

Assessing Water Scheme Functionality and Governance in South Gondar, Ethiopia



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Executive Summary

This study was conducted to better understand how communities manage and govern their water schemes in Ethiopia, and how these aspects of management and governance are related to scheme functionality and sustainability. This study, along with similar studies other CARE posts, will enable CARE to evaluate its programming approaches and make appropriate adjustments and changes in the future.

In July and August 2011, the South Gondar field staff conducted 100 (nine initially in order to practice using the tool, 91 for the study sample) scheme functionality and governance snapshot surveys. Designed to quantify qualitative data, the survey tool was used to facilitate the first phase of the study. Using the scores of the snapshot surveys for 91 schemes, outliers were determined. Once outliers were selected, the field office staff visited both high and low performing schemes (nine total) to conduct focus group discussions with male and female water users as part of the second phase of the study. In addition, in-depth interviews were also conducted with local and district officials and community water committees.

The results of this two-part study revealed information pertaining to scheme functionality and the four aspects of water governance: participation, transparency, accountability, and inclusiveness in Ethiopia. Through the snapshot surveys, it was revealed that the majority of the South Gondar water schemes function at average to high levels. In addition, it was revealed that there is an association with community participation and scheme functionality. Despite high levels of participation and inclusiveness from the majority of the communities, snapshot scores and subsequent focus group discussions indicated that water committees and their schemes are low performing in terms of accountability. Lower levels of accountability were attributed to community members' lack of knowledge related to committee reelection and committee meeting reports and updates. Most water committees lacked clear channels of communication with community members. Weak water committees and the lack of available parts to maintain water schemes may also potentially limit functionality as well as long-term scheme sustainability.

Although this two-part study was wrought with several limitations (i.e. restricted time, limited budget, translation, weather conditions, restricted sampling) that affected the quality of data and subsequently the analysis of the data, the information gathered and presented here still provides a sound overview of the various functionality, governance, and sustainability issues that water scheme users, committees, and officials face in South Gondar, Ethiopia. The findings can be used to help the CARE water sector strengthen its programming. In addition, the CARE water sector can also take the information to strengthen its tools used to monitor and evaluate its communities and programming.

Based on the information provided by water users and committees, there are three integral components to improving water scheme functionality and sustainability in South Gondar: 1) conducting follow-up trainings of water committees, that also includes a component for water users to gain a better understanding of the committee's role and responsibilities to ensure mutual accountability; 2) creating strategic plan with local and district water officials to improve the spare parts supply chain and accessibility; and 3) continuing to engage with water users and committee leaders (i.e. not only when data is needed for studies such as these) even when scheme is functioning well or well managed.

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Introduction

This report details the results and findings of a two-part water scheme functionality and governance snapshot study that was conducted in July and August 2011 in the districts of Farta and West Estie in the South Gondar zone, Amhara region of Ethiopia. This study was conducted in the field by CARE's South Gondar Field Office, in coordination with the Millennium Water Program-Ethiopia in Addis Ababa, and CARE's Senior Water Advisor in the United Kingdom. Guidance and direction were also provided by the Water Team at CARE USA headquarters in Atlanta.

Background

CARE Ethiopia currently manages water-related programs throughout Ethiopia. For this particular study, CARE focused on South Gondar, a zone north of Addis Ababa, just of the large regional city, Gondar. CARE's South Gondar field office has extensive knowledge about its community and the various water projects that have been undertaken within the past decade. CARE has received funding for several of the districts in which it works in the South Gondar zone. USAID, AusAID, the Bill and Melinda Gates Foundation, and the Conrad N. Hilton Foundation have all provided funding for various wash projects in the zone. In Ethiopia, CARE currently invests much of its work and many of its projects into partnerships with local communities, local and district governments, and other NGOs. The water, sanitation, and hygiene (WASH) initiatives in South Gondar zone work to promote several objectives such as building local capacity, promoting governance, accountability, transparency, participation, inclusiveness, and empowering poor and marginalized communities.

In July and August of 2011, CARE conducted a small study to assess the functionality and governance of water schemes in the districts of Farta and West Estie in the South Gondar zone. The purpose of this study was to quantify qualitative information pertaining to the functionality and governance of water schemes, and the resulting sustainability of those water schemes. Data pertaining to functionality and governance were collected from surveys, focus group discussions and in-depth interviews. Through the findings of two-part study, partners and scheme stakeholders (i.e. *woreda/kebele* officials, committee members, water users, CARE staff, etc.) can identify areas of strength and weakness so that scheme functionality can be improved and sustainability can be ensured. Upon the sampling of schemes in these two districts, the scores of each scheme were analyzed and the outliers, both of the best and worst performing schemes, were determined. In the villages with the best and worst performing outliers, a team from the CARE Field Office in South Gondar and an intern with the Millennium Water Program-Ethiopia at CARE conducted focus-group discussions with men and women separately and in-depth interviews with community, government, and water committee leaders.

Methods

Snapshot Surveys

The Scheme Functionality and Governance Snapshot Survey and the Outlier Follow-up study were designed to capture quantitative and qualitative data pertaining to community water schemes in two districts of South Gondar zone in the Amhara region of Ethiopia. CARE Ethiopia's South Gondar team worked in groups to collect basic information about various water schemes such as type, age, and functionality. In addition, community members who use the schemes were gathered together to answer 20 survey questions related to their water scheme, primarily how it was managed and sustained. Based on the survey, questions related to participation, inclusiveness, accountability, and transparency were asked.

The sample size consisted of 91 schemes. Sixty-seven (67) schemes were sampled in Farta district, and 24 schemes were sampled in West Estie district. While the sample size was relatively small, it was decided to survey roughly 10% of the total schemes in each district primarily because of budget and time constraints.

Over a two week period, teams of two to three people from CARE’s South Gondar field office and its partners surveyed male and female water users (approximately 3-8 persons) at the 91 water schemes selected throughout the Farta and West Estie districts. The Scheme Functionality and Governance Snapshot Survey (see Appendix A) was comprised of five introductory questions related to the water scheme’s age, function status, and who provided the scheme. Following these basic questions, the survey is comprised of 20 questions related to participation, transparency, accountability, and inclusiveness. Each of these categories had five corresponding questions. Answers to the 20 questions were provided by the snapshot survey tool. The answers provided were numbered 1, 2, 3. Number one (1) typically denoted a poor response or a weak response, while three (3) typically denoted a strong, positive response. For example:

Question #1: What was the consultation like regarding the initial prioritization of what service was needed?		
1-Community members were not consulted in the prioritization of services.	2-Limited consultations with some community members were made in prioritization of services.	3-A wide set of community members were significantly consulted and they influenced services in named ways.)

For the 20 question survey, schemes could receive a minimum score of 20 (scoring one on all questions) or a maximum score of 60 (scoring a 3 on all questions).

Outlier Follow-up: Focus Group Discussions and In-Depth Interviews

After analyzing the results for each scheme surveyed, outliers were determined for each district. The outlier schemes (best performing and worst performing) in each district were then visited to conduct focus-group discussions with community men and women, separately (See Appendix B for Focus Group Discussion questions and In-Depth Interview questions). In addition, in-depth interviews with community leaders, committee members, and government officials were conducted for each outlier scheme in both Farta and West Estie (Appendix B). Six members of the South Gondar Field Office, including a CARE intern from Emory University, spent four days conducting focus group discussions at nine (9) water schemes. Subsequent in-depth interviews were conducted with six (6) district and kebele officials.

Data Analysis Procedures

Snapshot data were analyzed through simple Excel formulas (i.e. determining the frequency of a 1, 2, or 3 for a particular question on the survey). Scores for each scheme were totaled. Based on the score of the water scheme and its rank in the first quartile, third quartile, bottom tenth, or top tenth, outliers were determined. In order to broaden the outlier sample, outliers were chosen from within the first quartile and third quartile. Qualitative data collected through the focus-group discussion and in-depth interviews were coded and summarized.

Findings

1. Scheme Functionality and Governance Snapshot Surveys (Appendix C)

1.1 Functionality

The scheme functionality and governance snapshot surveys provided a general overview of how the water schemes in various *kebeles* function and how they are managed and governed by committees and communities. Approximately 73% of the schemes functionality for both Farta and West Estie districts were functioning well at the time of the study. A little less than 18% of the schemes in both districts were functioning but with difficulties. The remaining 10% of the schemes in both districts were not functioning at the time of the study (Figure 1). Based on the sample size, both districts had a high percentage of schemes that were functioning well. In Farta, 73% of the schemes were functioning well, while 10% were functioning but with difficulties. At the time of the study, the remaining 16% were not functioning. In West Estie, 71% were functioning well, while 8% were functioning with difficulties. At the time of the study, the remaining 21% were not functioning in West Estie.

