



Report on the Household Baseline Survey for Building Community Resilience Project

**In Poor Pastoral and Agro-Pastoral Communities in Somali
region, Jijiga and Degehabur zones, Arehary and Ubahile
kebeles, Ethiopia**

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Acronyms

CBPP	Contagious bovine Pleuro-pneumonia
CCPP	Contagious Caprine Pleuro-pneumonia
CHF	Swiss Franc
DM	Disaster Management
DRR	Disaster Risk Reduction
EDHS	Ethiopian Demographic and Health Survey
ERCS	Ethiopian Red Cross Society
FGD	Focus Group Discussion
HIV	Human Immune-deficiency Virus
ICR	Integrated Community Resilience
IGA	Income Generation Activity
KAP	Knowledge Attitude Practice
PMER	Planning Monitoring Evaluation Reporting
PPH	Postpartum Hemorrhage
PPS	Probability Proportional to Size
RC	Red Cross
RR	Response Rate
SRC	Swedish Red Cross
TB	Tuberculosis
VCA	Vulnerability Capacity Assessment
WATSAN	Water and Sanitation

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Executive Summary

The Integrated Community Resilience (ICR) project is implemented by Ethiopian Red Cross Society in collaboration with Swedish Red Cross. The program is a three-year (2014 - 2016) project with a funding from SRC. A total of 80,215 people are expected to benefit in the region from this particular ICR project.

The overall goal of the project is that communities in Somali region are better prepared and will recover better from disasters and other calamities. This integrated community resilience project will strengthen communities in four different areas: disaster risk reduction, health/ water and sanitation, livelihood and capacity building.

This report presents the findings of a baseline survey executed in *Arehary and Ubahile kebeles* of Somali region between 13th of November to 23rd of November 2013. It is based on the findings of a quantitative household survey of 340 households and 2 Focused Group Discussions at community levels. In the main body of the report, important results are disaggregated by kebele. The baseline survey focused on indicators set in the project document.

Analysis of demographic and socio-economic data reveals: 61.9% of the respondents are females, 64.0% of the respondents are found in 25-35 & 36-45 age categories, 92.8% of the respondents are illiterate, 56.6% of the respondents are agro-pastoralist, and 85.5% of them are married.

Though 88.4% of the respondents have lands, only 21.17% are experienced in cultivating a fodder. On average they use 9.28 hectare of land for fodder within each household. Less than half of the respondents (43.6%) have vaccinated their animals' against infectious diseases. However, most of them (80.7%) have used drugs for their animals when the get sick. On average they use 4.55 numbers of drugs with a mean cost of 1,293 birr per annum.

As most of them are agro-pastoralist, fodder cultivation is inevitable. And this can be enhanced by resolving problems such as scarcity of water, scarcity of farming materials, scarcity of seeds, etc. There are no local veterinary clinics or animal drug store, if possible construction of animal health facilities & drug supply stores are recommended.

92.9% of the households still practices open defecation. Only 7.1% have access to toilet facility. From those who have toilet facility, 66.7 answered that the latrine is in a good condition both inside and outside. 98.82% of the respondents wash their hands but this actually varies when we come to washing hands at critical times: 91.2% after defecation, 64.3% after cleaning child's bottom, 58.1% before preparing food, 91.2% before eating food, 51.3% before feeding a child, and 51.3% after taking care of animals. 35.2% of the respondents have been referred to hospital or other health facilities. 69.1% of the respondents does use different mechanisms to make the water safer to drink (they drink only water collected from the field). 87.9% of the respondents have been pregnant. However, only 11.3% of them received antenatal consultation during pregnancy, 98.4% of the respondents have given birth in their homes and concerning post natal care only 11.5% has checked at the health facility following after their delivery.

To declare defecation free environments, communities should be motivated on how to construct toilets and supply them some incentives like latrine. Community awareness creation programs should be conducted on washing hands at critical times such as after cleaning child's bottom, before preparing food, before feeding a child, & after taking care of animals. As referrals are very tough for this people, equipping local health facilities with the necessary materials and well trained health personnel is very essential. Awareness creations as well as construction of safe water facilities and supply of cleaning chemicals are recommended. Antenatal and postnatal care services are very low and home delivery is extremely very high. Efforts to improve antenatal and postnatal care should focus on addressing geographical and economic access. Addressing staff shortages through expanding training opportunities and incentives to health care providers and developing postnatal care guidelines are key steps to improve maternal and newborn health as well as helps women to deliver with a skilled attendant.

84.0% of the respondents know about malaria. However, only 43.4% are well aware regarding the mode of transmission.

As most of them only know about the name malaria, KAP have to be sought about the mode of transmission and the use of mosquito nets at least for children and pregnant mothers. If possible net delivery is also a good thing.

Extremely low numbers (5%) of the respondents surveyed know about traffic rules and regulations.

Traffic rules and regulations which are one of the means of prevention of traffic accidents should be disseminated to the community members with special emphasis.

Only a few numbers (16.3%) of the respondents has enough money to sustain themselves. The primary source of income on first place is livestock and agriculture is placed on second.

Only few members of the community have enough money and able to sustain themselves. Therefore, enhancing food security (like how they increase their livestock (including by products) and associated agricultural productivity) and teach them some coping mechanisms when time are tough is very critical.

During the FGD meetings, they had told us their priority needs in a ranked order: Water as 1st, Health 2nd, Education in 3rd place, and finally at last agricultural materials fourth place.

1. Introduction

This report presents the key findings from the Household Baseline Survey for building community resilience in *Somali region, Jijiga and Degehabur zones, Harshin and Ararso districts, Arehary and Ubahile kebeles*. The baseline survey was carried out in *Arehary and Ubahile kebeles* between 13th of November to 23rd of November 2013. The survey was designed, implemented and analyzed by team members composed of Azmeraw Bekele from Disaster Management (DM), Ashebir Asaminew from Planning, Monitoring, Evaluation and Reporting (PMER), Degife Dereje from Water and Sanitation (WATSAN) and Jesper Fridolf country representative of Swedish Red Cross (SRC).

This report is organized as follows. After providing an overview of the implementation site context and project background, the methodology for the household baseline survey are described. This is followed by an analysis of general household characteristics, livestock rearing, hygiene and sanitation, antenatal and postnatal care, malaria, road traffic and finally this section is concluded by analysis of livelihoods. The report concludes with a summary of findings and recommendations for further implementation.

1.1 Context and Project Background

Located to the eastern and south eastern parts of the country the Somali regional state has vast lowland, arid to semi-arid climate where pastoral and agro pastoral livelihood is dominant. The State of Somali has a very large area size ranking second next to Oromiya. At present the state comprises 9 administrative zones and 49 woredas. Jijiga is the capital city of the State. The State has common boundaries with Afar and the Republic of Djibouti in the north, Kenya in the south, the State of Oromiya in the west, and Somalia in the east and in the South.

Although most of the people of the state of Somali mainly earn their livelihood from livestock, they practice crop production as well. The major crops cultivated in the region are sorghum and

maize. Wheat and barley are also harvested in a smaller amount each year. Commercial activity is another occupation that is significantly exercised in the region

The region is one of the richest in terms of livestock resources and livestock is the main sources of food and means of income for the majority of the people. Despite many perennial rivers, fertile soils, some mid altitude areas with sufficient rainfall and plain lands that are suitable for agriculture, the crop production is limited to cover the food requirements of the people. The region inhabit more than 4.7 million people the majority of which live in rural settings.

Recurrent drought and its negative consequences are the major hazard that severely affected the people of the region. Due to its relief feature and climatic condition drought is the most frequent hazard and made the region the most water scarce region in the country. Safe water coverage is also one of lowest in the country.

Ethiopian Red Cross Society had conducted a Vulnerability Capacity Assessment (VCA) in two kebeles (Arehary and Ubhile) of Harshin and Ararso districts of Jijiga and Degahbur zones of Somali region between 24 and 30 June 2013.

