in creating demand for improved sanitation materials was not effective.

#### 7.4.4. Efficiency of CLTSH Program

Improving hygiene and sanitation is one of the priority agenda for government. The fact that CLTSH is implemented through the existing government structure has enhanced ownership among beneficiaries and government offices at different levels. The different training sessions for government staff and health extension workers, the different implementation guidelines developed by partners and government were to enhance the implementation capacity of government staff. CLTSH implementation guideline is available in all woreda health offices; however, CLTSH guideline is missing from health posts, indicating that health extension workers do not have access to the guideline, though they are the forefront implementers of CLTSH and are closer to communities where actual implementation is taking place.

Despite the fact that, health extension workers do not have CLTSH Implementation Guideline, they integrated CLTSH intervention in their day to day activities and
implemented equally to other health sector development priorities and tried to address hygiene components. As a result, hand washing at critical times increased from 7% to 19% at the end of 2015. Safe water storage also increased equally. As to the efficiency of the CLTSH approach, the fact that the project was implemented through the existing government structure and experts including health extension workers, resource utilization was in an efficient and integrated manner. CLTSH approach, for example, utilized health extension workers at community level to train and mentor large number of households within a short period of time. Woreda level health professionals also provided the necessary support to all health extension workers regardless of intervention and non-intervention areas. Even at federal and regional level, health professionals were supporting and providing technical support with no additional benefit for them. So, resources utilization was at minimal level due to the design and nature of CLTSH approach. CLTSH did not have separate project staff at woreda and region level, the project has been operated within the existing government structure and resource utilization was so minimal.

Furthermore, latrine construction, repair and improvement were done by household members and from locally available materials. The fund from donors was spent mainly on educational material production, training, mentoring, experience sharing and media message transmission, more of capacity building and knowledge sharing. The cost of CLTSH implementation could have been huge if households had not supported with latrine construction materials. The fact that CLTSH had been community led and integrated with health extension package, was also considered an important source of efficiency.

CLTSH programme was set to reach a total of 3,600,000 households and support them in constructing their own sanitation and hygiene facilities. For this program, a total of 23,288,329USD was allocated for three years. The prevalence of latrine from sample households in this evaluation was 60.85% (2,242,600 latrines) in CLTSH operation areas. Based on this understanding, CLTSH programme used 9,900USD per households with the intention of constructing their own latrine during three years program life time.

7.4.5. Impact of CLTSH Program:
The impact of the project is mainly determined in term of diarrhea-associated under-5 child mortality. This will be assessed from the on-going EDHS 2016 survey. However, the survey results indicated that 30% children in the surveyed households were sick of diarrhea within two weeks prior to the survey, by far higher than EDHS 2005 at 18%. This needs further study to verify the finding.

7.4.6. Equity in CLTSH Program:
Community led total sanitation and hygiene (CLTSH) is designed in such a way that, its application among people living in the smallest, appropriate and manageable administrative units, like, development units in Ethiopia is expected to produce collective action to realize jointly developed community action plan; social pressure to ensure community led follow up of the progress through the implementation of community action plan; and social solidarity which is possible to support and strengthen the participation of elders, children, women, men, people with disability, economically weak and strong residents and all marginalized people to take part in the process of triggering when major decisions are taking place and strengthening and development of culture of supporting each other among neighborhood. This nature of CLTSH ensures equitable service provision among all section of residents in development. In this particular evaluation the methodology used to select respondents to be interviewed at household level is random cluster sampling which allows the participation of all section of development unit residents and minimize biases due to selection.

7.5. CLTSH Implementation in Agrarian versus Pastoralist Areas

Generally, the evaluation areas (regions, woredas, kebeles and development units) selected for this study can be divided into agrarian, agro-pastoralist and pastoralist areas. Accordingly, almost all our evaluated areas are either agrarian or agro-pastoralists for which reason it was difficult to get respondents from purely pastoralist areas. Since Somali and Afar regional states consist of 53% and 29%, respectively, of the pastoralist community, we took respondents from Somali and Afar as pastoralist and the respondents from others as agrarian. With this understanding, this evaluation tried to compare few selected variables between pastoralist and agrarian set up.

According to the finding of this evaluation, only 16% and 23% of the respondents from Afar and Somali, respectively can read and write. On the other hand, higher proportion of residents of SNNPR (45%), Amhara (40%), Gambela (34%) and Benishangul Gumuz (30%) are able
to read and write. This indicates that vast majority of the residents of Afar and Somali are illiterate compared to the other regions.