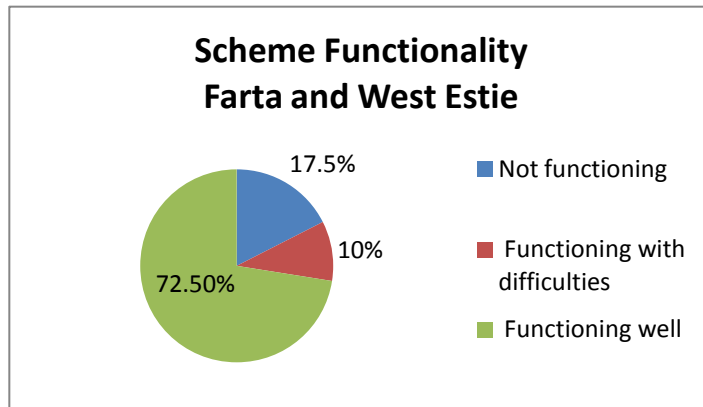


Figure 1. Scheme Functionality Percentage-Farta and West Estie (n = 91)

1.2 Scheme Implementation and Functionality

When looking at the water schemes for both Farta and West Estie districts combined, 13 of the water schemes were implemented by non-CARE organizations, such as FINIDA. The remaining 78 were implemented by CARE (Figure 2). The difference between the scores of schemes implemented by CARE and non-CARE organizations can be seen in Figure 3. The average score for CARE schemes was 50.7, while non-CARE schemes scored an average of 47.5.

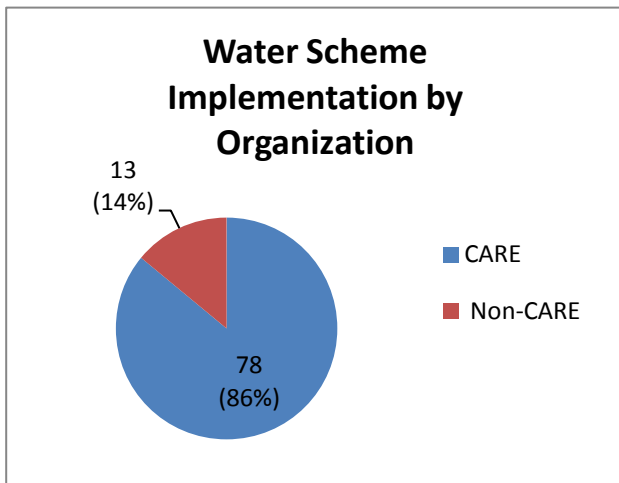


Figure 2. Water Scheme Implementation by Organization (n=91)

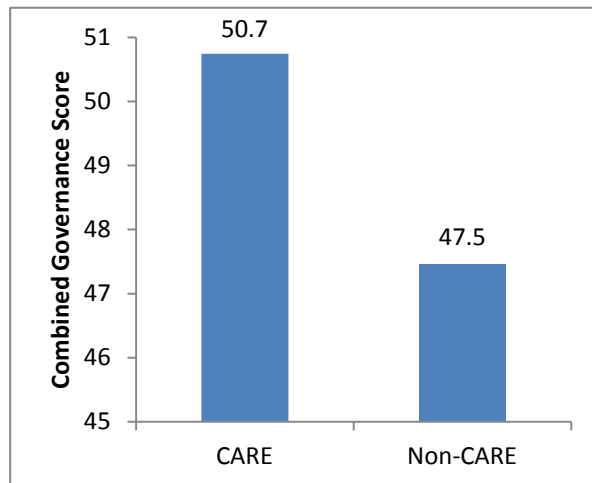


Figure 3. Average Governance Score CARE vs. Non-CARE Schemes (n=91)

1.3 Degree of Participation, Transparency, Accountability, and Inclusiveness

The primary purpose of the survey was to categorize information related to aspects of governance: transparency, participation, accountability, and inclusiveness. Answers to the questions in each of the four categories were analyzed to determine the degree of each aspect of governance. Most of the questions in each category received relatively high marks, indicating that the majority of schemes ranked highly in each category. However, many of the questions received a significant percentage of medium scores, indicating they were moderately governed. Figure 4 demonstrates the degrees of transparency, participation, accountability, and inclusiveness for the total schemes surveyed (n= 91).

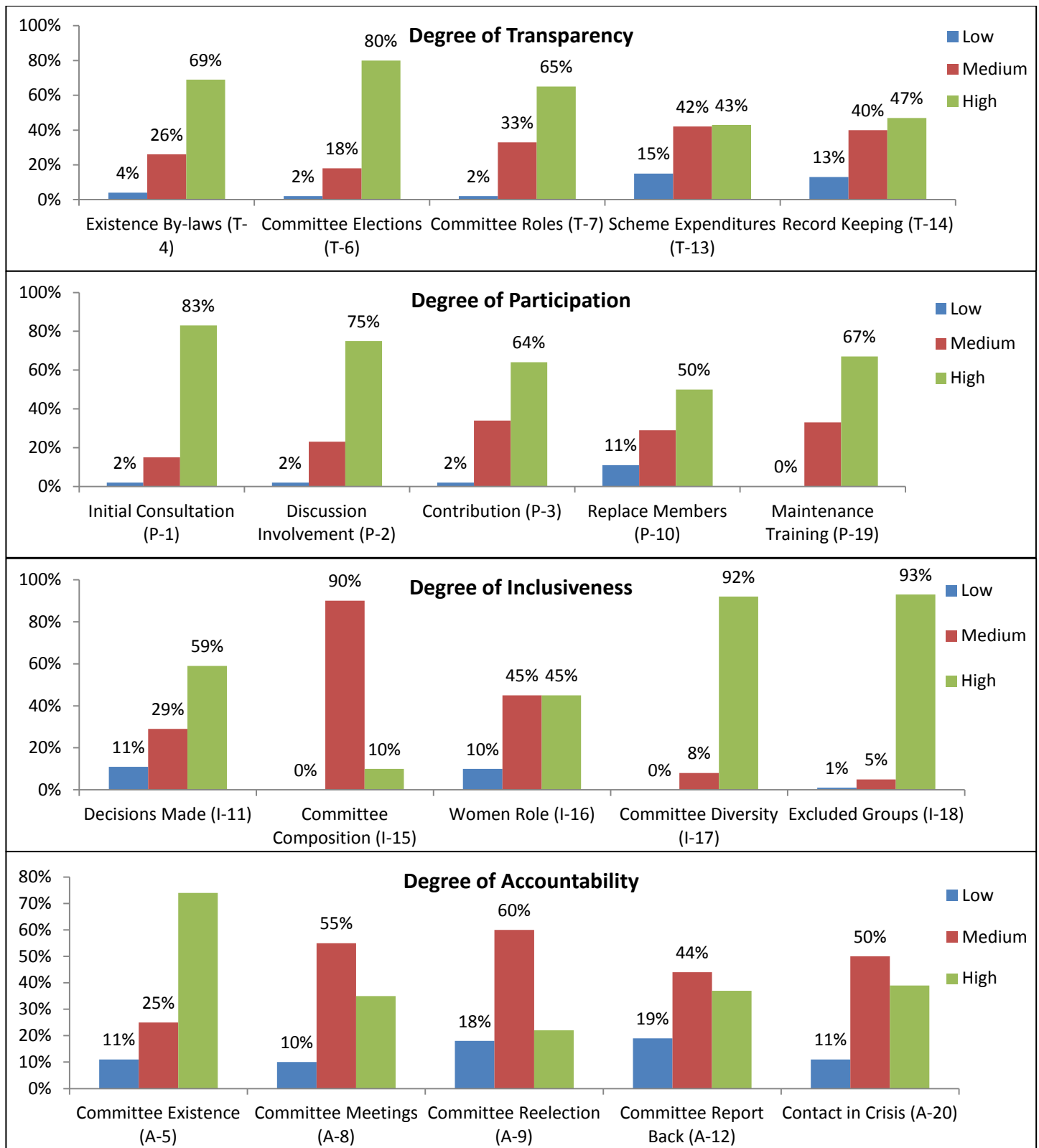


Figure 4. Degree of Transparency, Participation, Inclusiveness, and Accountability (Combined percentage scores for Farta and West Estie districts, per snapshot survey question).

Most communities demonstrated high marks for participation, with two-thirds of the communities indicating their high levels of involvement in the initial construction consultation and discussion, as well as

the maintenance training (P-1, P-2, P-19). (See Table 1 for categories and their related questions.) In addition, most communities reported high levels of inclusiveness, with the exception of committee composition. Ninety percent of the communities indicated moderate levels of committee composition. For this particular question (I-15), most scheme communities had three (3) women on serving on its water committee, but the moderate level answer (score 2) stated, “Women constitute 50% or less of the committee composition.” Most water committees in Ethiopia consist of seven (7) members. Therefore if three of those seven are women, then most schemes would report an average score for their committee’s composition

For the categories of accountability and transparency, there was an increase in low level scores (although low level scores never exceeded medium or high level for any of the survey questions.) Water scheme users reported low or average levels related to accountability and transparency. For example, 19% of the communities indicated that the committee fails to report back to them after meetings are held (A-12). Eighteen percent (18%) of the communities reported that there is no agreed term of office for committee members. In addition, 15% of the communities indicated that they have little to no knowledge of scheme expenditures or income (T-13).