As a result of the VCA findings and recommendations, this integrated community resilience (ICR) is implemented by Ethiopian Red Cross Society (ERCS) in collaboration with Swedish Red Cross (SRC). The program is a three- year (2014 - 2016) project with a funding from SRC. A total of 80,215 people are expected to benefit in the region from this particular ICR project

The integrated community resilience project will also be carried out in these two Kebeles (Arehrey and Ubahile) of Harshin and Ararso districts, Fafan (also known as Jijiga) and Jarar (also known as Degehabur) zones of Somali region respectively. Community resilience is defined as a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. [See Figure 1]

The two kebeles were selected considering the vulnerability of the majority of the population for various disasters. The low land topography, the arid climate and the degraded environment are the major factors contributed to the occurrence of recurrent drought and its negative consequences over the vulnerable people.

Although reduced in frequency and magnitude, there have been conflicts between the government forces and rebellions. Resource based inter-ethnic conflict along the bordering areas with Oromia and Afar regions is the most common disaster resulting huge humanitarian crises including deaths, displacement, loss of livelihood and property.

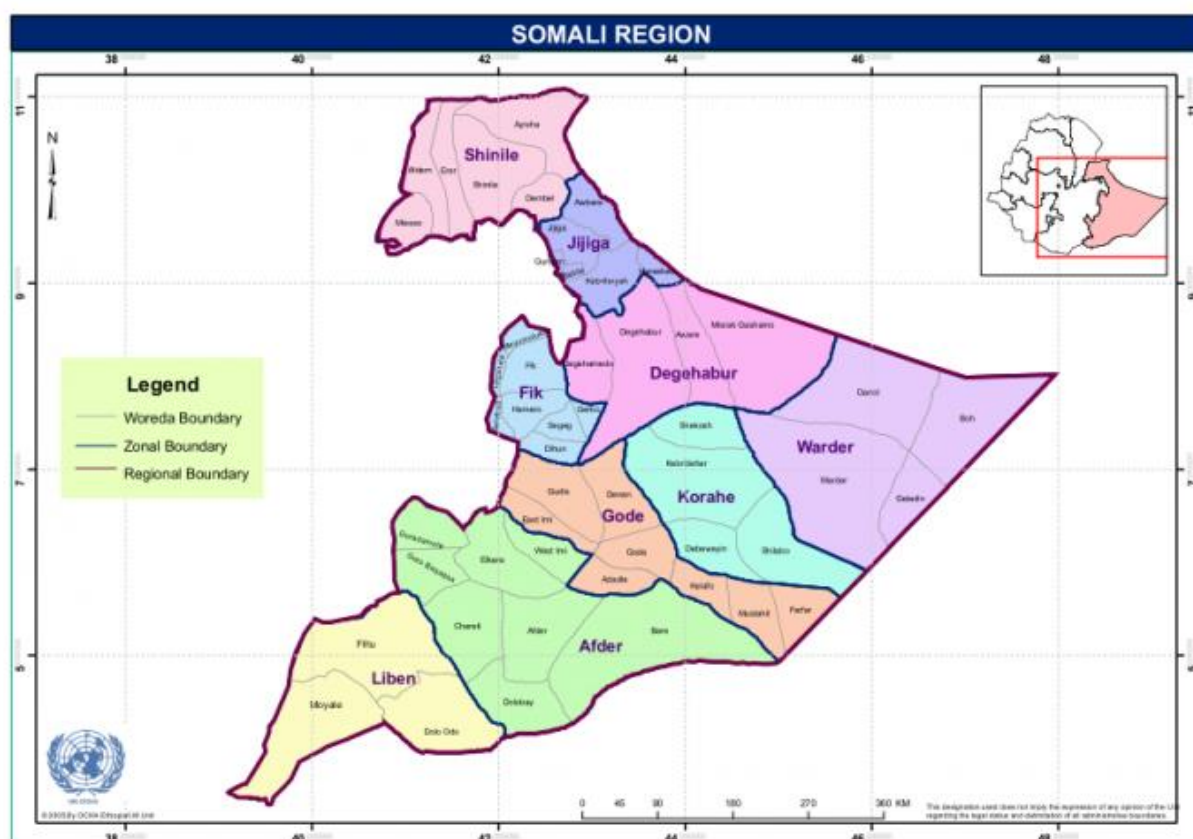


Figure 1: Map of Somali region in Ethiopia

The project will strengthen the communities in four different areas;

- Outcome 1: Disaster risk reduction, Strengthening target communities to reduce risks and vulnerabilities to disasters
 - The focus will be on Disaster Risk Reduction training and the strengthening of animal husbandry
- Outcome 2: Health/water and sanitation (WatSan), Reduce community's vulnerability to health and WATSAN related hazards

- A focus on malaria reduction, road safety activities and to train community volunteers in social mobilization on antenatal and postnatal care.
- Outcome 3: Livelihood, Improve community's possibilities to livelihood and thereby reduce their food insecurities.
 - Include income generating activities. Micro loans are facilitated to the targeted population and technical assistant is provided. A few examples of areas where training activities will be conducted: cattle fattening, dairy cow management, apiculture, micro-enterprise management and marketing.
- Outcome 4: Capacity building, Improve the capacity of Somali regional branch to manage long term community resilience programs
 - Activities are mainly focusing on the training of staff in different areas, one example in training in DRR and Community resilience. Volunteer management activities will further strengthen the branch; one example is the establishment of a RC club and task force at the Jijiga University.

These outcomes will increase the capability of the population in the two regions to become more resilient to fast and slow-onset disasters.

1.2 Objectives of the Survey

The primary reason for conducting the baseline survey is to facilitate impact assessment at the end of the intervention or to facilitate end evaluation and monitoring in the course of project implementation, with particular focus to the project's main objectives. The baseline survey has been designed to ensure that changes in these objectives and indicators can be measured over the course of the project.

The goal of the project is that communities in Somali region are better prepared and will recover better from disasters and other calamities.

The specific objectives of the Household Baseline Survey are as follows:

1. To understand the perceptions, desires, practices, motivations and constraints of households in the target area with respect to livestock rearing, hygiene and sanitation, antenatal and postnatal care, malaria, road traffic and livelihoods,
2. To assist the project and stakeholders in determining whether verifiable indicators and related targets, stated at the beginning of the project and encapsulated in Outcomes 1, 2, 3 & 4, are being achieved over time,
3. Examine the current situation of the project beneficiaries in terms of their economic and social aspects and the issues affecting their lives, and
4. Establish a benchmark for the current community resilience project in terms of the communities' awareness of health and health related issues, animal rearing practices, road traffic etc.

2. Data & Methodology

The household baseline survey was conducted in 345 households in Areharay and Ubahile. Data was collected *starting from 13th of November up to 23rd of November, 2013* as part of the survey to generate a baseline report for the 'Integrated Community Resilience Project'. Proportional sample size was considered to determine the actual sample needed for each of data collection tools for the two project areas (Kebeles). Households' selection methods are discussed in the next consecutive sections.

2.1 Sample Size Determination

The formula that was used to determine the sample needed for the survey is given as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size, and e is the level of precision.

Since we have a total target beneficiaries of 15,168 people, we divide this figure by average family size of 6 to get $N=2,528$ which is the total household size in our case. Using $e=0.05$, inserting this figures in the above formula we get $n=345$, which is the total sample size for our study. Probability proportional to size (PPS) sampling is used to calculate the sample size required for each kebele. [See Table 1]

Table 1: Determined Sample Size for each of the Survey Areas

Zone	Woreda	Kebele	Household	Proportion	Sample Size
Jijiga	Harshin	Ararhrey	1,728	0.68	236
Degehabur	Ararso	Ubahile	800	0.32	109
Total			2,528		345

A total of 345 questionnaires were administered with the total number of household members covered by the survey numbering 340 members. The response rate for this particular survey was 98.5% and this is quite satisfying.

2.2 Sampling Technique

A method of Single Random Sampling was utilized for the survey. One household per village was selected for the survey. Selection was mostly random but consideration was also paid to the distance of households from one another to avoid clustering of households that might be too close to one another.

A system of Systematic Random Sampling could not be utilized since the Somali population is mostly pastoralists who are not evenly spread out and therefore households had to be selected wherever a community happened to be found.

No gender influence was factored into the study. Whether a female or male responded to the interview depended on the time of day as gender roles and duties would determine at what time of day a household member was likely to be found at home.

