A SITUATIONAL ASSESSMENT OF WATER ACCESS, UTILIZATION, AND MANAGEMENT IN BORANA ZONE, SOUTHERN ETHIOPIA: - WOMEN'S PERSPECTIVE AND LOCAL EXPERIENCES TO REACH OUT THEM.

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INTRODUCTION

Water is the basis of life. It is essential to the existence and health of ecosystems and to all life that depends on them.[1] Water has an indispensable role to all productive and reproductive activities like agriculture, industry, energy generation, hygiene, and sanitation. Likewise, access to clean drinking water is a perquisite to meeting basic human rights.[2] Despite the above facts, sources particularly male pastoralists[3] who live in arid and semi-arid parts of Ethiopia are challenged by water shortage due to climatic change-induced effects, affecting livestock production and livelihoods, triggering conflict among different ethnic groups.[4] Evidence indicates that gender[5] inequalities are exacerbated as women have limited access and control

[1] án, José L., S. Meyer & L. Karbe (2007): Water as the basis of life. In: Lozán, J. L., H. Grassl, P. Hupfer, L.Menzel & C.-D. Schönwiese. Global Change: Enough water for all? Wissenschaftliche Auswertungen, Hamburg. Online: www.klima-warnsignale.uni-hamburg.de

[2] https://www.un.org/waterforlifedecade/human_right_to_water.shtml

[3] https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-022-00263-3#:~:text=In%20Ethiopia%2C%20pastoralists%20and%20agro,northeast%2C%20east%2C%20and%20south.

[4] Alliance Diversity International & CIAT. (2022). Livestock water source monitoring and risk management system project document

[5] https://cgspace.cgiar.org/bitstream/handle/10568/108323/Step-by-step%20process%20to%20mainstream%20gender%20in%20climate-smart%20agricultural%20initiatives%20in%20Guatemala_Acosta%20et%20al.%202020.pdf?sequence=1&isAllowed=y

over water sources particularly in pastoral areas even though women are at the frontline of climate change. Drought has reduced available water sources, and women and girls must walk longer distances to fetch water. Often sanitation and hygiene are also their responsibility.[6] Women are not only victims of climate change but can drivers of adaptation measures to climate change. Women's close dependence on natural resources has positioned them well to understand and innovate livelihood strategies adapted to climate change and resulting food insecurity.[7] Rural women and girls are often the first to know of water unavailability and poor-quality water due to their social roles in the household.[8] Despite these significant roles, women remain marginalized from making decisions over water access and use in the household. They further don't have assets, information, training or technologies to ease water access.[9] The acknowledgement of the relationship between gender and water is crucial to achieving progress on water security and gender equality, and the achievement of the Sustainable Development Goals.[10] While gender shapes both men's and women's lives, women have a more disadvantaged position in comparison to men with significant implications for the adoption of Climate Smart Agriculture (CSA) practices.[11] Cognizant of the above facts, a Real-Time Livestock Water Source Monitoring and Risk Management System (LWSM) project has been intentional about addressing gender inequalities through its interventions.

The Livestock Water Source Monitoring and Risk Management System Project has been implementing by the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) in Borana Zone, Southern Ethiopia with the aims to develop a real time water source monitoring system in Ethiopia that provide water information to livestock producers and other stakeholders for risk management decision making and drought planning in pastoral areas of Ethiopia. The project has been working to enhance the Ethiopian government's drought-risk management response by institutionalizing a near-real time information dissemination system for pastoralists with limited access to technology and low literacy. The project will (1) develop or customize an integrated platform to monitor livestock water availability on near-real-time basis using digital satellite imagery to identify areas of high vulnerability/risk and anomaly for livestock risk indexing in the MoA/EIAR (2) develop a simplified web-hosted and product information dissemination tool based on well-evidenced usability studies for male and female pastoralists with low levels of ICT literacy (3) develop a scalable and holistic capacity enhancement program centered around gender-responsive water information systems to mitigate drought risks through workshops, training, learning modules,

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[6] IBID

[7] Aoyagi M, Suda E and Shinada T. (2011) Gender inclusion in climate change adaptation. ADBI working paper series, No. 309, Asian Development Bank Institute (ADBI), Tokyo. Mekelle, Tigray, Ethiopia. Available at: https://www. econstor.eu/bitstream/10419/53674/1/668644265.pdf. Accessed 25 July 2018

[8] Denton, F. 2002. Climate change, vulnerability, impacts and adaptation: Why does gender matter? In Gender, development, and climate change, ed. M. Rachel. Oxford: Oxfam

[9] Balehey et al. Pastoralism: Research, Policy, and Practice (2018) 8:23 https://doi.org/10.1186/s13570-018-0129-1

[10] IFAD.2012. Gender and water Securing water for improved rural livelihoods: The multiple-uses system approach.

