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COLLEGE OF DEVELOPMENT STUDIES

CENTER FOR ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

GENDER ASPECTS OF IMPROVED WATER, SANITATION AND HYGIENE PRACTICE ADOPTION: IN GIRAR-JARSO WOREDA, NORTH SHEWA ZONE OF OROMIA REGION, ETHIOPIA

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January, 2021

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The Thesis Submitted to the Center for Environment and Development Presented in Partial Fulfillment of the Requirements for the Degree of Masters of Art in Environment and Sustainable Development

January, 2021

Addis Ababa, Ethiopia

DECLARATION

Herewith I, declare that this paper is prepared for the partial fulfillment of the requirements for the award of Master's Degree in College of Development studies center for Environment and sustainable development up on the title Gender Aspects of Water, Sanitation and Hygiene practice adoption in Girar- Jarso woreda, North Shewa Zone of Oromia regional state is prepared with my effort and it is my original work. I have made it independently with the close advice and guidance of my advisor. It has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Declared by: Kidist Gizachew

Signature: _____

Date: _____

CERTIFICATION

I certify that the MA thesis entitled “Gender Aspects of Improved Water, Sanitation and Hygiene practice adoption in Girar-Jarso woreda North Shewa Zone of Oromia region Ethiopia” was conducted by Kidist Gizachew under my supervision and hereby I recommend this thesis for examination.

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ABSTRACT

This study aimed to assess the gender aspects of improved WASH practice adoption in Grar Jarso woreda, north shewa zone of oromia region, Ethiopia. The motivation behind conducting this study was to increase the understanding of the community, academician, policymaker and those who use this research as a starting point to undertake further study on how WASH practice and its sustainability was ensured through avoiding gender-based difference and promote equal participation. In this study, both primary and secondary source of data, as well as the quantitative and qualitative approach, was applied. An interview guide and checklist were prepared to conduct an unstructured interview with key informants and focus group discussions. A close-ended questionnaire was used to collect primary data from selected household respondents. The secondary source of data was gathered from different publications, articles, reports, previous studies, books and websites. For the purpose of this study out of the total 17 kebeles of the woreda about two kebeles were selected and from the total 1484 households of the two kebeles, about 315 sample households were selected through random sampling techniques. The collected data were analyzed through descriptive analysis using SPSS version 20. Women are vital agents for improving potable water, sanitation and the hygiene status of the household.The sanitation status of households plays a significant role in environmental and human health. Several interventions were undertaken by different stakeholders and NGOs such as constructing toilets in the school compound and around villages in the near distance for households, creating awareness about owning area free from fieance and urine as well as the adverse impacts of open defecation on the environment and human health, but still, gaps persist on understanding and sustaining WASH practice. The results of the study revealed that the source of water used throughout the year was hand-dug well and spring respectively. Related to this the sanitation status of households was subject to the source of income and means of livelihoods and have a gender dimension. Open defecation and urination are influenced by culture and gender differences which have health and environmental implication. On the other hand, the hygiene practice of households shows progress, especially after the COVID-19 pandemic. Finally, there should be a strong correlation between water and energy, education, health and women's youth and children's offices to ensure gender equality and WASH practice adoption.

Keywords Environment, Gender water, sanitation, hygiene practice and adoption

ACRONYMS AND ABBREVIATION

FGDs: Focus Group Discussions

HH: Household

HEW: Health Extension Workers

KII: Key Informant Interview

NGO: Non-Governmental Organization

SDGs: Sustainable Development Goals

UFCD: Under Five Children Diarrhea

UN: United Nations

UNICEF: United Nation Children's Fund

VIPL: Ventilated Improved Pit Latrine

WASH: Water, Sanitation and Hygiene

WHO: World Health Organization

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Almost all the nations in the world have reached a consensus to work jointly on improving the living standard of their citizens by 2030. Thus, they dedicated themselves to 17 effective and life-sustaining pillars known as Sustainable Development Goals (SDGs) which was:- charted by the UN in 2015 (Esquivel and Sweet man, 2016). The Sustainable Development Goals recognize that water and sanitation as human rights and have set targets at a 'universal' scale so that people of the planet have and 'equitable' access to potable water, safe sanitation and hygiene practice by 2030 (Esquivel and Sweet man,2016).

It is well known that access to potable water, safe sanitation and hygiene varies with gender, age and socioeconomic difference. Women and girls are especially affected by the lack of access to sufficient sanitation and hygiene because of gender-related differences, cultural and social factors. Gender is differentiated roles and responsibilities created and assigned to women and men, girls and boys in the community based on socially constructed characters, conducts, doings and traits a particular society considers appropriate and ascribes to men and women differently (WHO, 2009).These separate roles and dealings between them may intensify and aggravate gender discriminations where one group mainly males are systematically favored and holds benefits over women (Haussmann, 2016).

As J. Butter (1990) states that, because of the various roles, responsibilities, status and way of life gender makes the social, economic and political variance to be defined as women and men differently with a sense of belongingness. All over the world, the day-to-day functioning i.e. social, cultural and economic interaction makes peoples become adaptive of or learn what is expected and observed, what is anticipated, performed and respond in the expected manner thus gradually build and sustain the gender-based division of activity.

Communities that exist at different levels may differ in degree of inequality in the societal status of their women and men combination. But where the prevalence of inequality exists, the position of women (its associated conduct and role distribution) is typically perceived in less regard or concern than men. Within numerous societal clusters, however, men are more advantageous than women.The availability of resources and different skills such as

educational background and job opportunity with good salary may create the opportunity of monopolization by men over women (Almquist, 1987).

According to the UN water policy brief, the significance of including both women and men in the overall management of water, sanitation and hygiene practices has been acknowledged at the international level, beginning from the 1977 United Nations Water Conference at Mar del Plata (UN Water, 2006). International Drinking Water and Sanitation Decade (1981-90) and International Conference on Water and Environment in Dublin (January 1992) are acquainted with the crucial role of women in water delivery, management and conservation. Furthermore, the resolution inaugurates the International Decade for Action, 'Water for Life' (2005-2015), which calls for women's membership and contribution in water-associated progression efforts (UN Water, 2006).

Empowering women to be front-runners for WASH implementation is championing the role of women in decision-making, capacity building, educating children on promoting improved safe sanitation and hygiene practice (Water For life, 2005-2015 report).

According to the report on gender and development on water, sanitation and hygiene (UN Water, 2006) state that in the wider community women take the primary responsibility for the management of domestic water supply, sanitation and health. The multidimensional use of water is not restricted only for drinking, but also for food preparation and cooking, care of child and care of the sick, private hygiene, washing and waste removal. Due to their high necessity of water resources women have accumulated substantial awareness about water resources, including place, quality and storage methods.