A structured questionnaire, incorporating both open and closed-ended questions, was initially developed by the assigned team members. Questions were derived from a review of the project log frame for identification of benchmarking indicators as it is suggested by the SRC country representative. These questions were examined by SRC delegates who made further contributions to the questionnaire content and finalized through the process of consultation with the team to ensure that the questionnaire was sufficiently comprehensive [See Annex 1]. Focus Group Discussion (FGD) were also designed and implemented to gain understanding of the community level perceptions. [See Annex 2]

Before conducting the survey a pre-test was undertaken in one village of the targeted kebele (Ubahile) community to establish the quality and comprehensiveness of the survey and to ensure that the expected answers were drawn out by the interviewers. Note that this same people (included in the pretest) were excluded on the actual survey not to put so many burdens on them. All 15 enumerators conducted the pilot survey during the course of one day. The findings from the pre-test revealed that some of the questions were not clearly understood by the respondents. In addition, there were some gaps in the questionnaire and it was not deemed sufficiently comprehensive. The lessons learnt from the pre-test were discussed with the enumerators and incorporated into a revised version of the questionnaire.

2.3 Training of Enumerators

Fifteen enumerators (11 males and 4 women) with suitable qualifications and experience in socio-economic data collection were recruited to undertake the survey. Each enumerator was a 4th year university student. In addition three supervisors' from ERCS and SRC delegate had given training to the enumerators, supervised their work and organized the entire mission. Enumerators came from the Jigjiga University for the purposes of geographical identification and for establishing boundaries and were required to be Somali language speakers. The enumeration team received one day's classroom training to develop an understanding of the survey questionnaire, to gain practice in completing the questionnaire, to understand the definition of some peculiar technical terms and to practice interviewing techniques with survey colleagues.

2.4 Field operation, Data Entry and Analysis

Data collection from the field was conducted over a 10 day period between the 13th of November up to 23rd of November 2013. The Supervisors in the field were constantly on hand to provide clarification and instruction to the enumeration team on concepts, definitions and to resolve difficulties in carrying out the field work. Sampled interview question was checked on a question by question basis and explanations sought for unclear information or errors. The Supervisors enhanced the team's potential through identifying the strengths and weaknesses of individuals within the team and pairing team members accordingly. One important thing to be noted here is that, the settlements of the community were such a challenging task (much beyond our expectations) for the survey team as the settlements were found vastly diverse and scattered. Each village contained few households and the village were far apart many kilo meters away.

Each questionnaire was submitted systematically by each enumerator to the assigned supervisors (supervisor enumerator ratio is 1 to 5). The survey data from each location, once edited and cleared, were entered to Statistical Package for Social Sciences (SPSS) software for the subsequent analysis to be made on the survey.

3. Results and Discussions

3.1 Demographic and Socio-economic Characteristics

The summary of the completed and collected questionnaire from each household in each kebele along with the response rate (RR) is depicted in the table below. [See Table 2]

Table 2: Sample versus collected data

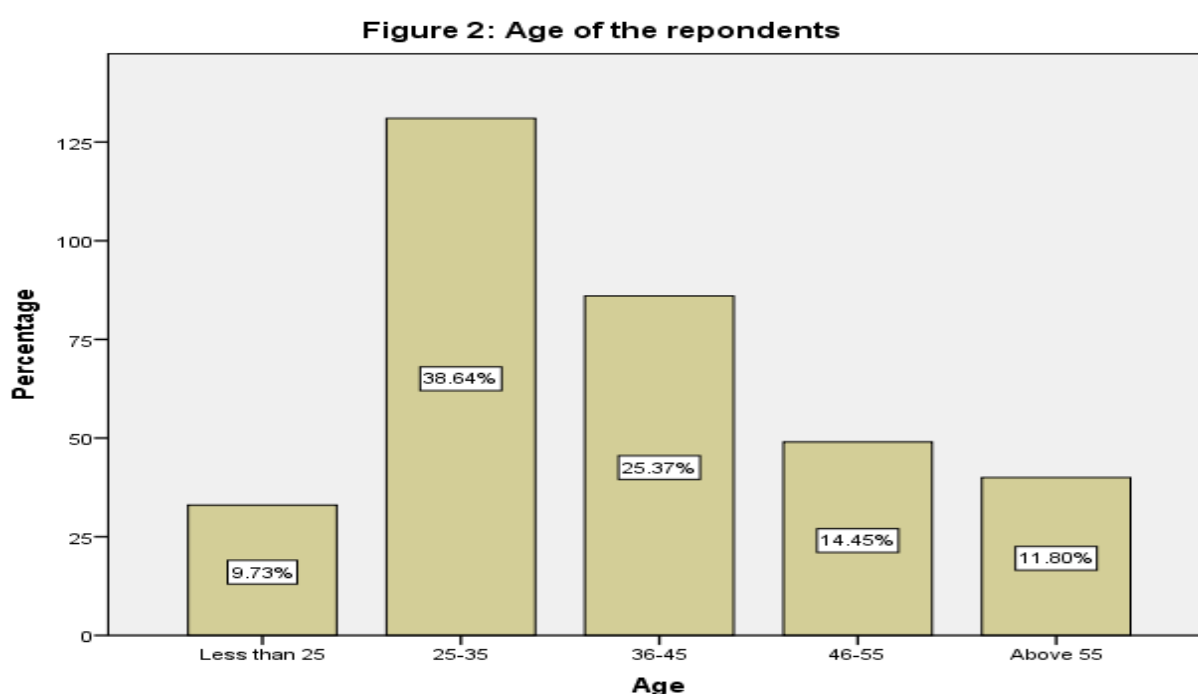
Kebele	Sampled	Actually Completed	Percentage of Collected against its total	Response Rate in %
Areharey	236	235	69.1	99.6
Ubahile	109	105	30.9	96.3
Total	345	340	100	98.6

The RR of a survey is a measure of how many people approached, (i.e. 'sampled') actually completed the survey expressed as a percentage. As shown in Table 1.1, we observe a higher

response rate, which in turn, the more likely the results are representative of the population, provided the sampling is appropriate in the first place. These figures also imply that the respondent population is motivated (as they are benefited from the project) and the survey is well-executed.

As it is also observed from Table 2, majority of the households asked are residing in Areharey which has more population density than that of Ubahile.

From those who had given valid responses, 61.9% of the respondents are found to be females while the rest are males. The reason why we get such inflated sex ratio (more female respondents) is that as the survey is house to house mostly females are likely present in the house thereby included in the survey. Coming to the age distribution of the respondents, majority of them are found to be in 25-35 and 36-45 age categories. This shows most of them are on the productive age which is important for the economic productivity of the pastoral people. [See Figure 2]



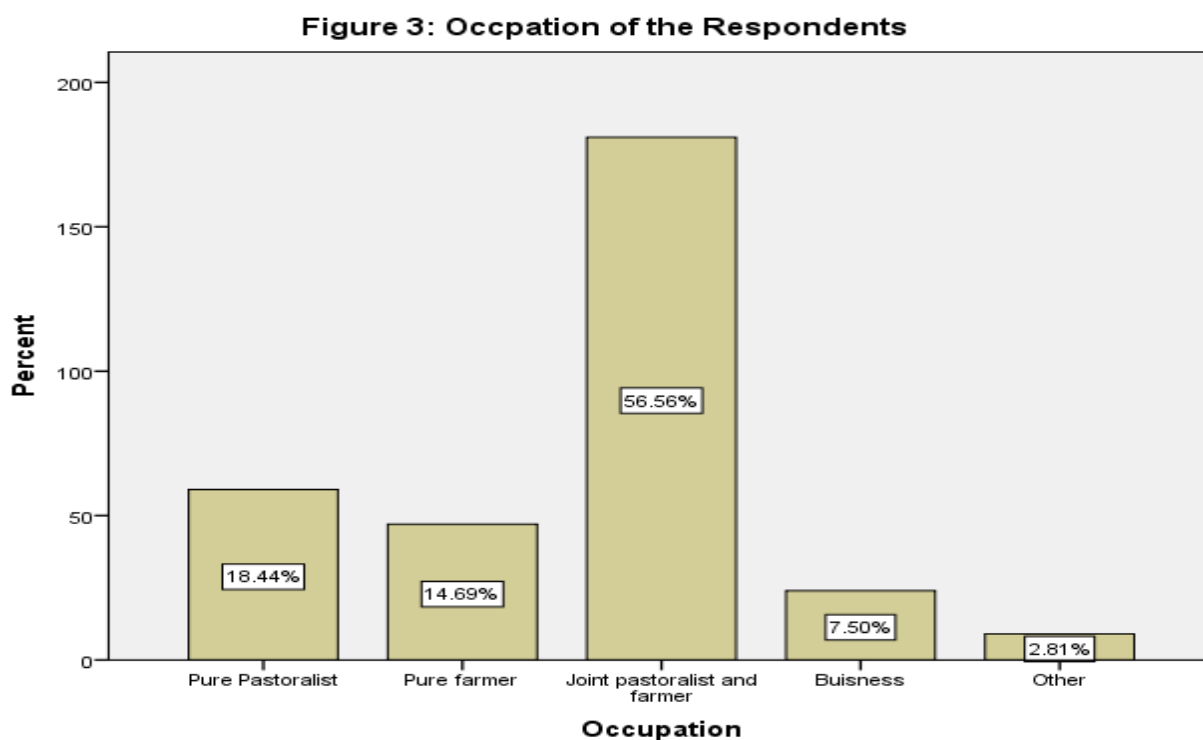
As indicated in Table 2, majority (92.8%) of the respondents surveyed are illiterate. We have observed this when we were on field work. There was no formal school in both kebeles. In addition on the FGD this was reflected and it is among one of the most important current needs

in the community. This also has its own impact on labor production and productivity. (See Table 3)