[11] https://cgspace.cgiar.org/bitstream/handle/10568/108323/Step-by-step%20process%20to%20mainstream%20gender%20in%20climate-smart%20agricultural%20initiatives%20in%20Guatemala_Acosta%20et%20al.%202020.pdf?sequence=1&isAllowed=y

and feedback loops to the Ministry, pastoralists, planning and risk management agencies, Non-Government Organizations (NGOs), Universities and scaling partners.

OBJECTIVES

This situational assessment is preliminary study to know the situation of women who live around water ponds and create linkage and learn experiences of non-governmental organizations (NGOs) that have been operating in the Borana Zone. The assessment includes women's access to water during dry and wet seasons, the purposes for which women use water, and any unwritten rules in the area's water utilization. It also presents water management/control system and women's involvement in it, how women access water information, any traditionally established system that promotes women's access to information, and so on. Furthermore, it includes NGOs current experiences to reach out women who live in remote parts of Borana through their training and information dissemination activities.

METHODOLOGY

Field visit, individual interview, focus group discussion and key informant interview were the methods used for data collection. From 27th March to 3rd April 2023 the project team conducted field visit to understand the situation of water points in person, individual and group interview with women who live around each water pond to understand their access to water, water utilization, management in dry and wet seasons and other related issues, and key informant interview with local NGOs leaders to understand how women who live remote parts of Borena receive information and training. The NGOs were identified by interviewing the head of the Borena Zone Women and Social Affairs Office. Checklists were prepared and used for interviewing women (Annex 3), the head of the Borena Zone Women and Social Affairs Office (Annex 4) as well as the NGO leaders (Annex 5). In all cases, the national coordinator at Yabello Pastoral and Dry Land Agriculture Research, the local consultant for the project, and the lecturer at Borena University supported the team by organizing the women interviewees, arranging meeting time with head of Borena Zone Women and Social Affairs Office and NGO leaders. They also served as translators during interview time from English to Oromifa and vice versa and reviewed the report and provided feedback. During the interview time, notes were taken, and voices were recorded with consent.

KEY FINDINGS

The Water Ponds: Eight ponds, namely Haro Bura, Haro Bokosa, Haro Dingamo, Jilo Dhokicha, Liban Jatan, Bakke, Derbi-Korba, and Haro Ketela were visited (Annex-2), and these ponds are human-made by harvesting rainwater, to use later when there is no water. Some of the ponds were initiated and constructed by the community itself in collaboration with the government, such as Haro Dingamo, Jilo Dhokicha and Liban Jatan, the rest of the ponds were constructed by the government. The water ponds are major entry points of the project to collect water information about the area to guide the Ethiopian government's drought-risk response to pastoralists' water need. We found out that except Haro Ketela, there was water in all water ponds. It was observed that Derbi Korba's water and rangeland management is better than other ponds, while Haro Bakke, Haro Ketela, Haro Bokosa and Liban Jateni range land and water management is poor (Annex-2-Pictures of Water Ponds).

Water Access: For some women interviewees (Annex-1), the water pond (Haro Dingemo, Jilo Dhokicha, Liban Jatan) is a major source of water, but they also collect water from wells or boreholes, motor pump points or government provides them with water when the dry spells and the water ponds is dry. Motor pumps are unreliable in most cases and some water wells are very far from their resident area. In the case of Liben Jatan and Jilo Dhokicha, women travel 20 km. (round trip) and six hours (round trip), respectively, to collect water every day when the dry spells. They are also challenged by long queues at motor pumps and boreholes. Some of the interviewed women indicated that the water ponds (Haro Bura and Haro Bokosa) are far from their residence therefore, they use them as an alternative water source when the dry spells. Women around Derbi Korba does not experience water shortage when the dry spells because of a strong water management system. The water stays for longer periods even during droughts. In the case of Haro Bakke and Haro Ketela, water ponds are their only source of water, but Haro Ketela was broken by flood leaving the pond empty. The woman interviewed stated strongly that *they needed the Haro Ketela pond to be constructed as soon as possible* before the rainy season passed. "We don't have an optional source of safe water therefore, we collect water from runoff locally called "Dololo", she said.

Water Utilization: In all cases, they pack the water in jerrycans and carry water on their back from the water source to their home. They use the water for drinking, cooking, cleaning/washing, and feeding new-born and weak animals. But when there is water shortage, priority is given to drinking and cooking in all households. In all cases, they drink the water without treating it because their access to water purification tablets[12] like "Wuha Agar" is exceedingly rare. Some use traditional water treatments like Ash or milk and salt. However, they do not have milk now because they lost their valuable assets (cattle) in the recent drought[13]. Women who live around Haro Ketela, Haro Bura, Haro Bokosa, Jilo Dhokicha and Haro Bakke experienced waterborne diseases like cholera, Ameba, diarrhea, and vomiting because of the absence of drinking water purification tablets.