The government of Ethiopia has designed a sound program in response to the country and nationwide requests for water sanitation and hygiene as well as gender equality. The One WASH National Program is serving as a pillar in terms of constructing water points in rural areas, making easy access to clean water and reduce burdens of women, promoting safe sanitation and hygiene practice in schools and health centers. The government of Ethiopia has also endorsed the water resource management policy in (1999) that actively encourages the involvement of interested and concerned bodies including women (Rahmato, 1999).

In the same way, water sector strategies have integrated the gender issues, despite these encouraging initiatives women's full participation and their role in decision making is still underestimated (Manase, et al., 2003). However, the gender aspect of improved WASH

practice adoption was not sufficiently studied to provide empirical evidence to policymakers and implementers to enhance knowledge-based intervention.

1.2. Statement of the Problem

In Ethiopia, 60 to 80 percent of transmissible diseases are attributed to inadequate access to safe water and inadequate sanitation and hygiene services. Also, an estimated 50 percent of the consequences of undernutrition are caused by environmental factors that include poor hygiene and lack of access to water supply and sanitation. There are strong links between sanitation and stunting, and open defecation can lead to fecal-oral diseases such as diarrhea, which can cause and worsen malnutrition.Diarrhea is the primary cause of under-five mortality in Ethiopia, accounting for 23 percent of all under-five deaths – more than 70,000 children a year (UNICEF,2016).

According to (Sweetman and Medland, (2017) on the introduction to gender and water, sanitation and hygiene, gender and development, the need for water, sanitation and hygiene is permanent throughout the life of human beings. Research done in 24 sub-Saharan African countries showed that about 13.54 million matured women and 3.36 million kids devote more than 30 minutes every day fetching water for family use (Graham et al., 2016). Like another major developmental area, adopting and sharing the experience of using clean water, safe sanitation and hygiene practices are extremely gendered or subjected to discrimination by nature. Access to and adoption of WASH is intervened not only by poverty and the nonexistence of basic infrastructure but also by power and inequality (Bishop, 2016).

In many developing countries including Ethiopia, there are several problems such as the absence of basic clean water, safe sanitation and hygiene (WASH) facilities and practice at the school level, cultural challenges and perception of WASH practice. Due to this and other related factors, women and girls are directly become the primary victims and suffer a lot from bodily and psychological disorders (Sweetman and Medland, 2017). This decreases girls' enrolment and school attendance during menstruation, lack of confidence and concentration on education. The same is true for women at the household level within inadequate access to and low adoption of sanitation and hygiene, there is no space for preparing clean food, washing hands before eating and after toilet, caring for the children and the sick. Similarly,

the absence of a toilet near distance or the dwellings results in open defection and urination, again this has health and environmental impact (Sweetman and Medland, 2017).

The most obviously observed gaps between women and men particularly in developing countries are widened differences in practicing safe sanitation and hygiene activities. The promotion of hygiene and delivery of sanitation at the household level is often considered as the main tasks of women. Women are advocators, educators and leaders of home and community-based sanitation and related hygiene practices (UN Water, 2006).

Different researchers study WASH in many different ways. For example (Cantrell,2001) studied the evaluation of water, sanitation, and hygiene program in rural communities extensively and also assessed the access to improved WASH, its proper implementation and the pre and post results of WASH induce change. If such gender aspects of water supply, safe sanitation and hygiene adoption gaps are not properly addressed, there will be an adverse impact on human health and the environment. Avoiding or balancing gender difference is expected to achieve not only access to clean water, safe sanitation and hygiene but also to ensure the sustainable adoption of WASH which has both direct and indirect implications on the health, wellbeing and productivity of households.

In grara –Jarso woreda the attitude toward WASH and it's sustainability particular the sanitation part may need extensive work because in the existence of communal latrine many practices of open defecation to some extent lack hygiene and division of tasks were observed.

The study tries to clear the vague understanding of sanitation as the absence of diseases to a more broad perception (Mulopo,2015) and (Svahn,2011) conclude about the adverse impacts of alienating women and gender imbalance not only from water management but also from exclusion in the overall spheres of developmental activities especially the water sector. Moreover, previous studies are different in terms of methodology and data analysis. Even regardless of the numerous studies conducted nothing is researched in Grar Jarso woreda as far as the researcher's knowledge is concerned. Therefore, by understanding these gaps, in the current study the researcher is initiated to work on gender aspects of improved WASH practice adoption, to extensively assess the gender-based activities and sustainable practices in North Shewa Zone Grar Jarso woreda.

1.3. Objectives of the Study

The general objective of this study was to assess the gender aspects of improved water, sanitation and hygiene practice adoption in Grar Jarso woreda, North Shewa Zone of Oromia national regional state.

1.3.1. Specific Objectives

- ✓ To assess the knowledge and awareness of the community towards gender aspects of improved WASH practice adoption.
- ✓ To identify the gender role and responsibility in keeping the sustainability of improved WASH practices.
- ✓ To analyze the contribution of adopting improved WASH practice on health and the environment.
- ✓ To identify the major gender-based challenges of the community for adopting improved WASH practice.

To guide the study towards the attainment of its objective, several research questions were developed:

1. How is the knowledge and awareness of the community towards adopting improved WASH practices?
2. What is the role and responsibility of gender toward sustaining improved WASH practice adoption?
3. How does adopting improved WASH practice contribute to the environment and health?
4. What are the major barriers that community have during adopting improved WASH?

1.4. Scope and limitation of the study

Geographically the study area for this study is Grar- jarso woreda, North Shewa Zone of Oromia regional state. Thematically the study focuses on the gender aspect of adopting sustainable WASH practice, specifically on how sanitation and hygiene activities were adopted among women and men, boys and girls.

The study rise issues of gender-related WASH practice, gender-based role and responsibility, the contribution of adopting WASH for sustainable environmental protection and human health and challenges encountered while practicing WASH. It covers two randomly selected samples of kebele's out of the 17 kebeles from the high and low land area. Also, its major targets were rural household respondents of sample kebele's, especially women-headed

households. Besides, information was also gathered from woreda's water and energy, women, children and youth affairs, education and health offices.

During the collection of data, it was difficult to collect data at the appropriate time due to COVID- 19 pandemic. Political instability and financial limitations were also other problems for data collection.

1.5. Significance of the study

The findings of this study might have much significance for academicians as research input, providing empirical evidence for local stakeholders and decision-makers. It will help the readers and end-users to better understanding of the gender aspects of improved water sanitation and hygiene practice adoption which ensures sustainable development, environmental protection and safe human health in long run. Sustainable development is impossible without realizing gender equality in the area of access to clean water, safe sanitation and hygiene. It will also make it possible for the community to believe in the non-gendered division of task, role and responsibility, particularly in the area of water sanitation and hygiene. It might also help policymakers to focus on and make inclusive gender and environmental issues as a priority in any sustainable development activities and used as background for policy amendments. Also, this study will be helpful for the researchers, since it enriches their knowledge base and also enlarges the scope for further research opportunities in the area of gender aspects of improved water sanitation and hygiene practice adoption.

