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# Learnings from Water Safety Plan implementation in South Ari Woreda

IRC WASH Ethiopia

Prepared by Muhammed Ibrahim, Betelhem Gebeyehu, and Nebiyu Gashawbeza on behalf of IRC, with input from Gezahegn Lemecha and Lemessa Mekonta. This report was edited and laid out by Tsegaye Yeshiwas. For questions or clarifications, contact IRC here: [www.ircwash.org/contact-us](http://www.ircwash.org/contact-us)

This document chronicles the establishment of water safety planning teams in South Ari Woreda and four pilot kebeles within the woreda, the development of comprehensive water safety plans, and their subsequent implementation. The document meticulously captured the overall process of plan development and implementation, highlighting the positive impact on the water, sanitation, and hygiene status of the area. It also incorporated the challenges they encountered during the water safety plan implementation and provided recommendations.

IRC WASH Ethiopia  
Golagul Towers Building  
Bole Sub-city  
Woreda 4  
House No. 813/814  
Addis Ababa

Ethiopia@ircwash.org  
[www.ircwash.org/ethiopia](http://www.ircwash.org/ethiopia)

# Contents

<b>ABBREVIATIONS</b> .....	<b>5</b>
<b>INTRODUCTION</b> .....	<b>6</b>
<b>OBJECTIVE</b> .....	<b>7</b>
<b>METHODOLOGY</b> .....	<b>7</b>
<b>RESULTS</b> .....	<b>8</b>
Water Safety Planning (WSP) Steps .....	8
Assembling the WSP team .....	8
Describing the water supply system.....	12
Identifying the hazards and assess the risks .....	13
Develop, implement and maintain an improvement plan.....	14
Define monitoring of control measures.....	17
Document, review and implement the WSP.....	18
Changes since the implementation of the WSP.....	19
Expansion and new construction of water supply schemes .....	20
Service level improvement and demand for improved WASH services water supply .....	21
Promotion of improved latrine .....	21
Improvement in water quality .....	23
<b>LEARNINGS AND RECOMMENDATIONS</b> .....	<b>25</b>
<b>ANNEX 1: WOREDA SUPERVISION CHECKLIST</b> .....	<b>27</b>

## Tables

Table 1: Service progress in the WSP kebeles .....	21
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## Figures

Figure 1: Six steps of WSP for rural water supply system (Adopted from the 2012 WHO guideline)	6
Figure 2: Kebele WSP roles and responsibilities posted on the wall .....	9
Figure 3: The first WSP training.....	10
Figure 4: Arbaminch experience sharing visit .....	11
Figure 5: WSP support visit to Sida kebele .....	12
Figure 6: Description of water supply systems .....	12
Figure 7: Kebele water systems road map (A) Sida, (B) Metser, (C) Shishir, (D) Arfes .....	13
Figure 8: Example of hazards and risks identified.....	14
Figure 9: WSP at scheme and kebele level.....	14
Figure 10: WSP team presenting Shishir kebele WSP to kebele cabinet members .....	15
Figure 11: Arfes kebele WASHCO orientation.....	15
Figure 12: Progress of WASHCOs at Bashal village water supply .....	16
Figure 13: Fakatar water scheme before and after WSP implementation .....	17
Figure 14: Reporting and feedback mechanisms for WSP activities.....	17
Figure 15: Documentation about water supply systems and WSP activities .....	18
Figure 16: Water supply expansion at Metser kebele .....	20
Figure 17: Yeset spring, relocated latrine, and hygiene facility .....	22
Figure 18: Promotion of SATO pan .....	23
Figure 19: Water scheme protective measures .....	24
Figure 20: Water users washing their leg outside water point fences in Metser and Shishir (before and after).....	25

## Abbreviations

GLoWS	Guided Learning on Water and Sanitation
HEW	Health Extension Workers
HWTSS	Household Water Treatment and Safe Storage
NGO	Non-Governmental Organisation
SDG	Sustainable Development Goal
WASH	Water Sanitation and Hygiene
WASHCO	WASH Committee
WHO	World Health Organization
WSP	Water Safety Plan

## Introduction

According to the World Health Organization (WHO) water safety plan (WSP) manual, WSP is “the most effective means of consistently ensuring the safety of a drinking-water supply using a comprehensive risk assessment and risk management approach that encompasses all steps in water supply from catchment to consumer”. The WHO recognizes WSP as the most reliable and effective way to manage drinking-water supplies to safeguard public health. It is a proactive risk assessment and risk management method that encompasses the entire water supply system, from catchment to consumer.

The general WSP development and implementation consists of eleven main steps (assembling team, describing the water supply system, identifying the hazards and assessing the risks, determining and validating control measures, re-assessing and prioritising risks, developing, implementing and maintaining an improvement plan, defining monitoring of control measures, verifying the effectiveness of the WSP, preparing management procedures, developing supporting programmes, planning and carrying out periodic WSP review, and revising WSP following an incident). These eleven steps are contextualised for rural WSP development and implementation into six main steps as shown in Figure 1. The six main steps are assembling the WSP team, describing the water supply system, identifying the hazards and assessing the risks, developing, implementing and maintaining an improvement plan, defining monitoring of control measures, and documenting, reviewing and implement the WSP.

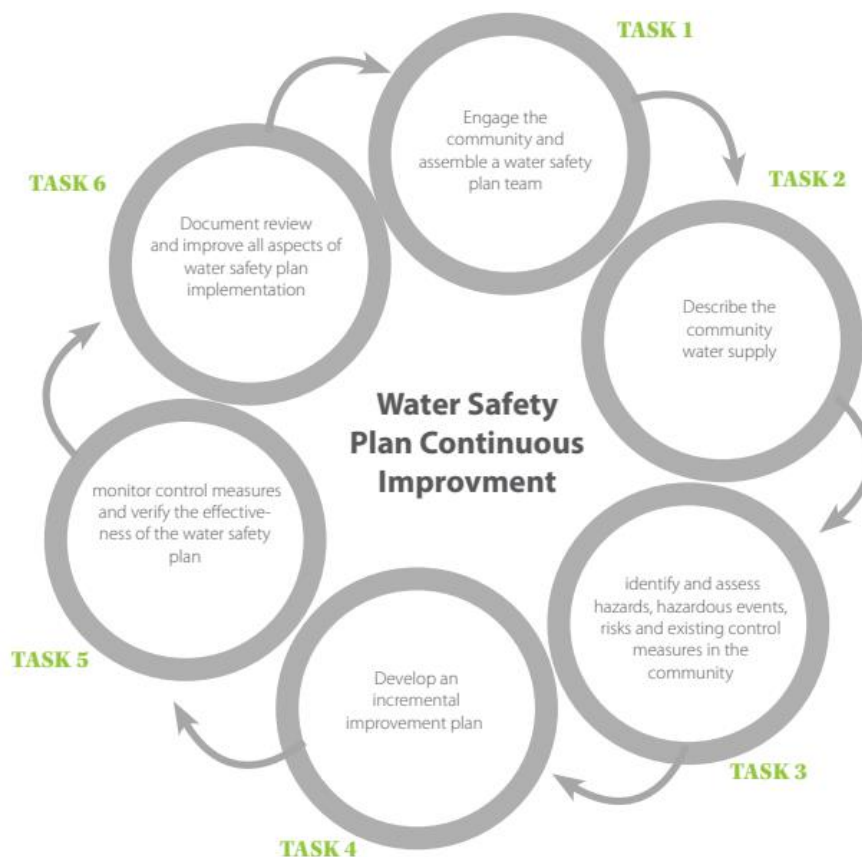


Figure 1: Six steps of WSP for rural water supply system (Adopted from the 2012 WHO guideline)

South Ari Woreda has been working towards achieving the SDG goal 6, targets 6.1 and 6.2 through the development of a costed SDG 2030 Plan. IRC WASH has been supporting the implementation of Woreda WASH SDG Plan as part of a support to Agenda for Change in Ethiopia project.

