Assessment of community's perceptions on rehabilitated and Improved Water Resources in Miyo wereda, Borana Zone of Oromia region

Mirgissa Kaba and Liben Gollo

December 2013

Table of content

List of abbreviations

BA	Beneficiary Assessment
CO	Citizen Observer
CSA	Central Statistical Agency
HH	House Hold
FGD	Focus Group Discussion
GTP	Growth and transformation plan
HEKS	STIFTUNG HILFSWERK DER EVANGELISCHE
masl	meters above sea level
NGOs	None Governmental Organizations
OSHO	Oromo Self Help Organization
SDC	Swiss Development Cooperation

List of pictures and tables

A. Table and figure

B. Photo

Executive summary

Background: Borana zone is one of the low land zones of Oromiya Region in Southern Ethiopia. The zone is subdivided in to 13 weredas. While ten of the weredas are characterized as lowland with an altitude of about 1000 mm above sea level, the remaining are relatively highland with an altitude of 1600 mm above sea level. Based on 2007 census, the total population of Borana in 2012 is estimated at 1.17 million.

Miyo district is one of the lowland weredas of Borana zone with currently estimated total population of 49,739. The wereda is affected by recurrent drought. In response to this problem, HEKS in partnership with OSHO has launched water scheme development through rehabilitation of existing ones or development of new ones in 2006. Evidences show that since the year 2006, 20 traditional wells, 9 ponds, 5 hand pumps and 4 cisterns were constructed in Miyo.

Although such initiative is believed to have contributed to improved water availability in specific target areas, there is no documentation on what specific changes has occurred as a result. This assessment was thus designed to identify beneficiaries' perceptions on change as a result of water scheme development or rehabilitation, their role in such water development and rehabilitation and validation of BA approach and method to carry out such an assessment. More specifically the assessment aims to identify beneficiaries' perceptions on changerelated to water scheme development, determine beneficiaries' participation in water scheme interventions and validate the BA method that are currently being at different Swiss supported projects.

Methods: A mix of water schemes that were rehabilitated or developed in Miyo district were selected for this study. From each kebele, six HHs that manifest different characteristics were randomly selected and interviewed. Besides, two FGDs (one women and men group) and one community meetings were completed in every kebele. Information was collected by trained citizen observers using checklist developed following objective of the assessment. Data so collected was categorized in to themes and sub themes again following assessment objectives. Findings were accordingly described without professional reflections of the facilitator and co-facilitator.

Key findings: Water scheme development by OSHO was based on full interest and contribution of community members. Although OSHO took the initiative based wereda water development or rehabilitation priorities, community members played active role in identifying the water site for development or rehabilitation and during the construction process.

Despite scarcity of water in Borana, culturally it is considered as shared property for every one irrespective of social status, how far one reside from water source or the fact that water is named after a person who initiated it (in old days) and after the name of a kebele (now days). Finding on perceived changes in connection to water scheme development was found to be apparent. Data generated from HH, FGD and community meeting has invariably revealed that perceived change was after development or rehabilitation of water scheme was explained in terms of shortened distance to water source, year round availability and improved quality of water. With improved water scheme, time to fetch water was shortened by at least 2 hours which imply now women saved on average 2 hours. Unlike usual where water availability was intermittent, with development or rehabilitation of water source, water was said to be available throughout the year. Nonetheless, this is not uniform in all the study sites as water scheme in Baha and Cheri Turura are not productive during this assessment compelling women to travel long distance to fetch water. Question on how saved time was used revealed that community members in Metti, Dikicha and Cheri Turura used saved time to plant vegetables and fruits at their backyard for household consumption. Now, there are members of the community who sell vegetables at market. Dikicha participants invariable indicated that saved time was used for community development activities such as soil and water conservation.

Perceived changes in quality following water scheme development or rehabilitation was noted in terms of improved human health status where common health problem (*garaakaasa)* has declined except in Baha where water was available only for few months of the year and Cheri Turura where hand pump encountered technical failure the last six months.

Although small and weak animals were watered at water source or by fetching water from the scheme, all participants invariably argued that there was no difference in animal health in connection to new or rehabilitated water scheme. Participants have rather complained that their animals are not getting water and requested for additional water scheme for their animals. This was particularly emphasized by participants of Metti, Melbana, Cheri Turura and Baha kebeles.

The finding as well as reflections from validation workshop attested the fact that BA approach is a strong tool that helps to generate rich and trustworthy evidence in response to the assessment questions. Its strength was particularly emphasized where the tool has generated genuine and unbiased information that truly reflects realities of the wereda at large. Furthermore, it was found that the BA process is empowering as beneficiaries themselves carried out the assessment. Participants of validation workshop unanimously called for the use of BA approach for community development initiative in the future. During this particular assessment, citizen observers were provided opportunities to share their reflections on the entire process, the tools and what needs to improve in the future. Accordingly, it was gathered that citizen observers shared similar opinion with other assessment participants regarding perceived changes following the development or rehabilitation of water sources. Besides, citizen observers emphasized the richness of data generated through BA. However, they suggested more time for FGDs and community meetings that require time for identification and mobilization of participants and the need to interview men and women separately to ensure active participation of women.

- OSHO's water scheme development/rehabilitation initiative benefited from active participation of beneficiaries
- Following scheme development/rehabilitation water was said to be available throughout the year, complaints of health problem has declined and saved time was used for economically and environmentally gainful activities
- In as much as it helps in generating rich data, BA approach was found to empower community's capacity to assess implications of development initiatives at community level

Introduction

Borana zone is one of the 18 zones of Oromiya Regional State, located in the Southern part of Ethiopia. The zone is subdivided in to two agro-ecological zones – the semi-arid lowlands to the south (10 weredas') with an elevation of about 1000 meters above sea level (masl) and humid highland to the north (3 weredas) with about 1600 masl.

In reference to the 2007 census, the total population of Borana is estimated at 1.17 million of which about 2% are living in urban centers while the remaining wider majority are living in rural settings[1]. Borana is known for its livestock rearing that is often considered as a symbol of identity and mark of wealth status. Economic characteristics of these two ecological zones show that while the lowland weredas rely on livestock rearing as the mainstay of their life, the remaining weredas (3) are engaged in agriculture as well as cattle rearing as their economic activity.

Among the Borana, land and its resources such as water, pasture and forest has been commonly owned, managed and shared with defined local system of governance. It was documented that collective ownership is reflected in everyday expressions of "we and our"[2]. Despite evidences of water source named after a clan or Olla (village) leader, every member of the community irrespective wealth status, where he/she lives etc has equal access to water source.

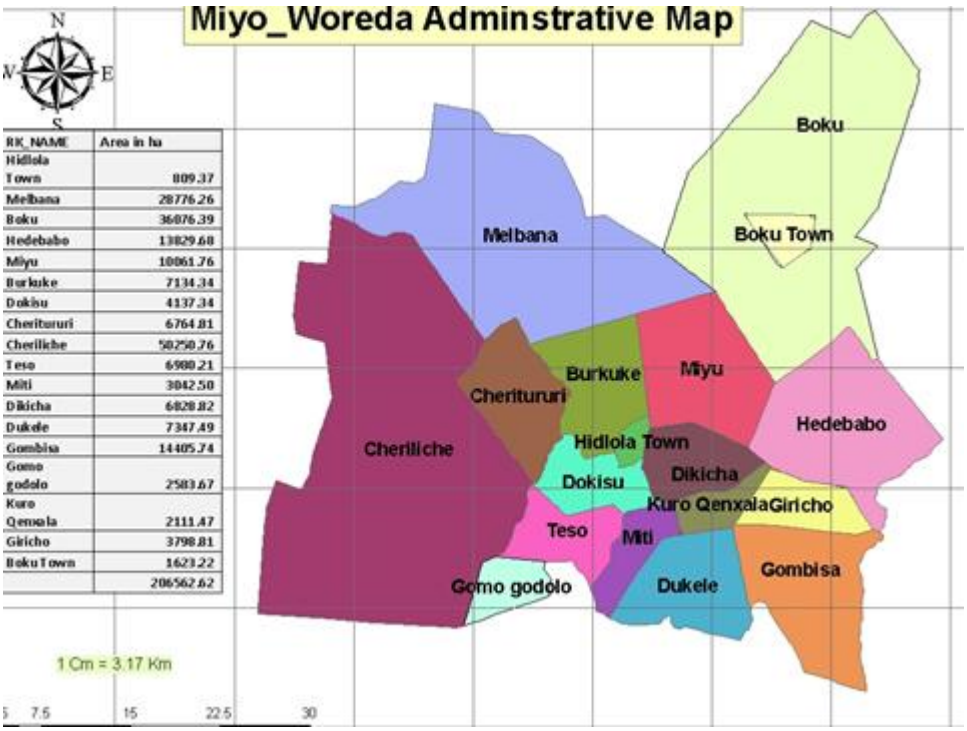
Shortage of water for human and livestock population is the case in Borana than an exception. Common sources of water for animals and human use include ponds, traditional wells, river, springs and surface water. It is documented that Borana has defined system of governance on water use. Use of water from deep wells is restricted where such water sources are kept for difficult times. Such wells are not only critical sources of survival at difficult times but also as centers of residence and institutions[3]. Unlike deep wells, access rights to temporary water source such as wirwixa, *mansole and mado*[4] is unlimited although only few households may use. In Borana, management of water is the responsibility of a person referred to as A*bba herega* which