1.6. Organization of the Thesis

The paper is organized into 5 chapters. The first chapter introduces the content of the paper, briefly discusses the background of the study, statement of the problem, general and specific objectives including research questions, scope and limitation, the significance of the study, ethical issues are all parts of chapter one. Chapter two covered a related literature review, whereas chapter three discussed the research methodology. Chapter four presented the result and discussion of the study and the last chapter provided major conclusions and recommendations.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Concepts of Gender

Gender is used to refer to a set of roles, responsibilities, rights, expectations and obligations that are socially and/or culturally associated with being male or female. Gender also includes the power relations between and among women and men, and girls and boys. It's based on widely shared beliefs and norms within a society or culture about male and female characteristics and capacities. Similarities and differences will vary within and between societies and can change over time.

Gender is different from 'sex,' which refers to how people are classified biologically as male or female. At birth, infants are assigned a sex based on a group of characteristics such as chromosomes, hormones, internal reproductive organs and genitalia (USAID, 2012).

Gender is defined as socially constructed social differences and relations as well as role and responsibility between men and women beyond biological nature which are learned and often experienced in society due to the traditional, cultural and behavioral context of the area and is subject to change over time. It is also a way of forming a distinct societal status for undertaking the task of various roles and responsibilities. so gender is differently perceived and practiced components of social organization made upon this unequal status (Lorber and Farrell, 1991).

To discuss why gendering is done from birth permanently and by everyone, we have to understand not only the way peoples experience gender but, considering gender as part and broad components of social institution is important. As major components of social institution gender are the most practicable way through which human beings lead their day-to-day interaction and communicate to achieve certain issues. Through historically learned behavior or culturally transmitted habits peoples pay attention and practice gender division of labor, distribution of resources and assigning different roles and responsibilities even including for children is become chronic and continuing (Acker, 1991).

2.1.1. The Difference between Gender Equity and Gender Equality

Gender equity is the process of being fair to women and men, and girls and boys. To ensure gender equity, action must be taken to compensate for ingrained economic, social and

political disadvantages that prevent women and men, and girls and boys from operating on a level playing field. Gender equality is a state or condition that affords women and men equal enjoyment of human rights, socially valued goods, opportunities and resources. Genuine equality means more than equality in numbers or laws; it means expanded freedoms and improved overall quality of life for all people.

The gender gap is a measure of gender inequality. It is a useful social development indicator. For example, one can measure the gender gap between boys and girls in terms of health outcomes, as well as educational levels achieved and labor income (USAID, 2012).

2.3. Concepts of WASH

WASH is an abbreviated word for Water, Sanitation and Hygiene approved by UN in 2007-2008 during the international year of sanitation and these components are defined below accordingly.

Water is an essential resource and potential for the survival and development of all living things on the earth. The multidimensional and infinite use of water such as for drinking, cooking, food preparation and personal hygiene especially for human begins, in general, make it valuable and considered as life by itself (UNICEF, 2016).

Sanitation is a broad term and includes management of human excreta, stormwater, greywater, solid waste, hazardous and industrial waste (Ademiluyi and Odugbesan, 2008; Smith et al., 2004). This study limits its focus to the management of human excreta and related hygienic activities. It also assesses constructing communal or private latrines in the near distance for safe management and disposal of human urine and feces rather than using open space, filed, forests and areas around the water body. Open defecation includes fields, forests, bushes, water bodies. These directly help to keep human beings healthy and the living environment clean by avoiding easily communicable diseases (UNICEF, 2016).

Unimproved sanitation facilities are those that moderately avoid human contact with fecal matter and examples of these are pit latrines that have no slabs, hanging and bucket latrines. Improved or better quality latrine facilities verify that human fecal matter does not come into contact with humans and examples of these are pour flush (piped sewer system, and septic tank), Ventilated Improved Pit Latrine (VIPL), pit latrine that has a slab and composting toilets (WHO and UNICEF, 2008).

Hygiene refers to attitudes that inspire continuous adoption of innocent cleanliness practices to keep people and their living area uncontaminated, enhance dignity, prevent blowout of

infections, decrease under-nutrition and sustain health. Hygiene is also about keeping oneself, one's living area and working atmosphere net to avoid sickness and disease. Hand washing is the practice of cleansing the hands with water or another liquid with or without soap or other cleansers for the hygienic purpose of eliminating soil/dust and micro-organisms (CDC, 2009).

According to the (Bishop 2016) briefings, vital hygienic practice contains:

i. Handwashing with soap at acute instant like after going to the toilet and before eating
ii. Clean and sanitized management of human fences and purity of sanitation facilities,
iii. Safe home or local water management from source to the point of intake,
iv. Nutrition sanitization, and
v. Menstrual hygiene and management.

Sustainable Adoption is defined contextually for different terminologies but from a WASH perspective, it means that continuity or sustainability contains the incidence of exercising WASH behaviors. Sustainable WASH adoption is about behavioral improvement in enduring the frequent practice of sanitation and hygiene including latrine construction and proper usage, continual usage of soap for handwashing before eating and after toilet and promotion of water treatment technologies (Martin et al., 2018).

2.2.1. WASH: a gender analysis

Women and girls face diverse sanitation and hygiene challenges than men, due to social and biological factors. The practice of using open areas by women for defecation or urination is seen as taboos, stigmas and creates secrecy shame and disgust around excretion, but the picture is very different for a man.

Menstruation, pregnancy, childbirth and its aftermath, and female menopause all create needs for water, sanitation and hygiene that are specific to women. These specifically female bodily functions and structures are sensitive to different exposures so that inadequate access to and improper adoption may lead to hygienic, psychological and health wellbeing problems that can affect women and girls in a range of ways (Caroline Sweetman and Louise Medland, 2017).

The Gender-differentiated capacities to adapt water, sanitation and hygiene at the household level and in schools are dependent on access to water and many contributing factors including cultures and norms upon which the community persists for a long period. Women as a housekeeper use water for house-made and personal hygiene frequently, within the short time

intervals for toilets whereas the use of water among men for personal hygiene is considered taboo and the rate of adoption is low. Keeping personal hygiene especially for burst feeding women can help in the long run to prevent their children from different communicable diseases (Dickin, 2017).

2.3. Global contexts of WASH

According to the final UNICEF and WHO (2015) report or findings on safe sanitation and clean drinking water globally shows that over 663 million peoples suffer from the lack of access to potable drinking water and 159 million individuals depend on shallow water for their water intake. There is considerable difference among countries and regions in accessing clean water and safe sanitation. Around 79% of individuals are reliant on untreated or subject to the consumption of polluted water and 93% rely on shallow water living in rural areas.