In July 2022, WSP team members from four pilot kebeles in South Ari woreda received comprehensive training on the development and implementation of the WSP. Since then, the team has been working on water safety activities in the kebeles. This study was conducted to document the development and implementation process of the WSP and the learnings in these four kebeles.

## Objective

The aim of this study is to document the implementation process, and learnings from the development and implementation of water safety planning in the four pilot kebeles of South Ari woreda. In addition, the study looked at the implementation of WSP and its contribution to creating demand for WASH services and improving operation and maintenance activities. The study also tried to come up with possible recommendations for future WSP support.

The main guiding research questions for the study are:

- To what extent have all the WSP steps been covered and documented by the WSP team?
- What are the main benefits, challenges, and learnings during the WSP development and implementation?
- What are the main changes in kebeles since the implementation of the WSP (including service level)?
- Has the implementation of the WSP contributed to improvement in demand for improved WASH services? Is there an improvement in functionality/has demand for maintenance increased? Are there new water supply, sanitation, and hygiene facility construction because of WSP implementation?
- What are the main interventions needed to improve WSP performance in the kebeles?

## Methodology

The study used a mixed method approach consisting of primary and secondary data sources. Primary data was collected via key informant interviews, and direct observation during field visits to the kebeles. Secondary data was obtained through document review, WSP team meeting minutes, monitoring reports by woreda team, and overall process documentation.

The key informant interviews involved interviews with woreda WSP members, kebele WSP teams, WUAs, and users found during water scheme visits. The key informant interview questions are found in Annex 1. Interview questions included steps of WSP development, implementation, and progress to date.

Field visit was conducted in three of the four WSP implementation kebeles because one of the kebeles (Arfes) was not accessible during the visit. However, the WSP team members were interviewed during WSP refresher training. Field observation checklist can be found in Annex 2.

After the data collection process, the primary and secondary data was analysed and used for this assessment report to answer the guiding research questions.

## **Results**

### **Water Safety Planning (WSP) Steps**

#### **Assembling the WSP team**

Establishing the WSP team is the first step to start the implementation of water safety planning. The team is expected to include people from the community, relevant government sectors, kebele administration, NGOs, and other key stakeholders.

Piloting WSP is one of the project activities IRC WASH undertook through Agenda for Change in Ethiopia project activities. IRC WASH discussed with the woreda water, mines, and energy office about the WSP approach and how to implement it. During the 14th learning alliance meeting, the participants discussed the importance of establishing a WSP team and starting the implementation process. The learning alliance approved the woreda WSP team and the team officially started the implementation instantly.

Woreda water, mines, and energy office with IRC WASH selected the drainage catchments for WSP implementation based on beneficiary number, water infrastructure and technology type, accessibility, and topography of the area. Two drainage catchments were selected (Foshiti and Maki), and four kebeles (Arfes, Metses, Sida, and Shisher) were selected within the two catchments. Then, the learning alliance approved the pilot kebeles.

Based on the learning alliance's discussion, the woreda administration wrote a letter to the woreda WASH sector offices (water, health, education, administration), natural resource management office, agriculture office, and Gazer utility to assign one technical expert to be a member of the woreda WSP. Similarly, the woreda water, mines and energy office wrote a letter to the selected four kebeles to establish kebele WSP team comprised of kebele federation, kebele manager, kebele health extension worker (HEW), kebele agriculture and natural resource management expert and school representative (WASH club leader).

Since the establishment of the WSP teams at woreda and kebele level there have been some changes in membership because of turnover, due to changes in position or work location. Kebele federation and health extension worker were changed at Metses kebele, a member from the agriculture office, and the school representative were changed at Arfes kebele, and a member from the agriculture office was changed three times at Shisher kebele. From the woreda WSP team, only a member from the woreda health office was replaced.

The national rural WSP implementation guideline, which is adopted from the WHO guideline and prepared by the Ministry of Water and Energy, suggests the kebele federation chairperson as coordinator of the Kebele WSP team, and all activities of WSP should be documented at the kebele federation office. Based on this suggestion, all the kebele WSP teams have an assigned



office in the kebele federation offices. In all visited kebeles, the team has its own office to conduct meetings and file all documents related to water safety planning activities.

The establishment of WSP revitalised kebele level WASH activities because the federations in these kebeles were not very active before the establishment of the WSP teams. The WSP team provides extra energy for WASH efforts inside the kebele and is the sole functioning WASH coordination platform in the kebele.

Members of the WSP team are clear on their roles and responsibilities. The kebeles also posted the WSP members' roles and responsibilities on the wall of their offices (Figure 2) especially responsibilities related to their day-to-day activities. The role of the HEW is to create awareness at household level on improved sanitation and WASH in health care facilities. The role of the federation chair is to handle issues related to scheme management. The role of the school representative is to solve issues related to school WASH and school WASH club activities. The agriculture expert is responsible for facilitating water resource management activities and controlling the effect of pesticides and fertilisers on water systems.