Table 3: Educational Status of the Respondents

Education	Frequency	Percent
None	311	92.8
Primary	24	7.2
	335	100

Majority of the respondents (56.6%) of the survey areas are working pastoral activity and farming on a joint manner for their livelihood. 18.4% are pure pastoralist while 14.7% are pure farmers and the rest 10.3% do business and other things (like labor and help from other relatives). [See Figure 3]



Most of the respondents (85.5%) of surveyed answered that they are married. 3.6 % of them are single while the rest 11.0% are either separated or windowed. From those surveyed, there are households containing one to twenty one members. On average, there are 6.6 people within each

household. The reason for this higher household size is the practice of polygamy mainly visible in these communities. [See Table 4]

Table 4: Marital Status of the Respondents

Marriage Status	Frequency	Percent
Single	12	3.6
Married	288	85.5
Windowed	30	8.9
Separated	7	2.1
Total	337	100

3.2 Improving Livestock Rearing

The output needed in this section is to see that Livestock rearing to be improved through the introduction of various adaptation measures aimed at improving pasture management and strengthening animal husbandry.

Livestock are domesticated animals raised in an agricultural setting to produce commodities such as food, fiber and labor. Livestock rearing is a key livelihood and risk mitigation strategy for small and marginal farmers. Livestock are generally raised for profit. Raising animals (animal husbandry) is a component of modern agriculture. The economic value of livestock includes: meat, dairy products, fiber, fertilizer, labor and land management. Survey results are discussed below briefly.

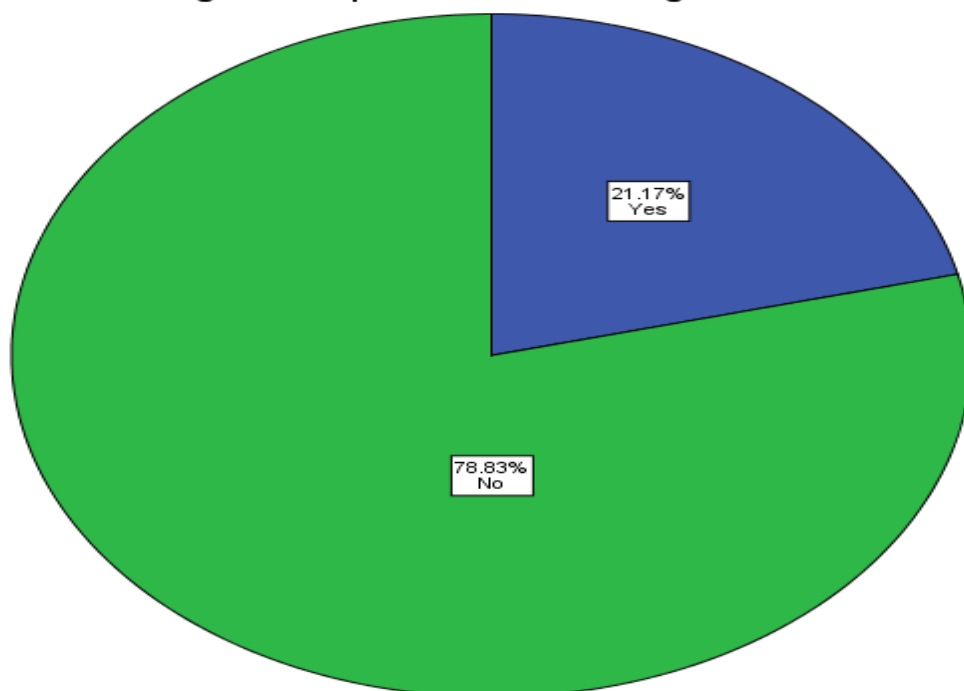
The land holding patterns are significantly different. Majority of the respondents (52.9%) are small land holders while 31.9% are big land owners and the rest 15.2% are either marginal land holders or landless. [See Table 5]

Table 5: Type of Landholding Patterns of the Respondents

Type of Land	Frequency	Percent
Big	105	31.9
Small	174	52.9
Marginal	12	3.6
Landless	38	11.6
Total	329	100

Among those 88.4% who have land, only 21.2% are experienced in cultivating a fodder. This is a very small figure which depicts narrowed culture of fodder cultivation. [See Figure 4]

Figure 4: Experience in cultivating a fodder



From those who have no experience in cultivating a fodder [each of the four choices analysed separately] 55.9% said there is scarcity of land (44.1% said no land scarcity), 81.4% said there is scarcity of water [note that this is greatest of all problems observed there] (18.6% said no water scarcity) and 65.5% answered there is scarcity of seeds (while 34.5% answered no seed scarcity).

And finally those who have said there is other type of scarcity include 19.2% which is the least figure among its four counterparts (80.8% answered no other scarcity). Although small in numbers from those of 19.2% who answered other type of scarcity, they have listed other problems like scarcity of animals, scarcity of facilities (cultivating tractors & other farming materials), I do not want to do, because I am doing business, lack of government help, lack of finance, and lack of fertilizer. [See Table 6]

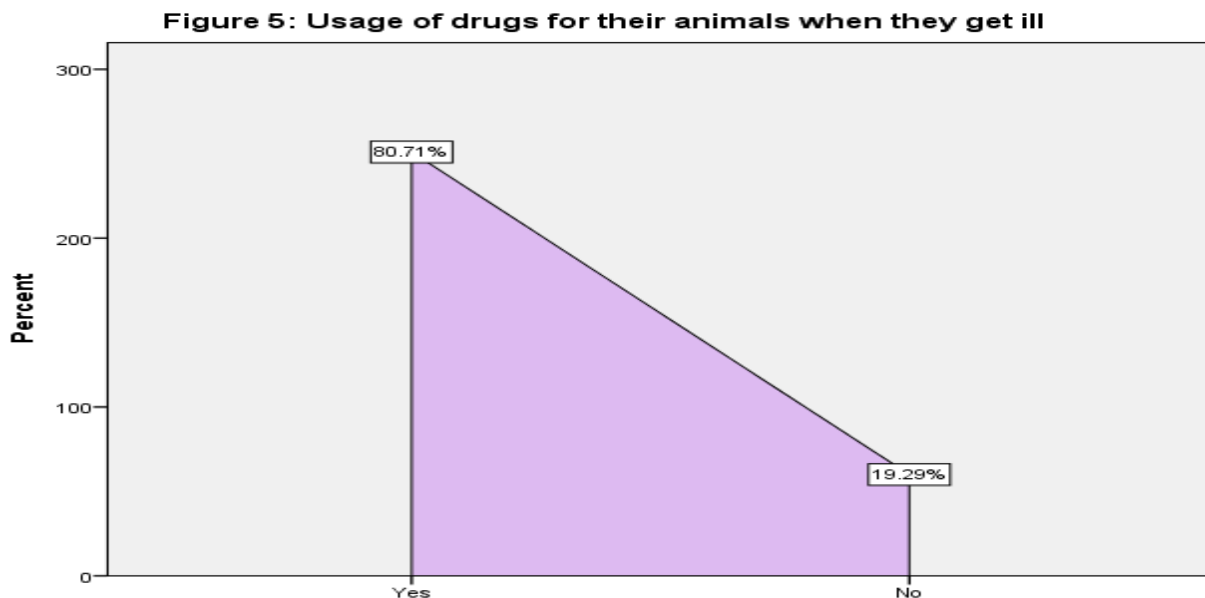
Table 6: Types of Scarcity Observed in Cultivating a Fodder

Type of Scarcity	Yes	No	Priority Need Rank
Land	55.9%	44.1%	3
Water	81.4%	18.6%	1
Seed	65.5%	34.5%	2
Other	19.2%	80.8%	4

From those who had previous experience with cultivating a fodder, we asked them to guess how much of land they use for fodder (in hectare) per annum. From those surveyed, there are households using land for fodder 0.03 (same for both kebeles) to 150 (36 for Ubahile & 150 for Areharey) hectare. On average, they use 9.28 (9.32 for Ubahile & 10.79 for Areharey) hectare of land for fodder within each household.