Similarly, about 2.4 billion persons (32%) internationally live with the non-existence of safe sanitation services. The absence of access to clean water and exposure to pollution increases the occurrence of high-risk diseases like diarrhea. Diarrhea has become one of the most chronic and exists at top priority by killing Children under the age of five (WHO, 2014).

2.4. National, Regional and Political context of Sanitation

According to (Novotný et al., (2018) in Ethiopia the initial promotion for general sanitation started in 2003 in the Southern Nations, Nationalities, and Peoples Region. This promotion firstly pays attention to family members, disseminating the news that it is the responsibility of each family and its members to have access to a toilet. The promotion of the sanitation program was undertaken through the active involvement of society. Endorsement of the Community-Led Total Sanitation has been a major way to advance cleanliness and ecological sanitation since 2011(Novotný et al., 2018). The initial stage for providing public health service in the pastoral areas has been the Health Extension Program initiated in 2004, which gradually develop into the newly commenced Health Sector Transformation Plan (WHO, 2015). This plan hires more than 38,000 professional females and each of them works on protective and awareness creation activities on major health care sections such as household heath, infection avoidance and halting its spread, hygiene and environmental sanitation and general awareness on health and wellbeing and messages (WHO, 2007).

2.5. Water and Sanitation Policies in Ethiopia

Like the sustainable development goals, the Federal Democratic Republic of Ethiopia's constitution Article 90 sub-Article one states that "to the extent that the country's resources permit, policies shall aim to provide all Ethiopians access to public health, education, clean water, housing, food and social security". Before 1999, the establishment of clean water supply and sanitation facilities has been made without referring to any policy framework. However, based on the Federal Democratic Republic of Ethiopia's constitution Macro-Economic and Social Policies and Development Strategies, the Ministry of Water Resources Development has articulated water resources management policy (1999) in which policy on water and sanitation has been given prominence as vital issues (Ministry of water resource, 1999).

The Water Resources Management Policy requests for more inclusive decision-making; encourages the participation of all stakeholders including the private sector; developing the ranks of cost retrieval; as well as assimilating water supply, sanitation and hygiene advertisement events. Besides, Water Sector Strategy (2002) and Water Sector Development Program (2002-2016) have been permitted to establish a foundation for sustainable development and management of the country's water reserve. On the other hand, the 'Ministry of Health framed and recognized the National Sanitation Strategy (2005), which purposes to achieve 100% implementation of better-quality water and sanitation (Rahmato, 1999).

The general objective of water supply and sanitation policy was to increase the safety, efficiency and yield of production and productivity of Ethiopian people through the delivery of sufficient and pure clean water supply sanitation and hygiene facilities and to strengthen its reliable support to the economy by endowing clean water facilities that meet the livestock industry and other water need production (Ministry of water resource, 1999).

Objectives of water supply and sanitation policy include:

- ✓ Overall Provision of Continuous and adequate water supply facilities.
- ✓ Undertake operation and maintenance of water supply and sanitation amenities sustainably.
- ✓ Encouraging viable use of water resources through guarding of water sources, competence in the usage of water as well as control over depletion.

- ✓ Programing capacity building in terms of the enabling environment, including institution, human resources development, and legislation and regular framework for water supply and sanitation.
- ✓ Making a favorable environment for upgrading suitable sanitation facilities.

As it is stated in the policy, the advancement and management of water supply service should be applied at regional, woreda and kebele level with complete involvement of the societies and other concerned body, a vital stage towards sustainability.

2.6. Overview of WASH in Developing Countries through Gender Lens

Among WASH components, sanitation was gradually come out of a major technical discipline to one that includes different subject matter such as economic, environmental, and social and gender implications (Tilley, et al., 2013).

Sanitation practices like using latrines and technology for the management of menstrual wastes and washing practices need special consideration are viewed from the perspective of providing modernized sanitation technology. The establishment of sanitation facilities has been seen as a critical problem especially in the area where traditional and social (gender) customs push girls to the way they hide their pain and sanitary material (Molyneux, 2006). Construction of Sanitation facilities and technologies in the way it includes a gender-targeted explanation of taboo, disgrace, self-respect, care and protection helps to alleviate psychological stress and other sufferings of women and girls resulted from lack of safe sanitation and hygienic practice (Black and Fawcett, 2008).

2.7. Factors influencing knowledge and practice of hygiene in (WASH)

Research done by the United Nations Children's Fund (UNICEF) and the Ethiopian Ministry of Health shows those respondents of the study in the rural parts of Ethiopia had low practice and understanding about the know-how, perception and practice of hygiene (Akpabio and Takara, 2014).

It is estimated that around 60% of kids plotted did not understand about the likely occurrence and spread of infections through human urine and wastes, use of soap and frequent hand washing was implemented at low level particularly in rural part.

The low practice of hygiene and safe sanitation depends on many contributing factors such as access to education in the area is limited especially in rural areas, low awareness and level of acceptance and cultural issues (Akpabio and Takara, 2014).

2.8. Theoretical Perspectives on Gender

2.8.1. Structural Functionalism

Functionalists' theory debate that gender roles and responsibilities emerged and were recognized well before the pre-industrial era when men normally took over the duties outside of the home, such as hunting and women characteristically perform the domestic activities in the community. Due to physical limitations encounter by women during pregnancy, their role is restricted to handle activities at home and stay for a long period. After adopting these habits once, related activities and responsibilities were passed from generation to generation gradually since they preserve the wellbeing and maintain the unions of the family they are considered as functional.

The social and economic change occurs in the United States during World War II was followed by the modifications of family structure (Sperling,1991) states that Women participate in different activities outside of the home alongside their domestic role to stabilize the rapid occurrence change.

2.8.2. Conflict Theory

Sates about the disagreements arise upon the use of scared or limited resources and conflict or struggle in the community to become dominant on others. The gender perspective of conflict theory is about the superiority of men and the inferiority of women in certain groups (Hoffman 1999). Hoffman, (1999) also states about disagreements arise upon the use of scared or limited resources and conflict or struggle in the community to become dominant over others. The gender perspective of conflict theory is about the superiority of men and the inferiority of women in certain groups.

2.8.3. Feminist Theory

This theory shares common features of conflict theory to observe differences or gender imbalance in the family. Radical feminism, in particular, reflects the efforts of the family in preserving or enduring male supremacy over others. In patriarchal societies, men’s offerings are more appreciated than those of women. As a result, women have become voiceless and tend to be silenced or downgraded (Kauffman, 1989).

2.8.4. Symbolic Interactionism

According to Blumer, (1986) the target of symbolic interaction is a mare to learn different doings and behaviors through symbolic interaction of known and adopted behavior by describing the critical role of symbols in human interaction. For instance, the way we communicate symbolically by action with women and men is different based on masculinity and femininity.