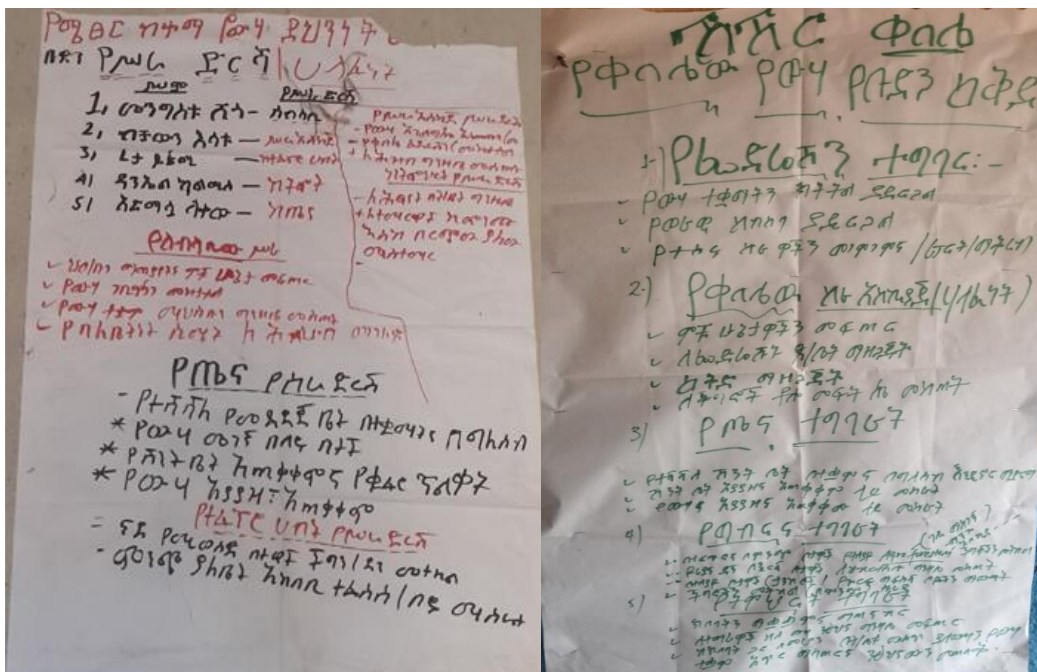


Figure 2: Kebele WSP roles and responsibilities posted on the wall

The first training was organized by South Omo zone water department with financial support from IRC WASH (Figure 3). Both woreda and kebele WSP team members participated in the training. The training lasted for five days, consisting of four days of theoretical sessions and one day dedicated to practical training. The training mainly focused on, introduction to WSP, implementation steps, and practical field training on risk assessment and describing the water system using training materials from the SNNPR water resource management team and Guided Learning on Water and Sanitation (GLOWS) guideline. In addition, the teams also received a refresher training in September 2023, based on identified gaps during woreda supervision visits and requests from kebele WSP team.



**Figure 3: The first WSP training**

After the first training, the teams also had two-day learning visit at Arbaminch in July 2022 to learn from Arbaminch Water Supply and Sewerage Enterprise (Figure 4). According to Amare Alsa, from Sida Kebele, "All the water systems we visited and the WSP implementation seem to be amazing, we need to take this learning to our kebele; they achieved the WSP because they are committed to conduct it, we have to wake up and make efforts to change the service in our community, I like to take this experience to my kebele".



**Figure 4: Arbaminch experience sharing visit**

Members try to align the WSP plan with their day-to-day activity plans and sometimes coordinate together to visit households and water schemes. The team conducted repeated meetings with all WASHCOs in the kebeles and provided information about the WSP. The discussion with WASHCOs includes risk factors to their specific water supply system, scheme management, community participation on water resource management, water supply service delivery and construction of new water scheme for unserved community with contribution from the community, and WSP concepts and implementation. There is also a discussion with households who have no water supply system to plan for protected water sources. In addition, the team also discussed about construction of improved latrines and eradicating open defecation in the kebeles. The team also presented concept of WSP and kebele water safety plan to the kebele cabinet members. The kebele WSP team communicates with the woreda WSP team through phone call, written report and in person supervisions.

The woreda WSP team conducted its meeting every month at the beginning but later changed the meeting to twice in a quarter. In addition to the regular meetings, the woreda WSP team also meets after their quarterly support and supervision visit to WSP implementation kebele (Figure 5). The woreda team provides regular support to the kebele team on quarterly basis. In addition, the team tries to provide additional support by aligning with the woreda water office field activities if the field visit is at the four WSP kebeles. After each visit, the woreda WSP team meets to discuss their visit and provide feedback to the kebeles. The meeting includes progress on WSP implementation, support provided to the kebeles, gaps and additional support required. The woreda then writes an official letter to the kebeles with feedback and action points for both the kebele and woreda WSP teams.



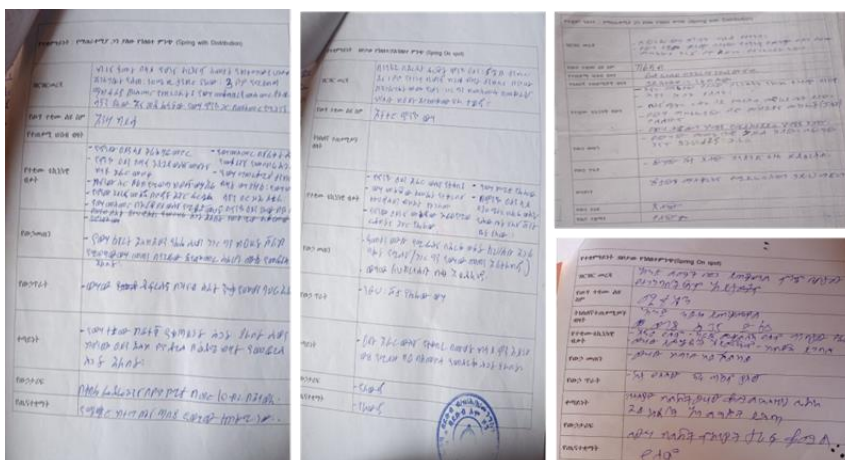


**Figure 5: WSP support visit to Sida kebele**

### Describing the water supply system

Once the WSP teams were assembled and trainings were conducted, the kebele WSP teams start their implementation by mapping and describing water supply systems in their kebeles from catchment to the households. This includes environmental, climatic, and anthropogenic factors that directly or indirectly influence the resilience of services, service accessibility and the management of water sources.

The kebele WSP team visited all water supply systems in their kebeles that are both improved and unimproved using the WSP guidelines. The information gathered about the schemes included name of the scheme, number of users, functionality status of the scheme, physical and chemical quality of water from source to the households, existence of WASHCO and tariffs and financial information if any. As shown in Figure 6, all the four WSP teams described their kebele water supply systems in the format.



**Figure 6: Description of water supply systems**

The WSP team then sketched their water supply systems in a road map (Figure 7). The map includes all protected and unprotected water sources, villages, and water distribution points.

However, even though the team identified the environmental factors that are risking the system such as exposed pipeline, open manholes toilets nearby water sources, they did not include this information in the map.