[1]CSA.The Ethiopian census report, 2007, Addis Ababa.
[2]BokuTache& Ben Irwin. Traditional institutions, multiple stakeholders and modern perspectives in common property: Accompanying changes within Borana pastoral system, April 2003

[3]BokuTache.Individualizing the Commons: Changing resource tenure among Boorana Oromo of Southern Ethiopia. MA thesis submitted to the School of Graduate Studies, Addis Ababa University, 2000.
[4]*Wirwixa* is water collected from runoff while *mansole* and *mado* are natural water sources that are dug around dried pond or well in the case of *mansole* and springs at the side of hills in the case of *mado*

is still functional in Borana although it may not be as powerful as usual. The role of *Abba herega* is to ensure people use deep wells (*eela)* during difficult times and collection and use of run off during rainy season. Furthermore, mobilization of the community for maintenance and protection of water source is the responsibility of *Abba herega.*

Miyo district is one of the lowland weredas of Borana zone. Based on the 2007 census, the total population of Miyo district for 2012 was estimated at 49,739[5]. The wereda is affected by recurrent drought. Annual report on water coverage in Borana zone for 2012/13 revealed that 66% of the rural population has access to potable water. In Miyo wereda however, only 25% of the population has access to clean water supply[6]. Yet, another study commissioned by the Zonal Health Department to test quality of water schemes that were developed and rehabilitated in Miyo shows that only 30% of water sources in the wereda were safe to drink[7]. The wereda is one of those frequently affected by drought and, existing water schemes are not potable.



Map of Miyo district, Source: Wereda finance and economic development

[5]CSA.Ethiopian census report, 2007.
[6]Borana zone water sector annual report for 2012/12.
[7]CICP.Unpublished report on water scheme test, 2013.

In response to such problems and to contribute to broader local development initiatives and particularly water scheme development and rehabilitation, HEKS has partnered with OSHO since 2006. According to available evidences, to date 20 traditional wells, 9 ponds, 5 hand pumps and 4 cisterns were constructed in the wereda including couple of such schemes currently under construction with support from HEKS.

Although it is assumed that such support has made some differences in the life of beneficiary communities, there is no concrete evidence on what differences were brought about in consequence. This assessment was designed to generate beneficiary's views on changes that occurred as a result of water scheme development and/or rehabilitation in selected kebeles of Miyo wereda.

Specific objectives

- Identify beneficiaries' genuine views and perceptions on changes resulted from development and/or rehabilitation of water sources
- Determine beneficiaries' genuine views and perceptions on community's role in development or rehabilitation of water scheme
- Validate BA method (considered as pilot BA for SDC) in Ethiopia.

Methods

The assessment was based on prior efforts made by HEKS to define what should be done, in which specific areas, by whom and with what specific strategies. This was developed in to a concept note that has provided detailed road map on the Beneficiary Assessment in Borana. The concept note was further consolidated by a visit to the site with an objective to verify selected sites, determine sampling frame to eventually select assessment participants and identify research assistants (COs) from the community using specific criterion.

Assessment Design: The assessment followed cross-sectional explorative design and t was carried out during August 9 – September 25, 2013.

Assessment population: Residents of specific kebeles that benefitted from HEKS supported water schemes development/rehabilitation in Miyo district represent assessment population.

These include kebeles where 5 hand pumps, 7 traditional wells *(eelas)*, 3 cisterns and 6 ponds that were constructed since 2006. Thus, all community members who benefitted from OSHO's water development or rehabilitation intervention.

Assessment participants: Among OSHO's water scheme development and/or rehabilitation interventions, specific water schemes in six kebeles: Metti, Hidhi Babo, Dikicha, Mebana, Cheri Turura and Baha kebeles were selected based on mix of schemes in terms of type, number and type of users and year of development or rehabilitation by OSHO (table 4 further below). Residents from these kebeles were categorized in to four wealth status following locally established classification: a) *Qolle* (the poorest of the poor) are those who do not have any cattle[8] and live with government's monthly food ration b) *Hiyessa* (the poor) are those with 2-5 heads of cattle c) *Giddugalesaa* (Middle class) are those with up to 10 heads of cattle in all kebeles and 50 heads of cattle in Melbana and d) *Dureesa* (rich) are those with over 10 heads of cattle in all kebele and over 50 heads of cattle in Melbana. List of such classification were developed for regular users of the respective kebeles selected for the assessment and. Samples for both Household interview and FGDs were drawn proportion to size of the respective wealth classification.

Method of data collection

Data was collected by local research assistants (COs) who were identified in consultation with local leaders using specific criterion[9]. They were trained for three days on how to collect information, the use of checklist and how to document. In addition, they were given an opportunity to exercise the process in role plays during the training and during community level exercise[10]. Assessment villages were divided in to group 1 and 2 and COs were assigned for data collection as detailed in the table below. COs from the kebele were responsible to guide location of selected HHs for interview and organize FGD and community meetings.

[8] Such residents the poorest members of the community who do not have chicken that is not considered resource among the Borana used only for sale since Chicken is not edible by Borana

[9] Willing to participate in data collection and recognized by the community to be able to do such a role, lives in the community and beneficiary of the scheme, should be male and female from a village

[10] COs were taken to a community which was not selected for the assessment to exercise data collection at HHs, FGDs and community meetings.

Table 1: Assignment of COs for assessment

Villages	Group 1	Group 2	Villages
Baha	Data collection by COs from Cheri Turura and Melbana Guidance and organization by COs from Baha	Data collection by COs from Hidhi Baabo and Metti Guidance and organization by COs from Dikkicha	**Dikkicha**
Cheri Turura	Data collection by COs from Cheri Baha and Melbana Guidance and organization by COs from Cheri Turura	Data collection by COs from Dikkicha and Metti Guidance and organization by COs from Hidhi Baabo	**Hidhi Baabo**
Melbana	Data collection by COs from Cheri Turura and Baha Guidance and organization by COs from Melbana	Data collection by COs from Hidhi Babo and Dikkicha Guidance and organization by COs from Metti	**Metti**

Multiple methods were employed to generate data at the community level. Accordingly a) in depth interviews were carried out witha total of 36 HH(six from each kebele) b) 12 sessions of FGDs (6 for men and 6 for women) with total participants of 105 and c) community meetings with an average estimated total of 50 community residents from the respective sites (totals 300 participants from all the sites) were employed to generate information using pretested tools. Furthermore, observation of water schemes (functionality, cleanliness and protection) and validation meetings with COs every days and with stakeholders at wereda level were useful methods employed to identify and consolidate data. Details of the data collection methods employed and along purposes for the respective method is detailed in the below table.