2.9. Empirical Review

Cocker et al. (2017) study about water, sanitation and hygiene interventions in Ethiopia particularly in the rural community of the afar region depending on primary data collected from selected villages in the region. Two study designs namely the quantitative survey method to assess the water intake, sanitation, hygiene and household observation method to collect data on environmental health was employed. The study compiles findings of the research on water, sanitation and hygiene activities in the village and interpreting the result via risk assessment processes.

Regarding sanitation, the finding shows that from the total 148 peoples recruited for the interview less than 47% had latrines within unimproved facilities and under standardized set up of pit latrine. The habit of using the toilet is low which leads to the practice of open defecation in shrubs found around the living areas. From a gender perspective, the number of males practicing defecting more than the number of females in the study area so males are more fell unsafe than females due to open defecation. To ensure their safety males travel a long distance and encounter the probability of being beaten by a snake.

Similarly, the hygienic practice of the respondents under study is not satisfactory. The availability of soap in the household is limited which is directly related to income level and the habit of handwashing before eating, after toilet after cleaning babies, after braiding hair, after milking cows and after working on-farm and at home with animals is low (Cocker et al., 2017). The current study, therefore, differs from this study in the sense that, its focus on gender aspects of improved WASH practice adoption. Methodologically, this paper also differs from that study, because the researcher plans to apply both descriptive and explanatory research with both quantitative and qualitative.

Another study done on individual and community-level risk factors in under-five children diarrhea among agro-ecological zones in south-western Ethiopia by Alemayehu, et al., (2020), shows that the universal problem of UFCD differs from county to country because of

different interlinked possibilities of issues largely the high incidence of death among the community happened due to lack of access to clean water and safe sanitation (Troeger et al., 2018). This research was done by using a stratified sampling technique with a structured questionnaire and observation of various checklists.

The finding of the study indicates that the absence of handwashing practice at a critical time highly increases the occurrence of UFCD relative to those who undertake the practice (Kumar et al., 2017). The non- existence of sanitation service, soap and its practice during cooking for food, feeding infants without sufficient cleanness and failing to adopt the practice may aggravate the incidence of UFCD. Finding that depend on the income level of a nation indicate that the consequence of hygiene practice resulted in a 39% for high-income country whereas and 32% for low-income country, but unsanitized hands that are contaminated were easy means for the spread of infection while feeding infants if specially caution has not been taken (Ejemot et al., 2009). Equally, finding in north-western Ethiopia shows the existence of microscopic abdominal parasites were related to insufficient cleanliness of hand and sustained washing practice (Gizaw et al., 2018).

Thus, the proposed study differs from this study, since the focus of the researcher study is on sanitation and hygiene practice sustainability or adoption and methodologically, the researcher also applies both descriptive and explanatory design in which both quantitative and qualitative data are consulted.

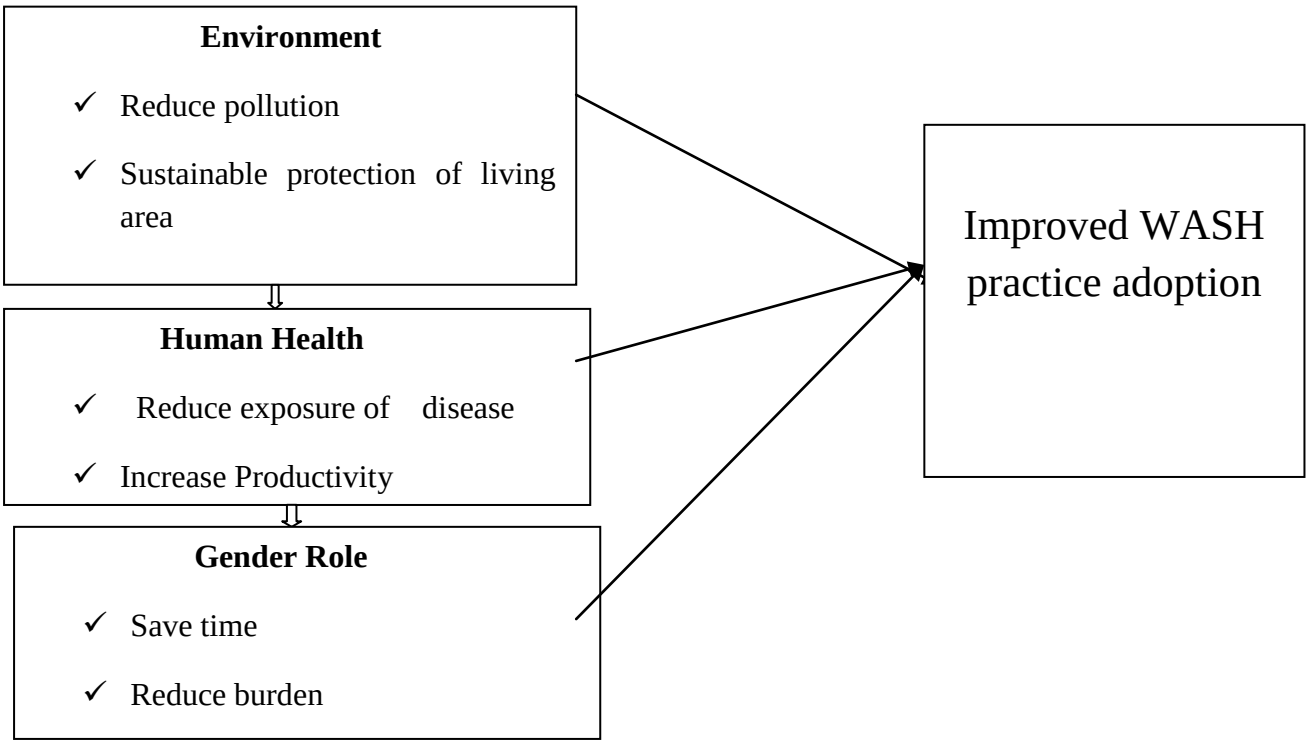
Novotný et al., (2018) study about the social and political construction of latrines in rural Ethiopia. The study uses both qualitative and quantitative methods and applies both primary and secondary data sources. Basic infrastructural constraint, restricted availability, accessibility, ecological and cultural exposures were the main criteria to select the area under study to understand the nature of complicated issues that hinder the use of latrines and sustain the habit. The finding shows that the high availability of latrines within low quality hurt the health and aggravate the incidence of sanitation-related problems. The gender perspective of the study indicates that female-headed family is exposed to the worst sanitation consequences due to a lack of manpower to build and preserve latrines. The methodology, data analysis technique and components covered understudy particularly assessing only the sanitation part differ this article from my work which focuses on extensive assessment on gender aspects improved water, sanitation and hygiene adoption.