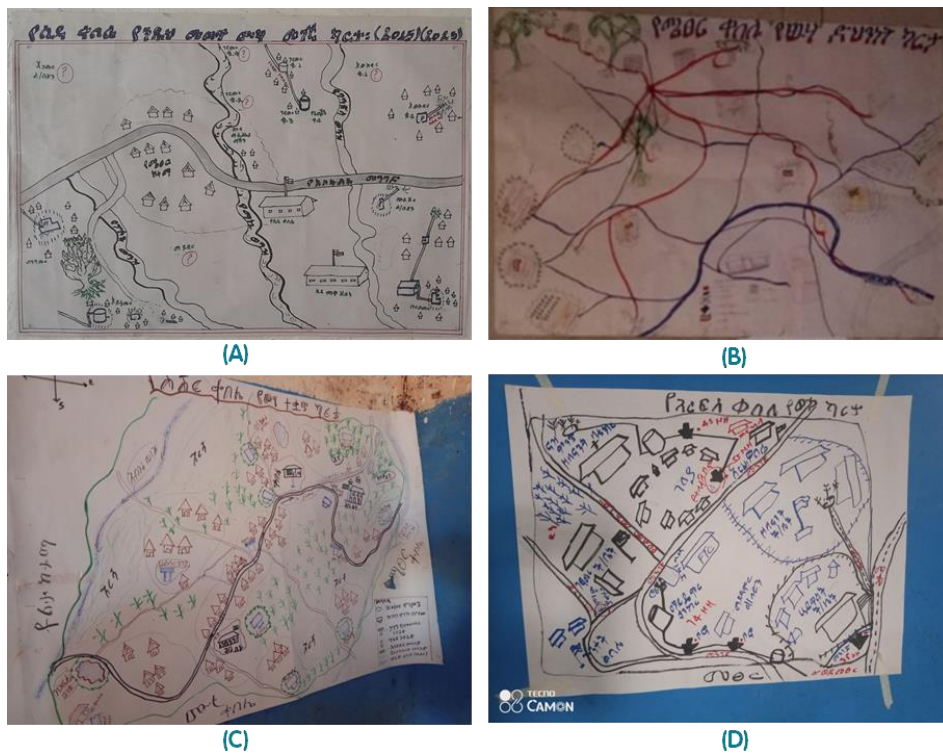


Figure 7: Kebele water systems road map (A) Sida, (B) Metser, (C) Shishir, (D) Arfes

### Identifying the hazards and assessing the risks

Following the completion of the mapping and description of all community water supplies in the kebele, the WSP team conducts a thorough discussion to identify potential risks to the safety and quantity of the community water supplies, evaluate the effectiveness of the existing control measures, and assess the level of associated risks to the quality and quantity of the drinking water sources (Figure 8).

Some of the identified risks in the water supply systems are household's latrine found upstream of water sources within 30 meters, households with unimproved latrines, trees that are around the water sources that could affect catchment recharge, schemes that have no fence, schemes that have no committees, exposed pipelines and villages with no protected water sources.

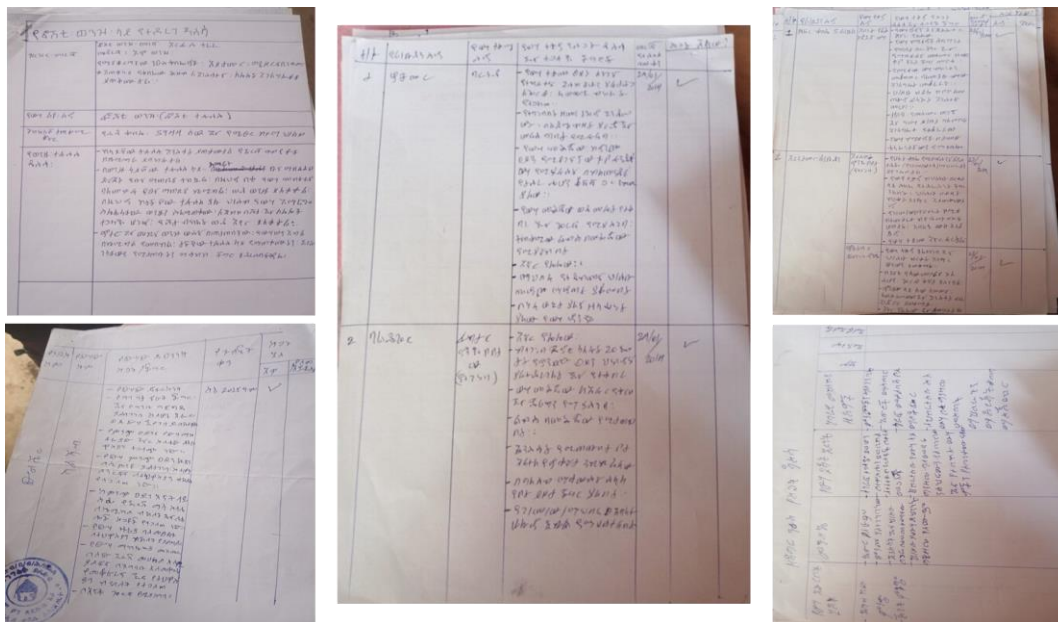


Figure 8: Example of hazards and risks identified

## Develop, implement and maintain an improvement plan

The WSP team develops an improvement plan after identifying risks and defining additional control measures required to mitigate risk. Designing control measures necessitates an assessment of existing internal and external resources, followed by prioritisation of control actions to be taken in the short, medium, and long term, considering the severity of the problem, available limited resources, and implementation capacity.

The WSP team developed action plan for each scheme assessed during the risk identification steps. The plan was documented in a file as separate for each scheme per village and posted at the wall of the WSP team office. The planning format includes the activities, responsible body, and date for implementation (Figure 9).

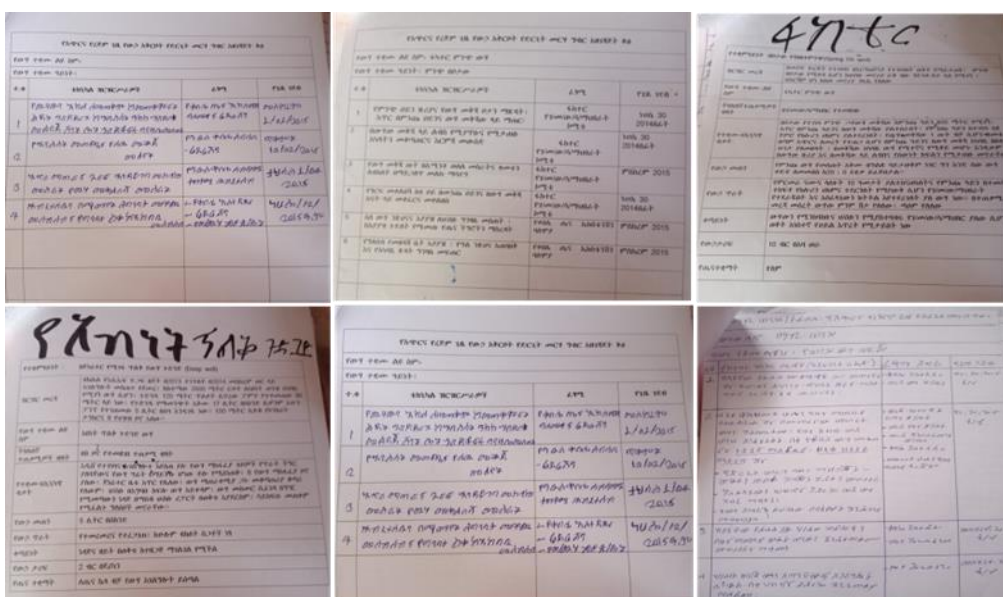


Figure 9: WSP at scheme and kebele level



After the development of the plan, the team went to validate and discuss on the next WSP activities. The team used different methods to discuss and validate the plan. For example, Shishir kebele WSP team presented the WSP and planned activities to kebele cabinet members (Figure 10). The other three kebeles presented the WSP and planned activities to kebele and village leaders.