Table 2: Detail methods of data collection

Methods	**Number of participants**	**Purpose**
Interview of spouses at HH level	36 HHs (58 participants)	Information on access to and availability of water source, consequent changes at HH level
FGD (6 men and 6 women groups)	105	Shared views and opinions on changes in consequences of rehabilitated/developed water scheme protection, maintenance, concerns and what needs to improve
Community meetings (one at every kebele)	300	Validation of the findings from FGD and interviews thereby generating additional insights on the objectives of the assessment in reference to the themes
Discussion with COs at the end of every day of data collection	12	Reflections on data and observations that were not documented in the checklist
Synthesis workshop with the citizen observers	12	Generate additional evidences and reflections on specific themes from the citizen observers as beneficiaries
Validation workshop key stakeholders	32	Share key findings to participants drawn from key government sectors, community representatives and CSOs to obtain their insights on the process, results and also generate additional insights
Auditing the entire process	Facilitator and Co	Generate useful input to the future of BA tools and procedures

Methods of data analysis

Prior to the development of tools for data collection and as part of the orientation to project team and facilitators, expected themes and sub themes were developed in reference to the project objectives (annex 1). For each theme questions were defined to generate data at different levels. During data collection, raw data was synthesized at the end of every day under predefined themes and sub themes, in puts for additional themes and sub themes were also generated. Further categorization and interpretation of data was done after data collection was complete. Data was compared for each of the methods and summarized. Draft summary was shared with key stakeholders in Miyo district during the validation workshop which helped to consolidate the findings by way of answering specific objectives of this assessment.

We had our views which may not be different from those we talked to but still useful… COs engaged in discussion on the days performance

Photo by LG, Sept 2013

Ethical considerations

The purpose of Beneficiary Assessment and its expected result was explained to Miyo Wereda administration and respective kebele leaders. The wereda administration wrote letter to the respective kebeles requesting them to facilitate the assessment. At kebele level, leaders provided guidance during preparatory phase and also took active role in the selection of COs.

COs were provided three days training including practical field test of tools to fully acquaint them with the tools and processes. At household level, during FGDs and community meeting, participants were informed about the assessment and requested for participation. Anyone not interested to participate were given the right to quite at will.

Finally, highlights of the findings were shared with local authorities to get their inputs and ensure ownership of the results. Results are tabulated and described without any analytical interpretation except towards the end of this report to ensure findings reflect local opinions.

Water source before and after intervention at Hidhi Baabo - Photo by MK, Sept, 2013

3. Key Findings

3.1. Socio demographic Characteristics of Sample Households

Characteristics of sampled households for household interviews and FGDs are summarized as follows:

a) Number of participants: A total of 36 households and 58 individuals 62% being women were interviewed athousehold level. One men and women FGD sessions were completed at every study site making a total of twelve FGD sessions 105 (53) men and (52)women participated. In addition an estimated total of 300 participants in community meeting[11]were completed during the assessment.

b) Age and sex distribution of participants: While it was difficult to estimate age and sex of participants of community meeting, sex and age of those who participated in household interviews and FGD is summarized in table 2. There was not a major difference in the proportion of men and women participants. There were 75 men and 88 women who participated in FGDs and interviews. At household level, fourteen women were interviewed alone since they were either widows or husband was not available during the interview. As is clear in the table 31% of men and women participants were found to be

Age	Male (N/%)	Female (N/%)
< 20	1 (1.3)	2 (2.3)
21-30	6 (8.0)	17 (19.3)
31-40	28 (37.3)	27 (30.7)
41-50	17 (22.7)	15 (17.0)
Above 50	23 (30.7)	27 (30.7)

Table 3: Age and sex distribution of HH interview and FGD participants

[11] Participants of community meeting were not uniformly counted

over the age of 50 years while the remaining majority was aged 30-50 years.

b) Family size: Household interview participants were asked about their family size. Based on data from responses of the 36 households involved in the interview, 33% have less than five children, 67% have over six children and 17% have over 10 children. This shows that family size in Borana is high compared to the national average which is about 5[12].

c) Occupational characteristics of participants: Borana is considered to be with livestock rearing as an economic mainstay of the community. Findings from interview and FGD participants revealed that over three quarter are pastoralists and this represents. It was found that the remaining majority are engaged in farming activities. Evidences from the community shows that relatively more participants from Dikicha and Metti reported to be engaged in agricultural activities, which is an emerging economic activity in Borana.

Occupation	Household Number/%	FGD Number/%
Farmer	7 (19%)	26 (25%)
Pastoralist	29 (81%)	75 (71%)
Civil servant		4 (4%)
Total	36	105

Table 4: Occupational characteristics of HH interview and FGD participants, Data from the field, Sept 2013

3.2. Description of water schemes and the community

Water schemes in Metti, Dikicha, Cheri Turura and Baha were newly developed while Hidhi Babo and Dikicha schemes were rehabilitated. Conservative estimate of regularly users of the newly developed or rehabilitated scheme was 3050 households. Given large family size in Borana, and there are intermittent users from other villages, the water schemes are currently serving quite large population.

[12]CSA. Ethiopian Demographic and Health survey report, 2012.

Type of scheme	Location	Purpose of use	Year of rehabilitation/ development	HH size as regular users	Current state of use
Pond	Melbana	Human	2011/12	575	In use
Cistern	Baha	Human	2009	411	Not in use
Hand pump	C-Turura	Human	2006	450	Not in use
Hand pump	Metti	Human	2006	250	In use
T.Well(Ella)	Dikicha	Livestock Irrigation	2013	553	In use
T.Well	H.Baabo	Human	2012	811	In use
Total				3050	

Table 5: Description of water sources by type, kebele, year of intervention and users

3.3. Community involvement in water scheme development

The whole process of water scheme development was found to start with OSHO discussing about the problem and intentions with local (kebele) leaders after administrative issues on which kebele, priorities and support at wereda level is clarified. It was noted that discussion at kebele level is a benchmark for local leaders to organize discussion forum in presence of the entire community including respected community leaders and water managers (*Abba herega)*. It was gathered that at such forum, whether water is indeed a problem is verified, specific site for development or rehabilitation is selected and community's willingness to contribute is sought. FGD participants in Metti pointed out that "*we as community members, especially the elders explained our water problem at the meeting. We explained potential sources of water but we did not tell which scheme type we need*". Participants from Hidhi Baabo and Melbana pointed out that the current Haro was there for years. These water sources were said to have been rehabilitated to its present form by OSHO and it was based on information the community provided and their contributions during construction. *"This Haro was source of water even before OSHO came. They [OSHO] guided us on how to dig particularly its depth and width. We also built fence around it to protect it from animals entering into the scheme (Women FGD participants).* Data generated from FGDs, household interviews and community meetings have invariably indicated that new sites were all identified with an active participation of the community while close technical guidance were provided by OSHO.

It was gathered that in addition to identification of sites or new water source and planning of its construction as well as rehabilitation of existing schemes, active community participation was the case during the construction. It was unanimously argued that community members irrespective of age and sex have participated in breaking stone, bringing it to the construction site, digging the earth, taking out soil, collecting and bringing sand to construction site etc. It was learnt that such contribution of the community is not totally for free. OSHO was said to pay 25-30 birr per person. However, it was gathered that that such a pay was only symbolic. "*Payment from OSHO is very small as compared to the amount of time we spend and what other NGO pays. But for us, we understand the water is meant for us and we would not mind even working on this for free"* as emphasized by all participants. Male FGD participants in Hidhi Baabo pointed out that "*OSHO's payment for our contribution to the water scheme development is not much and we do not mind even if there is no payment since the effort is meant only for us".* It was found that, other NGOs pay more money/day which did not affect the contribution of local community to water scheme construction. As part of water scheme development or rehabilitation, community members do not only participate in the early construction but also on a regular diversion of run offs especially during rainy season in order to protect water scheme from destruction. Such contribution was found to be guided by local wisdom. "*We know entry points of run offs to water scheme and where to lead it – this is what we have lived with*" said one of the FGD participant in Cheri Turura.

All assessment participants unanimously explained that they were satisfied with the process OSHOfollowed in identification and development of water scheme. Particular satisfaction was mentioned where OSHO is said to respect for local wisdom in developing or rehabilitating water scheme. Men and women FGD participants in Cheri Turura emphasized that, "*There are water schemes developed by other NGOs without active role of the community where suchwaterschemes were not up to the expectation of local people. Since OSHO listens to and follows local wisdom, we have not heard OSHOassisted water sources had any problem*".

3.4 Access to water:

Water in Borana is considered as an important communally ownedresource. It was gathered that although communally owned, all water sources in Borana are named after a person who first initiated the scheme and lived there around the scheme. The water is always named after the first

initiator even after his death although this has changed in recent times. Despite such symbolic ownership, finding shows that neither the person nor his clan members have special privilege to access water. All members of the village have equal access to the water source. However, it was indicated that *Abba Herega* (currently water committee) is expected to ensure 'proper use' of water. Proper use of water was explained in terms of turn taking while using based on first come first served especially when water point is narrow, protect water source from animal and payment for water especially if fee is jointly levied for maintenance purpose.