The household survey data from this evaluation revealed that 73% and 48% of respondents reported that residents of Afar and Somali, respectively, have farm land for families. This can be compared to that of SNNPR (98%), Oromia (95%), Benishangul Gumuz (88%) and Gambela (76%) where residents have farm land for the families. Though it is not as it is in the other regions, this finding indicates that farming is the major economic source of residents in Afar and Somali regions too.

The result from this outcome evaluation clearly showed that 88%, 70.5% and 49% of respondents from Afar, Gambela and Somali, respectively, reported that they are using open field for defecation which is found to be much higher compared to Benishangul Gumuz (0.5%), SNNPR (5%), Oromia (21%) and Amhara (31%).

Respondents from households without latrine were asked a question ‘Do you want to have your own household latrine?’ and their responses showed that the vast majority of respondents in all regional states, including Afar and Somali, showed their interest to have their own latrine. This is really a motivating factor for hygiene and sanitation implementers particularly in Afar and Somali regions. These findings are clearly presented in the following figure. The findings of this evaluation showed that only 9% and 25% of the households in Afar and Somali, respectively, get water for household consumption from protected source compared to Gambela (100%), SNNPR (93%), Oromia (79%), Amhara (76%) and Benishangul Gumuz (72%).

On the other hand, the practice of treating water before use at household level in Somali (51%) and Afar (18%) is much better than Benishangul Gumuz (2%), Amhara (5%) and SNNPR (8%).

As the result of this evaluation indicates, 15%, 41% and 47% of households in Benishangul Gumuz, Afar and Somali, respectively, reported to have separate container for drinking water which is much lower compared to that of Gambela (93%), SNNPR (69%), Tigray 69%, and Amhara 64%.

As a result of poorly implemented hygiene and sanitation programs, as it is clearly showed in the above statements, Afar, Benishangul Gumuz, Gambela, Somali and Oromia are regional states where diarrhea is common among children who are under 5 years old.

Generally, higher proportion of respondents from Afar and Somali regional states are agro-pastoralists and the vast majority is illiterates. Though most of the respondents showed their interest to have their own latrine at their home, this evaluation revealed that the vast majority of households in these regions are still using open field for defecation. Again, despite better proportion of households reported that they are treating water before use; they are getting water for household consumption from unprotected sources.
8. Conclusions

Based on the findings of this outcome evaluation, the following conclusions are synthesized as a basis for our recommendations. The following are encouraging findings which motivates CLTSH implementers and should be further strengthen in the future.

- As it is clearly seen from the outcome of this evaluation, more than half of surveyed households have their own latrine; majority of the respondents in the study woredas dropped children’s stool into toilet facility; in the vast majority of surveyed households, pathways to latrines are walked on recently indicating that household members are using their latrines; above half of households with latrine in this evaluation have plan to change or improve their latrine within one year time; 97.5% of respondents in this evaluation have the habit to wash their latrines, - In addition to those households having their own latrines, households which did not have their own latrines were part of this evaluation. Accordingly, the vast majority of them want to have own latrine; majority of these households planned to construct their own latrine in one year time and almost all of them believe that the cost for the construction and improvement of latrine should come from households.

  - Though the habit of washing hands during the other critical times is not satisfactory, the vast majority of respondents in this evaluation have the habit to wash their hands before eating. In addition, this evaluation revealed that majority of the households is getting water for household consumption from protected sources.
  - According to the result of this evaluation, diarrhea is still common among under five years old children and the good thing is majority of respondents took their children affected with diarrhea, to health facilities for treatment indicating improved health service seeking behavior of care takers.
  - As it is clearly visible from the findings of key informant interview at woreda health office, performances including organizing and conducting consensus building workshops among stakeholders in all 12 surveyed woredas; training of trainers (TOTs) and training of facilitators were given, majority of woredas, and produced good number of trainers and facilitators and as a result the initiation of CLTSH and triggering at grass root level were running in good pace.