Another study was conducted by Matimati, (2017) on perception toward Perceptions towards Water, Sanitation and Hygiene among Communities in Chipinge District, Zimbabwe. A qualitative method was employed to collect data using semi-structured interviews, focus group discussions and participant observations of the communities. According to White et al., (2016), other methods like free-listing of priorities, ranking and water, sanitation and hygiene demonstrations can be done to show the community perceptions and attitudes. The frequent outbreaks of disease and vulnerability and high water, sanitation, health and hygiene promotion intervention initiate the study to be conducted. The study also tries to install an association between access to health and hygiene education and behavior change and highly focuses on interventions for clean water, safe sanitation and sustainable hygiene behavioral change.

Thus, to some extent, my study involves the big components of the above study such as clean water, safe sanitation and hygiene but differs in methodology and assesses the gender aspect of water, sanitation and hygiene practice sustainability.

2.10. Conceptual Framework

Based on the problem statement and review of both theoretical and empirical literature the researcher develops a conceptual framework that indicates the relationship between the dependent variable (health and environmental effect- social and environmental sustainability) and independent variable (WASH practices). So, the following framework shows the significance and effect of adopting WASH practice on health and environment (social and environmental sustainability.



Source: Author's construction, 2020

Figure 2.1 Conceptual frameworks of the research

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Description of the Study Area

The study was conducted in Girar Jarso Woreda Noth Shewa zone of Oromia National Regional State, Ethiopia. The woreda is located about 112 Km far from Addis Ababa to the North of the country. Geographically the woreda extended between 9°38´00´´ to 10°00´00´´ North latitude and 38°34´00´´ to 38°50´00´´ East longitude (Figure 3.1) that covers about 402 hectares. The woreda has a total population projected from 2007 census using the regional growth rate (2.9%) revealed that it was about 94839 of which about 48,565 are male and 46,273 are female living in 17 kebeles (CSA,2008).

Major sources of drinking water in the district were deep and shallow wells, pipe or tap-water, pond, spring development and hand-dug wells. As the data obtained from the Water, Mineral and Energy Office of G/Jarso district indicate, about 64,166 people of the district were supplied with potable water, showing that the potable water coverage of the district was 81.4% in 2013. The number of the population accessed to potable water or pure drinking water has increased to 94.1% in 2014. The potable water sources or points are constructed by government or non-governmental organizations (NGOs).

The agro-climatic zones of the district by their altitudinal ranges are Dega (Temperate >2500m) 55%, Weyinadega (Subtropical 1500-2500m) 27% and Kola (Tropical 500m-1500m) 18%. The average annual temperature ranges from 15^0c to 18^0c, while average annual rainfall varies between 1200 and 1400mm.

According to the 2012 annual report, the land use/land cover of Girar Jarso woreda was, about 75% and 16% were under annual and perennial crops cultivation and grazing area, respectively, while 1.5 and 7.5% were under forest cover and other uses like residences, degraded area, valleys, etc.

Related to the drainage of woreda, Zegawedem, Guar and Danisa were the major rivers of the district. The known springs are turban Ashe, Aba Dibil, Aba Broche and Woyini, while Denka, Gunfura, Kersa and Safe are the known streams. The total length of rivers and streams in the district is about 46km.

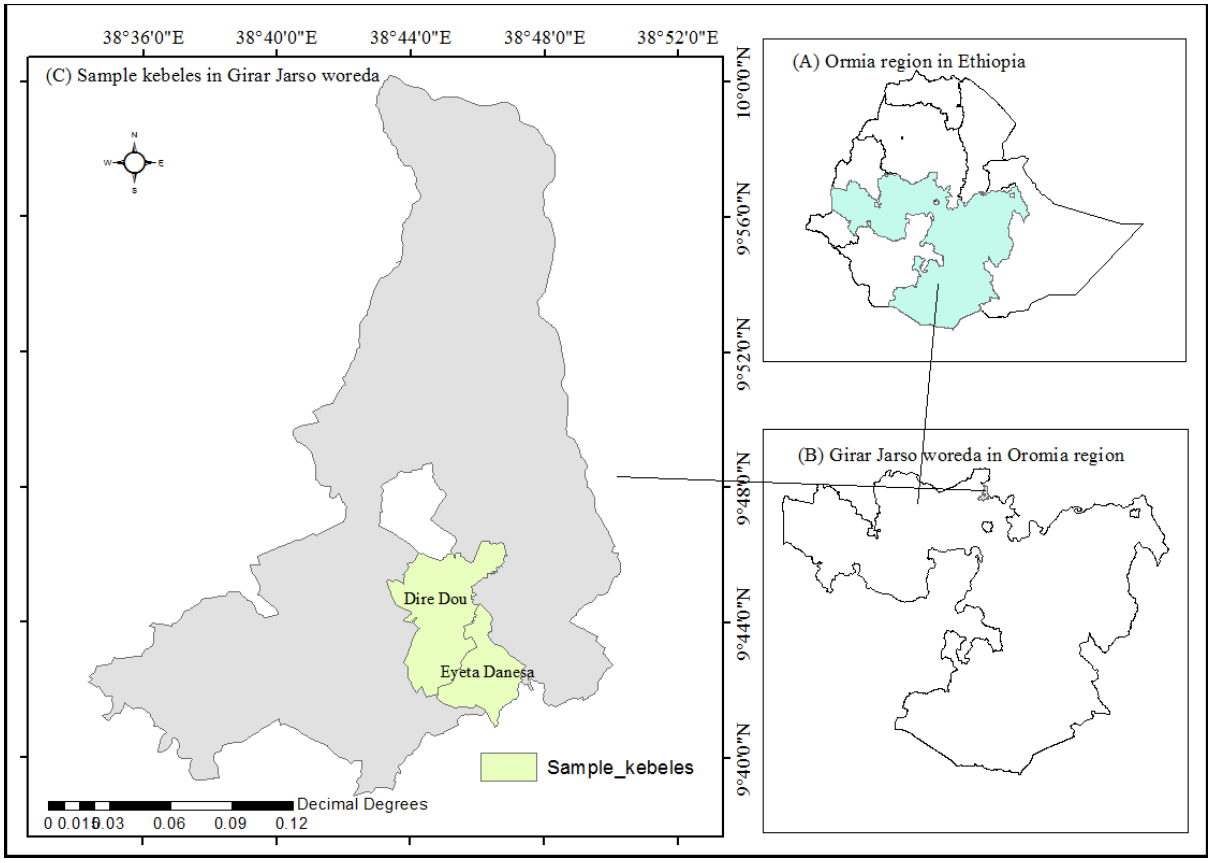


Figure 3.1 Girar Jarso woreda location map from woreda land administration office

3.2. Research Design

For this study, the descriptive-concurrent triangulation research design was used as a concurrent research design is a scientific method of investigation that applies both qualitative and quantitative data. In this method, qualitative and quantitative data are collected and analyzed simultaneously to describe the current conditions, terms, or relationships concerning a certain specific field problem (Creswell, 2009).