During the dry season people come to fetch water from far villages, at times as far as beyond the Ethiopian border. It was learnt that hand pump in Metti is used by Borana community in Kenya who are living in Sololo, across the border. Similarly, Melbana and Dikicha water schemes, for example, serve residents from as far as Boku village and some Ollas of Hidhi Baabo which is about 30 and 10 KMs respectively. Equally, water sources in Cheri Turura (hand pump) and Baha (Cistern) were found to be serve residents from other *ollas* who are not regular users. Participants unanimously argued that *"access to water is every ones right irrespective of wealth status and distance from water source".* Yet, it was learnt that users from other communities are expected to request local water managers (*Abba Heregaa*) to fetch water or water their animals as a symbol of courtesy.

Participants were asked if in the course of accessing water, conflict has ever occurred or is potential for future. Data shows that there is no conflict ever heard in connection to accessing water scheme by non-regular users. It was gathered that Borana is said to be known for its tradition of reserving traditional wells (*eela*) for difficult times and use water from run offs *(wirwixa*) and *haro* during rainy seasons which is the case even to date.

A woman in Baha commented that "*we did not know if the cistern would dry. Thus all of us from this village and those from distant ollas have continuously fetched water from here and it is no more available".*

Photo by LG

3.5. Perceived changes in connection to scheme development or rehabilitation

Assessment of perceived changes in the life of people and animals and attributions to such changes show that all those who participated in the assessment agreed that there were evident changes. Such changes and its attributes are detailed below.

a) Perceived change in availability of water

Participants unanimously described change in availability of water in the study kebeles in terms of two before and after indicators 1) distance it takes to fetch water and 2) how long water is available in the scheme for use.

i) Change in distance to water sources**:** Following development or rehabilitation of scheme, time to fetch water has remarkably reduced. Participants unanimously argued that they have saved time in fetching water following the water development/rehabilitation intervention as shown in the below table.

Table 6: Availability of water by distance

Kebele	Distance to water scheme before intervention	Distance to water scheme after intervention	Remark
Metti	2-4 hrs (80%)	< 2 hrs (100%)	Rehabilitated water schemes targeted previous water source although the scheme has expanded to serve more people than usual
Baha	> 4 hrs (100%)	< 1 hrs (60%)	
Melbana	> 2 hrs (60%)	< 1 hrs (60%)	
Dikicha	> 4hrs (50%)	< 2hrs (60%)	
H.Babo	> 2 hrs (80%)	< 2 hrs (60%)	
C.Turura	> 2 hrs (60%)	< 1 hrs (60%)	

As it is clear from the above table, over 60% of women[13] pointed out that they used to travel for at least 4 hours to fetch water before the scheme was developed or rehabilitated. A woman FGD participant in Baha pointed out that "*We used to carry water [with Jaricane] from far places and we have experiences where a pregnant woman delivered on her way back fetching water and this is not exception to Baha as similar problems prevail in other areas too".* Now, after development or rehabilitation of water schemes, more than 60% of the participants unanimously pointed out that travel time have considerably been reduced to about one hour. Woman interviewee from Cheri Turura indicated that, *"Now after the pump was built, water is available next to my house and distance is not a problem anymore. Over the last six months however the problem recurred since the pump is not functioning. As a result we are obliged to fetch water from the usual sources used before the pump was built"*. While distance to water scheme has changed for humans, change in distance for animals was noticed only in Dikicha and Hidhi Baabo where scheme was also meant for animals. Participants of community meeting in Hidhi Baabo, thanked OSHO for the water scheme now closer and cleaner.

A woman interviewee from Metti pointed out that "*Oh fetching water used to take much of our time. SoMettimes I return back to scheme twice or more as smaller animals should also be watered. This was indeed a painful experience".*

Photo by LG, Sept 2013

ii) **Availability of water in the scheme**: Data show that availability of water has improved following development and/or rehabilitation of the schemes. It was gathered that before development or rehabilitation of the scheme, water availability was limited to few months as it dries up quickly. Men FGD participants in Melbana argued that, "*The amount of water available in the scheme was small and it dries quickly before the rehabilitation. However, since it was rehabilitated water holding capacity of this haro has improved and water is available throughout the year*".

[13]Division of labor related water shows that in Borana women are responsible to fetch water for household use as well as to water small animals while men are responsible to water animals among.

How long water is available was not uniform. Water schemes in Melbana, Metti, Cheri Turura and Hidhi Baabo were found to yield water throughout the year. On the other hand, water schemes in Baha and Dikicha were found to serve only for 3 months and 6-8 months a year respectively. While this is the usual reality, it was gathered that in reference to assessment time all water scheme were found to have water and in use while schemes in Baha and Cheri Turura did not have water. The Cistern in Baha was overly utilized and dried up while hand pump in Cheri Turura has got technical problem 6 months prior to the assessment.

Participants from Baha unanimously argued that water holding capacity of Cistern and number of users did not match. While it was planned to serve residents of 4 *ollas*, the cistern was actually serving additional residents from 4 *ollas*. On the other hand, two women interviewee argued that the cistern has cracked and water leaked contributing to fast dry up. Such argument was not supported by other participants.

iii) Alternative water sources when/if water scheme dries: There was no particular evidence on current complete absence of water in focus kebeles of this assessment. It was gathered that there are alternative water sources under all circumstances. However, types of alternative water sources are not the same in all sites involved in the assessment as shown in the table below.

Table 7: Alternative water sources by Keble

Study sites	**Alternative water source**				
	Mansole/ Mado	Wirwixa	Haro (Pond)	Water source never dries	Migrate to where water is available
Melbana	X	--	--	X	--
Baha	--	X	X	--	--
Cheri Turura	--	X	--	X[14]	--
HidhaBabo	X	X	--	X	X
Metti	X	--	--	X	--
Dikicha	X	--	--	--	--

[14] Until it fails, hand pump used to yield water throughout the year

The above table depicts alternative water sources in the respective assessment sites when available scheme dries up. As is clear from the table small wells dug by households or groups of households (*mansole*) or springs at the side of plateaus (*mado*) were the common alternative water sources. Participants from Baha unanimously argued to revert to *Haro Burquqe* (pond) which has been in use even before the cistern was constructed. Residents from Cheri Turura use water source collected from runoff (*wirwixa*) as an alternative water source. Fifty percent of interviewee in Hidhi Baabo indicated that during difficult shortage of water, they migrate to places where water is available.

Example of Mansole dug by community members when water from normal source dries at Dikkicha

Photo by Adam, date unspecified

Currently, however except those in Baha and Cheri Turura who were found to rely on *haro and wirwixa*, the rest are using developed or rehabilitated water schemes.

b) Perceived change in quality of water

i) Perceived change in Human health: Perceived change in water quality for human beings following development or rehabilitation of water scheme was explained by all participants in terms of change in complaints related to health problems at individual, household and community level. Data from interviews, FGDs and community meetings invariably indicates that there was an improved state of human health following water scheme development or rehabilitation. It was gathered that "*garaakaasaa, qandho and ilaatti*" were

Women FGD participants in Cheri Turura faced similar problem like those from Baha. They however argued that "*Our health has improved with the construction of water pump. However, the last six months we reverted to water source at our usual wirwixa and we started to have stomach problems that were gone"*.

Photo by MK, Sept 2013

common health problems complained about by all participants at all levels before the development or rehabilitation of water scheme. Complaints about these problems however have declined after the development or rehabilitation of the schemes. Such changes were found to be inconsistent for residents in Baha and Cheri Tururа where improved health was not sustained. Women interview in Baha emphasized that "*For us there is no change because we use water from cistern only for brief time in a year and it is gone for good part of the year"*.

ii. Perceived change in health of livestock:

Data from interview, FGD and community meeting has invariably revealed that except in Dikicha and Hidhi Baabo, there was no change in quality of water for animals again defined in terms of improved health and productivity. It was learnt that water sources in Melbana, Metti, Cheri Turura and Baha were not meant to serve animals. As a result it was unanimously argued that change in animal health was not evident. Participants in Dikicha and Hidhi Baaboo on the other hand explained that with the rehabilitation of water schemes such animal health problem as *awwarsa and luuxaa*[15]has declined. Although change in the health of animals was not forthcoming from the data, it was explained that small and sick animals that cannot travel long distances and donkeys were and are watered at water source meant for human beings. People either bring the animals to water scheme and fetch to water them or fetch water and water them at home. Yet, change in the health of such animals was not clear from data collected at different levels.