**Figure 10: WSP team presenting Shishir kebele WSP to kebele cabinet members**

The WSP team also established WASHCOs on water schemes that didn't have a committee and strengthen the already existing committees in each of the schemes, by discussing with the federation and the kebele chairman. After discussion with the communities, four new WASHCOs were established in Sida and Arfes kebeles and nine existing WASHCOs were revitalised in Shishir and Metser kebeles. The WSP team provided informal training (orientation) on scheme management and WSP (Figure 11). Though this is a good step towards strengthening of WASHCOs, proper training is still required to formally establish these WASHCOs and work on strengthening them.



**Figure 11: Arfes kebele WASHCO orientation**

The strengthening and establishment of the WASHCOs contributed to the completion of WSP activities and supported the kebele WSP team during implementation and facilitation. WASHCOs mobilised water users to construct fence around water points and sources, clean the surrounding of their water schemes, plant trees, and improve tariff collection.

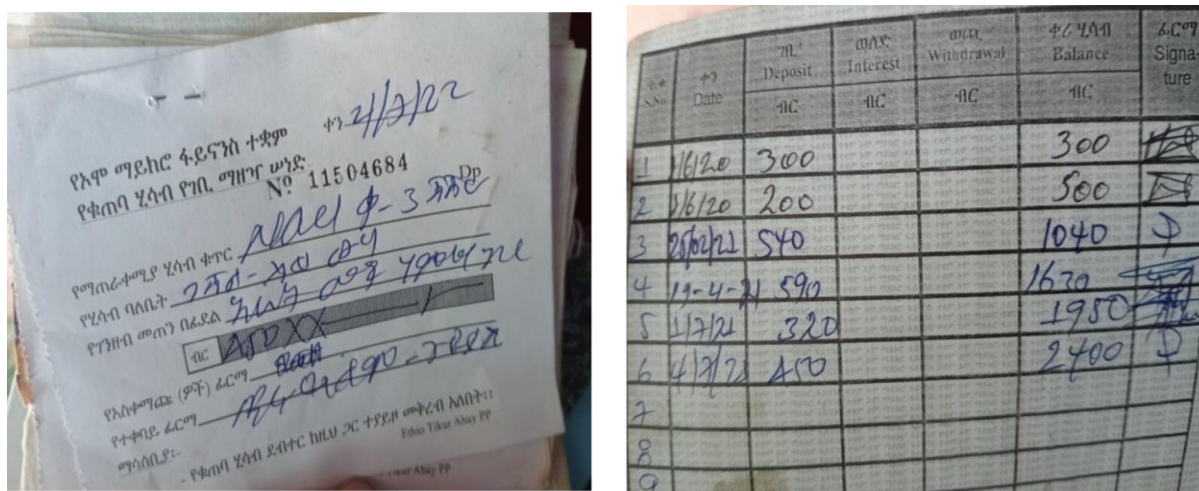


Figure 12: Progress of WASHCOs at Bashal village water supply

### The experience of Fakatar Water Users Association (WUA)

The Fakatar protected water spring is found in Shirshir Kebele of South Ari woreda. The scheme has been serving the community for 20 years, but it was facing several challenges, including water contamination from users through washing clothes, taking showers in the water collection area, and animals drink water from the same water point.

The WSP team in the kebele together with the water user association developed a WSP including flood diversion, fencing the water scheme, revising the user bylaw, and separating body bathing and animal drinking area from the water fetching point. Both kebele WSP team and the scheme WUA members coordinated with the user community for this.

Dari Dermi, chairperson of the Fakatar WUA, said “The WSP had a number of positive impacts on the community, users are now more satisfied with the water service, and revenue collection has improved. In addition, the collaboration between WUA and kebele WSP team raised awareness on personal hygiene, household latrine use, and water handling at home. As a result, more households are using improved sanitation facilities”.





Figure 13: Fakatar water scheme before and after WSP implementation

### Define monitoring of control measures

Monitoring includes operation and verification of the water supply systems. The operational monitoring is an ongoing observation or inspection to assess whether the water supply system is operating properly using predefined checklists. It also includes checking whether control measures can remove and/or reduce potential risks of contamination. Verification monitoring is an action taken to confirm whether water quality targets are being achieved, and water supply systems are operating properly.

The woreda WSP team supports and supervises the kebele WSP activities based on a checklist. The woreda team then reports to the woreda water office through an official letter. The team discuss each kebele report in the presence of woreda water office head and IRC WASH representative. The final agreed report is shared to kebele WSP teams and IRC WASH.

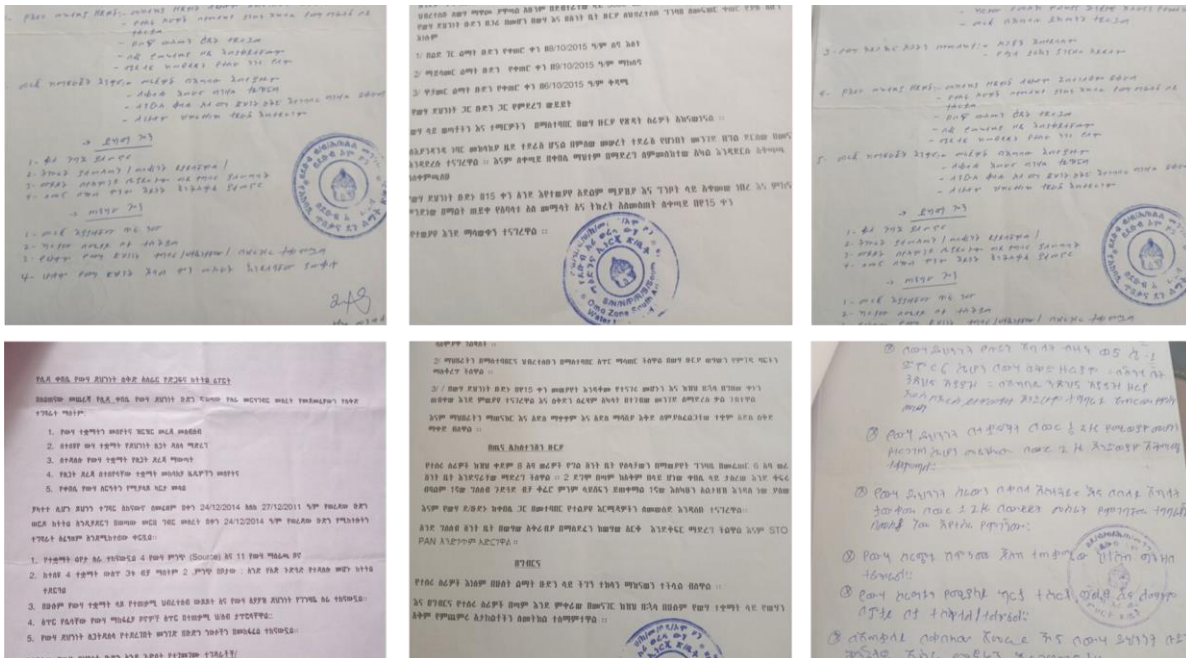


Figure 14: Reporting and feedback mechanisms for WSP activities

## Documenting, reviewing and implementing the WSP

The WSP team document the status and operation and management of the water supply system and ensure that the WSP remains up to date and effective. Woreda WSP team developed a checklist to supervise and support kebele WSP activities. The woreda WSP team members visit each kebele on quarterly basis. The team organise discussion after the supervision at kebele level and provide feedback. The woreda level discussion minutes with its feedback are shared to Kebele WSP team, and woreda water office. The team shared the first feedback to IRC WASH focal person but didn't share the second and third feedback; no reason was mentioned for this.