Table 1. Scheme Functionality and Governance Snapshot Survey Questions (by governance category)

Participation Questions	
P-1:	What was the consultation like regarding the initial prioritization of what service was needed?
P-2:	What was the involvement of community members in discussions and decisions?
P-3 :	What was the contribution of labor, material, leadership and skills?
P-10 :	What is the situation regarding power to replace ineffective committee members?
P-19:	What training and capacity is in place regarding basic maintenance of the scheme?
Transparency Questions	
T-4:	What is the situation regarding the existence and functionality of bylaw, guidelines, internal articles, etc?
T-6:	What is the process regarding committee and office-bearer elections?
T-7:	What level of knowledge about roles and responsibilities is there at community and committee level?
T-13 :	What knowledge is there about the regular income (total community contributions) and expenditures (e.g. spare parts) related to the scheme?
T-14:	What is the situation regarding committee knowledge and practice of regular record keeping?
Accountability Questions	
A-5:	What is the situation regarding the existence of Committee?
A-8:	What is the situation regarding committee meetings?
A-9:	What is the situation regarding committee re-election?
A-12	What is the process of the committee reporting back to community?
A-20:	Who should be contacted in case of trouble related to services (e.g. relevant district departments or other)
Inclusiveness Questions	
I-11:	How are decisions made at community and committee level?
I-15:	What is the committee Composition like?
I-16:	What is the role of women in decision making?
I-17:	What is the situation regarding diversity of committee and office bearers? (e.g. gender, age, ethnicity, clan, religion, wealth, other?)
I-18:	What groups are excluded/marginalized regarding access to services? (e.g. ethnicity, clan, religion, wealth, disability/chronic illness, other vulnerable groups?)

2. Outlier Focus-Group Discussions

Table 2 is a breakdown of the outlier schemes where focus group discussions and in-depth interviews took place. (To see a more comprehensive breakdown of each outlier scheme’s snapshot survey results, please see Appendix D.)

Table 2. Outlier Location, Scheme Type, and Snapshot Score

	District	Kebele	Scheme	Age	Type	Score	Percentage
1	Farta	Farta Kuskam	Kubeyeble	7	HDW	47	Q1
2	Farta	Farta Kuskam	Zefafit	1	HDW	56	Q3
3	Farta	Sahirna	Felaw	4	HDW	45	Q1
4	Farta	Sahirna	Kerkeha Wuha	4	HDW	55	Q3
5	Farta	Kanat	Amorharu	9	HDW	53	Not in percentile*
6	Farta	Askuma	Abatie Dingay	3.5	HDW	49	Not in percentile*
7	Farta	Askuma	Asemaghne	7	SSD	43	Q1
8	West Estie	Adama	Bayedegm	1	HDW	56	Top 10
9	West Estie	Adama	Tinjut	8	HDW	37	Minimum

Topic 1: Water Schemes in the Community

1.1 General Information

Most respondents from both low and high performing schemes indicated that there were alternative water schemes nearby (approximately 5-9 in the area). Some respondents noted that these alternative schemes were located somewhat far away. For some, this distance would require a 2 hour walk to fetch water from an alternative scheme. However, when the community’s designated water point was functioning, the alternative schemes would not be utilized. In addition, many respondents noted that such alternative schemes would be used seasonally. A few village focus groups stated that these seasonal schemes would be utilized during hot season or if a drought occurred and their main water schemes ran dry. The outlier schemes have been in existence for two to nine years. The majority of the schemes were constructed with the assistance of CARE or FINIDA and the majority of the outliers did contribute materials during the time of the schemes’ construction. Overall, the participation of the community and the inclusiveness of water users by partnering organizations were strong in most outlier schemes (exceptions are noted in findings below). There was not a strong association between the age of the outlier schemes and their scores. Some schemes that functioned well were old; some were brand new. Other schemes that functioned poorly were relatively new, while others were fairly old. This demonstrates that other factors, such as transparency, accountability, inclusiveness, and participation are more important in determining the functionality and sustainability of water schemes.

1.2 Low Performing

Users of the Felaw scheme in Shirna *kebele* indicated that currently the scheme is functional, but approximately six months prior to the interview, the scheme was non-functional. It was, however, maintained by the CARE trained artisan. Both male and female respondents at this scheme emphasized that they:

* This particular scheme was chosen at the last minute while traveling. The weather conditions were poor and the ability to travel to the original destination was limited. The South Gondar office decided to pick a scheme that was closer to the location of the others on the itinerary for that particular day of surveying. Unfortunately, the scheme is not part of the outlier bunch, based on its Snapshot Survey score, but it did provide useful information despite being considered an “average performing scheme”.

- Possessed no real “buy-in” to the water scheme;
- Expected CARE to maintain the scheme as it was the organization that provided the scheme.

Felaw demonstrates that participation from the community is a major factor in the success of a scheme. For Felaw, lack of participation by the community has prevented the community to make a real investment in its water scheme management and maintenance.

1.3 High Performing

Respondents from the high performing scheme, Zefatit, in the *kebele* of Farta Kuskam, indicated that the scheme is so new (approximately two (2) years old) that it has yet to encounter any real problems related to scheme functionality. They also stated that if they did encounter a problem, they felt confident that they would be able to fix and/or maintain the scheme. This confidence demonstrates clear ownership instilled into the community by CARE through the communities’ initial participation and inclusion into the planning process.

Topic 2: Ownership and Functionality

2.1 General Information

For many respondents, it was understood that the community was responsible for maintaining and caring for the water scheme. However, a few respondents at one particular scheme (Zefatit) indicated that while they understand that CARE, jointly with the community, provided the means for the water, they insisted that it is actually the government’s job to provide the water. Regardless, respondents appeared to agree that working with government and NGOs was the best way to instill ownership and ensure functionality of the schemes.

2.2 Low Performing

Water users of the Felaw water scheme in Shirna indicated that CARE is responsible for providing water to the community. While the community members are comfortable with paying a contribution to help with maintenance costs, the respondents indicated that ultimately CARE is responsible for supplying and providing water to the community members using the Felaw scheme. This reaction initially came as a surprise to the interviewing team; however, it was soon explained that the scheme at Felaw was created prior to CARE’s initiative to partner with community members and government officials. This response clearly revealed how the absence of community partnership shaped the mentality and expectations of the community receiving the services. In this case, lack of participation and inclusion appears to be strongly correlated to poor functionality and sustainability.

In addition, the SSD scheme of Amesanghne admitted that it never collected fees for maintenance. A theft occurred and the SSD mechanics were greatly affected, in that it is no longer functioning. There were no funds in reserve, so therefore, the part could not be replaced and the rest of the scheme fell into disrepair. In addition, the scheme’s water committee requested assistance from both community members and the *kebele* government. The community members did not wish to contribute money as they felt that water committee members could pay for it with the per diem they each received during their initial training through CARE and the *kebele* government. The water committee said no. In addition, the community’s request to the *kebele* government for assistance was denied as the *kebele* stated that the scheme was not new and the community must take action themselves as it is solely the community’s problem. Therefore, in this case, there is a strong relationship between the lack of accountability and transparency and their effect on the functionality of the scheme.

2.3 High Performing

Despite the contribution from community members towards the majority of the outlier water schemes, some schemes, even high performing ones, did not feel the need to have a regular contribution given by the community. For example, in Bayedegm in West Estie, community members indicated that there is no consistent collection for the maintenance of the water scheme. The respondents indicated that they only contributed if there was a problem with the scheme and it needed to be repaired. Collection of funds would only occur during this time. Despite no real problems with this system, the respondents, both male and female, indicated that the water committee was discussing the need for routine collection and had recently set-up a plan for routine collection, but had not yet implemented it. Community members noted that this new process would be accepted by the majority of the community members.

Topic 3: Collaboration

3.1 General Information

Respondents for the outlier schemes indicated that community members and the corresponding water committees are the ones who consider the capacity of the scheme, as well as the amount that is paid per year towards scheme maintenance. Most water committees had female members of the committees, but the numbers varied between 3 or 4 females on a 7 person committee. In addition, the majority of the water committees in the outliers communicated clearly and effectively with community members (not necessarily the case for all of the snapshot survey schemes results). The water committees and community members made it clear that the community and committee members jointly decided how often meetings should be held. For those schemes whose committees did not hold regular meetings, they felt it was a way to save time as long as the scheme remained clean and functioning.

3.2 Low Performing

The committee for the Kubeyeble scheme only has 2 female committee members on its committee, which is low compared to other committees that currently have 3 or 4 females serving on the committee. In addition, the male respondents at the Felaw scheme indicated that they are happy women are now present on the committees.

3.3 High Performing

The Bayedegm scheme, in terms of collaboration, follows much of the responses as other high performing schemes. Women are accepted and welcomed into leadership roles and they are expected to provide input and participate in decision making. Male respondents from the Bayedegm scheme indicated that women are actually better at controlling the money and contributions that are collected for the scheme maintenance and repair.

Topic 4: The Need, Demand, and Availability for Water

4.1 General Information

The overall responses related to the need, demand, and availability of water were similar across the outlier sample. Most male and female water users indicated the following:

- Three to four jars¹ (20L each) of water were collected daily (usually by women).
- Collection occurs Monday through Thursday; more water (1 additional jar to the 3-4 jars) was collected on Fridays.
- Travel time to a water scheme is no more than 30 minutes.
- Wait time was approximately 25 minutes. (Slightly longer on Fridays due to no collection on Saturday and Sunday).