  Outcomes Status of CLTSH Implementation

  - The analysis of data collected from households showed that 27.4% of households are still using open field field for defecation. Again most of the available household latrines are traditional pit latrine. In addition to these, though respondents of KII and FGD reported that their development units and kebeles are open defecation free, the household survey showed us there are no development units found to be ODF. This is probably mirror reflection of the way we implemented CLTSH as it is indicated in this report.
  - The vast majority of the household questionnaire respondents showed their interest to improve their latrine and again same proportion of respondents from households without latrine showed their willingness to have latrine for their home. Almost all respondents of both groups (households with and without latrine) reported that the responsibility of covering the cost of improving latrine and constructing new latrine is the responsibility of households. This positive finding which is potentially supporting condition is encouraging to CLTSH implementers to motivate them to implement CLTSH in a better way.
  - Though the vast majority of the respondents reported have washed their hands before meal, proportion of respondents who wash their hands before food preparation, after defection and after cleaning children bottom is still very low. The availability of washing facilities with water and soap or substitute in the study area is found to be critically low.
  - Respondents from higher proportion of households reported to get water for household use from protected source and most of them claim that they are storing drinking water separately; the vast majority of households do not treat water before they use it.
  - Higher proportion of under 5 children from surveyed households experienced diarrhea within 2 week before this survey. A child is found to be affected by diarrhea more than twice annually. The vast majority of children affected with diarrhea is taken to health facilities for treatment and have got some form of treatment.

  Factors Influencing CLTSH Implementation

  Policy and Strategy

  - Policy and strategy documents, National CLTSH Implementation Guideline, National CLTSH Training Manual and CLTSH Verification Protocol Documents developed and endorsed by the Government of Ethiopia have created conducive and supportive environment for the implementation of CLTSH programs in the country.
  - Reviewing the National Implementation Guideline revealed that it lack in guiding implementers through the post ODF implementation of CLTSH and resulted difficulty in ensuring improvement of sanitation and hygiene facilities up through sanitation ladder and inability to sustain positive sanitation and hygiene behaviours. This situation resulted that most of household latrines are not constructed in such a way that they are...
not good enough to prevent communicable diseases, do not provide privacy to users and do not protect the users from physical conditions. This condition might explain the higher prevalence of diarrhea among under 5 children in this evaluation compared to the report in E-DHS-2011.

- Physical absence of CLTSH Implementation Guideline in offices of government and non-government organizations at woreda and kebele levels was one of the prominent findings of this evaluation. Accordingly, the guideline was available in 10 of 12 woreda health offices. On the other hand, among all 24 health posts assessed in this evaluation the guideline was available only in 3 health posts. This finding indicates that there is no clearly set road map, for the establishment of inter-sectoral collaborations among stakeholders, lack of means of strengthening synergetic effect of social networking and absence of commonly understood step by step implementation of hygiene and sanitation programs. All these shortages due to the absence of the guideline is believed to have strong effect on the quality of CLTSH implementation in general and post-triggering follow-up.

- Moreover, training manual(s) on community conversation and family dialogue were not available in any of the visited sector offices. The absence of training manual produced and endorsed by the Federal Ministry of Health might create difficulty for CLTSH implementers in giving training on CC/FD which again weaken the post triggering follow up of CLTSH implementation.

### Process of CLTSH Implementation:

- Though there have been adequate number of consensus building workshops, training of trainers and facilitators training in almost all operation areas, the quality of these workshops was found to be questionable. This is supported by the fact that the outputs of consensus building workshops in most of woredas was partial and there are woredas without join action plan developed and endorsed by the stakeholders that took part in the workshops. This situation strongly affects the strength of inter-sectoral collaboration of stakeholders and weakens the post triggering follow up of CLTSH program implementation.

- Triggering of development units is found to be common practices in all operation areas, but, when we see the outputs of the process of triggering, there is development units conducted triggering sessions without producing community action plans. This situation causes that communities lose their orientation as to what they are anticipating to gain and it makes unclear the need of post triggering follow up.

- Shortage of efforts related to post-triggering capacity building of both front line implementers and CLTSH team members at development unit levels is one of the major finding of this evaluation. Even in operation areas where trainings were provided, sessions which did not address community conversation and family dialogue were common. This situation caused that CLTSH team members do not have adequate knowledge and skill in facilitating the community conversation and family dialogue sessions which again resulted weak post triggering follow up of CLTSH implementation.

- In most of development units included in this evaluation, the community conversations sessions at development unit levels were not facilitated by CLTSH team members. This reality affects negatively the post triggering follow up of CLTSH implementation. Moreover, since there is no transfer of power stick from the historic doers (HEW’s, health professionals, kebele administrators, etc.) to communities (CLTSH team members), the process of empowering communities is found to be negligible.

- In this evaluation, majority of the respondents of interviews at household level reported that they are willing to improve their latrine and they agree to cover the cost of improving their latrines. The vast majority of the respondents from households without latrine are found to be willing to have their own latrines and have planned to construct the same within one year after this

### Evaluation of CLTSH Program Implementation

- In this evaluation, the process of evaluation of CLTSH program was not done according to the outline stated in the National CLTSH Implementation Guideline. This situation created multiple technical and strategic gaps which again resulted communities who could not lead their development, ineffective post-triggering follow up and unexpectedly very low service coverage.