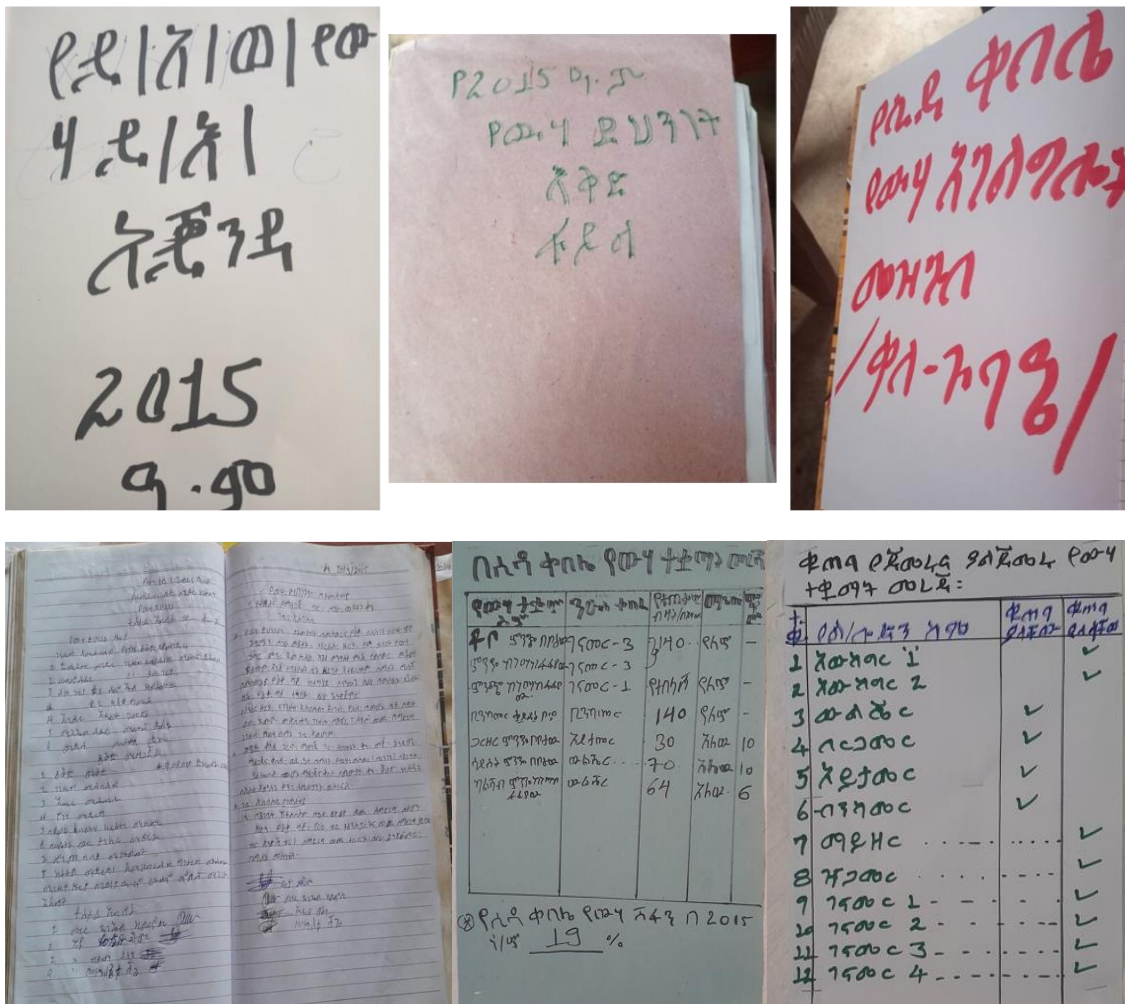


Figure 15: Documentation about water supply systems and WSP activities

Though the documentation is important to learn and scale good experiences, the teams at both woredas and kebeles are weak in documenting activities, progress, and learnings. The role of woreda water office in supporting documentation is very low. Most of the communications are oral.

## Changes since the implementation of the WSP

### Case: Arfese Kebele WSP team activities

Arfese kebele is one of the kebeles found in South Ari woreda. The kebele has 15 villages and four constructed water schemes of which three of them are non-functional before the establishment of kebele water safety plan team in June 2022. The kebele WSP team is composed of kebele manager, HEW, school representative, agriculture representative, and water user federation. The WSP team received a comprehensive capacity building training about WSP in July 2022.

After the training, the first activity, the team undertook visiting all villages in the kebele to assess and document the status of both protected and unprotected water supply systems. The team identified that there were no WASHCOs and federation established in the kebele. In addition, out of the four water schemes, three water schemes were not functional and most community members were using unprotected water sources although the kebele has a potential for scheme development. The team then developed a mitigation plan based on the risk factors and to reach the unserved village with protected water supply. The team also conducted repeated community awareness creation meetings with the support from kebele administration.

The WSP team mobilised the community to collect around 6,720 ETB. When they had enough money, they requested support from the woreda and received pipes (about 400m) and technical staff. In addition to the cash, the community also contributed in labour and material. The woreda water office technicians with the involvement of the community, replaced a 400-meter pipeline, cleaned the reservoirs, put fence around water sources and water points, and planted different local trees around five identified catchments including the four existing sources. In addition, one additional water point was constructed, the three non-functional schemes were rehabilitated, and WASHCOs were established. Overall, the community contributed an estimated amount of 45,000 ETB in cash, labour and material for the activities mentioned. The users then agreed on a monthly tariff of 10 ETB per household; they have collected about 5,820 ETB so far.

The kebele WSP team is currently working with the community that doesn't have protected water schemes. The discussion with the community created an awareness on the need of protected water sources and community contribution. Two villages have agreed on a monthly contribution of 10 ETB, while three villages have agreed to contribute on an ad hoc basis when they know the estimated total cost of construction from the woreda water office.

The team also has a plan to expand a water supply to Zobenant primary school before the opening of 2016 EFY school calendar. With the team's facilitation, construction materials were collected by mobilising students before the close of 2015 EFY school calendar and woreda promised to provide the pipeline and technical support.

Regarding sanitation activity, the team identified 19 households that had no latrine and had been practicing open defecation. The health extension workers repeatedly visited all the 19 houses with the support from the WSP team for awareness creation. Currently, the households have constructed their own latrine and stopped practicing open defecation.