Based on this, the study surveyed gender aspects, regarding the adoption of improved water sanitation and hygiene practices in rural Grar-jarso woreda. Specifically, the study assessed the adoption of WASH practices, its challenges and the contribute

on of WASH practices to health and the environment. Therefore, it describes and explains the status of women and men regarding the adoption of WASH practice. It is descriptive because the study tries to assess practices and challenges of WASH practice as it exists and explain the effects of adopting WASH components.

3.3. Research Approach

Both qualitative and quantitative research (mixed research approach) was used to fill identified gaps, addresses the stated general and specific objectives and provide a better understanding of the research problem than either approach alone (Creswell, 2009). The study was directed by the principle of multiple sources and validation of collected information by using different data collection tools and analysis techniques of both qualitative and quantitative data. The case under study needs a collection of numerical /statistical/ data by using the quantitative method as a leading approach to expresses findings by percentage through applying a close-ended question. The qualitative approach involves the narration of results based on the data gained from interviewees by incorporating the information obtained from FGD and KII by applying open-ended questions for the case under study in selected kebeles.

3.4. Target Population

The target populations of this study were 1484 peoples of Eyeta and Dere Doiyou kebeles. Among the total population, about 315 households were selected by using Yemane's formula of sample size determination. Additionally, qualitative and secondary data were collected from key informants of woreda water and energy, women, children and youth, health and education offices. Moreover, selected individuals who don't involve in the household surveys were involved in focus group discussions (FGDs).

3.5. Sampling Procedure

Sampling is the process of selecting the required sub-section of the targeted population that was expected to represent the total population to gather data for the case under study or phenomenon (Polit and Hungler, 2013). Polit and Hungler, (2013) indicated that sampling was more useful than surveying to get information quickly, to save money and avoid additional cost and to find results with known accuracy that was easily calculated mathematically. Therefore well-designed sampling procedures detailed hereunder are applied to enhance the research quality.

3.5.1 Sampling Area

Grar Jarso woreda has 17 kebeles, of which two kebeles namely Dire Doyou and Eyeta Dnisa were purposefully selected.These two kebeles were found in grara jarso on the north and southern part of the woreda.The selected two kebeles were dependent on the case under study

and on their nature of landscape from the high and low land area, this means no matter with the existing water point that is constructed by government or non-government organizations. The point is here, within the available water resource assessing the gender aspects of adopting the practice of sanitation and hygiene activities are very important.

3.5.2 Respondent size Determination and Sampling

Determining the survey household sample size was the next step which comes after selecting the sampled kebeles. Since making participants and inclusive the whole population was difficult; the research used simple random sampling techniques to select sample households for the survey to give an equal chance of getting into the sample.

To determine the sample size of the households the researcher uses the Yamane Taro formula (1967). The total household number of the selected two kebeles in 2018 was 1484 which was used to calculate the sample households as given below.

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

Where n- Sample size and N- Population in the two kebeles and margin of error which is 5% (0.05).

n= 1484/1+1484(0.0025)

n=1484/4.71=315

n=315

Then the sample size of the two kebele's determined proportionally to the population. Hence, the sample size determined for Eyeta Danesa and Dire Doyou were 215 and 100 respectively (Table 3.1)

Respondents from the two kebele/villages were, selected through simple random sampling methods. Purposive sampling is used due to the inclusion of key informants and FGD discussants selected based on their proximity to the case under study and representatives of social structure like age, gender and involvement in water committees and Kebele structure.

Table 3.1 Distribution of sample respondents proportional to the size

No	Name of kebele	Total households by kebele	Calculated sample size
1	Dire Doyou	1012	215
2	Eyeta Danesa	472	100
	Total	1484	315

Source: Calculated for the current survey, January 2020

3.6. Data Type and Source

Data were collected from both primary and secondary sources to assess the gender aspects of WASH practice adoption in the study area.

A structured questionnaire was employed to get a first hand or primary data directly from the respondents through a household survey, observation, focus group discussions and key (FGDs) and key informant interviews (KIIs). Primary data was more reliable and increase the confidence and active involvement of the researcher.

Use of secondary data is common while undertaking different studies before involving in assembling primary data to strengthen the body of the study. For this study secondary data was collected from different sources such as articles, journals, books, reports and related literature and publication which are related to a case under study. As compared to primary data secondary data is inexpensive, saves time and money.

3.7. Data Collection Instruments

Towards achieving the general and specific objectives of the study and to attain reliable information from the respondent, three types of data collecting tools were employed. The tools are household survey questioners, focus group discussions (FGDs) and key informant interviews (KIIs) checklists (see annex I and II) as detailed hereunder.

3.7.1. Household Survey

During the household survey, close-ended questionnaires were prepared and applied to gather data from the selected household respondents. This tool was easy and suitable to undertake a survey and obtain the required information from a huge number of respondents. Under the household survey, the questioner was divided into two parts. The first part of the questioner was about the respondent's background information which includes sex, age, academic qualification marital status and family size. The second part was the largest and designed to feed the main research question and the specific objectives of the study. It also includes the necessary variables prepared in the form of close-ended questions. the close-ended questions are also organized in tabular form to invite respondents to give a precise answer by using scales (Likert scales). The value of the scales was between one and four (1 = high, 2 = moderate, 3 = low, and 4 = not at all).

As it allows for the involvement of enumerators it was translated into the local language (Oromifa) and provided training (on the tool and survey methodology) to ease the data collection and reduce the communication gap between respondents and enumerators. The researcher together with the data collectors first conducted a questionnaire pre-test in Dire Doyou kebele before the actual survey and then improved before duplication of the tool and actual administration of the survey.

3.7.2. Focus Group Discussion (FDG)

Focus Group Discussion (FGDs) is among the basic tool to conduct different researches to obtain diversified qualitative ideas upon similar issues from different collections than an interview conducted separately with individuals and save time and cost incurred during data collection (Kothari, 2004). The method also allows the reflection of different concepts from the data providers with various experiences and background history and also forgotten ideas can be raised based on others. Accordingly, the FGDs were undertaken by using open-ended questions prepared before the field research. In each FGD 7-9 participants were selected from the community representing different social groups like age, gender and committees including water and sanitation committees in each selected kebele. In total, one FGD was conducted in each sample kebeles.



Source: Own photo, (May) 2020.

Figure 3.2 Focus Group Discussion in Dire Doyu and Eyeta Danesa kebeles

3.7.3 Key Informant Interview

Key informant interview was used to generate qualitative information about the general gender aspects of WASH practice adoption in the woreda and selected kebeles. In total, four respondents for KII were selected purposively from woreda women, youth and children affairs, Health, Education and water and energy offices. Care was taken while selecting the KII informants to have a deep understanding and knowledge about the subject under study. Additionally, open-ended questions were prepared in need of an extensive explanation of the case under study by the knowledgeable concerned body.