¹ 20 L x 4 jars x 5 days +20 L (Friday) = 420 L / 7 days = 60L/ average 6 people = 10 L per person per day.

- Some respondents indicated that the amount of water collected was sufficient; others felt it was not sufficient, especially during dry season.
- Water users do have concerns about potential conflict arising if people are not fairly contributing to the scheme's maintenance fund (if one exists).

4.2 Low Performing

For the no longer functioning, low performing scheme of Amesanghne scheme users indicated their traveling time was 25 minutes when the scheme was functioning. Now they must travel at least two hours to obtain water. When asked about paying another community for use of the far scheme, they indicated that they do not pay. However, they indicated that they used to charge outside members of the community a fee to use their scheme when it was functioning.

4.3 High Performing

High performing scheme respondents indicated that they were very vigilant with how they monitored outsiders using their water scheme. Some respondents indicated that they require outsiders to pay 300 Birr² if they want to use the scheme, but there was no indication that this total amount was ever collected. Respondents indicated that such a contribution for use is negotiable with outside community members.

Topic 5: Focus Group Perceptions of Water Scheme Sustainability

5.1 General Information

Most respondents indicated that one of the key factors related to the success of water scheme sustainability was a well-managed water scheme. Well-managed, in this case, is termed as having qualified individuals who can properly maintain the scheme and having a group of people (i.e. the water committee and individual community members) who use the scheme properly and follow the rules set forth by the community and its committee. In addition, many respondents indicated that schemes should be:

- Properly fenced;
- Properly locked to maintain security;
- Produce high quality water;
- Undergo chlorination.

5.2 Low Performing

Low performing schemes indicated that several factors that prevented sustainability:

- Lack of “moving parts” available within the *kebele* and the scheme-using community;
- Intermittent functionality of the scheme;
- Lack of community participation/buy-in.

Also, the lack of sustainability and failure of the SSD scheme (Amesanghne) indicated that the water committee was not effective in its leadership and in its ability to garner community support. Water committee members fully admitted that their poor leadership and failure to collect maintenance funds aided in the failure of the SSD scheme. Users of the Amesanghne, Felaw, and Kubeyeble schemes also indicated that their water quality was poor as there was sediment present in some water and the taste was less than desirable.

5.3 High Performing

² It is assumed that this payment would be per year, but the details were not discussed thoroughly. Regardless of the amount, water scheme users in some communities do feel that it is necessary to charge a fee for outsiders as many water scheme users believe that mischief and damage is done frequently by outsiders using the scheme because they are not invested in that particular scheme.

High performing schemes indicated that sustainability takes place when:

- Water committees, water users, and trained maintenance workers collaborate and do what is best for the community
- Committee members have strong communication skills with the water users.
- Water users are allowed to attend water committee meetings.

3. In-Depth Interviews

In addition to the various focus group discussions conducted, interviews with community officials, such as *kebele* managers and water committee members. These interviews primarily dealt with information pertaining to their role in water governance and management among scheme users, *kebeles*, and *woredas*.

District Officials

In-depth interviews were conducted, separately, with the Farta District (woreda) water official, as well as the water official for the West Estie district (woreda). Both Farta and West Estie district officials indicated:

- Much of the district's schemes were functioning properly and community contribution towards these schemes was strong.
- Contributions by the communities and partnerships with communities and NGOs helped to improve sustainability.
- The presence of women on the scheme water committees was an important step towards improving water scheme governance and management.

Both officials also noted the following challenge:

- There is a lack of skilled labor (hydrologists) in the district. District officials must request assistance from zonal or regional officials, which requires time and patience.

In addition, the official from West Estie, due to the district's remoteness and terrain, face geological barriers that limit the excavation and availability of sufficient and adequate water sources. In addition, West Estie still faces the challenge of dealing with community dependence on outside assistance, whether it is from government or an NGO. This dependence can cause conflict among water users, as committee members may request per diem for trainings. Also, general conflict occurs if there is not adequate, safe water throughout the year, especially during dry season or when schemes are not functioning properly.

Kebele Officials: Farta Kuskam Kebele Manager and Askuma Kebele Manager

Both *kebele* managers indicated that their roles are to:

- Coordinate activities and initiatives among various *kebele* workers, such as health workers.
- Determine which schemes are problematic, as well as understand regulations and policies related to water.
- Maintain contact with the water committees of various schemes, especially with regard to trainings and capital that is currently in their accounts (due to maintenance collection).

The interviews revealed that conflict still exists between communities with access to water and those without close access to water. However, the *kebele*, along with villagers, and district officials, try to solve these conflicts through the site planning of future schemes.

The Farta Kuskam *kebele* manager indicated that there are 41 water schemes³ in the *kebele*, but there is a need for more schemes. In addition, water scheme users want to continued access to water quantity and

³ Need to check with South Gondar staff. Map of water schemes provided by Habtamu indicates roughly 20 schemes in Farta Kuskam.

quality. As of the time of the interview, the Askuma kebele manager indicated there were 28 schemes in the kebele, with 21 functioning and 7 which were not functioning. The non-functioning schemes were either attributed to conflict or theft.

Farta Kuskam Kebele, Kubeyeble Scheme Water Committee Members

An in-depth interview was carried out with two members of the Kubeyeble water committee. One male was the secretary of the committee, while another male was the caretaker for the water committee. Both committee members indicated that:

- Community's water was prioritized for drinking.
- Schemes had not experienced any severe problems with its water scheme in the past five years.
- Water schemes improved the quality of water.
- Committee members would like CARE or FINIDA to help those people who still do not have easy access to schemes.

Comments on the Two-Part Study

Scheme Functionality and Sustainability Snapshot

The scheme functionality and governance snapshot tool proved useful in determining how schemes within the same district compared to one another. In addition, it provided a means for comparison of schemes across *keels*. The ability to quantify qualitative data helped to organize general data and “quickly” assess the scheme, its functionality, and how it is governed within a village or catchment area.

While the study was plagued by many constraints (such as budget and time), the information gathered was useful, especially in determining the usefulness and practicality of the scheme functionality and governance snapshot tool.

First and foremost, the administration of the snapshot study to 91 schemes was conducted quickly due to limited time by field staff and weather conditions. The timing of the snapshot and the presence of the CARE intern from Emory University happened to take place during the rainy season, when navigating roads is unpredictable and difficult. In order to accommodate for this issue, the snapshot study across two districts was condensed to a two week period (5 business days each) and the sample size of the schemes was automatically made smaller because of the limitations.

Feedback received from study participants and administrators:

- Snapshot survey was fairly cumbersome and complicated in some instances.
- Respondents felt as though some of the snapshot questions were redundant; redundancies were also expressed during the focus-group discussions.
- The pre-defined snapshot answers corresponding with a number restricted the process at times.
- Meanings of such things had to be defined prior to entering a water scheme. For example, for some, sustainability was equivalent to functionality. The difference had to be explained prior to the start of the survey.

The administrators of the survey were primarily made up of members of CARE's South Gondar field office and affiliated partners. These members were divided into teams of two or three persons. While the smaller teams were able to efficiently collect information quickly, there are some factors to consider that may change how the information was collected. For example:

- Questions asked in the snapshot survey and the corresponding answers (provided within the survey itself, through statements and corresponding number rankings) could be interpreted differently by each team member, resulting in inconsistent answer choices for respondents.

- Teams administered the snapshot questions differently. Some provided answer choices and their corresponding number. Other teams let respondents respond freely, while the team members classified respondents' answers accordingly.

In addition, because of the time, budget, and weather constraints, it is possible that the overall chain of command of the study could have changed at each level of communication. Expectations and directions regarding the study from the CARE water team could be communicated across the various avenues, such as emails and phone calls, but expectations versus what is possible in the field (especially due to weather and time constraints) may have also skewed the outcomes and responses of the snapshot study, and subsequently, the specific outliers chosen for the follow-up focus-group discussions and interviews.

Outlier Study

The outlier study, like the original snapshot survey, was constrained due to time and weather. The outlier study was conducted over the course of four days, with one of those days being reserved for travel due to unpredictable weather conditions. In order to cover nine water schemes in four days, the South Gondar Field Office team split into two teams. The teams rotated from day to day, with the Emory intern being on one of the teams and fellow team members serving as translators and facilitators. While notes were shared with team members after the field visit, there is some discrepancy as to how much information was recorded and if information was lost through the translation of notes both orally and as they were transcribed. While most of the information is clear, there is always room for error when translations or second-hand transfer of knowledge is passed down.

Overall, the South Gondar field office team worked very well together. They were collaborative and cooperative with each other. All team members were very focused on the task at hand and worked well together, despite the constraints of time and weather. It was evident that they are used to working together and hold each other accountable to get their work completed. It is apparent that they have a strong understanding of the purpose of the studies and how their CARE work plays into their work at the field level, but also how it transfers to the higher levels of CARE.