[15]*Awwarsa*and*luuxa* are type of animal health problems caused by shortageof feed, drinking dirty water. Symptoms of such problems are diarrhea (*albaati*), getting thinner (*huqachu*) and skin soaring skin that eventually lead to death of animal

iii) Change in life style: Perceived changes in life style among regular users of developed or rehabilitated schemes were drawn from change in source of income, housing, what is eaten and level of participation in local development initiatives.

As shown above, participants pointed out to have saved time with the rehabilitation and/or development of water schemes. For what purpose has saved time been used reveals that women participants in the respective kebeles, were engaged in economically gainful activities (Table 6). Women in Cheri Turura, Dikicha and Metti shared their common experience that they have now gardens at their backyard where they produce cabbages, green pepper and kale not only for household consumption but also for markets. However, selling these products remains at lower scale and not sustainable since production is not much. The initiative however was appreciated and seen as a hope to improve household income. A woman from Dikicha argued that "*Few years back, I cannot even think of producing cabbages and green pepper since water was scarce. Now after this scheme is rehabilitated here, I and other women in the village have garden. I produce kale, green pepper and cabbages which are used for household consumption and at times when we produce more we sell it out*". This was shared opinion among women in Metti as well. It was gathered that men are also producing such vegetables as sugar cane in Metti, Dikicha and Cheri Turura following the development and/or rehabilitation of water sources. Men in Metti further pointed out that they are busy producing chat (*cataedulis*), for an attractive market and insatiable demand in Hiddi (the capital of Miyo district). This has improved household income and subsequently state of life at household level has changed with more money to buy food.

Now we don't complain about garaa kaasa since we drink clean water. Because girls assist their mothers in fetching water from distant places, they were not attending school which is no more the case now. These are changes in life as a result of water rehabilitation in our village

Photo by Martin, August 2013 Short video available)

A woman from Metti explains changes at household level "*now we can sell something from our backyard to buy desired additional item for household consumption*". Similarly men from Dikicha argued that now there are many men involved in petty trades. An old man from Dikicha

shared his view that "*now days many men in this village have got time where some have used the time to do petty trade to make money they use for household purpose*[16]. Not only has life style at house hold level changed, but also participation of both men and women in local development initiatives has become the case. While men are taking part in soil and water conservation activities, women are engaged in saving and credit schemes launched by government. Men FGD participants in Dikicha has also argued that they have invested their time in rehabilitation of the highly degraded land that has since revived with more plants and water source now. A Woman from Baha argued that "*I have time to participate in group saving and credit activities along with other women in this village. We have hopes that our life will improve subsequently*". As it is clear from the table below engagement in community development activities including activities in soil conservation, involvement in saving and credit schemes and development of backyards were found to be major use of time saved.

[16] According to recent law made by Gada leaders, chewing chat and drinking alcohol were outlawed. S a result men are now using money they make out of petty trade for household purpose.

Table 8: Use of saved time after intervention by kebele

Kebele	Respondents	Participants response on use of saved time			
		Community development activities	Small trade	Gardening (fruits, vegetables and chat)	No time saved
Metti	Male	0	2	1	3
	Female	1	0	3	2
Baha	Male	3	0	2	3
	Female	4	0	5	0
Cheri Turura	Male	3	0	2	3
	Female	3	0	6	2
Hidhi Baabo	Male	3	0	3	0
	Female	0	4	4	1
Melbana	Male	1	0	1	0
	Female	3	0	3	3
Dikicha	Male	2	2	1	1
	Female	0	3	4	1
		23	**11**	**35**	**19**

3.6. Water management practices

As shown above, Borana has an established water management system. In order to ensure protect and maintain water source, users were found to designate someone to take charge to overlook and ensure appropriate use of water scheme[17]. Such a person referred to as *Abba herega* and perhaps one or more additional persons co-opted is/are responsible to ensure proper use of water scheme[18]. Over the last few years especially those developed or rehabilitated water schemes were not named after a person except *Harowaario* (melbana) scheme. The remaining schemes are called by names of the kebele like cistern in Baha, hand pump in Cheri Turura… Besides, the whole concept of *Abba herega* appears to have been replaced by water committee in all study communities. According to a male FGD participants from Melbana, *"Role of Abba herega and water committee is similar expect Abba herega is often one person who may co-opt aid and can be replaced if he needs to be while water committee is a group of people elected by the public"*. Findings shows that all water schemes involved in the assessment were found to have water

[17] Appropriate use of water was explained in terms of turn taking in fetching water based on who comes first, ensuring water scheme is protected from animals and community members are mobilized to maintain water scheme.

[18] It was learnt that such a person is always male member of the community.

committee composed of both men and women except in Dikicha where three old men volunteered to play the role of water committee. Data from all sources (interview, FGD and community meetings) show that although water committee is composed of men and women, role of women is not as influential as that of the men and participants were found to often refer to men instead of women in discussing about water committee. Women FGD participants from Cheri Turura argued that *"water committee in our village is composed of both male and female although women are not taking their role seriously".*

Findings from FGDs show that men and women have different views on the number of water committee members and representation of men and women as summarized in the table below.

Table 9: Composition of water committee by kebele

Kebeles	FGD participants	Composition of water committee		Total
		Men	Women	
Metti	Men	3	4	7
	Women	4	1	5
Baha	Men	3	2	5
	Women	4	5	9
C.Turura	Men	5	4	9
	Women	4	3	7
H.Babo	Men	5	4	9
	Women	3	3	6
Melbana	Men	4	2	6
	Women	3	5	8
Dikicha	Men	3	0	3
	Women	Don't know		

As it is clear from the above table there is marked differences in terms of composition of water committee as explained by men and women FGD participants. Women FGD participants in Cheri Turura pointed out that *"water management is often considered as the domain of men than women that women's role and participation in the committee may not be strong and influential".* Participants of community meeting in Dikicha and Melbana have also shared similar impression where, '*women's participation in water committee is more of symbolic*"[19].Current functionality of water committee shows that the committee in Hidhi Baabo, Baha and Melbana were functional while the rest are either non-functional or are not serving expected purpose. In Dikicha role of water committee is played by three volunteer men since there is no water committee.

The assessment result shows that participants from Baha, Melabana and Hidhi Baabo are satisfied with the accomplishment of water committee. Contrary to this, those in Dikicha, Metti and Cheri Turura are not quite happy with accomplishments of the water committee in their respective communities. It was found that the committee is not mobilizing the community to

[19] An elder in Melbana told me that traditionally women do not have role in maintaining and protecting water. This is the role of *abbaherega*. However, women have the right to complain if she encounters problem in using water or if she notice a problem. Engagement of women in water committee is emerging with rehabilitation *of harowaario* [Melaban well].

fence and maintain water sources. Participants in Metti and Cheri Turura have further complained that money they contributed for maintenance of water scheme was believed to be misused by committee members. FGD participant from Cheri Turura explained community's common concerns in relation to water committee: "*Money we contributed to maintain water scheme was not used for the intended purpose and we are not getting any information from committee members".*

In areas where water committee was said to be weak, observation of water schemes by citizen observers revealed that cleanliness of such water schemes as Haro at Melbana, hand pump at Metti were poor. Women were seen to get into water with their shoes on at Melbana and the stairs constructed to step in to water was found to be muddy.

Payment for water use

It was gathered that fee for water use was introduced in some of the villages although this was not uniform in every study site. As is clear from the table below, water user fee is associated to the type of water scheme instead of all water sources. All hand pumps and cistern in Baha were found to have introduced fee on water use. It was gathered that especially when water is fetched for animals such fee is relatively higher. According to data from schemes in Cheri Turura, Metti, and Baha fee was introduced by the community in order to make money available for maintenance of water scheme when/if problems occur.