We have also asked them of their experience regarding animal vaccination. Less than half of them (43.6%) vaccinated their animals against infectious diseases while the rest 56.4% do not do so. This figure implies awareness on importance of animal vaccination is low.

However, the reverse is true when we come to use of animal drugs, most of them use animal drugs. 80.7% of the respondents surveyed answered they have used drugs for their animals while the rest 19.3% do not do it. From those 19.3% who have replied no animal drug usage, 49.1% use traditional methods while the rest 50.9% use nothing. [See Figure 5]



From those who had previous experience with animal drug usage, we asked them to guess how many drugs they purchase per annum. From those surveyed, there are households using drugs for their animals 1 (same for both kebeles) to 30 (12 for Ubahile & 30 for Areharey) in number. On average, they use 4.55 (3.94 for Ubahile & 4.86 for Areharey) number of drugs when their animal get ill within each household with an average total cost of 1,293 birr.

On FGD meetings in both kebeles we had discussed the animals' diseases common on the survey areas. They have told us the symptoms; however, we are not able to list the diseases as we do not know their scientific names. Therefore we tried to list disease symptoms by animal type as follows. There is no animal health facility in both areas surveyed. We have tried to list the symptoms by animals' disease as follows:

- On cows and oxen the disease symptom is it will prohibit movement thereby making it sit, hindering mouth openings etc. There is also a deadly killer in 24 hours whose symptom is fatigue and it is called “eteso” in Somali language. If it passes 24 hours, the chances of survival will increase.
- On Camels, there seems to be a seasonal disease. The disease will make the skin to be sore which makes it to lose some part of its meat. Their legs will darken and their nails

will be off from their leg fingers. Sore mouths and swollen necks are also additional symptoms.

- On goats, the symptoms are diarrhea, much fluid via their nose, sore skin, etc
- On sheep's, the symptoms are changing of skin color, abolishes skin hair, it is also genetically transmitted. There is also insect disease as soon as it entered the sheep will collapse and die.
- Other studies show that Livestock diseases including Trypanosomiasis, Contagious bovine Pleuro-pneumonia (CBPP), Contagious caprine Pleuro-pneumonia (CCPP), Anthrax, Sheep and goat pox, Parasite and Barbarossa infestation are commonly affecting the production and productivity of livestock.

3.3 Improving Hygiene and Sanitation

Safe water and adequate sanitation are basic to the health of every person on the planet, yet many people throughout the world do not have access to these fundamental needs. An important step towards resolving this global crisis is to understand its magnitude: how many people lack access to drinking-water and sanitation?

To help answer this question, household surveys are conducted every year throughout the world to assess drinking-water, sanitation, and hygiene-related practices at the household level. Hereafter we present the results of hygiene and sanitation practices of our target areas. The outcome expected here is to reduce communities' vulnerability WATSAN related hazards.

Almost all (92.9%) of the households living in the target areas do not have a toilet while only 7.1% have access to toilet. United Nations agencies estimate that the persistent lack of toilets and sewage treatment leads to the deaths of some 700,000 children a year from diarrhea and other avoidable ailments linked to fecal contamination.

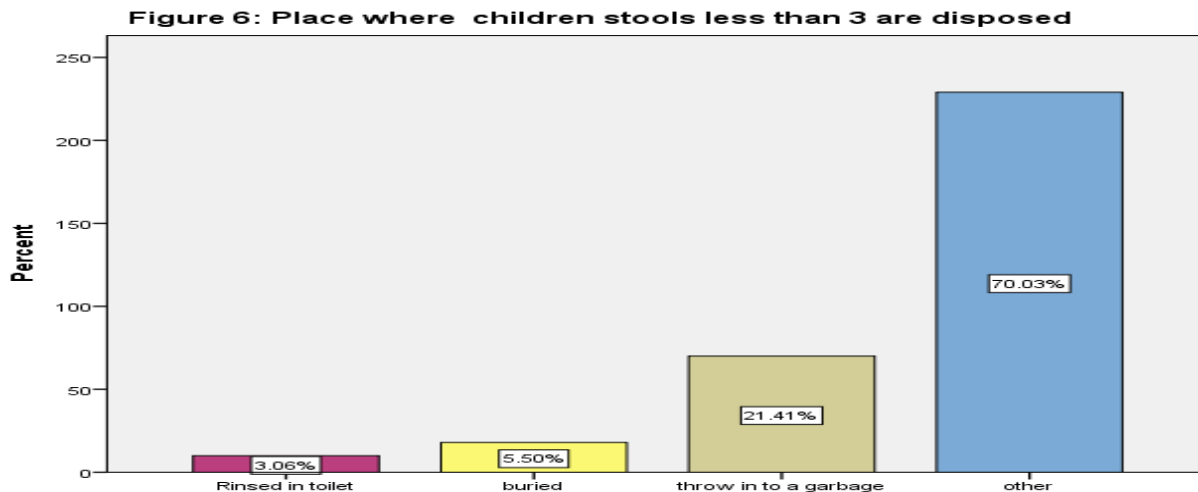
As it is discussed in the above paragraph most of the households do not have a toilet facility. To this end equivalent total number of households' i.e. 92.9% (99.0% in Ubahile and 90.1% in Areharey) still practices open defecation in the target areas surveyed. The actual coverage of improved sanitation facilities (which is the coverage that counts for the MDG targets) is

extremely low throughout, is only 1.7% (but if we include unimproved, improved and shared the figure grows to 7.1% which is still very low) for the whole survey. This is extremely low figure which needs a very much hard work for the project to meet its output for declaring defecation free environment by the end of the project period. [See Table 7]

Table 7: Sanitation Coverage of the Target Areas

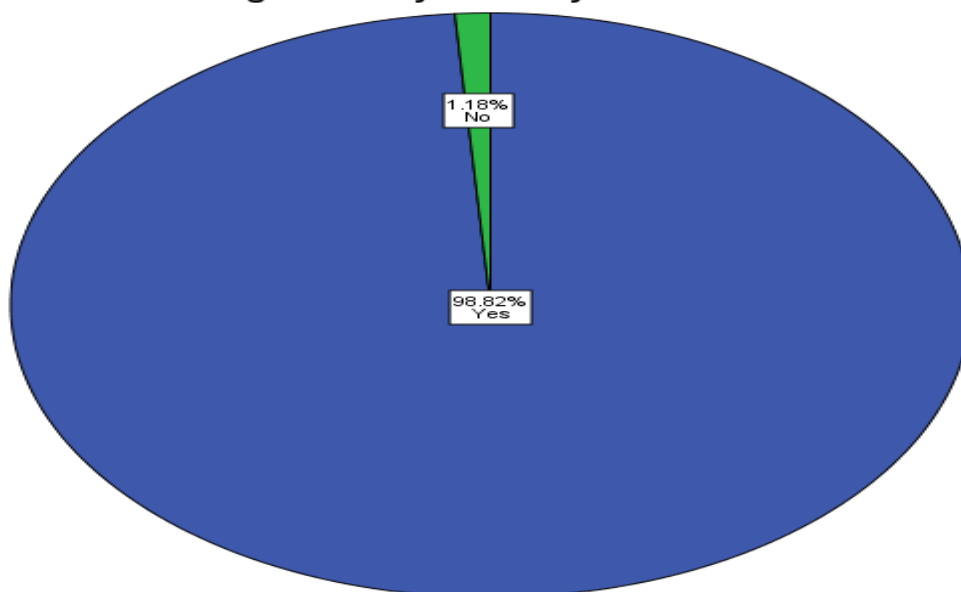
Kebele	Sanitation Type	Frequency	Percent
Areharey	Open Defecation	210	90.1
	Unimproved (Traditional Latrine)	5	2.1
	Shared	14	6.0
	Improved latrine	4	1.7
	Total	233	100.0
Ubahile	Open Defecation	104	99.0
	Unimproved (Traditional Latrine)	1	1.0
	Total	105	100.0