## Expansion and new construction of water supply schemes

The woreda water, mines and energy office shared the WASH SDG master plan for the four kebeles with service level, and specific annual activities. The shared document included list of expected construction of new schemes, and operation and maintenance activities. The kebele WSP teams tried to align their WSP activities including construction of new schemes and expansion work with the SDG plan. Yohannes Melti, head of woreda water office said “We are observing a lot of change since the WSP team established and started its implementation. Based on increasing demand for safe water, communities are asking the woreda water office for support, after securing their contributions. Metser and Arfes kebeles are good examples for this”.

Arfes kebele has 15 villages and only four had water schemes before the beginning of the WSP implementation in the kebele. One village in Arfes Kebele with the support of WSP team constructed a new water scheme. Additional five villages planned to construct new water schemes for their village and have started collecting money. Another village that was not reached by the WSP team also collected 2,000 ETB and approached the kebele federation for support. The community is now aiming to collect 10,000 ETB to start construction of new water schemes.

In Sida kebele, Jagamer village, the dwellers didn't have protected water source. The WSP team had a discussion with the villages, which led to the selection of water committee members. The community then started to collect a monthly contribution of 20 ETB per month; up to now, they have saved around 800 ETB. The community is now requesting the technical and material support from the woreda water, mines, and energy office to construct protected spring.

In Metser with the facilitation of WSP team, the community contributed cash and labour for the construction of three new water distribution points (Figure 14). Communities are happy and eager to complete the extension and start service. The construction of new water point at Arki village where the water source of the town is located solved the complaint and interruption of water supply due to pipeline breakage from Arki to Metser. In addition to the mobilising households to pay for water use, the tariff is also improved. In Metser, tariff per month changed from 10 ETB to 20 ETB and tariff for households using a water meter changed from 3 ETB to 5 ETB per meter cube per month.



Figure 16: Water supply expansion at Metser kebele

## Service level improvement and demand for improved WASH services water supply

There is an improvement in the community awareness and thinking on safe water from source to home. The culture of community safe water storage improved and now most households store water in the narrow water containers. Service level improved because of change in community participation. Table 1 shows service level progress in the kebeles. Community contribution increased to maintain the existing water schemes, expansion, and new construction. Up on their active participation on tariff collection, communities are requesting for basic water supply services.

**Table 1: Service progress in the WSP kebeles**

Kebele		Sida	Metser	Shishir	Arfes
Service before WSP	# of unserved village	11	3	5	15
	# of functional water schemes	1	3	6	0
	# of non-functional water schemes	5	6, 3 abandoned	4, 4 abandoned	4
	# of WASHCOs	0	9 bono committee	9 WASHCO, 9 bono committee	0
	# of households with no toilet	20	11	62	19
Service after WSP implementation	# of unserved village	7	0	5	6
	# of functional water schemes	3	3	8	4
	# of non-functional water schemes	3	0	2	0
	# of WASHCOs	4	11	9 WASHCO, 9 bono committee	4
	# of households with no toilet	0	0	0	0

## Promotion of improved latrine

In Sida kebele, a household located near Yeset spring had a toilet upstream of the source. The toilet is believed to contribute to contamination of the water. In addition, the household had eucalyptus tree near the spring that is believed to have significant impact on the yield of the spring. After long discussion and awareness work, the WSP team convinced the household head to properly abandon the toilet, construct a new improved latrine (Figure 15) at a safe location and cut down the eucalyptus tree. In addition, the WSP team identified 20 households that practice open defecation. These households constructed a latrine after repeated discussion and household visit by the health extension workers and the WSP team.



**Figure 17: Yeset spring, relocated latrine, and hygiene facility**

In Metser kebele, three households relocated their toilet to a new site considering contamination of water sources. In addition, there were households that practice open defecation in the kebele; there was a common place known for open defecation. The WSP team identified these during the identification of risk factors. The WSP team mobilised the community members and demolished the place and closed off the space so that the community cannot access it for open defecation. In addition, 11 households in the kebele that previously practiced open defecation, constructed their own latrine in this period.

Similarly, 62 households in Shishir kebele and 19 households in Arfes kebele who previously practiced open defecation constructed their own latrine because of continuous discussion and convincing from WSP team.

The promotion of new plastic product (SATO pan) by woreda health office with the support from UNICEF helped to upgrade existing unimproved latrines in South Ari woreda. There is an increase in the need for SATO pan although there is a shortage of product in the woreda. SATO pan is being widely introduced in the four kebeles at different kebele level meetings (Figure 16). So far about 373 households have bought and installed SATO pan in the woreda and 66 households in the four WSP kebeles bought and installed SATO pan.



**Figure 18: Promotion of SATO pan**

### **Improvement in water quality**

The WSP team conducted household water treatment and safe storage and (HWTSS) awareness creation during the house to house visit by the HEWs. However, getting chlorine for household water treatment is difficult, that is why the households started storing water in a narrow mouth pot and Jerricans.

During their assessment, Metser kebele WSP team identified water turbidity problem on the Rorat water supply source. However, the water turbidity problem is beyond the capacity of the kebele WSP team. They tried to find the risk factors for the turbidity but has not yet identified the issue. The turbidity is high specially in the rainy season.

Some of the water scheme protective works are demolishing of big trees around the schemes, storage tanks and reservoirs because they are identified as a risk.

There are around 79 self-supply wells in Metser and households were advised to cover the top of well as shown in the Figure 17. In addition, all water schemes in the WSP kebeles have flood diversion structure and large trees surrounding the areas have been removed. Because of this, some of users have reported to see improvement in the water discharge and water quality even after a week.





**Figure 19: Water scheme protective measures**

There is a difference between kebeles in implementing the planned activities. The WSP team at Shishir kebele developed a strong community water use by laws that govern users. As the figure below shows one of the bylaws is preventing people not to wash anything inside the compound of the water distribution point.





**Figure 20: Water users washing their leg outside water point fences in Metser and Shishir (before and after)**

## Learnings and recommendations

Although the implementation period of WSP activities in South Ari woreda is short to look at outcome, the four kebeles are progressing well in keeping water schemes sustainable, water supply expansion to the unserved villages, minimize scheme non-functionality and change household toilets to improved latrines.

WSP is important to trigger community awareness on protected water sources and start request for improved water service. Those communities living in the WSP implementation village and use unprotected water sources are ready to contribute for the construction of water supply system. The villagers started saving for future water supply systems. The high participation of community in most of the WSP activities created good opportunity to create trust between WASHCOs and the community.

The WSP activities contribute for increase yield of water sources. Planting different local plants and cutting off big trees like eucalyptus resulted in increase in the yield of spring in the Wulsher spring at Sida kebele.

Conflict between neighbour kebeles caused breakdown of water supply pipes extended from one kebele to others. Conflict between villages related with water supply can easily be solved by fair distribution of the water supply system to all villages; specially communities living around the water source need to benefit to protect the pipeline break; what the Metser WSP team did at Arki village is a good example.

Turnover of the Kebele agricultural experts due to change in working location affects the implementation of the WSP. The presence of agricultural experts is important in identifying the type of plants to be planted around the water scheme as part of catchment protection activities.