Water Management: There is a water management committee in all communities except Haro Bake water pond. In all cases, water management committees comprised of only men, they control the water sources and make priorities when the dry spells. "Cattle come first, then the elderly, pregnant and lactating mother follow and then we come," interviewee said. In addition, they also construct a fence for the water pond so that cattle do not enter the pond. In the case of Derbi Korba, they did not have water related issue because the pond stayed long due to a strict regulation set by the water manager. There is a punishment if they violate the regulation, for instance, if the livestock enters the pond and drinks or someone washes cloth in the pond, there is punishment up to 1000birr and 500birr respectively. The women around Derbi Korba have been practicing nursery around the water pond already, and they also aspire to begin vegetable cultivation for household consumption and earn income. In the case of Beke, the water quality is extremely poor because of poor water management. Out of the three

[12] https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=201&printable=1

[13] https://alliancebioversityciat.org/stories/borana-pastoralist-struggling-survive-under-recurrent-drought-ethiopia#:~:text=The%20zone%20have%20been%20experiencing,and%20food%20sources%20for%20pastoralists.

interviewees, two of them were sick of water-borne diseases like cholera, diarrhea, and vomiting at Beke.

Water Information: The situational assessment also includes women's access to water information (types of information and medium of communication). They share information about the availability, quantity, and quality of water, the queues, and if the water motor works since it does not work in most cases. Most of them monitor the water ponds by going in person and sharing information with each other through oral communication. In most areas, mobile phones and radio do not reach them. They get information related to health directly from health extension workers via door-to-door services. Women who live around Haro Dingemo, Jilo Dhokicha, Darbi Korba and Haro Ketela have women's associations for saving and loans and general services. But women who live around other ponds do not have an association/network.

Local Experiences to Reach Out Women: NGOs are using different strategies to reach out to women who live in remote parts of Borena through training and information dissemination. In remote parts, women who do not have mobile and radio access. Community Initiative Facilitation and Assistance (CIFA) engaged women to be part of the water management committee to control the water through Transformative House-Hold Methodology[14] to transform the attitude of the society towards women. They also use government structure for information dissemination. CARE Ethiopia uses Village Saving and Loan Association (VSLA)[15], Mother to Mother[16] and Social Analysis and Action approaches[17] to create pathways of empowerment through multiple activities. In addition, they use community mobilization through government structure. HUNDE (a local NGO) created Self Help Groups (SHGs)[18] to solve their social, economic, and political problems. Socially they meet every week, discuss health, nutrition, climate disaster risk management and harmful traditional practices. Economically, they improve their income though saving and loan. Politically, they exercise leadership at a kebele level. They use media for early warning information, and they give radio for some selected SHGs, and they listen to Radio message during their weekly meeting and discuss about the topic transferred by the Radio. They also use marketplaces and other meeting places for information dissemination. They put speakers and make announcements for those who do not have access to mobile phones and radio transmission. They also use early warning committee at Kebele level and traditional forecasters/influencers for information dissemination. Plan Ethiopia uses government structure for community mobilization. They do the outreach campaign in each kebele through health extension worker and model mothers. When they deliver a training, they use Model Mothers to mobilize women. They adopted a local tradition called "Bune Kele" meaning come and let us drink coffee. They use informal ways for awareness creation by adding fun and local proverbs in the training. Model mothers, health extension workers and development agents are key actors for training delivery.

[14] https://agriprofocus.com/upload/THM_Booklet_-_final1423832782.pdf
[15] https://www.vsla.net/
[16] http://www.iycn.org/files/IYCN_Mother-to-Mother-Support-Group-Facilitator-Manual_0311.pdf
[17] https://www.fsnnetwork.org/sites/default/files/SAA_Toolkit_FINAL.pdf
[18] https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_116168.pdf

CONCLUSION AND RECOMMENDATIONS

To conclude, the situational assessment confirms that climate change (drought and flood) highly impacts the life of pastoralist women although there is a culture of harvesting rainwater to reduce water shortage in the area. They also use alternative water sources like wells or boreholes, motor pumps or government provision, either in the dry or wet season, but they are highly challenged by unfunctional motor pumps and long queues at motor pumps points and boreholes. Women basically need water for household consumption like drinking, cooking, personal and family hygiene, feeding newly born and weak animals, but their access to water and water treatment is very limited. Women are absent from the water management committees of all visited areas. Water managers control the water, put priorities, and implement water preservation mechanisms. At places with a strong water manager (Derbi Korba), water stays long even if the drought spells and women are encouraged to involve in nursery production. Most women in all visited areas lack mobile phones and radio access unless they have young children. Most of the interviewee's search for water availability by going in person. It was also learnt that government and non-government use different strategies to reach out to women through their interventions or disseminate information to women in remote parts of Borena. Therefore, the Water Source Monitoring and Risk Management System project is a timely project to give response to pastoralist women and men needs. The project's activities include.