From those who (7.1%) have a latrine access, 66.7% answered the latrine is in a good condition (both inside and outside). Note that the sanitation condition in Areharey is slightly better than that of Ubahile. As the toilet facilities coverage in the target areas is very low, only few households 3.06% rinsed in toilet the stool of children under three. 5.5% of them buried it. The third method which accounts 21.4% which is markedly higher percentage share than the previous two methods is throwing into a garbage method. This garbage's are traditional garbage's that the households construct to store wastages for a temporary period of time. However, the majority of the households (70.03%) used other methods like some of them do not have Childs aged less than 3 and most of them throw it somewhere in the outside. [See Figure 6]



Good hand washing is the first line of defense against the spread of many illnesses and it is like a "do-it-yourself" vaccine—it involves five simple and effective steps (think Wet, Lather, Scrub, Rinse, Dry) you can take to reduce the spread of from the common cold to more serious illnesses such as meningitis, bronchiolitis, influenza, hepatitis A, and most types of infectious diarrhea. so you can stay healthy. Regular hand washing, particularly before and after certain activities, is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others. Among all of the respondents almost all (98.8%) of them wash their hands [See Figure 7]. Regarding the frequency of washing hands; 50.6%, 45.3% and 4.1% of the respondents wash their hands usually, sometimes and rarely respectively.

Figure 7: Do you wash your hands?



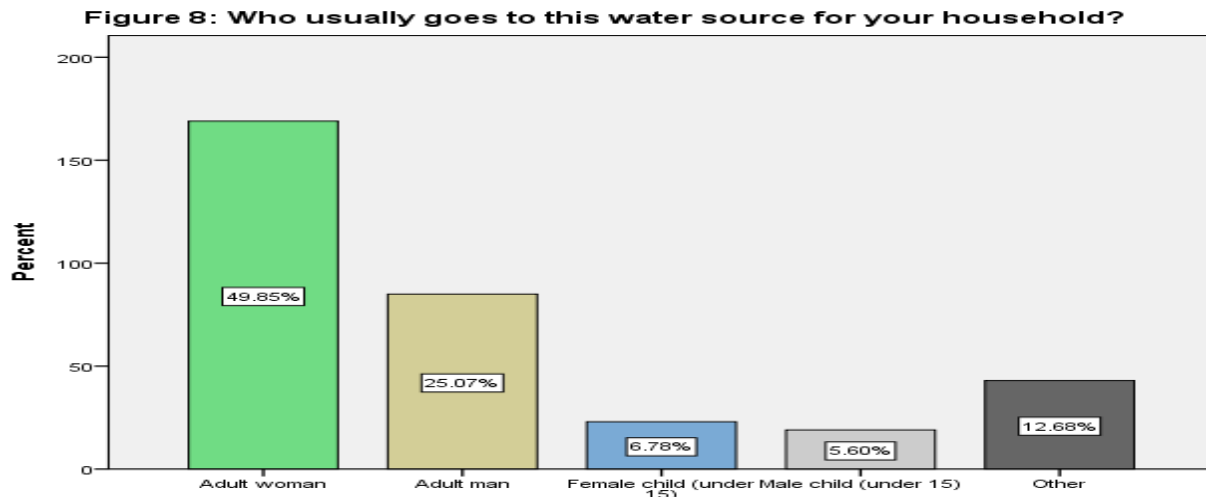
The output needed here is that Target communities demonstrate improved knowledge on the link between hygiene practices and water borne diseases. Its aim is to increase the number of target population practicing hand washing at critical times by the end of the project. In both kebeles the practice of washing hands before eating food and after defecation is very high which is 91.2% (91% in Areharey & 91.4% in Ubahile) and 90.3% (94.0% in Areharey & 90.3 in Ubahile) respectively. However, washing hands at critical times like:- after cleaning Childs bottom, before preparing food, before feeding a child, after taking care of animals are just above the average 50% and almost similar results are observed in both target areas. [See Table 8]

Table 8: Demonstrations of Hand Washing Practices at Critical Times in the Target Areas

Critical Time	Areharey		Ubahile		Total	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
After Defecation	94.0	6.0	81.9	18.1	90.3	9.7
After Cleaning Childs Bottom	62.0	38.0	69.5	30.5	64.3	35.7
Before Preparing Food	60.7	39.3	52.4	47.6	58.1	41.9
Before Eating Food	91.0	9.0	91.4	8.6	91.2	8.8
Before Feeding a Child	50.4	49.6	53.3	46.7	51.3	48.7
After Taking Care of Animals	50.0	50.0	54.3	45.7	51.3	48.7

Safe water coverage is 44% in Somali regional state while it is 69% nationally. This is because all Somali regional state's biggest problem is the lack of water. The community focused on construction and rehabilitation of community birkeds for improved rainwater storage. Thus this is the only source of drinking water for all the target areas surveyed.

The time it takes to fetch water is seasonal. During the rainy period it will take them 30 minutes to 1 hour. However, during dry seasons things are difficult here, they elapse almost a day to fetch water from their surroundings. Mostly women (49.9%) fetch water but when they get pregnant the man (25.1%) will take over the mission. Others account 12.7% and they have said some use car for fetching and some said random chance (anyone who has free time). [See Figure 8]



Significantly higher number i.e. 69.1% (66.4% in Areharey & 75.2% in Ubahile) of respondents does use different treatment mechanisms to make the water safer to drink. But 30.9% of the respondents do not use any treatment. Due to this most of the respondents (as the treatment mechanisms are not as such perfect) are vulnerable to vomiting, diarrhea, abdominal pain, etc. From those who treat the water 8.9% boil, 21.9% stain it through a cloth, 35.8% let it stand and settle, 2.4% water filter and the rest 31.1% are others (who directly drink as it is, boiling only for children etc).

The output needed hereunder is to strengthen health care referral system through community awareness raising. *Almost one third 35.2% (32.1% in Areharey & 42.3% in Ubahile) of the respondents have been referred to hospital or other health facilities.* Their referral time ranges from as recent as before two months to 6 years ago. The place where they referred include: Jijiga, Hargessa, Bale Gudale, Harshin, and Hartsheik. The reasons for referral include hypertension, arthritis, labor delivery, muscle not working, abnormal menstruation, malaria, kidney infection, Postpartum hemorrhage (PPH), Tuberculosis (TB), common cold, abdominal pain, excessive bleeding, gastric, retention of placenta and typhoid. The mode of transport includes; normal bus, by foot & walking for long period of time, car rent and ambulance.

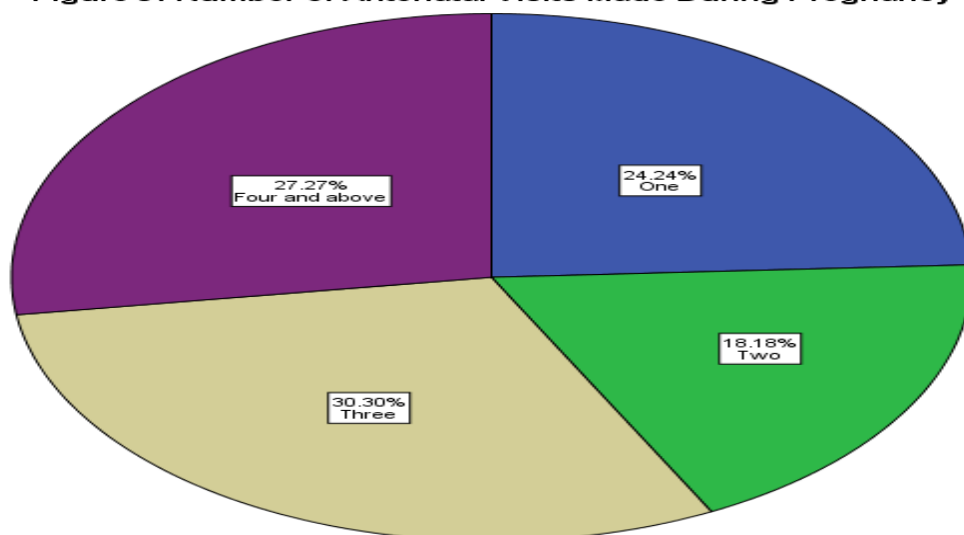
3.4 Antenatal and Postnatal Care

The output expected from this section is to Increase awareness of importance of access to health services (antenatal delivery and post natal). When a woman's pregnancy has been diagnosed, she should immediately go to an antenatal clinic to receive regular check-ups before the baby is born. These are designed to detect problems of the unborn baby before symptoms occur so that more help can be given. Post natal care is likewise necessary to ensure that no complications have developed in the woman after childbirth.