Table: 10. Payment for water by type of water scheme and kebele

Kebele	Type of scheme	Water use for	Payment per jericane
Melbana	Traditional well	Human	No payment
Baha	Cistern	Human	25 cents
Cheri Turura	Hand pump	Human	25 cents
HidhaBabo	Pond	Animal and Human	No payment
Dikicha	Traditional well	Animal and Human	No payment
Metti	Hand pump	Human	25 cents goat 50 centsfor ox and donkey 1 birr for camel

3.7. Resilience to drought

Question on whether community's capacity to cope with drought has changed as a result of water scheme development or rehabilitation generated useful insights. It was gathered that resilience to drought varies in terms of type of water scheme and when it was developed or rehabilitated. Participants from Melbana, Baha, Cheri Turura, Metti and Dikicha have invariably stated that community members in the respective sites were resilient to the last drought in 2011[20]. Participants in Baha have attributed their resilience to the last drought to the cistern which was used for storage of water. Women FGD participants in Baha indicated that 'Community members stayed in their village unlike other communities that migrated out since water was available'. This was further argued by both men and women FGD participants in the same voice that *"Tracks brought water which they put into the cistern and for us we fetch as normal as usual for human use. It would have been difficult to survive the last drought otherwise"*. However, it was unanimously argued by participants at all levels that Baha cistern was not meant for animals that several animals died in consequence.

Participants from Dikicha argued that the fact that width and depth of water scheme has improved, water was available longer that the community has something to rely on although it was not sufficient. According to men FGD participants "*Availability of water becomes critical and at times number of people served declines. However, resistance to drought has improved since people could at least dig mansole around the well and also rely on agricultural products produced in earlier years"*. A man who participated in the community meeting in Dikicha has similarly argued that, "*During the last drought, this water source was the only closest source of water that served both animals and human beings including those from neighboring community. However, it could not meet the needs of all animals and human beings form the surrounding communities".* Women from Melbana pointed out that *"Since this water source is rehabilitated it is saving not only us in this community but also those who live in far places for human use, thanks to Waaqa"*. During the community meeting in Metti, participants argued that the hand pump served not only residents of the community but also those from distant villages. According to one of women community meeting participants, "*During the drought those who live across the border in Sololo[21] used to fetch water from this source*". It was gathered that communities in

[20] Participants referred to recent drought in explaining resilience to draught.
[21] Sololo is a small center in Kenya close to Miyo wereda.

Metti had water that does not dry even during drought and they continue to produce chat and fruits that helped them to be more resilient after the development of water scheme.

A women interviewee in Cheri Turur pointed out that availability of water has improved child survival during the last drought. She provided an account where "*Since milk was not available any more during the drought, children could have died of lack of food. However, we mixed water with sugar and feed our children. So, this water scheme saved life"*. She however flagged her concern that this may not be the case now *"I do not know what would happen if drought happen here since the pump is not functioning any more".* Those from Hidhi Baabo however argued that water scheme was developed very recently that they do have experiences. One of the men FGD participants argued that *"I am sure availability of water is critical to be resilient to drought and I hope in the future people and livestock will be safer"*.

All participants and more particularly those who took part in community meetings unanimously argued that availability of water is an important resource under circumstances of drought at least for some time. In view of this, after the development and rehabilitation of water schemes, specifically women and children managed to stay together in the same village longer while men travel away in search of water for livestock. A man community participant in Dikicha stated that "*Although with longer drought even rehabilitated or developed water scheme depletes, availability water helped to keep people especially women stay together until support comes*". Although it was not shared by any one participant a single women community participant from Metti pointed out that *"availability of water kept children in school which would otherwise is difficult to*".

We need more water for us as well as our livestock. We are happy to play proactive role, Men from Hidhi Baabo.

Photo by Adam, data unspecified

Looking forward

In all assessment sites, concerns were flagged over lack of water for animals[22] and intermittent availability of water in the schemes at Baha and Cheri Turura. While satisfaction was apparent with improved availability of water for human beings, short distance to fetch water and more time to do economically gainful activities, overwhelming majority of participants at all levels emphasized the need to develop water schemes for animals too. "*During drought we travel long distances to find water for animals and often fail to get water and unfortunately we lose a lot of livestock. During the last drought a single individual has lost up to 100 cattle".* This argument by a man who participated in community meeting in Melbana was shared by all community meetings except in Dikicha and Hidhi Baabo. However, in all the communities involved in the assessment, the need for additional water scheme was not an exception.

The other concern was related to sustained availability of water in the developed or rehabilitated water schemes. This was particularly a concern as shared by participants from Baha and Cheri Turura where the schemes has either dried or encountered technical problem during the assessmentand there is nothing they could do about it. As pointed out above, they revert to the usual water sources which compromise their saved time and consequent engagement in other activities and their improved health. Women FGD participants in Cheri Turura expressed their concern *"We have urged water committee to do something with the money we contributed. They*

[22] It was gathered that livestock particularly cattle are important assets and mark of identity as rich or poor in Borana. In view of this in as much as they need water for themselves as humans, similar privilege is desired for their animals too.

failed to do anything. The kebele leaders told OSHO about the problem and they did not take any measure either. We do not know the problem and what to do about it. We are now drinking water from our usual source and we got all the health problems we were freed from".

Although there was not uniform suggestions on what needs to be done on failed water sources, it was gathered that training of community members on maintenance of water schemes, awareness creation on community members contribution to cleanliness, development and/or rehabilitation of other water schemes were identified to help sustain water schemes.

Discussion with administrators at wereda level, revealed that despite water development being one of the critical sector chosen for development in the Growth and Transformation Plan (GTP), there was no allocation of resources for water development or rehabilitation at wereda level. Participants from the administration, water and sewerage, pastoral development and health sectors have all admitted the limited role at their level. Nonetheless, they appreciated contribution of OSHO in improvement of water schemes in the wereda. Although it was not clear from the discussion, they are committed to improve their role in coordinating the different actors, ensuring standards and building management capacity of community members.

It was unanimously argued that "the wereda administrations as well as sectors were satisfied with the establishment of WASH committee composed of sectors and CSOs. To date there is no mechanism to ensure standards are maintained in water development, coordination between different actors in water development remained nonexistent and hand over of completed water schemes to the community is not clarified and community's management capacity is not built"

Photo by MK, Sept 2013

Application of BA methods and challenge encountered

Stakeholders in action defining objectives and themes of assessment based on project goal, Photo by MK , Aug 2013

Beneficiary assessment which is a participatory method appears to be an evolving method to document beneficiary's perception of development interventions. In the course of assessment of community's perception of rehabilitated and developed water schemes in Borana, relevant insights were generated on the method. This is believed to contribute to further development of BA tools and approaches. These insights are categorized under different themes.

a) Identification of local residents as citizen observer (COs) followed specific procedure. Specific criteria were developed to identify pair of COs (a male and a female) to generate relevant information using tools developed for this purpose after getting relevant training and with close guidance from professional facilitators. COs will collect information in assessment sites other than their own community where they guide COs from other communities and organize meetings[23]. Community members (elders and kebele leaders) were engaged to help in identifying the right person after explaining the objective of assessment and roles of COs. This was an important undertaking where community members are involved in the assessment process early on.

[23] In their own community, COs played logistic roles such as guiding other COs, in consultation with facilitators determine sites for FGDs and community meeting and inviting participants to such sites

Three of the 14 COs were not able to read and write. It was found challenging both during training and during assessment despite the fact that they were given more time to internalize the questions and processes with assistance from their pairs at kebele level. Reflections from citizen observers suggested mandatory reading and writing skills of future citizen observer. Furthermore, as a facilitators we would suggest the development of appropriate training and assessment tool for those who cannot read and write. As one could see from the note here, Kotolo, one of the COs who could not read write recognized the need to read and write and promised to send his kids to school.

I will send my children to school and will also mobilize the community to start education for adults like me.

Photo by Martin, August 2013

b) Participatory approaches in defining areas of observation: As part of the orientation session, stakeholders of the project and facilitators of the assessment went through an iterative process to that helped to lay the foundation for common understanding about the objectives and approaches of BA. Furthermore, this has helped define areas of observation following the objectives of the assessment. This was an important process that helped to categorize focus areas of the project and data desired to be generated. Once areas of observation were defined, participants went ahead to define themes and sub themes which has eventually guided development of specific tools.