Overall Conclusions

Participation and Inclusiveness

- Participation and inclusiveness are strong for the majority of the schemes in the districts of Farta and West Estie.
- Participation and inclusiveness was not indicative of the functionality of the scheme itself. For example, many non-functioning schemes scored relatively high with regard to participation and inclusiveness, despite their non-functioning status. This reflects how the participation and inclusiveness questions primarily pertain to the initial creation of the schemes.

Accountability and Transparency

By reviewing the responses of the snapshot survey, it is evident that most schemes scored lower on issues related to accountability and transparency.

- Lower levels of accountability were attributed to community members' lack of knowledge related to committee reelection and committee meeting reports and updates.
- Most water committees lacked clear channels of communication with community members.
- Weak water committees and the lack of available parts to maintain water schemes may also potentially limit functionality as well as long-term scheme sustainability.

Use of Tools and Scalability

- The scheme functionality and governance snapshot tool did provide a solid means of data collection.
- The ease of the use and the practicality of the snapshot tool were challenged during this study.
- The scoring that resulted from the administration of the snapshot did provide a rather comprehensive view of the range of functionality and sustainability of the various water schemes in Farta and West Estie.
- This particular tool could potentially be scaled up so that it is used at other CARE posts but the tool would require some modification.

Recommendations

- **Conduct follow-up trainings of water committees.** Water committees clearly noted the training they received prior to and during the water point construction. Follow-up training can include informing them of local and district water policies, but also provide an opportunity for them to voice concerns regarding their water scheme and receive subsequent training (i.e. money management, how to conduct a meeting, etc).
- **Teach follow-up water information sessions to water users.** Most communities indicated that they are aware of the committee's roles as they were told so during the construction of the scheme. However, water users should be actively engaged (with water committee members, CARE staff, and local water officials present) so that they may learn about roles/responsibilities, water policies, and water efforts. Such action will improve accountability between water committees and water users.
- **Create action plan with local and district water officials to improve the spare parts supply chain and accessibility.** The majority of scheme users, water committee members, and water officials interviewed indicated that accessibility to spare parts was a major obstacle in scheme functionality and sustainability. Government officials, CARE, and water users (specifically those trained in scheme maintenance) must work together to improve spare part accessibility.
- **Continue to engage with water users and committee leaders.** While it was evident that CARE field office staff had strong rapport with water users and committee members, many high functioning schemes indicated that they would like CARE to be more engaged with them (i.e. not only when data is needed for studies such as these) even when schemes are functioning well or well managed. By improving engagement and making it more frequent, CARE's efforts to monitor water scheme functionality and sustainability may be more consistent and less burdensome.
- **Refine snapshot tool.** The snapshot tool is an excellent tool for obtaining information pertaining participation, accountability, transparency, and inclusiveness. However, its use requires proper training of field staff and sufficient time to gather respondents and travel. The tool could be adjusted so that it is used for a very rapid survey, which could be done on the spot when field staff might be engaged with the community regarding another topic (i.e. community-led total sanitation).

Appendix A

Scheme Functionality and Governance Snapshot

A scheme functionality and governance snapshot is a tool used to capture how WASH and other community IWRM structures' functionality and how community governance systems are operating. This snapshot probes into the issue of governance of IWRM-related initiatives at community level, and has been designed to allow aggregation of data in a simple and systematic way from community to regional levels.

What is a governance snapshot at community level?

The governance snapshot asks a set of questions that reveal issues around governance linked to IWRM structures, e.g., communal water points, small-scale community managed irrigation systems, etc. After initial background questions including ones that probe functionality status, there are twenty questions in the snapshot which shed light on key issues like participation, accountability, transparency and inclusion.

Why is it useful?

The snapshot provides a quantitative and simple way of looking at local governance, an area of work which is a strategic objective and is pivotal to the success or failure of community IWRM initiatives in terms of the ability to run the systems in the short run, but also in terms of long term sustainability. The findings can alert implementers to any patterns of weaknesses which need addressing in the future and provide a mechanism to identify community IWRM systems which are facing problems. There is also room for qualitative comments/feedback on the quantitative scores given.

How will the data be collected and used?

The data can be recorded on the form itself and ideally translated into a local language. Sets of forms from each district should be analyzed using excel, from which graphs can be produced.

The findings of the snapshot should be discussed internally and the district summaries shared in mid-year or annual reports.

For accountability and transparency purposes, it is best if the snapshot is done openly. For example, each of the 20 questions could be translated and laminated on an A4-size paper that is displayed as people decide which of the three scores they will give to that question. The scoring could be done with pebbles or in some other visual participatory way, as well as recorded on paper. A copy of the scores given should also be left in the community where other written documentation of the initiative is kept.

How many community IWRM systems should be reviewed?

We would recommend that all IWRM systems within a district are assessed once every three years and that partners set up a system to ensure this in a way that is relatively easy for them to administer.

Who should collect this data?

Partners (ideally not just field staff but with headquarters or monitoring staff) should periodically undertake their own assessments. We would also encourage third party assessments of findings, e.g. by partners in each other's areas of work, to increase the external validity of the findings. We would also recommend that local government be involved in the assessments; ultimately it would be a great success if this becomes a role that they take on and follow up with through support to community IWRM systems experiencing problems.

Who should be interviewed?

The data are to be collected by mixed interest groups, including women and men, community members and

committee leaders. We recommend that at least 5 people are involved in each interview. The interview process should ensure that the discussion is as participatory, transparent, and as inclusive as possible.

Analysis and Follow up

Each program should identify a system for undertaking, analyzing and then acting on these snapshots.

There are three loops required to ensure effective use of this data:

- 1) A loop which ensures that community IWRM systems visited which are experiencing problems are followed up on by staff and local government
- 2) A loop which ensures that data is aggregated and then discussed within the wider team and fed back into changes to programming focus or methods (a simple excel table is provided to support this)
- 3) A loop that ensures that the aggregate data is forwarded for compilation in the reporting process

Scheme Functionality and Governance Snapshot

Title of Person filling in form _____	Date _____
Name of scheme _____	
List components of scheme (e.g. water point domestic/run off water for irrigation/irrigation system/clothes washing/cattle trough/shower/other) _____	
Community name _____	District: _____ Country _____
Who constructed the scheme _____	Who renovated where relevant _____
Who set up the committee _____	Who has strengthened committee more recently _____
Other background points _____	

Where respondents do not know the answer or the answer is not applicable please score 0. Answers to be provided in the shaded boxes

I)	Age of water-point (in yrs)				
II)	Main investment made in scheme by:	1 = CARE	2= Other NGO	3= Government	
III)	What is the current functionality status?	1= Not functioning	2= Functioning though difficulties	3= Functioning well	
IV)	If not functioning at all (i.e. community not getting water)	1= more than one month	2= between 1 wk and 1 month	3= less than 1 week	

v)	If functioning but not well please specify (<i>can put down several numbers</i>)	1= significant leakages affects water supply 2= small leakages doesn't affect water supply	3= some parts broken affects water service 4 = some parts broken but doesn't affect water service	5= problems with attendants/or committee affects service 6= problems with attendants/or committee doesn't affect service	
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Note where not functioning or not functioning well for technical reasons provide details at the end of this form

Note T = Transparency; A = Accountability; P = Participation; I = Inclusiveness

			1	2	3	
1	P	What was the consultation like regarding the initial prioritization of what service was needed?	Community members were not consulted in the prioritization of services	Limited consultations with some community members were made in prioritization of services	A wide set of community members were significantly consulted and they influenced services in named ways	
2	P	What was the involvement of community members in discussions and decisions?	No community participation in discussions and decisions at all levels of the process	Low and patchy participation in discussions and decisions by community members at all levels of the process	High participation of community members at all stages in discussions and named influence on decision making	
3	P	What was the contribution of labor, material, leadership and skills?	No community contributions in any form at all levels	Community contributed in some form	High community contributions at all levels of the project, examples can be given by interviewees	
4	T	What is the situation regarding the existence and functionality of bylaw, guidelines, internal articles, etc?	The committee ⁴ functions without bylaw or guidelines	The committee has bylaws or articles, etc but they are not functional	The committee has bylaws or articles which can be quoted or shown if on paper and it follows these in named decision making	
5	A	What is the situation regarding the existence of Committee?	The scheme has no committees	The scheme has a designated committee but people are unsure	The scheme has a committee that meets and that others know about	

⁴ Table refers to committee but please consider other structure e.g. customary institution where such an institution is overseeing the service.

				who is involved and what they do	
6	T	What is the process regarding committee and office-bearer elections?	The committee and office bearers were selected not elected	It is unclear, mixture of selection and community voice	The committee and office bearers were elected by the community
7	T	What level of knowledge about roles and responsibilities is there at community and committee level?	Community members and committee members do not know their roles and responsibilities	Community members and the committee have some knowledge about their roles and responsibilities	Community members and committee know their roles and responsibilities and can explain these to others
8	A	What is the situation regarding committee meetings?	committee meetings have never been held	The committee held a few meetings in the past	The committee holds meetings regularly and the last one can be stated or better still minutes seen
9	A	What is the situation regarding committee re-election?	There is no agreed term of office	The situation is unclear	There are agreed terms of office, regular meetings to re-elect committee members and office bearers have occurred for older schemes, the last elections can be recalled
10	P	What is the situation regarding power to replace ineffective committee members?	Community members have no knowledge that they can replace ineffective committee as a whole or members any time	Community members have some information that they can replace ineffective committees or members any time	Community members know their right to replace ineffective committee or members any time and can talk about when they have exercised their right
11	I	How are decisions made at community and committee level?	Decision making is usually the role of an individual	Few members participate in decision making	Most if not all members take part inclusively in decision making, a point agreed to by all present
12	A	What is the process of committee report back to wider community?	There is no committee report back to the wider community	There is some committee report back to the wider community	There is a systematic and named system in place and being used for committee report back to the wider community