Thirty-four percent of women who gave birth in the five years preceding the survey received antenatal care from a skilled provider, that is, from a doctor, nurse, or midwife, for their most recent birth. This is a marked improvement from 28 percent in 2005. One woman in every five (19 percent) made four or more antenatal care visits during the course of her pregnancy, up from 12 percent in 2005. The median duration of pregnancy at the time of the first antenatal visit is 5.2 months. Only 10 percent of births in the past five years were delivered by a skilled provider. More than six women in every ten (61 percent) stated that a health facility delivery was not necessary, and three in every ten (30 percent) stated that it was not customary. Just 7 percent of women received postnatal care in the first two days after their last delivery in the two years before the survey. The most important barrier to access to health services that women mention is taking transport to a facility (71 percent), followed by lack of money (68 percent) and distance to a health facility (66 percent). [EDHS 2011]

Majority (87.9) of the respondents have been pregnant. *However, only 11.3% (12.3% in Areharey & 9.3% in Ubahile) of them received antenatal consultation during their pregnancy.* Concerning antenatal visits from those 11.3% who make antenatal consultation during pregnancy 24.2%, 18.2%, 30.3%, and 27.3% account for those who made one, two, three, and four & above times antenatal visits respectively. [See Figure 9]

Figure 9: Number of Antenatal Visits Made During Pregnancy



Most of the respondents (47.1%) have started their first visit during the pregnancy period of 5-9 months [See Table 9]. And almost all (97.8%) of them did not receive HIV testing during delivery. In addition 87.1% of them have not been vaccinated for TT. Regarding knowledge of the respondents on general danger signs during pregnancy 52.8% know excessive bleeding, 28.9% know convulsion, 54.4% know prolonged labor, 51.6% know high fever and 22.8 know other additional symptoms like hypertension, anemia, flank pain, unusual headache, malnutrition, body swelling, being sleepless, and still birth.

Table 9: Starting Month of First Antenatal Visit

Visit Time	Frequency	Percent
1-3 month	12	35.3
4-6 month	6	17.6
5-9 month	16	47.1
Total	34	100

Majority (98.4%) of the respondents has given birth in their homes, 0.6% in health centers and 0.9% in hospital. 74.8% of them has answered their newborn child started breastfeeding soon. Exclusive breastfeeding is practiced by 68.2% of the respondents. *Concerning post natal care, only 11.5% (13.9% in Areharey & 6.3% in Ubahile) has checked at the health facility following after their delivery.* The reason why most of the respondents do no check at health

facility following after delivery are: lack of transportation, lack of problem after delivery, because the health post is not functional, lack of finance, lack of education i.e. do not see it as necessary, women are not allowed to go to the place, lack of public transportation facilities, and the health centers are from our home.

3.5 Malaria

Malaria is one of the most deadly diseases in Ethiopia. And Somali is one of the environmentally and geographically prevalent places in Ethiopia for malaria. The output expected in this section is to reduce the prevalence of malaria in selected communities.

Majority (84.0%) [87.6% in Areharey & 76.0% in Ubahile] of the respondents know about malaria. However, most of them do not know about the mode of transmission. Only 43.4% (45.0% in Areharey & 39.8% in Ubahile) are well aware concerning the mode of transmission. The possible reasons they have given include: at the rain time we see mosquito, the rain water that stay on the ground, mosquito bite, due to open dam, dirty water and the grass near to their house.

66.9% of the respondents know the sign and symptoms of malaria. However, a much lessened number (20.4%) of respondents use mosquito nets for their families for the sake of malaria prevention. The reason for this low mosquito net usage are: lack of money, lack of external support, do not have mosquito nets, did not even see what the nets look like, it is not available in our area, there is no health facility or other organization delivering the net, and do not know the use of mosquito nets.

3.6 Road Traffic

Extremely low number (5%) [6% in Areharey & 2.9% in Ubahile] of the respondents surveyed knows about traffic rules and regulation.

They had sometimes heard about road traffic accidents. The reasons for the accidents were road problem, high speed of cars, drivers not driving on the right road, etc. Regarding their experience on highways, they do not have preference to go on the right or left side.

3.7 Livelihood

Pastoralism is an important livelihood strategy in Ethiopia, yet pastoralist communities are particularly vulnerable to food insecurity due to climate change, livestock production infrastructure/facilities problems, market limitations, underdeveloped IGAs, price fluctuations and policy environment that often neglects the specific needs and potential contribution of pastoralist communities.

Only a few numbers (16.3 %) [18% in Areharey & 12.4% in Ubahile] of respondents has enough money to sustain themselves. The first main source of income for the respondents is livestock and the second main source of income is agriculture. [See Table 10]

Table 10: Main Source of Income

Source of Income	Yes (%)	No (%)
Agriculture	41.6	58.4
Livestock	71.1	28.9
Employed	0.6	99.4
Labor	9.4	90.6
Other	8.3	91.7

4. Conclusions and Recommendations

The integrated community resilience project will strengthen communities in four different areas: disaster risk reduction, health/ water and sanitation, livelihood and capacity building. The major results of the survey along with recommendations are presented as follows:

4.1 Conclusions

- ✓ Though 88.4% of the respondents have lands whether big, small or marginal only 21.17% are experienced in cultivating a fodder. On average they use 9.28 hectare of land for fodder within each household.

- ✓ Less than half of the respondents (43.6%) have vaccinated their animals' against infectious diseases. In reverse to this most of them (80.7%) have used drugs for their animals when the get ill. On average they use 4.55 numbers of drugs with a mean cost of 1,293 birr per annum.
- ✓ 92.9% of the households still practices open defecation. Only 7.1% have access to toilet facility
- ✓ From those who have toilet facility, 66.7 answered that the latrine is in a good condition both inside and outside
- ✓ 98.82% of the respondents wash their hands but this actually varies when we come to washing hands at critical times: 91.2% after defecation, 64.3% after cleaning child's bottom, 58.1% before preparing food, 91.2% before eating food, 51.3% before feeding a child, and 51.3% after taking care of animals
- ✓ 35.2% of the respondents have been referred to hospital or other health facilities
- ✓ 69.1% of the respondents does use different mechanisms to make the water safer to drink (they drink only water collected from the field)
- ✓ 87.9% of the respondents have been pregnant. However, only 11.3% of them received antenatal consultation during pregnancy, 98.4% of the respondents has given birth in their homes and concerning post natal care only 11.5% has checked at the health facility following after their delivery
- ✓ 84.0% of the respondents know about malaria. However, only 43.4% are well aware regarding the mode of transmission
- ✓ Extremely low number (5%) of the respondents surveyed know about traffic rules and regulations
- ✓ Only a few numbers (16.3%) of the respondents has enough money to sustain themselves. The primary source of income on first place is livestock and agriculture is on second place

4.2 Recommendations

- ✓ As most of them are agro-pastoralist, fodder cultivation is inevitable which is observed in a poor stage. The project should do something to resolve problems such as scarcity of water, scarcity of farming materials, scarcity of seeds, etc.
- ✓ Most of the respondents use drugs for their animals but there is no veterinary clinic or animal drug store around their residence. If possible construction of animals health facilities of drug supply stores are recommended
- ✓ Open defecation is one of the major problems observed in the target areas. The project should teach the people the advantage of declaring defecation free environments, how to construct toilets and supply them some incentives like latrine