Training of COs in class room and in the fiel, Photo by MK, Aug 2013

c) Training of citizen observers (COs): Team members were provided conceptual (knowledge) and practical (skill) training on the assessment (objectives), what the expected result serves and tools that will be used. Following class room, participatory

approaches (role plays approach and group work) were employed to help COs understand the tool and procedures. They were taken to a different community that is not considered for the assessment to use tools to collect information. This process was closely monitored and notes and pictures were taken to provide evidence informed feedback to COs on what has gone well and what needs to improve. Again this process was rather iterative with relevant inputs generated to improve BA approach and tool.

d) Time given to internalize tools and procedures: Citizen Observers were composed of persons who are fast learners, slow learners and those who cannot read and write. In view of this, data collection started 15 days after completion of training. This was an opportunity for COs to digest on the tools, process and expectations. The pairs at each kebele were tasked to help each other based on their level of understanding. Before they commence data collection; a one day orientation was given to them. It was realized that the time gap has helped them improve their understanding of the process, tools, what information from where, how to ask and take notes.

e) Timing for data collection: Reflection from citizen observers revealed that selection of timing for household interview, FGDs and community meeting should always be in line with seasonal activities in the community. Data collection was carried out in September, where men and women were not busy with specific seasonal task. However, people were found busy with group activities of different types organized by different actors (government, CSOs and personal/households routines). Consequently, engaging community members in a discussion during the afternoon was found to be challenging.

f) Support by local leaders: In as much as local leaders were informed of the assessment and were involved in the selection of COs from early on, in some of the villages particularly Cheri Turura, Metti and Melbana village leaders were not supportive to the assessment. As a result, meeting expectation within set time frame for the respective villages was difficult. Reflection from COs revealed that active role of local leaders in organizing FGDs and community meeting as well as smooth organization of such forums require at least two days of prior notice to participants.

g) Participation of women: From the assessment it was gathered that women's participation in household interviews and FGD was passive. Women were found to conform what men say when they sit with their husbands and in a bigger discussion forum. They were found

to be active listeners instead of speakers even if in issues of their concern like fetching water which is the domain of women. Thus, COs have strongly suggested that women should be interviewed alone.

h) Daily discussion with citizen observers: During data collection, each team of COs were brought together separately for an average of an hour. During this time they were given an opportunity to reflect back on how the day went, what surprised them from the process and key findings under each theme without looking at their notes. This helped facilitators to capture points that may have not otherwise been documented by the team member and also generated inputs for the community meeting, the following day. The session was not only useful to generate insights but also helped to motivate relatively shy team members.

i) Synthesis workshop with citizen observers (COs): This was introduced into the list of tools since it was realized that as beneficiary CO's may have additional insight of their own or may provide their own reflections on the materials they all generated from the respective community. This offered an opportunity to listen to what CO's found impressive about the process and what needs to change in the future.

j) Validation workshop: After initial findings were framed into specific themes and sub themes, highlights of the processes followed and findings were shared with participants invited from the respective kebeles assessed, wereda leadership (administration, water, health, pastoral office, education) and representatives of CSOs. They were given an opportunity to share their opinions related to objective, method and finding which helped to enlist relevant inputs.

In view of the above points, and based on insights generated from the validation workshop, it was realized that BA was considered as an interesting and powerful tool. The fact that BA procedure relies on members of local community to generate information, people feel comfortable to tell true stories which is not the case if someone comes from elsewhere to do the same job. As a result findings truly reflect realities on ground. Besides, the power of BA in terms of generating evidences that can be inferred for a wider geographical setting. It was strongly suggested by stakeholders during the validation that this approach should be used by other development partners as well.

Discussion

Equity to water source in Borana is evidently fair where everyone irrespective of where he he/she/they live has equal access to water scheme. Nonetheless, it was interesting to note that the symbolic authority over water is maintained by expectations from those others to ask for permission to use. This however is not a barrier to use water sources.

With the development or rehabilitation of water schemes availability of water within closer distance was ensured. It was clear from the finding that especially women has saved time and energy in fetching water from far distances on the one hand and retained improved health in consequence. Specific changes in terms of distance to water source have declined from an average of 4 hours to 2 hours. Such saved time was used engagement in local development activities including involvement in saving and credit schemes, production of vegetables and fruits at backyard etc. This has in turn contributed to improved state of life at household level and contribution to soil and water conservation activities at community level. Now more than ever women are engaged in producing vegetables and fruits at their backyards, involved in saving and credit activities while men are involved in community development activities including in natural resource protection such as social and water conservation initiatives. In terms of health, community appears to have realized improved quality of water. This was explained in terms of declining stomach health complaints except in Baha where there was no change and recently in Cheri Turura where the hand pump has failed. Change in animal health was not the case except in Hidhi Baabo and Dikicha where water sources were also for humans as well as animals, while rest of the schemes was only for humans.

In as much as such changes were attributed to improved access to and quality of water, OSHO was considered instrumental in initiating the scheme development or rehabilitation. OSHO''s role as provider of financial resources, technical input and provision of materials and equipment not available in the community was considered critical. Similar notion was shared by participants from wereda administration where OSHO is considered as an important partner that works towards meeting the wereda's water development plan. Despite evident contribution from OSHO, community members strongly felt that the water is their own and played much stronger role in the process. Specifically, their role in process of site selection, digging and provision of sands and rock for its construction or rehabilitation was outstanding. Yet, following scheme

development or rehabilitation, maintenance and protection of the scheme appears to be weaker. Although water committee was established at all the schemes except Dikicha, the committee was found to be either not functioning or are not very active why?. Water committee at all schemes was composed of both male and female members of the community. Yet, women's role in the committee was found to rather symbolic than proactive with sense of responsibility (on what base this inferred).

Regarding the future, community was generally demanding for more water schemes that considers animals. Equally, community members especially in Baha and Cheri Turura demanded for more capacity building of local community members so as to fix problems as it appears. Wereda stakeholders on the other hand looks forward to the future with their role in coordinating water development initiatives, supportive supervision at scheme level, building the capacity of water committee and provision of guidance to stakeholders in water development.

Acknowledgement

Beneficiary assessment in Borana has benefitted from contributions of different partners who played relevant role at different levels. The initial contribution by Riff Fullan and Martin Fischler was instrumental as it laid the foundation for the assessment. They both travelled all the way to Borana to share their experiences and provided hands on support to local partners on the implementation of the assessment. We also would like to thank them both for their constructive comment to the earlier draft of this report.

The assessment would not have been successful without the active role of citizen observers and initial facilitation of local leaders. While citizen observers took all the pain in travelling within the kebele, mobilizing the community for meeting etc in addition to collecting required information, kebele leaders assisted in identification of citizen observers. They deserve our heartily acknowledgement. Community members who were chosen for the study have provided relevant information without any reservation. Thanks to them as well.

Local wereda administration and the different sectors have actively participated in the assessment with the sense of ownership of assessment outcomes. We appreciate their commitment and would like to thank them for the active participation in the process and mobilization of support at kebele level.

OSHO staff members at filed level particularly Adamu and Addisu dedicated their time and resources (hall) for the successful accomplishment of the task. We would to thank them for their unreserved support. Similarly, HEKS field and country office specifically Belay Kebede and Chali Gutata, and Getachew Haile and Zelalem Bacha at field level did not reserve in making the assessment possible. We appreciate their support.

Finally, we would like to extend our appreciation to SDC for offering us with the opportunity to operationalize this important tool that could contribute to development initiatives.

Annex I: Assessment tools employed for data collection

Area of assessment	Specific field of observation	Guiding questions for field phase **(in bold: questions raised/confirmed by CO's)**	Question addressed to:			Additional remarks
			HH	FGD	Comm. meeting	
1. Involvement of community in planning	1.1. Participation planning and implementation	• **Who participated in the planningof the construction/rehabilitation of the water source?** • Are you satisfied with the option chosen? Yes/No? Explain. • **How did the community contribute in the implementation?**		X	X	
2. Availability of water (quantity and access)	2.1 Equity in access to water	• **Do you (HH level) / does all households (FGD level) from the community have equal access to the build (or rehabilitated) water source**? Yes/No? In case no, who are left behind and why?	X	X		Differentiation according to social groups is desirable
		• Who else (from outside the community) have access to the water source? Do they have equal access as the own community? Explain?		X		
	2.2Availability of water	• For how many months per year do you use the scheme? When the scheme dries what other options do you have?	X	X		
	2.3 Time/workload for fetching water	• **How much time do you use to fetch water for the household per day before/after the scheme was implemented? (women)** • How much time do you have to wait for your turn to get the animal to drink water before/after the scheme was implemented? (men) • [If time was saved]….How do you use the extra time?	X X X			Specifically find out if there is any change in time for fetching water and workload for women
3. Water quality	3.1 Perceived changes in water quality (human and animals)	• **What changes in water quality (for animals and people) do you observe?** (compare situation before and after the building/rehabilitation of the water source) • **Did the change in water quality have any effect on the health of people and animals? Yes/No?** How?	X		X	
4. Water management	4.1 Roles and function of the water committee	• **Do you have a water committee? If yes, what is the composition (men/women)?**		X		
	4.2 Water management (protection, cleaning, maintenance)	• **How is the water source managed?** (protection, cleaning, maintenance; with or without water committee) • Are you satisfied with the management? Yes/No. Explain. • How do you pay for repair/maintenance (e.g. hand pump) *Additional observations to make on the spot (Check!)* • *Check if there is fence around the scheme?* • *Check cleanliness of the water sources.*		X	X	
5. Resilience to drought	5.1 Perceived change in coping strategies (mechanisms)	• How does the community cope with drought? • Was anything different as a result of the new water source being in place?		X	X	
6. General Impact	6.1 Most important change at HH and community level	• What are the most important changes (effects) the water scheme brought to your life? (positive/negative?) 1. HH 2. Community level	X		X	
7. Other aspects	Open	• Do you have any other aspects you would like to mention about the water source?			(X)	