13	T	What knowledge is there about the regular income (total community contributions) and expenditures (e.g. spare parts) related to the scheme?	Members of the community have no information about the regular, e.g. monthly income and expenditure of the scheme	Members of the community has little or outdated information about the income and expenditure of the scheme	Members of the community have up-to-date information about the income and expenditure of the scheme (recall of date information shared and or overall status, even if approximate figures not remembered)	
14	T	What is the situation regarding committee knowledge and practice of regular record keeping?	The committee does not have the knowledge of how to keep records	The committee has some knowledge of record keeping but this is incomplete or not followed in practice	The committee has the knowledge and keeps records which have been seen	
15	I	What is the committee Composition like?	All members are men	Women constitute 50 or less	Women constitute more than half	
16	I	What is the role of women in decision making?	Women are not involved in decision making at all levels	Women take part in few occasions in decision making	Women have significant role in decision making, examples can be given	
17	I	What is the situation regarding diversity of committee and office bearers? (e.g. gender, age, ethnicity, clan, religion, wealth, other?)	There is no diversity of representation in committees and office-bearers	Committee and office-bearers are not very representative	Committee and office-bearers are representatives of different named interest groups in the community are represented	
18	I	What groups are excluded/marginalized regarding access to services? (e.g. ethnicity, clan, religion, wealth, disability/chronic illness, other vulnerable groups?)	There are community members excluded /marginalized from using the services	No community members are excluded but a few do not use the services	All community members use the services equally and equitably and there are initiatives in place to help those who might not otherwise be able to access services (e.g. for the poorest, disabled, etc)	
19	P	What training and capacity is in place regarding basic maintenance	Committee members have never taken any training	Committee members have taken some training and have a limited	Committee members have taken training and have demonstrated an ability to	

		of the scheme?	and never been involved in scheme maintenance	knowledge of basic scheme maintenance but this is patchy	maintain the scheme when it ceased functioning	
20	A	Who should be contacted in case of trouble related to services (e.g. relevant district departments or other)	The committee has no clear information about who to contact in case of any problem beyond the local capacity	The committee has some information on who to contact in case of any problem beyond the local capacity	The committee has clear information on who to contact in case of any problems beyond local capacity and have accessed this information to address the problem encountered	

Question	Additional comments

Appendix B

Assessing Water Scheme Sustainability & Governance in Ethiopia*

Goal: To determine key factors influencing the sustainability of water schemes in Ethiopia to allow CARE to better construct or rehabilitate water schemes in the future.

Pilot Questions

1. How do the way communities make decisions impact the sustainability of water schemes in Ethiopia?
2. What factors contribute to the establishment of community ownership of water schemes in Ethiopia?
3. How does a community's availability of resources impact the sustainability of its water scheme(s) in Ethiopia? Does the community pay any fee for the usage? How was the tariff decision made?
4. How does the relationship between the local government, NGOs, and the community impact the long-term sustainability of water schemes in Ethiopia? How are relevant stakeholders jointly working towards the sustainability of the system?
5. How does a community's demand for, and availability of, water impact the sustainability of its water schemes in Ethiopia? How many households use the water scheme? Is the water supply enough throughout the year? Especially during the dry season?
6. How does the degree of gender equality influence the sustainability of water schemes in Ethiopia? Rather better to ask: the number of women in the WASHCO especially in the area of decision making position?

1. Focus Group Discussions

Remember to separate men and women for the FGDs.

Be sure to include information pertaining to each scheme snapshot results. Prepare/bring those sheets.

Introductory Remarks and Informed Consent:

I would like to thank you all for coming today. My name is _____ and my assistant is _____

A few days/weeks ago, some people came and looked at how well your community's water schemes are working. Out of all of the schemes examined, one of your schemes [**say which scheme**] was working **very well / not working well at all**. [**Provide more details on our snapshot results.**] We would like to see why this water scheme has **worked so well / is no longer working (or not worked well)**** .

* Adapted from Water Scheme Sustainability in Northern Mozambique by Deanna Tollefson & Herty Herjati.

** Choose the correct phrase based on the governance snapshot evaluation. The water schemes that will be followed up with will be those that have been most sustainable and those that have been least sustainable.

To do this, over the next few weeks our research team will be conducting group discussions with men and women in two districts as part of a CARE project to determine what makes water schemes sustainable. As you know, water schemes are created, or rehabilitated, frequently in this district, but sometimes they stop working and are never fixed. We feel that the best method to increase sustainability of water schemes in your community is to talk to you, and other men and women, about your opinions and experiences of planning, developing, maintaining, and using your water scheme(s). Even if you have never been involved in the development or maintenance of the water scheme, your views and opinions are very valuable to us.

Let me tell you a little about how we will conduct the group discussion today. As we have already told you, your participation in this group is voluntary, so if you prefer not to be part of this discussion you are completely free to leave. However we value all of your opinions and hope that you will stay and share your views. We will use your answers only for this research project. Ultimately, your answers will help your community, and other communities, have longer lasting water supplies.

I would like to say that there are no right or wrong answers. We will simply be asking for your opinions and experiences, so please feel comfortable to say what you really think. We would like to hear as many different points of view as possible, so feel free to disagree with someone else and share your own view, but please also respect the views of others. We will not be going around the room, just join in when you have something to say or you want to respond to someone else's comment. However, it is also important that only one person talks at a time so that we don't miss anything on the recording.

During the discussion __[person's name]__ will be taking notes and reminding me if I forgot to ask something. However, so that s/he does not have to worry about writing down every word, we would also like to record the whole discussion. The reason for recording is so that we don't miss anything that is said and so that the rest of the research team who are not here can also hear your views exactly. Please do not be concerned about this. Our discussion will remain completely confidential; we will use only first names in the discussion, the information will only be used for this research project only, and the recording will be securely stored so that it is not accessible to anyone outside the research team.

Are there any questions before we start?

Introduction to Each Other

As an introduction, let's go around so that you can introduce yourselves to each other and to me.

- Tell us whether you are currently working and what type of work you do. (*I.e. Farmer? Vendor? Logger? Fisherman?*)
- What is the highest level of education you have received?
- Can you describe the main sources of employment for men and women in this area?

Topic 1: Water Schemes in the Community

- How many water schemes do people use in your community?
- Do you use different water schemes in the wet and dry season? *Probe: What is the reason?*
- Map the water schemes. Note:
 - How long each water scheme has been in use (rehabilitated, newly constructed, etc)?
 - Which water schemes function now? In the wet season? In the dry season?
 - Do you know who (if anyone) provided you with, or rehabilitated, this (these) water scheme(s)? (If so, who?) Did you make small level of maintain to your schemes by your own?
- Have the group scheme to the specific water scheme that we are discussing. Circle it. This is not pretty mach clear.

Topic 2. Ownership and Functionality

- Do you pay for any upkeep of water? If so, how much? How frequently?
- How do you feel about paying to have clean water? *Probe: How much would you be able to pay?*
- Whose responsibility is it to provide clean water? *Probe: What are the roles of the responsible parties in providing clean water?**
- Who maintains this water scheme [the specific scheme that we are discussing]? Why do these people maintain it?
- Must people receive training to fix the scheme? *If so: How can people receive it? Who provides this training?*
- How were you involved in the construction or rehabilitation of the water scheme, or in its current maintenance? *Probe: How have people 'donated' their time or resources to develop/maintain the scheme?*
 - If people have donated their time/resources, why do they do so?
 - Do men and women participate equally in maintenance of water schemes?
 - Were women involved/consulted in the planning of the water scheme?

Topic 3. Collaboration

- Who is in charge of making decisions for the community (especially regarding construction/maintenance of water schemes)? *Probe: NGO, government, committee, etc.*
- Has a water committee been established in your village? *If the answer is 'Yes' then probe: Could you give me the names of people who have been elected for water committee? When was their last meeting?*
- What is the responsibility of the Water Committee?
- How does the Water Committee communicate with the community? How, if at all, do they report back to the community?
- Are any women members of the committee? If so, what role do they play?

- How do you feel about the level of women involvement with the water committee?
- In general, what do you feel about women making decisions? What about women in leadership roles?
- Is the organization (i.e. CARE, other NGO, etc) that helped to make the water scheme involved in your community? If so, how are they engaged?