- ✓ Washing hands at critical times such as after cleaning child's bottom, before preparing food, before feeding a child, & after taking care of animals are somewhat at low stages just above average values. Therefore, community awareness creation programs should be conducted.
- ✓ Not only referrals but also local health facilities are not suitable. The referrals are very far without transportation facilities and lack of finance from respondents can be cited as examples. The local health facilities are not equipped with the necessary materials and well trained health personnel. Thus, possible remedies should be sought by the project as this has been one of the major problems raised during the FGD discussions.
- ✓ Access to safe water is very low. They use rain water which is not clean and the mechanisms they use to clean are not as such perfect. Awareness creations as well as construction of safe water facilities and supply of cleaning chemicals are recommended.
- ✓ Antenatal and postnatal care services are very low and home delivery is extremely very high. Efforts to improve antenatal and postnatal care should focus on addressing geographical and economic access while striving to make services more culturally sensitive. Antenatal and postnatal care can offer important opportunities for linking the health system and the community by encouraging women to deliver with a skilled attendant. Addressing staff shortages through expanding training opportunities and incentives to health care providers and developing postnatal care guidelines are key steps to improve maternal and newborn health.
- ✓ Most of them know about malaria but KAP have to be sought about the mode of transmission and the use of mosquito nets at least for children and pregnant mothers. If possible net delivery is also a good thing.
- ✓ Traffic rules and regulations which are one of the means of prevention of traffic accidents should be disseminated to the community members with special emphasis.
- ✓ Only few members of the community have enough money and are able to sustain themselves. Therefore, the project should help in enhancing food security (like how they increase their livestock (including by products) and associated agricultural productivity) and teach them some coping mechanisms when times are tough.
- ✓ During the FGD meetings, they have ranked according to their priority needs Water as 1st, Health 2nd, Education in 3rd place, and finally at last agricultural materials fourth place.

Annex 1

Questionnaire

Code

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Ethiopian Red Cross Society
Somali Region Community Resilience Project
Baseline Survey Questionnaire

This questionnaire is prepared for the baseline for the project *Community Resilience* to be conducted in Somali region. This baseline survey questionnaire focuses on three different areas; disaster risk reduction, health/water and sanitation (WatSan) and livelihood.

Interviewer Name: _____

Supervisor Name: _____

Date: _____

1. General Information

1.1. Location of beneficiary

a. Region Somali

b. Zone

c. Woreda

d. Kebele

1.2. Sex?

a. Male b. Female

1.3. Age

a. Less than 25 b. 25-35 c. 36-45 d. 46-55 e. above 55

1.4. Level of Education?

a. None b. Primary c. Secondary and above

1.5. Occupation

a. Pure pastoralist b. Pure farmer c. Joint pastoralist and farmer d. business
e. other specify

1.6. Marital status?

a. Single b. Married c. widowed d. separated/divorced

1.7. How many people live in the household?

2. Improving Livestock rearing

2.1. Type of total land holding?

a. Big b. small c. marginal d. landless

2.2. Do you have a previous experience with cultivating fodder?

a. Yes b. No

2.2.1. If yes, Can you guess how much of land you use for fodder(in hectare) per annum

2.2.2. If yes, do you feel that it is enough for the whole year?

a. Yes b. No

2.2.3. If no, what prevents you from doing so?

- a. Scarcity of land b. Scarcity of Water c. Scarcity of seeds
- d. Other Specify

2.3. Have you ever vaccinated your animals against infections diseases?

- a. Yes b. No

2.4. Have you ever used drugs for your animals when they get ill?

- a. Yes b. No

2.4.1. If yes, how many drugs will you purchase per annum? _____

2.4.2. How much the drugs cost you per annum? _____

2.4.3. If yes, what kind of animal diseases are common in this area?

2.4.4. If no, what will you use?

- a. Traditional method b. nothing

3. Improving hygiene and sanitation

3.1. Do you have a toilet?

- a. Yes b. No

3.2. What is your practice regarding defecation?

- a. Open defecation b. unimproved (traditional latrine) c. shared
- d. Improved latrine

3.3. Do you have a practice of washing hands after defecation?

- a. Yes b. No

3.4. Do you see the latrine in a good condition (inside and outside)?

- a. Yes b. No

3.5. Where do you dispose children stools less than 3?

- a. Rinsed in toilet b. buried c. throw in to a garbage
- d. other specify

3.6. Do you wash your hands?

- a. Yes b. No

3.7. If yes, when do you wash your hands?

- a. After defecation b. After cleaning child's bottom c. Before preparing food
d. Before eating e. Before feeding a child f. After taking care of animals

3.8. If yes tell us about the frequency of washing?

- a. Usually b. sometimes c. rarely

3.9. What is the main source of drinking water?

- a. Public pipe b. unprotected (dug well, spring, pond etc)
c. Protected (dug well, spring, pond etc) d. Surface water (river, dam, lake etc)
e. other specify _____

3.10. How long does it take to go there, get water and come back? In
hours _____

3.11. Who usually goes to this water source for your household?

- a. Adult woman b. adult man c. Female child (under 15) d. male child (under 15)
e. other specify _____

3.12. Do you treat your water in any way to make it safer to drink?

- a. Yes b. No

3.13. What do you usually do to the water to make it safer to drink?

- a. Boil b. strain it through a cloth c. let it stand and settle d. water filter
e. other specify _____

3.14. Have you been referred to hospital or other health facility?

- a. Yes b. no

If yes when? _____

Where? _____

Why? _____

What was used as a means of transportation? _____

4. Antenatal and postnatal care

4.1. Have you ever been pregnant?

- a. Yes b. No

4.2. If yes, have you received antenatal consultation during your pregnancy?

- a. Yes b. No

4.3. If yes, how many times?

- a. One b. two c. three d. four and above

4.4. If yes, When did you start your first visit of Antenatal care (ANC) which month?

- a. 1-3 month b. 4-6 month c. 5-9 month

4.5. Did you receive HIV testing during delivery?

- a. Yes b. No

4.6. Have you been vaccinated during your pregnancy for TT?

- a. Yes b. No

4.7. Do you know the general danger signs during pregnancy?

- a. Excessive bleeding b. convulsion c. prolonged labor d. high fever
e. other specify
-

4.8. Place of delivery?

- a. Health post b. health center c. hospital d. home

4.9. Does the newborn child start breast feeding soon

- a. Yes b. No

4.10. Do you give the child exclusive breastfeeding?

- a. Yes b. No

4.11. Have you ever checked at the health facility following your delivery?

- a. Yes b. no

4.12. If no why not?

5. Malaria

5.1. Do you know about malaria?

- a. Yes b. No
-

5.2. Do you know mode of transmission?

- a. Yes b. No

5.3. If yes, can you tell the mode of transmission?

5.4. Do you know the signs and symptoms of malaria?

- a. Yes b. No

5.5. Do you use mosquito nets in your family?

- a. Yes b. no

5.6. If no why?

6. Road Traffic

6.1. Have you heard about traffic rules and regulations?

- a. Yes b. No

6.2. If yes, what are they?

7. Livelihood

7.1. Do you have enough money to sustain yourself?

- a. Yes b. No

7.2. What is the main source of your income?

- a. Agriculture b. Livestock c. Employed d. Labor e. other

Specify_____

Annex 2

FGD

Points to be raised on FGD

1. About safe water use?
 - Where is your water supply source?
 - How far from the village?
 - How many months you have access to water?
 - Have you been using household water treatment?
2. About road traffic accidents?
 - When you are on motorbike do you wear helmet? Seat belt in a car?
 - Have you ever heard about road accidents?
 - What were the possible reasons for that?
 - Do you walk on highways with your left side?
 - Do you have a practice of watching the car speed and distance before you cross a road?
3. Water borne diseases?
 - What water borne diseases are common in this area?
 - What do you do when you and your family get infected?
4. Sanitation condition of the area
5. Exclusive breast feeding implementation by mothers and
6. Cultural norms (bad traditional habits related to breast feeding, delivery, etc)

Key informant Questionnaire

1. Total number of people visiting the health center?(HEW)
2. What was the reason for visiting by major diseases? (HEW)
3. Number of people sent for referral? (HEW)
4. What are the major diseases for cases observed for referral? (HEW)
5. Number of women who take ANC per annum without duplication(HEW)
6. Data on ANC, Delivery and PNC per annum(HEW)
7. Road traffic data of injured people (if possible from worda or zone traffic office)