1. Building the capacity of key stakeholder on gender, water source, and climate change through a continues seminar/training/workshop to sensitize relevant stakeholders in the Borana zone about water source availability and accessibility to pastoralist women by connecting with climate change.
2. Conducting a gender analysis [19]to further analyze the situation, inform project implementation plans and activities, monitoring and evaluation tools, and it will be useful information for policy makers, researchers, government, non-government, private sectors, and donor agencies.
3. Joint revision of the project monitoring and evaluation matrix with project team based on the gender analysis findings.
4. Implementing in the Pastoralist Community of Practice (PCoP) and exemplary inclusive model that promotes active engagement of marginalized groups, to underpin a transformation towards more results-based, sustainable, and scalable water management initiatives.
5. Developing knowledge management materials including a series of technical/policy briefs and use -case documents on gender.
6. Identifying the private sectors and other actors who benefit pastoral women from their intervention and create linkages, for example provision of loans for enhancement of water ponds infrastructure, etc...
7. Collecting sex/gender disaggregated data and periodic monitoring of the project gender activities and capture changes on women because of the project intervention.

And it is highly recommended to

1. Link the project with Conservation Agriculture (CA) and Nutrition Sensitive Agriculture (NSA) initiatives.

[19] https://cgspace.cgiar.org/bitstream/handle/10568/108323/Step-by-step%20process%20to%20mainstream%20gender%20in%20climate-smart%20agricultural%20initiatives%20in%20Guatemala_Acosta%20et%20al.%202020.pdf?sequence=1&isAllowed=y

2. Further explore most applicable system to disseminate information related to water and climate change for women.
3. Consider engagement health extension workers to address issues related to health issues due to water quality.
4. Engage Women and Social Affairs at national, regional, and zonal level to create/strengthen women groups at local level, which is proven experience to capacitate women and disseminate information to them.

ANNEXES

Annex-1-Responses of interviewed women at each water pond.

Pond name**: Haro Bura** Woreda**: Elwaye** Kebele**: Dhertu** **Pond status:** Water is available in the pond. **Interviewee name**: Adi Sara Dulecha	 **Water Access and Utilization** I live around Haro Bura pond. We use Haro Bora during the dry season. It is far from the place where we live. We collect water twice a day (morning and afternoon) by traveling on foot? at least two hours during dry time. We find another alternative source to collect water during the wet season. We use the water for drinking and washing. The water has germs, but we drink it because we have no other choice. We do not have access to modern water treatment medicines like "Wuha Agar" to kill the germ. Therefore, we use the traditional way of water treatment by using "ash." **Information** We need information related to clean water access in short distance. We do not have mobile and radio access. Our association (women association that was organized by kebele) also failed because of the long drought. We did not get rain for four years (6 rainy seasons). **Valuable Assets** Our valuable assets are livestock, but all died because of drought therefore our livelihood is dependent on donation. We are supported by CARE-Ethiopia. Big water ponds are managed by men. Women are mostly involved in small pond committees.

Pond name: **Haro Bokosa**
Woreda: **Dubluk**
Kebele: **Bokosa**

Pond status: Water is available in the Pond. The pond would potentially be filled by mud unless environmental protection action is taken.

Name of interview participants:
Imet Wariyo (Widow)
Tiru Godana Begejo (Married)
Elema Gufu Begejo (Married)
Kebele Gelgelo (Married)

Water Access and Utilization

The Haro Bokosa water pond is far from our residence. We use another alternative, a small pond in our surroundings in the wet season because we have big families that we take care of although we are mostly challenged by long queues. We go to the big pond when the small pond is finished. We use the small pond minimum for a week time. Previously we used donkey for transporting water, but our donkeys died because of drought. Some use Motorbike but there are few. Most of us use our own labor. We go four times to collect water a day. We use the water for drinking and cleaning purposes. Humans and animals (small ruminants) drink water. The water is not clean, but we drink it because we do not have any option. Sometimes we get water treatment like "Wuha Agar" from health centers but mostly we do not.

Water Management

There is a water management committee in our surrounding. All are men and there is one chairperson. They control the water utilization and put priorities when the dry season takes a long time. Cattle come first, then elderly, and pregnant mother comes next, and we take last.

Needs Related to Water.

Reducing distance, "Wuha Agar" (water purification tablets), motor, irrigation are our needs related to water.