Topic 4. The Need and Demand and Availability for Water

- Who collects the water in your community?
- How many jerry cans do you use per day?
- Do you feel the amount of water you can collect is sufficient to meet your needs?
- Other than the people in your community, are there people from other village using your community's water sources? The specific water scheme? How is that regulated/managed?
- How long must you walk to access water from this scheme? [Time or Km] What about in the wet season? In the dry season?
- How long must you wait in line to collect water?

Topic 5. Focus Group Perceptions of Water Scheme Sustainability

- [If this water scheme is functional]: What has been the most crucial factor in keeping this water scheme functional?
- [If this water scheme is not functional]: What has been the biggest barrier to keeping this water scheme functional?
- Do you think your water scheme is sustainable? *Explain sustainable: Do you think the water scheme is lasting well? Do you think it will last for a long time? (How would sustainable be explained?)**
- What do you think contributes to the sustainability of water schemes in general? To this water scheme?
- What concerns do you have about this water scheme?

Closing Questions

- Overall, are you satisfied with your community's water? Why or why not? (*Probe: Complaints about quantity of water, accessibility to water, quality of water, including taste, smell, water purity, etc*)
- How is the party responsible for water fulfilling its responsibilities to your community? How are they not?

Closing Remarks: Thank you so much for your time. We appreciate your participation. We have learned so much from you, and we look forward to using your insight to better the water situation in your community and surrounding communities. Thank you for all of your help!

2. In-Depth Interviews (IDI)

IDI for district government officials

Introduction:

Recently, CARE Ethiopia staff have been assessing how well water schemes in your district are working. **[Provide some basic details of the initial sustainability survey, if they are available.] (BRING BASIC DETAILS)** As you know, water schemes are created, or rehabilitated, frequently in this district, but sometimes they stop working and are never fixed. Our goal now is to determine the factors that influence the sustainability of the water schemes—how long the water schemes last and how regularly they are maintained.

To do this, over the next few weeks our research team will be interviewing community government officials/water committee members and community leaders and conducting focus group discussions with villagers with the goal of determining what makes improved water schemes sustainable. In addition, we would appreciate your specific insight into the government perspectives on the water situation in this district. As a member of the [Ministry of Water and Energy (or other government position) for this district], we know that you are very aware of the water policies and regulations and government perspectives regarding water provision. We would be very appreciative to learn more about this from you.

The questions we have for you will ask about the government policies, programs, and challenges regarding water provision, specifically in this district. In addition, there are questions that ask for the government’s perspective on the sustainability of water schemes. Even if you do not know the answer to a question, your views and opinions are very valuable to us. I would like to say that there are no right or wrong answers. We will simply be asking for what you feel to be true, and your opinions, so please feel comfortable to say what you think.

Your participation in this interview is completely voluntary, so if you prefer not to be part of this discussion you are free to not answer the question and/or ask us to stop the interview. However we value all of your opinions and hope that you will stay and share your views. Whatever we discussed today will be confidential. We will use your answers only for this research project. Ultimately, your answers will help your fellow citizens to have longer lasting water supplies.

I will be taking notes and so that we do not have to worry about writing down every word, we would also like to record the whole interview. The reason for recording is so that we don’t miss anything that is said and so that the rest of the research team who are not here can also hear your views exactly. Please do not be concerned about this. We will use only first names in the discussion, the information will only be used for this research project only, and the recording will be securely stored so that it is not accessible to anyone outside the research team.

The interview will last approximately 30-45 minutes. We will take as little time as possible. Are there any questions before we start?

1. Policies:

- a. What policies, program and regulations exist regarding water provision for communities in this district?
- b. Are there policies on payment for water? (Who decides if people pay? Is there a maximum or minimum price that can be charged to the community?)

2. Responsibility for water:

- a. Who is responsible for providing water to communities?

- b. What is the government's role with regards to water provision in this district?
3. **Sustainability:**
- a. How do you define a sustainable water scheme?
 - b. How do you believe the government can help enhance the sustainability of water sources?
 - c. What does the government need to improve the sustainability of water schemes?
4. **Closing Questions: Improvements and Challenges**
- a. What do you perceive to be the biggest improvements in the past five years for water provision?
 - b. What do you perceive to be the biggest challenges to providing water? What barriers exist? What solutions do you see to the problem?

IDI for Officials in Community (includes Water Committee members and/or other governing official)

Introduction:

A few days ago, some people came and looked at how well your community's water schemes are working. Out of all of the schemes examined in a couple of districts, one of your schemes [**say which scheme**] was working **very well / not working well at all**. [**Provide more details on our snapshot results.**] We would like to see why this water scheme has **worked so well / is no longer working (or not worked well)***.

To do this, over the next few weeks our research team will be interviewing government officials/water committee members and community leaders in two districts as part of a CARE project to determine what makes improved water schemes sustainable. As you know, water schemes are created, or rehabilitated, frequently in this district, but sometimes they stop working and are never fixed. We feel that the best method to increase sustainability of water schemes in your community is to talk to you, and gain specific insight into the water situation in this community. As a local governing official and/or a member of the Water Committee, we know that you are more aware of the water policies and regulations in this community, in addition to the details about the water scheme [**name/location**]. We would be appreciative to learn more about this situation from you.

The questions we have for you will ask about your opinions and experiences of planning, developing, maintaining, and monitoring the water scheme(s) in this community, specifically the [**name/location**] scheme. Even if you do not know the answer to a question, your views and opinions are very valuable to us. I would like to say that there are no right or wrong answers. We will simply be asking for your opinions and experiences, so please feel comfortable to say what you really think.

Your participation in this interview is completely voluntary, so if you prefer not to be part of this discussion you are free to not answer the question and/or ask us to stop the interview. However we value all of your opinions and hope that you will stay and share your views. We will use your answers only for this research project. Ultimately, your answers will help your community, and other communities, have longer lasting water supplies.

I will be taking notes and so that we do not have to worry about writing down every word, we would also like to record the whole interview. The reason for recording is so that we don't miss anything that is said and so that the rest of the research team who are not here can also hear your views exactly. Please do not be concerned about this. Our discussion will remain completely confidential; we will use only first names in the discussion, the information will only be used for this research project only, and the recording will be securely stored so that it is not accessible to anyone outside the research team.

The interview will take approximately one hour, depending on your answers. Are there any questions before we start?

Background information

- No. of Interview
- Highest level of education.
- What is your position and where are you working?

* Choose the correct phrase based on the governance snapshot evaluation. The water schemes that will be followed up with will be those that have been most sustainable and those that have been least sustainable.

- How long have you lived/worked in this village?

Opening Questions

- How long have you been in a leadership role in this community?
- How many communities do you have responsibility for?
- How many people are in this community?
- What does your work entail?
- What are your responsibilities in this position?
- What training have you had concerning water management and/or leadership/management? How many times?

1] General Questions about Water in the Community

- What water problems has your community experienced in the past five years? (Drought, floods, etc)
- What type of policies, plans of the government related to water sector you are familiar with?
- What policies or regulations shape how your community accesses water?
- What efforts do you/ your office make to ensure that these policies are enforced?

2] How do you monitor your water schemes?

- Is there a Water Committee? Could you provide me the name of community members? What have some of the recent committee activities or actions been?
- How frequently is the scheme monitored? Who monitors it? How do they monitor it?

3] How does the community maintain the water source?

- Who fixes the water scheme if it is broken (or soon to be broken)? (Community people/professionals?)
 - o Why do these people maintain it?
- Do you need technical assistance to fix it? If so, from whom do you acquire this expert assistance?
- If training is required, are people in your community trained to fix it? If so: Who provides this training?
- Where do you procure the parts needed to fix the water scheme?
- How do you pay for maintenance?

4] What other water schemes exist in your community?

- What water scheme did people rely on before this water scheme was constructed or rehabilitated? What type of scheme was it?
- What source/scheme do you rely on if/when this water scheme is broken?
- Do you get water from the same place in the rainy season and the dry season?
- In your mind, how does this water scheme compare to other water schemes in your community?

5] Availability of Water

- How many water sources are there for the community?

- Do you ever witness, hear of, or mediate conflict over the water? If so, what is the reason for this conflict?
 - o *Probe:* Proximity of water schemes, quality of water, ease of access, location (on someone's land, etc)

6] Collaboration

- Was the water scheme constructed or rehabilitated?
- Who was involved with the initial construction? (Government or NGO? Name of Org?)
 - What did the outside organization contribute?
 - What did the community contribute?
 - What was the role of men in the planning/construction? What was the role of women in the planning/construction?
- How is this organization (gov or NGO) currently involved with the community?

7] How do you perceive this community's ownership of the water scheme?

- Do you collect pay money for water (i.e. to help maintain the water scheme)?

If yes:

- How frequently do you collect money?
- How much do you collect from each household?
- How do you determine how much money to collect?
- Why do you collect this much?

If no: How do you acquire the resources to upkeep the water scheme? (Support from NGO, government, etc)

For yes or no: Could you please show us your records? Log book?

- Whose responsibility is it to provide clean water for the community?
- How do you feel if an outside NGO provides water for the community instead of the government?
- If an outside organization provides its support for a water project, what does the government feel its role should be?

Closing Questions: Do you have any further comments or suggestions regarding water in your community?