There is no refresher training for kebele federations and water user associations on water scheme management that make the committee members less active on their services. As a result, most WASHCOs does not have saving accounts. Refresher training at all levels is very important

and should include kebele chairman to participate in some of the awareness creation events so as to provide full support for the WSP activities.

Capacity of kebele WSP team members improved through time with practical implementation of the planned activities and regular woreda supportive supervision.

Finally, the WSP implementation needs additional time to see the final outcomes and need continuous support and follow up from the Woreda.

# Annex 1: Woreda supervision checklist

## የቀበሌ ውሃ ደህንነት አተገባበር ሂደት መከታተያ ችክ ሊስት

መመሪያ
1. ይህ ችክ ሊስት 5 ክፍሎች 23 ጥቅሞች የያዘ መሞላት ነው
2. ከስር የተመለከቱ መለኪያ ነጥቦችን በመጠቀም መረጃ ሙሉ
3. የውሃ ደህንነት ቡድኑ መረጃ በሚሰጡበት ወቅት ተጨማሪ የቁጥር፣ የጊዜ እና የተግባር መረጃዎችን መመዘገብና በፎቶ ማቅረብ ይጠበቅበታል።
4. የውሃ ደህንነት ቡድኑ ለተከናወኑት ተግባራት ተጠቃሚው ሀ/ሰ-በ ድረስ በመውረድ ግንዛቤ መኖሩን ያረጋግጣል፤ የቃል መጠይቅ ያከናውናል፤ በውሃ ተቋማት ዙሪያ የተሰሩ አደጋ መከላከያ መከላከያ ተግባራትን ይገመግማል፤ በቂ መሆኑን ያረጋግጣል።

መረጃ እጥረት	
በፍጹም አልሰማማም ወይም አይታወቅም	0
አልሰማማም	1
መካከለኛ	2
አስማማለሁ	3
መሙሉ በሙሉ አስማማለሁ	4

1. በውሃ ደህንነት ቡድን ዙሪያ		
1.1	የተፋናጀ የውሃ ደህንነት ቡድን ተቋቁሟል	
1.2	የውሃ ደህንነት ቡድኑ ሀላፊነታቸውን በሚገባ አውቀው አየተገበሩ ነው	
1.3	የውሃ ደህንነት የተግባራ ደረጃዎች (ደረጃ 1-6) ያሉት በቡድን አባላቱ ይታወቃሉ	
1.4	የውሃ ደህንነት ቡድኑ በቋሚነት አየተገናኘ (በ15 ቀን) እና አየተወያየ ይሰራል	
1.5	የውሃ ደህንነት ሰራው በቀበሌ አስተዳደር እና የበላይ አካላት ታውቆ ነው የሚሰራው	
2. የውሃ ስርዓትን መዳሰስ		
2.1	የውሃ ስርዓቱ ከምንጭ እስከ ተጠቃሚው ሀ/ሰ-በ በደንብ ተገልጿል	
2.2	የውሃ ስርዓቱን የሚያሳይ ካርታ ተሰርቶ ግልፅ በሆነ ቦታ ተሰቅሏል	
2.3	የውሃ ስርዓት ማሳያ ካርታው የመስክ ምልክታን እና ቅንጅታዊ አሰራርን የተከተለ ነው	
2.4	የውሃ ስርዓቱ የተዳሰሰበት መረጃ በአግባቡ ደከመንት ተደርጓል	
3. የውሃደ አደጋ እና የስጋት ዳሰሳ		
3.1	ለአያንዳንዱ የተዳሰሱ ተቋማት ያሉና ሊከሰቱ የሚችሉ የአደጋ ስጋታቸው ተገልጿል	
3.2	የአደጋ ስጋት እና ዳሰሳው የመስክ ምልክታንና የሚመለከታቸው አካላትን ያማከለ ነው	
3.3	የአደጋ ስጋት እና ዳሰሳው የአካባቢውን ነገርና የጓላ ታሪክ ያገናዘበ ነው	
3.4	የአደጋ ዓይነቶች በስጋት ደረጃቸው ልክ በሰቅ ቅድሚያ በመስጠት ተሰርቷል	
4. የአደጋ መከላከያ ዘዴ እና ለነገር መከላከያ ዘዴዎች ማሻሻያ ዕቅድን በተመለከተ		
4.1	መከላከያ ዘዴዎች (ለነገር እና ለአዳዲስ አስፈልጊ) ለሁሉም የተገኙ አደጋዎችና አደጋ ስጋቶች ተገልጿዋል	
4.2	በቀበሌ ደረጃ የውሃ ማህበራትን በማስተገበር የተሰሩ ተግባራት አሉ (መልሱ አዎ ከሆነ ዝርዝሩን ማስታወሻ ያዙ)	
4.3	አደጋዎችንና የአደጋ ስጋቶችን ለመከላከል በቂ መከላከያ ዘዴ ታቅዳላችኋል	
4.4	ጭዳ ላይ ከመዳዳት ነፃ የወጡ ቀበሌያት ለመመስረት የተሰሩ ስራዎች	
4.5	ለአያንዳንዱ ነገር የአደጋ መከላከያ ዘዴ ማሻሻያ አቅድ በአግባቡ ተደራሽ ሆኗል	
5. መረዳ ማደራጀት እና የቅንጅት		
5.1	ሁሉም የውሃ ደህንነት መረጃዎች በአግባቡ ተይዘዋል (i.e. የውሃ ስርዓት ዳሰሳ፣ የአደጋ ስጋታ፣ የሀ/ሰ-በ ውይይት, እና ሌሎች መረጃዎች)	
5.2	ለቀበሌ አመራሩ ስለ ውሃ ደህንነት ዕቅድ እና አተገባበር ግንዛቤ ተፈጠሯል	
5.3	ለጎሳ ደብዳቤ አመራር ስለ ውሃ ደህንነት ዕቅድ እና አተገባበር በቂ ግንዛቤ ተሰጥቷል	
5.4	የውሃ ደህንነት ግንዛቤ ለሁሉም ሀ/ሰ-በ ተደራሽ ተደርጓል	
5.5	የውሃ ደህንነት ዕቅድ ለሁሉም ፈጻሚ ባለ ድርሻ አካላት ተደራሽ ተደርጓል	
የውሃ ደህንነት እና ወቅታዊ ጉዳዮች		
6.1	ቀበሌው የዋሽ ዘላቂ ልማት ዕቅድ ፈክካል ዕቅድ አለው/ ከሌሌው በማስረዳት መስጠት ወቅታዊ ዝናብና ሌሎች የተፈጥሮ ጉዳዮች ጋር በተያያዘ የውሃ ደህንነት አስተዋጽኦ ምንድን ነው;	
6.2		

**Visiting address**

Golagul Towers Building

Bole Sub-city

Woreda 4

House No. 813/814

Addis Ababa

Ethiopia

[Ethiopia@ircwash.org](mailto:Ethiopia@ircwash.org)

[www.ircwash.org/ethiopia](http://www.ircwash.org/ethiopia)