Valuable Assets

Most valuable assets for us are Agriculture, livestock (small ruminants and cattle). Agriculture includes maize, teff, and soybean. Regarding our livelihood, our life depends on aid. We have a small number of goats. We used to sell our goats to buy forage for cattle and household goods for consumption, but we cannot save the cattle and the money. All gone: The goats, the money, and the cattle.

	Water Information Regarding information, we need information about quantity and availability of water. no mobile network (of four people two of them have mobile phones). They travel one hour to find a mobile network, no radio, no women association/women's army. We get information related to health directly from health extension workers via door-to-door service.
Pond name: **Haro Dingemo** Woreda: **Dilo** Kebele: **Kebericho** Village: **Godana Gelgelo** **Pond status:** The pond has water. **Name of Interview participants:** PartiJilo Godana kaso, Jilo Guya, Kebele Godana, Insene Jeba	 **Water Access and Utilization** During wet time we use Haro Dingemo pond. During the dry time the government provides us with water. We bring water two times per day. We utilize water for drinking, cooking, and washing purposes. We use the water to feed kids. The water is not clean for drinking we rarely get water purification tablets like "Wuha Agar", but we drink it because we do not have another option. But we never experience disease because of water. **Water Management** There is a water management committee in the area that is nominated by the community. All the committee members are men. The committee has also a chairperson. They put into practice the Geda[20] principles and they are stronger than other areas in monitoring the water since there is water scarcity in the area. They

[20] Gada is a traditional system of governance used by the Oromo people in Ethiopia developed from knowledge gained by community experience over generations. The system regulates political, economic, social, and religious activities of the community dealing with issues such as conflict resolution, reparation and protecting women's rights. It serves as a mechanism for enforcing moral conduct, building social cohesion, and expressing forms of community culture. Gada is organized into five classes with one of these functioning as the ruling class consisting of a chairperson, officials, and an assembly. Each class progresses through a series of grades before it can function in authority with the leadership changing on a rotational basis every eight years. Class membership is open to men, whose fathers are already members, while women are consulted for decision-making on protecting women's rights. The classes are taught by oral historians covering history, laws, rituals, time reckoning, cosmology, myths, rules of conduct, and the function of the Gada system. Meetings and ceremonies take place under a sycamore tree (considered the Gada symbol) while major clans have established Gada centres and ceremonial spaces according to territory. Knowledge about the Gada system is transmitted to children in the home and at school. https://ich.unesco.org/en/RL/gada-system-an-indigenous-democratic-socio-political-system-of-the-oromo-01164

	frequently monitor, control, and prioritize. They also construct a fence for the water pond so that cattle do not enter the pond. **Information** Mostly we exchange information with each other. Few people have mobile phones access (2 out of 4 people). Or we go and monitor the water ponds ourselves. We have also a Saving and Loan Association that is organized by Agri-Service NGO. One group has 50 women. **Valuable Assets** Our valuable assets are livestock however all gone now because of prolonged drought.
Name of water pond-**Jilo- Dhokicha** Woreda-**Miyo** Kebele-**Melbena** Area name-**Werdele** Village name-**Jilo** **Pond Status:** Pond has water. **Name of interview participants** Gelmo boru (Married) Daki Jilo (Widow) Daki Wario (Married) Dadi Gelgelo (Married) Lolo Abole (Married) Kaliti Kenu (Married) Elema Koto (Widow) Daki Koropu (Married)	 **Water Access and Utilization** In the dry season, we get water from other water sources called *Tula wells.* It was traditionally dug out by the community. The well is underground water, but it is flooded now because the rain is heavy. In the wet season, we use the water pond. We collect five times per day from the pond since it is nearest to our residence. We also access drinking water from the motor pumps, which is frequently out of use. It stays for a minimum of five months without maintenance. Therefore, we use pond water and well water for drinking. We use the water for hygiene and drinking. We rarely use the water purification tablets like "Wuha Agar", from the clinic. (Mostly, we can't find it). We clean the water and drink in three ways: using ash, milk and salt. When the water is mixed with the milk, the dust goes down immediately. We use milk and salt together. But we don't have milk now because we lost cattle because of the drought. We drink it as it is. We also try to filter it using a cloth. But there is stomach disease because of the water. Regarding time, we travel 30 minutes to collect water from the pond water and motor pump point and six (6) hours (round trip) from the traditional well in the dry season. We go to the traditional