All these findings reveal that the implementation of CLTSH in UNICEF’s and WSSCC/ GSF’s program areas misses quality considerably and lack essential contents suggested by the National CLTSH Implementation Guideline.

CLTSH Implementation Guideline lacks part considering post ODF follow up and ensuring improved sanitation and hygiene facilities.

- Generally, this evaluation revealed that the processes of implementation of CLTSH program was not done according to the outline stated in the National CLTSH Implementation Guideline. This situation created multiple technical and strategic gaps which again resulted communities who could not lead their development, ineffective post-triggering follow up and unexpectedly very low service coverage.

- Organization level post triggering follow up was one of the areas addressed in this evaluation. As the finding of this evaluation clearly indicated, 8 out of 12 woreda health offices have regular review meetings to health extension workers.

- Pre-triggering which did not produce essential outputs of Consensus Building workshop which were not expected to ensure strong inter-sectoral collaboration;

- Triggering sessions that did not ensure community action plan which is the road map to CLTSH implementation and follow up;

- Post triggering training sessions organized for CLTSH implementers which happened without considering CC/FD which again are supposed to empower the people at grass root level and serve as instrument for community led follow up. Overall, the implementation of CLTSH in UNICEF’s and WSSCC/ GSF’s program areas misses quality considerably and lack essential contents suggested by the National CLTSH Implementation Guideline.

Though the general status of outcomes of CLTSH program implementation in Afar and Somali is more or less similar as it is in the other regional states, considerable proportion of respondents from these regions have farmland for farming and the vast majority are illiterates. Though most of the respondents from Afar and Somali showed their interest to have own latrine at their home, this evaluation revealed that the great majority of households in these regions are still using open field for defecation. Large proportion of households in Afar and Somali are still getting water for household consumption from unprotected sources. On the other hand, good proportion of households in these regions reported that they are treating water at household level before use.
9. Recommendations

Recommendations to the Federal Level

1. As it is clearly seen from the findings of this evaluation, one of the recommendations to the F-MoH should be the strong requirement of improving the processes of implementation of CLTSH according to the outlines given in the implementation guideline and continuing to respect its subsidy free principle.

2. As it is found in the other regions, it is clear that CLTSH program is implemented in agro-pastoralist areas of Afar and Somali regions with poor quality and this resulted in very low service coverage. As the finding of this evaluation indicated, CLTSH implementation in agro-pastoralist areas of Afar and Somali region requires critical efforts to improve according to the guides given in the CLTSH implementation guideline. Therefore, it is to recommend that F-MoH continue using CLTSH approach in Agro-pastoralist areas of Somali and Afar regions and initiate further study on feasibility of CLTSH Approach in purely pastoralist areas.

3. The availability of all policy, strategy, implementation guide, training manual and verification protocol documents is highly appreciable. As it is seen from review of CLTSH implementation guideline, it is clearly seen that the documents lack very important part which is supposed to deal with post ODF phase of CLTSH implementation. This part would strengthen the post triggering follow up and guide implementers in line with improving sanitation facilities to climb up the sanitation ladder. Hence, we recommend that the F-MoH and stakeholders at federal level consider the revision of CLTSH guideline so that it includes post ODF part of CLTSH implementation.

4. The community led post triggering follow up depends mainly on the trainers and facilitators’ knowledge and skill in relation to community conversation and family dialogue. For this, it is mandatory to have well prepared and friendly training manual on CC/FD which is adapted to sanitation and hygiene. We again recommend that F-MoH, as usual, and stakeholders at federal level initiate and lead the process of developing this essential document.

5. Once these documents (Revised CLTSH implementation guideline, CLTSH training manual, CC/FD training manual and verification protocol) are ready, and available in local languages, there must be introduction workshops in a cascading manner to all relevant health professional and stakeholders at all administrative levels. As part of this, we recommend that F-MoH and stakeholders at federal level should give directions to all health bureaus, desks, offices and health posts about the introductory workshop and the ministry also should take the initiative to conduct this workshop at national and regional levels.

6. The implementation of CLTSH is not the responsibility of one ministry or organization; it needs joint effort from all stakeholders. In order to get the maximum result, the joint effort should be well coordinated with clearly defined roles and responsibilities of each member organization. Therefore, we recommend that the F-MoH and stakeholders at federal level should take the responsibility of undertaking study on how we can organize and establish functional, effective and efficient coordinating structure which will coordinate quality implementation of CLTSH at all administrative levels.