- What is good about the water scheme?
- What would you like to see improved?
- What is the community's opinion of the people/organizations managing the water scheme?

Introduction:

A few days ago, some people came and looked at how well your community's water schemes are working. Out of all of the schemes examined in a couple of districts, one of your schemes [**say which scheme**] was working **very well / not working well at all**. [**Provide more details on our snapshot results.**] We would like to see why this water scheme has **worked so well / is no longer working (or not worked well)** *.

To do this, over the next few weeks our research team will be interviewing government officials/water committee members and community leaders in two districts as part of a CARE project to determine what makes improved water schemes sustainable. As you know, water schemes are created, or rehabilitated, frequently in this district, but sometimes they stop working and are never fixed. We feel that the best method to increase sustainability of water schemes in your community is to talk to you, and gain specific insight into the water situation in this community. As a local official, we know that you are more aware of the water policies and regulations in this community, in addition to the details about the water scheme [name/location]. We would be appreciative to learn more about this situation from you.

The questions we have for you will ask about your opinions and experiences of planning, developing, maintaining, and monitoring the water scheme(s) in this community, specifically the [name/location] water scheme. Even if you do not know the answer to a question, your views and opinions are very valuable to us. I would like to say that there are no right or wrong answers. We will simply be asking for your opinions and experiences, so please feel comfortable to say what you really think.

Your participation in this interview is completely voluntary, so if you prefer not to be part of this discussion you are free to not answer the question and/or ask us to stop the interview. However we value all of your opinions and hope that you will stay and share your views. We will use your answers only for this research project. Ultimately, your answers will help your community, and other communities, have longer lasting water supplies.

I will be taking notes and so that we do not have to worry about writing down every word, we would also like to record the whole interview. The reason for recording is so that we don't miss anything that is said and so that the rest of the research team who are not here can also hear your views exactly. Please do not be concerned about this. Our discussion will remain completely confidential; we will use only first names in the discussion, the information will only be used for this research project only, and the recording will be securely stored so that it is not accessible to anyone outside the research team. The interview will take approximately one hour, depending on your answers. Are there any questions before we start?

Background information

- No. of Interview
- Highest level of education.
- What is your occupation and where are you working?
- How long have you lived/worked in this village?

Opening Questions

* Choose the correct phrase based on the governance snapshot evaluation. The water schemes that will be followed up with will be those that have been most sustainable and those that have been least sustainable.

- How long have you been in a leadership role in this community?
- What water problems has your community experienced in the past five years? (Drought, floods, etc)

1] What is your opinion on the Water Committee?

- What do you know about the Water Committee?
- What are its responsibilities?
- Do you feel it fulfills its responsibilities?

2] How does the community maintain the water scheme?

- Who fixes the water scheme if it is broken (or soon to be broken)? (Community people or outside professionals?)
 - o Why do these people maintain it?
- In your opinion, do local people need training to fix the water scheme? What kind of training do they need?
- Do people ever receive such training? If so, who has provided this training?

3] What other water schemes exist in your community?

- What do you rely on if/when this water is broken? What kind of water scheme is it?
- Do you get water from the same place in the rainy season and the dry season? (If not, where do you get water in these seasons?)

4] Availability of Water

- Do you ever witness, hear of, or mediate conflict over the water? If so, what is the reason for this conflict?

Probe: Proximity of water schemes, quality of water, ease of access, location (on someone's land, etc)

5] Collaboration

- Was the community involved with the initial planning and construction or rehabilitation of this water scheme?
- How have men contribute to this process? How have women contributed to this process?
- Are you satisfied with your amount, and the community's amount, of participation in this process?

6] How do you perceive this community's ownership of the water scheme?

- Whose responsibility is it to provide clean water?
 - o *Probe:* What are the roles of the responsible parties in providing clean water?
- Do you pay for any upkeep of water? If so, how much, and how frequently?
- How do you feel about paying to have clean water?
 - o *Probe:* How much do you think a household would be able to pay? How much would a household be willing to pay?
- How involved do you perceive community members being in making decisions about water?
- How does the Water Committee involve the community in, and report back to the community, about the decisions that they have made?

Closing Questions: Satisfaction and Suggestions

- What is your opinion about water and water management in this community?
 - What is good about it?
 - What would you like to see improved about your water source?

81	Borene #1	HDW	Zemedede	Melat	West Estie	CARE+Comm	Comm	2	3	5	2	1	3	0	0	3	3	2	1	2	2	2	1	2	1	2	1	2	1	2	2	3	3	3	1	39	
82	Girar Mender	HDW	Girar Mender	Melat	West Estie	CARE+Comm	Comm	2	3	5	2	1	3	0	0	2	2	3	3	3	3	3	2	1	2	3	3	2	3	3	3	3	3	3	2	51	
82	Debelo	HDW	Sheleko	Melat	West Estie	CARE+Comm	Comm	4	1	5	2	1	1	1	0	3	3	3	3	3	3	3	2	1	3	3	2	2	3	2	3	3	3	2	3	53	
84	Minch Wuha	HDW	Wonberoch	Melat	West Estie	CARE+Comm	Comm	4	2	6	1	1	3	0	0	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	2	51	
85	Negad	HDW	Wonberoch	Melat	West Estie	CARE+Comm	Comm	4	2	6	1	1	1	1	3,1,5	3	3	2	3	3	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	2	50
86	Bayedegm	HDW	Bayedegm	Adama	West Estie	CARE+Comm	Comm	2	2	4	1	1	1	0	0	3	3	3	3	3	3	3	2	3	3	3	2	3	3	3	3	3	2	3	56		
87	Misaro Minch	SSD	Sekela	Yedidigmegn	West Estie	CARE+Comm	Comm	2	2	4	3	1	2	0	3	3	3	3	2	2	3	3	2	2	3	3	2	2	2	2	2	2	3	3	2	3	50
88	Retabit	HDW	Berbelay	Adama	West Estie	CARE+Comm	Comm	3	2	5	1.5	1	3	0	0	3	2	3	2	2	3	2	1	2	1	2	1	1	1	2	2	3	3	3	2	41	
89	Wochit Minch	SSD	Wochit	Adama	West Estie	CARE+Comm	Comm	2	2	4	1.5	1	3	0	0	3	3	3	3	3	3	2	2	2	2	3	2	3	3	2	3	3	3	3	2	53	
90	Tinjut	HDW	Tinjut	Adama	West Estie	CARE+Comm	Comm	1	4	5	8	2	1	1	0	2	2	2	2	1	2	3	2	1	2	2	1	1	1	2	1	3	3	2	2	37	
91	Mukeda	HDW	mukeda	Gono	West Estie	FINIDA	Comm	2	2	4	3	2	1	1	0	3	2	2	3	3	2	2	2	2	2	3	2	2	3	2	2	3	3	3	3	49	

-  Inclusiveness
-  Participation
-  Transparency
-  Accountability

Appendix D
Outlier Snapshot Results

#	Scheme Name	Scheme Type	Comm/Village Name	Kebele	District	Who constructed scheme	Who set-up committee	M	F	Total	I	II	III	IV	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total Score
1	Kerkeha Wuha	HDW	Gibadie	Shirna	Farta	CARE	CARE	4	4	8	4	1	2		3	3	3	3	2	3	3	2	2	3	3	2	3	3	2	3	3	3	3	3	3	55
6	Filaw	HDW	Filaw	Shirna	Farta	CARE	CARE	3	4	7	4	1	1	1	3	3	2	2	2	2	3	2	2	2	2	2	2	3	2	2	2	3	3	2	2	45
9	Amorharu	HDW	Amorharu	Kanat	Farta	CARE	CARE	4	3	7	9	1	3	0	0	3	3	3	3	3	3	2	3	3	3	2	2	2	2	2	3	3	3	2	2	53
15	Asemaghne	SSD	Asemahegn	Askuma	Farta	CARE+Comm	Comm	3	2	5	6	1	2	1	1,3,5	3	3	2	2	2	3	2	2	2	2	2	1	2	2	2	2	3	2	2	43	
18	Abatedingay	HDW	Abatedingay	Askuma	Farta	CARE+Comm	Comm	2	3	5	3.5	1	1	1	0	3	3	2	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	3	3	49
41	Kubyibel	HDW	Manko Kubyibel	F/Qusquam	Farta	Finida + C	Comm	2	3	5	7	2	3	0	0	3	3	2	3	3	3	3	2	2	2	2	1	2	2	1	2	3	3	3	3	47
60	Zefafit	HDW	Zefafit	F/Qusquam	Farta	CARE+Comm	Comm	4	1	5	3	1	3	0	0	3	3	3	3	3	3	3	3	2	2	3	3	3	3	2	3	3	3	3	2	56
86	Bayidegim	HDW	bayidegim	Adama	West Estie	CARE+Comm	Comm	2	2	4	1	1	1	0	0	3	3	3	3	3	3	3	2	3	3	3	2	3	3	3	3	3	2	3	56	
90	Tinjut	HDW	Tinjut	Adama	West Estie	CARE+Comm	Comm	1	4	5	8	2	1	1	0	2	2	2	2	1	2	3	2	1	2	2	1	1	1	2	1	3	3	2	2	37