	well two times per day (We go in the morning at 5:00 a.m. and return at 11:00 a.m. or 12:00 p.m. We go in the afternoon at 4:00 p.m. and return at 9-4:00 p.m.). Our return time is determined by the queue. Only a few people have access to donkeys, and now the donkeys are died or weak. There is no motor to transport water. **Water Management** There are two water managers, and they are all men. **Information** We shared information by asking each other about the availability, quantity, and quality of water. Also, about the queue, particularly the motor water because it is far from us. Women don't have mobile for information sharing, but we use the mobile of our young children. Fathers buy for their children. There are no regular discussions created by the government or NGOs about hygiene and latrine utilization. But we created an informal saving association by ourselves. We used to sell milk and eggs and save. But during the drought, when we buy forage to save cattle, we finish the money. But all cattle die, we can't save them, and we also finish our money. The savings association was established five years ago. We established the association by learning from others. **Gender Based Violence.** There was polygamous marriage in the area but now it is being reduced. Old ladies' husbands have 4 wives. But the younger ones don't practice polygamy. **Valuable Assets** Most valuable assets for us are livestock-cattle, shots (sheep and goats). We have land for crop farming, but we can't farm because there are no oxen.
Name of pond: **Liban Jateni** Woreda: **Dhas** Kebele: **Gayo** Area name: **Dembela Mira** **Pond status:** Water is available in the pond. **Interview participants:** Daki Jela (Married) Lolo Abukura (Married) Dheki Liben (Married) Diko Aga (Widow)	

	Access and Utilization During wet times, we use the pond. During the dry time we travel 10 km to access water from the borehole. Meaning we travel 20 k.m for a round trip. During the wet time we collect water three times a day but in the dry time, we collect water one time only because of the distance. It is too far. We use water for drinking, hygiene, cooking and livestock. In the dry time there is water shortage, therefore, we give priority to drinking and cooking only. We get water purification tablets like "Wuha Agar" from the clinic but mostly we drink the water as it is. We used to drop milk/salt but now there is no milk. No problem related to water-borne diseases. **Information** Mostly we communicate through oral communication. We ask for information like availability of water if the water pump works by fuel (if the pump work?) queues. FM radio doesn't reach here, we don't have women in the network/association, and we have limited access to mobile network and phone. **Valuable Assets** Our livelihood depends on livestock, but it's all gone now. Our life depends on aid (We are supported by CARE Ethiopia)
Pond name: **Haro Bake** Woreda: **Yabelo** Kebele: **Beke** Area name: **Beke** **Pond status:** water is available in the pond. **Interview participants** **Kule Tuni** Kula Benke Adi Dedecha	**Water Access and Utilization** We use water from the pond in both seasons (dry and wet seasons). We use water for drinking, livestock, cooking, washing and hygiene, and irrigation. We give priority to drinking and cooking when water is scarce. Then livestock and washing comes. **Water Management** There is no management totally. The water quality is poor because of lack of water management. Out of the three interviewees, two of them were sick. (Water borne diseases) like cholera, diarrhea, and vomiting. We went to clinic and got treatment. **Information:** We ask each other orally. We have no mobile, no radio for means of information and no cooperatives. **Valuable assets** Livestock is our valuable asset, but we lost all because of drought. We have irrigation but it is not valuable.

Pond name: **Derbi Korba**
Area name: **Tuke Dima**
Woreda: **Moyale**
Kebele: **Medo**

Pond status: Water is Available

Interview participants

1. Dimo Guyo (married)
2. Debo Kumbi (married)
3. Kebele Boru (married)

Water Access and Utilization

During wet season, we use natural stream water. We collect water from streams left from floods. During dry season: we use Denbi Korba water pond. We collect water three times a day and it takes us 40 minutes to collect. In drought time, we didn't have trouble related to water because the pond stayed long because of a strict regulation set by the water manager. There is punishment if we violate the regulation, for instance, if the livestock enter the pond and drink (we pay 1000 birr) or if someone takes a bath in or human wash clothes (we pay 500 birr). We use the water for livestock feeding, drinking, hygiene, irrigation, and nursery plantation. We also want to learn about vegetable production. We drink the water as it is. We don't get water treatment, but there is no problem/disease caused by the water so far.

Water Management

We have a water manager but no women. We have one water manager. There was a thought by the manager to create a committee and include a woman in the committee, but it is not happened yet.

Water Information

We use information sharing in two ways, one through oral communication and the other one is mobile communication. Sometimes, we go to the pond and observe ourselves. There is also a women association in the area for saving and loans and general services. It is Woreda cooperative that organized us. Our association was established 20 years ago by ourselves but CARE Ethiopia and CIFA encourage and strengthen our association by giving money and training.

Valuable

Our livestock was valuable assets for us, but we lost them now. Water was available, but we lost our livestock because of forage shortage. We do small business-like selling sugar and biscuits.

Water Pond name: **Haro Ketela**
Woreda: **Moyale**
Kebele: **Bokola**
Area name: **Lagsure**

Pond status: there is no water in the pond.