Recommendations to Regional Health Bureaus

1. As part of introducing all CLTSH related document, we recommend that RHBS should give directions to all health desks, offices and health posts about the introductory workshop and the RHBS and stakeholders at regional level also should take the initiative to conduct this workshop at zone and woreda levels.

2. In order to follow up the progress of quality implementation of CLTSH implementation, effective and sustained follow-up is a real requirement and this depends on what types of indicators one is collecting, how the data are stored, analysed, disseminated and utilized. Achieving all these again depends on what types of and how complete the data collection instrument is. So, we recommend to the RHBS and stakeholders at regional level to develop data collection and storage tools and reporting formats with indicators measuring the process and outputs of CLTSH implementation.

3. We also recommend to the RHBS and stakeholders at regional level to establish broad base CLTSH data base which supports the front line CLTSH implementers and researchers for further study and program improvement.

4. The success of CLTSH implementation depends mainly on the quality of the process of running CLTSH and CC/FD trainings sessions, consensus building workshops and triggering sessions. We recommend to the RHBS and stakeholders at regional level to regulate these CLTSH related activities and ensure their quality at regional level and delegate with accountability to the woreda offices for activities at woreda and kebele level.

5. We again recommend the RHBS and stakeholders at regional level, after collecting from F-MoH; take the responsibility of distributing all CLTSH related documents to all health desks, offices, health posts and other relevant stakeholders.

6. The quality of the implementation of CLTSH at all levels depends on the knowledge and skill of front line implementers. For this purpose, we recommend to the RHBS and stakeholders at regional level to design and ensure based on the guidance given in the National CLTSH Implementation guideline, facilitate the organization of kebele level CLTSH verification team.

7. We recommend to RH and stakeholders at regional level that, based on the guidance given in the National CLTSH Implementation Guideline, facilitate the organization of regional and zonal level CLTSH verification team.

8. It is also recommended that RHBS and stakeholders at regional level support small scale enterprise groups so that it is possible for them to promote households for improved sanitation, demand based production of sanitation and hygiene and arrange space for product distribution centre at affordable price.

Recommendation to Woreda Health Offices

1. The success of CLTSH implementation depends mainly on the quality of the process of running CLTSH and CC/FD trainings sessions, consensus building workshops and triggering sessions. We recommend to the woreda health offices and stakeholders at woreda level to regulate the quality of these CLTSH related activities and ensure their implementations at woreda level and delegate with
accountability to the health posts for activities at kebele level.
2. The quality of the implementation of CLTSH at all levels depends on the knowledge and skills of front line implementers particularly health extension workers. For this purpose we recommend to the woreda health offices and stakeholders at woreda to design and ensure continuing training programs at woreda and kebele levels.

Recommendations to Health Posts
1. Implementation and follow up of development unit level action plan depends on the knowledge and skill of CLTSH team members. Well trained and empowered CLTSH team members are essential input in the process of empowering communities. For these reasons we recommend the health posts:
   a. Ensure regular review meetings for CLTSH team members with the purpose of follow up on the implementation of community action plan at development unit.
   b. Ensure continuing training program for CLTAH team members
   2. Verification ensures the quality of household latrines constructed and let the community to celebrate their achievements. Understanding this and based on the guidance given in the National CLTSH Implementation Guideline, facilitate the organization of kebele level CLTSH verification team
   3. Support small scale enterprise groups so that it is possible for them to promote households for improved sanitation, demand based production of sanitation and hygiene facilities, arrange space for product distribution centre at affordable price.

References
1. US Department of Health and Human Services; Center for Disease Control and Prevention,
2. Report from CDC Ethiopia (August 2013)
3. Hygiene and Sanitation Strategic Plan of Ethiopia developed in 2011
4. Universal Access Plan of Ethiopia
5. One WASH Program
6. Fourth Health Sector Development Plan of Ethiopia
7. First Growth and Transformation Plan; 2011
8. UNICEF/WHO Joint Monitoring Program; 2015
10. Post Triggering/Post ODF Follow up draft document, Plan International Ethiopia; 2015
11. Ethiopian Demographic and Health Survey; 2005
12. Ethiopian Demographic and Health Survey; 2011
13. The monthly minimum Wage Rate is ETB 420, for laborers and guards, who are expected to work for a maximum of 35 hours per week. The hourly minimum wage is thus calculated to be ETB 2.70 [http://www-wageindicator.org/main/salary/minimum-wage/ethiopia] (Information last updated on this page: 16-09-2014)