Checklist for wereda Line Departments

Relevant Offices (All Wereda level):

1) Wereda Administration office
2) Wereda Water Resources office
3) Wereda Health office
4) Wereda Pastoral Development Office (PDO)

Introduction and objectives of the assessment

Some probing questions:

1. What are the current and future rural/pastoral development priorities in your wereda? (to check if water work is a priority and relevant).

2. Are you aware of the water projects implemented by OSHO since 2006? If yes, what were your role and contribution to the project (e.g. need identification, provision and enforcement of procedures and standards, approval, monitoring etc.) ?

3. How are such water projects linked and contributing to water development priorities of the wereda?

4. Is there a handing over process of these schemes? What is the role of the wereda? Do you think these schemes are sustainable in the future? How?

5. What are in your view the visible impacts of these water schemes to the target groups?

6. Assuming the project is successful, what do you do as line agency to promote such initiatives? (ref. further dissemination, up-scaling etc.)

7. Any other points you want to raise or comment on!

Annex 2: Summary outputs from validation workshop

Discussion themes	Outputs from validation participants
Surprising or unexpected finding from BA	• Finding truly reflects realities on ground on water scheme development, roles, benefits and challenges that could be inferred for the entire wereda
Additional inputs that are relevant but not captured in the assessment result	• Student drop out has declined since water schemes were developed/rehabilitated • Seedling sites were initiated and tree plantation has started in connection to these water schemes especially Metti and Dikicha • Important lessons were drawn from Dikicha in water and social conservation • Community's engagement in environmental protection since time is saved
Important insight(s) from the whole process (objective, method and finding)	• Objective is clear and simple • Unique method that could help to study development interventions in the wereda • Engagement of beneficiaries to reflect on development initiatives that target them is unique and would give true picture of what is going on • Usually somebody from outside comes to study and may make conclusions which does not reflect realities on ground • Involvement of stakeholders at wereda level to review findings and provide input is unique • Finding on few villages represent the entire wereda • Results and recommendations from the findings can rightly be used for subsequent planning
Consideration in future water scheme development	• Wereda water sector to provide close technical support to stakeholder

initiatives in Miyo Borana	• Ensure community ownership is ensured by facilitating hand over process ones water scheme development is complete • Capacity building of water committee with clear JD and provision of relevant training • Wereda water sector translate package of water development in to action (train stakeholders engaged in water development) • Improve coordination among different actors to improve standards and scale up best practices
Consideration of future such assessment	• Peoples' awareness on what cleanliness means and how to make water clean at water source and at home • Local awareness on daily requirement of water consumption • How and if OSHO handed over water schemes and to whom • If water committee has JDS and were provided with training • If OSHO has benefitted from other CSOs engaged in water development and if it helped them in the process • Role of development agents, health extension workers and teachers in the community related to water scheme
Suggest/recommend improved water scheme rehabilitation and new scheme development	• Standardization and coordination is critical and this is the role of wereda water sector
Who should play what role in water scheme development	• **Government** • Technical support/guidance • Provision of JD for water committee and relevant training • Supportive supervision at scheme level • Facilitate hand over of completed water scheme • **Community** • Ownership of water scheme and active participation in

	development/rehabilitation • Take responsibility to ensure protection and maintenance • **CSOs** • Technical support • Provision of materials and equipment • Financial support

Annex 3: Summary of key findings from wereda level stakeholders

Theme	Summary information from wereda level stakeholders[24]
Current/future wereda level water priorities	• Of the five major priority sectors of the Growth Transformation Plan (GTP), water is considered the most important priority. However, due to shortage of financial resources there is no resource allocated for this sector • Currently, water development and rehabilitation is the domain of CSOs • Wereda administration is advocating for community mobilization for water development based on free labor and/or food for work arrangement
Our role in OSHO water project	• OSHO is considered an important ally not only in water scheme development but also natural resource management in Dikicha • Although there is no support to OSHO, we would like to do more in the future • Wereda water task force composed of various sectors (PDO, DPPO, Department of water, Road construction, education, health WoFED, and women's affairs) with the role to review project design and implementation
Linkage of OSHO's project to wereda water development plan	• OSHO is engaged in implementing our plan. • There is no standard to make CSOs accountable for poor construction except subjective approaches
Hand over processes	• We have a system where the wereda task force would take over completed project and hand it over to the community. • There is no formal hand over process although we have wereda task force responsible to track and receive completed projects
Impact of OSHO's water project	• Although there is no concrete measurement, OSHO has accessed water to the public and livestock • OSHO's successful contribution in natural resource development in Dikichachanged the land which was seriously eroded in
Promotion of best practices from OSHO	• We have learnt the use of Gabion in well construction from OSHOalthough this is not yet scaled

[24] The following wereda level stakeholders were engaged in a separate discussion (Pastoral Development Office, Water sector, Natural resource development sector and Wereda Administration

Annex 4: List of Citizen Observers

S.No	Name	Kebele
1	Kana Dokicha	Dikicha
2	GalmaGodana	Dikicha
3	DarmiDuba	Dikicha
4	LaasiiHalake	H/Babo
5	BoruGuyo	H/Babo
6	KabaleDuba	C/Trura
7	Boru Said	C/Trura
8	KabaleDida	Melbana
9	GalgaloDalacha	Melbana
10	GalmoJaldesa	Baha
11	ChalaHuka	Baha
12	WaqoleBoru	Metti

Annex 5: List of Validation Workshop Participants

S. No.	Name of Participants	Organization/representation	Position
1.	AddisuGirma	OSHO	Project Officer
2.	HundaraTafari	OSHO	Social worker
3.	MelekeGurmu	OSHO	Soil and water Expert
4.	Adam Fayyisa	OSHO	Project Manager
5.	RobaKonsole	OSHO	Social worker
6.	GalmaKanayo	MettiKebele	Development Agent /DA/
7.	TukeGuyo	HidibaboKebele	Elder
8.	GalmaGufu	MelbanaKebele	Elder
9.	DidaKorola	Wereda women and children office	Gender expert
10.	FikaduTsegaye	ACCORD Miyo Field Office	Project officer
11.	Wako Godana	DikichaKebele Administration	Kebele administrator
12.	Wako Kotobicha	HidiBaboKebele	Development Agent /DA/
13.	GuyoTadicha	BahaKebele	Elder
14.	BoruDejene	Miyo wereda Health office	Department head
15.	DirirsaGemechu	OSHO	Social worker
16.	GalmaDima	Chari TururaKebele	Development Agent /DA/
17.	GalamaGufu	MettiKebele	Kebele administrator
18.	JaldessaGelgelo	Cheri TururaKebele	Kebele administrator

19.	Mohammed Abakoda	Miyo wereda Pastoralist Development office	Head of the office
20.	AbiyotKase	Miyo wereda Water and energy development office	Head of the office
21.	HukaJilo	Miyo wereda administration office	Head of the office
22.	AbdubaSode	Miyo wereda Land and natural resource center	Head of the office
23.	Jaldessa Wako	Gayo Pastoralist Development Initiative	Delegate Area program Manager
24.	ChaliGuteta	HEKS Ethiopia	Program monitoring and evaluation officer
25.	Eisher	HEKS	East Africa Water consortium Coordinator
26.	Getachew Haile	HEKS Borena Field Office	Project Coordinator
27.	Dr. MirgissaKaba		Lead Consultant
28.	LibenGolo		Assistant consultant