Interviewee name

1. Loho Gracha

Water Access and Utilization

I am a lactating mother who lives around the pond. We access water from that pond (Ketela) only in the dry and wet seasons. It is our only source of water. But the flood broke the pond, and we lost the water. So, this time, we collect water from runoff that remain locally called "Dololo". We also use the pump water as an alternative even if it is not reliable, but it is also taken by the flood. *We need the pond to be constructed as soon as possible before the rain passes. We don't have an option.* Previously we used to collect three times a day. Now we collect water two times a day from Dololo. We use water for livestock (drinking), drinking, cooking, washing/hygiene. We rarely access water purification tablets "Wuha Agar". But mostly we drink it as it is. There are health problems like vomiting and diarrhea and the clinic told us it is amoeba.

Valuable Assets

Our valuable assets are livestock, but we lost them. Only goats and sheep are left now.

Information

We exchange information orally, observation (we go and see), mobile, we also have women cooperative. The name of our cooperative is Angasu Bokola Saving and credit Association. OPA organized us. Each group has 25 members. There are eight women cooperatives in this Kebele.

Annex-2-Different experiences of NGOs to reach out women who live in remote Borena

Head of Borena Zone Women and Social Affairs	There are 13 woredas in Borena, and there are women structure in all woreda but Dubluk, Dhas, Dire, Dilo have top performance in women structure. They meet, exchange information, save and loan etc.
	NGOs who work with us include UNICEF, Plan International, Action Against Hunger, Helvetas, CARE Ethiopia, HUNDE, Islamic Relief, CIFA, IOM,
CIFA (Community Initiative Facilitation and Assistance) It is a local NGO established 18 years ago. Focus area conflict, natural resource degradation, gender.	• Construct water schemes and reduce the distance, labor, and time for women. • **Women need to be part of the water management committee to control the water.** Now we accomplished 3 women to be a member of the water management committee out of 7 members. And 4 women to be a member of the peace management committee out of 7 members. • The community has a traditional management system. We didn't go to change that, but we go to make women to be a member of water management committee and women to be a chairperson of the committee through attitude change. • The society used to believe men are best managers than women however we proved in practice that water managed by women are better than those managed by men. • Most that are managed by only men committee are out of function than those managed by women/a committee with women members. • We used Transformative HH methodology to change the attitude of society. • We use local government structure for information dissemination like early warning information
CARE Ethiopia Dida Boru Head of Operation	• Now our focus is more on emergencies but before, we used Village Saving and Loan Association (VSLA) and Mother to Mother approaches for empowering women. • We have also Social Analysis and Action approach to create pathways of empowerment through multiple activities. • We use community mobilization through government structure like Kebele. • Kebele makes a call through cluster structure. Each cluster has representatives and verification made by the community. • We work with zonal, woreda and kebele level structure. • It is good to make them aware but do not allow them to influence you. • We also have community level facilitators they work with Kebele level structure. • The VSLA was established two years before, they might exist, but I don't know their status now. • VSLA was established in Araro, Dilo, Dhire, Moyale, Miyho and Dhas woredas. • They were established for income generation and self-sufficiency.

	• VSLA has 20 members. • We make them have a resource that they control and have an equal say with their husband. • 1 Kebele equals 1 VSLA. • The replication effect was high. • We trained them in business skills, link them with cooperative. • The criteria to be VSLA member is do not have income but interest, poor, live close by preferable because they make frequent meeting.
HUNDE	Strategies: Livelihood, changing harmful norms, • We use ''Gusagonofa'' as entry point and give cattle for women so that women can have a strong say. • Self Help Group to solve their social problem and learn saving and loan to do business. SHGs • There are SHGs who grow to CLA-to make them stronger in social, economy and leadership. • Socially they meet every week, discuss health, nutrition, climate disaster risk management, harmful traditional practices. • Economy, they improve their income and business. • Leadership they exercise leadership at kebele level. • We select active members from SHGs, organize them and provide them with solar energy as an incentive. We make 39 women groups to get access to solar energy, revolving fund, and grant fund. We involve them to involve in solar energy business. • We have SHGs in Gomole, Arero, Yabelo and Elweya. • In 1 kebele we have 6-15 depending on the size of the Kebele. • We organize economically poor, low social standard and interest. • From each SHG-3 members selected to be cluster members • Cluster roles include resource mobilization, conflict resolution, create new SHGs, auditing etc • We have community facilitator at kebele level they are female. • If she needs to organize a new SHG, she asks Kebele, she can't organize without the consent of Kebele. • She works closely with Kebele Women's Affairs • We provide ToT for community facilitator. Information • We use media for early warning information. We take the information from the National Metrology Institute (NMI) and transfer the information through Oromia Broadcasting Network (OBN). We have a partnership with NMI and OBN. • We gave radio for areas where radio transmission reach.

	• There are also early warning committees at kebele level. • We also use the marketplace and other meeting places for information dissemination. We put speakers and make announcements for those who don't have access to mobile networks and radio transmission. • There are also traditional forecasters/influencers. We also use their knowledge because people trust and listen to what they say. • We gave radio for some selected SHGs, and they listen before meeting.
Plan Ethiopia	• It is a year since we came to Borena. We mainly focus on life saving activities. • We do community mobilization. When we do this, we approach government structure as a good channel like zone, kebele and woreda. • We do an outreach campaign: in each kebele there are health extension workers and model mothers. Each kebele there is cluster. • Refresher training: we use model mothers to mobilize. There is a tradition called "Bune Kele". Methodology: we use fun by including local proverbs. In-depth understanding of local context is very important. We use informal ways for awareness creation. Model mothers, (active mother and father), health extension workers and development agents are key actors for training delivery. Information We use government hierarchy/structure for information dissemination.

Annex-2-Water ponds pictures

Pictures taken by Selamawit Firdissa

Water Pond Picture	Name
	Haro Dingemo
	Haro Jilo
	Haro Ketela

	Liban Jateni
	Derbi Korba
	Haro Bokosa

ANNEX-3-CHECKLIST- Understanding the Local Context from Gender Perspective

Time: 27-31 March 2023

Oromia region: Borena zone

Name: Selamawit Firdissa, Gender Specialist

Org name: Alliance Bioversity International & CIAT

Area context

1.	Area name	
2.	Woreda name	
3.	Kebele name	
4.	Name of water point	
5.	Total population who lives around the water point	
6.	% Of women	
7.	Availability of water in water pond	
8.	Proximity of water from their vicinity (particularly for women)	
9.	Purpose of the water pond (domestic or productive or both)	

Socio-cultural context

10	Activities that women/girls mainly involved in Household Community level	
11	Activities that men/boys mainly involved in Household Community level	
12	Any role changes among women/men/boys and girl after the drought/flood	
	Ownership	
13	What are valuable assets for the community	
14	What do women own? (Animals, technologies like mobile, radio etc.)	

Current Community of Practice related to water.

	Access	
15	Can a woman access water from the water point (if not why?)	
16	For what purpose a women use the water she collected	
17	How long (km/hour) a women travel to collect water?	

18	Any change before and after the drought/flood?	
	Utilization	
19	For what purposes do the women use the water?	
20	Any unwritten rules in the utilization of water in the area?	
	Water management (Control/decision making /)	
21	What are the controlling mechanisms of the water points that the community established?	
22	Who are members of the water management of the water points?	
23	How are they elected?	
24	Are women represented in water management groups?	
25	Current practice in prioritizing water utilization?	
	Information	
26	What is water meaning for you?	
27	For what purposes you use the water?	
28	How long (km/hour) you travel to access water?	
29	Any challenges your experience related to water?	
30	How do you get information related to water currently?	
31	What information do you need related to water?	
32	What is the best way for you to access information related to water?	
33	Any traditionally established water information channels for women? (Community of practice?)	

	Constraints	
34	Major constraints of women to access water points?	
35	Constraints related to the drought	
	Harmful traditional practices on women & girls	
36	Any harmful traditional practices on women & girls	
	Opportunities	
37	Major opportunities to address their constraints	

38	Major opportunities for women to access water information	

ANNEX-4-CHECKLIST: Mapping, networking, and experience sharing.

- Stakeholders who are currently working on women/gender in the area (mapping potential stakeholders)
- Local level women agents (armies), Self-help groups/unions
- Oromia women affairs office/ Oromia research centers (available gender strategy)
- Partners/NGOs working in gender/women.
- Local Universities
- Private sector actors (cooperative & insurance)
- Others

ANNEX-5-CHECKLIST: Experience sharing on current practice

Activities	**Local context experience (strategies)**
1. **(Outreach strategies)** Inviting and encouraging women very often to attend in a place and time that is convenient for them for local level outreach workshops,	
2. Ensure local authorities identify women attendants and where possible, **engagement of husbands** to allow them for attendance of project activities	
3. Messages should be simplified and changed into **local language** "user centred design" (**content and dissemination strategy**)	
4. Possible partnerships with **local partners** who have proven approaches to ensure women area reached (through digital and physical presentation) 5. Implement in the **Pastoralist Community of Practice (PCoP)** and exemplary inclusive model that promotes active engagement of marginalized groups, to underpin a transformation towards more results-based, sustainable, and scalable water management initiatives. 6. Identifying the **private sectors** and other actors who benefit pastoral women from their intervention and	

create linkages, for example provision of loans for enhancement of water ponds infrastructure, etc... 7. Preparation of **training manual** on gender and organizing training workshop to capacitate relevant stakeholders jointly with project team. **8.** Map available **policies, strategies, and studies.** 9. Finalize gender analysis plan	