3.8. Data Presentation and Analysis Plan

The primary data gathered through the household survey was first of all checked for accuracy and coded. Statistical package for social science (SPSS) version 20 software was applied to analyze the household survey data using descriptive statistics variables such as averages, frequency and percentages and generate different charts and graphs.

By referring through different related materials of qualitative data, the content of the research was strengthened to create a deep understanding of the general concept and short memos were prepared which was the best help in organizing and categorizing the data into themes. Therefore, the entire qualitative data were transcribed and analyzed through a narrative description. Finally, the qualitative and quantitative data were analyzed and interpreted and incorporated to address the identified research problem.

3.9. Ethical Consideration

The clear purpose of the study was depicted on survey to enumerators to inform and ask the willingness of the respondent to involve in the data provision. In connection with this, enumerators were trained and well informed to follow ethical considerations during the survey. In this process, the researcher checked the administration of the survey as per ethical consideration protocol. Thus, 315 respondents who gave their full consent were interviewed. During the interview, respondents were informed that codes instead of a name or other features that could lead to the identification of the individual respondents' will be used and the analysis performed accordingly. The respondents were also informed that all records used only for research purpose and kept them strictly confidential at all time, which was made as agreed with respondents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSIONS

4.1. Demographic Characteristics of the Sample Households

4.1.1. Response Rate

The response rate of a study helps to determine the statistical power of a test. A higher response rate increases the test statistic. This in return increases the accuracy of the test and subsequent inferences arising from the test. In this study, 315 questionnaires were distributed and all filled and returned. This shows that the return rate is 100 % which is considered as adequate to conclude the collected data. Based on the analysis of the collected data the characteristic of the households in which the survey was done is discussed briefly under this section.

4.1.3. sex, Age and household head composition of surveyed households

Demographic factors are essential indicators of gender aspects of improved WASH practice adoption. The demographic characteristic included under the study is age, sex, marital status, educational level and family size.

As shown in figure 4.1 of the total survey respondents 57.8% were females and the remaining about 42% are males. As females are highly attached to household activities especially with the availability of water, sanitation and hygiene practices, the interview was more focused on female respondents even in male-headed households. That's why the number of female respondents was greater than the male.

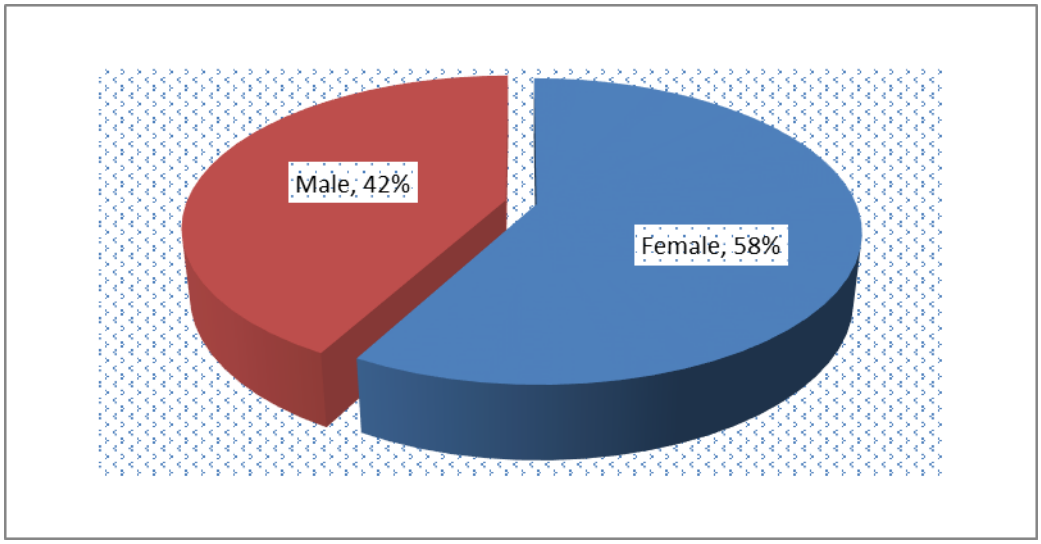


Figure 4. 1. Gender of respondent
Source: Own felid survey, 2020

According to figure 4.2 out of the total samples, a large proportion (30.8%) of survey respondents belong in 35 to 45 years old and followed by 45-55, 25-35 and over 55 years old age that accounts for about 23.5%, 22.2% and 22.5 respectively. Out of the total survey respondents in the 18 to 25 years age group, i.e., between 18 and 55. Households having over 55 years old still involve in water fetching as also confirmed through FGDs.

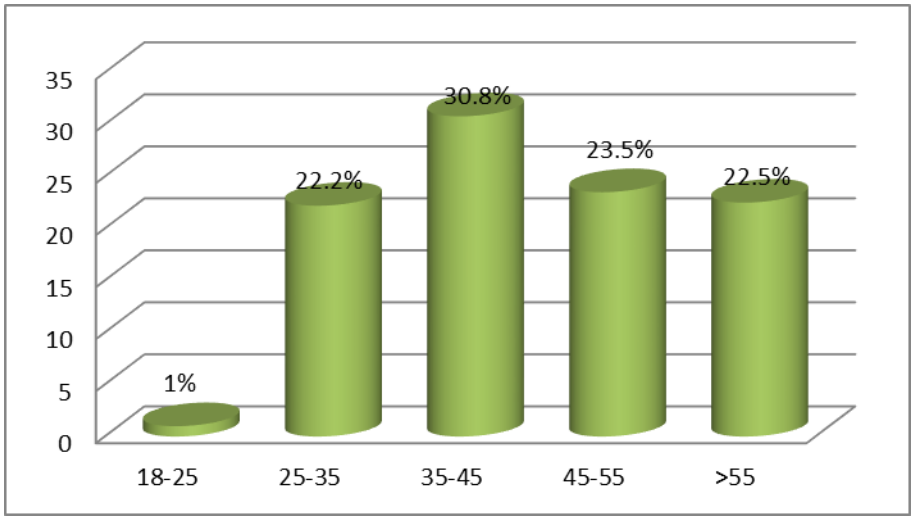


Figure 4.2 Age of respondents in ranges
Source: Own field survey 2020

Education is believed an important factor to influence practice and technology adoption, the survey included the education status of respondents. Hence, the survey revealed that a very large proportions 72% of respondents were illiterates and 18% have reading and writing skills. Respondents who practice only reading accounts for 7% and those educated in the formal system up to high school were very few 2%. Therefore, in general, the education status of survey households was at a very low level. Studies indicate that the educational level of the respondent is directly related to WASH practice. As their understanding and educational level increase their commitment to WASH practice and its sustainability increase while others practice WASHES in a common-sense beside their day to day activity.

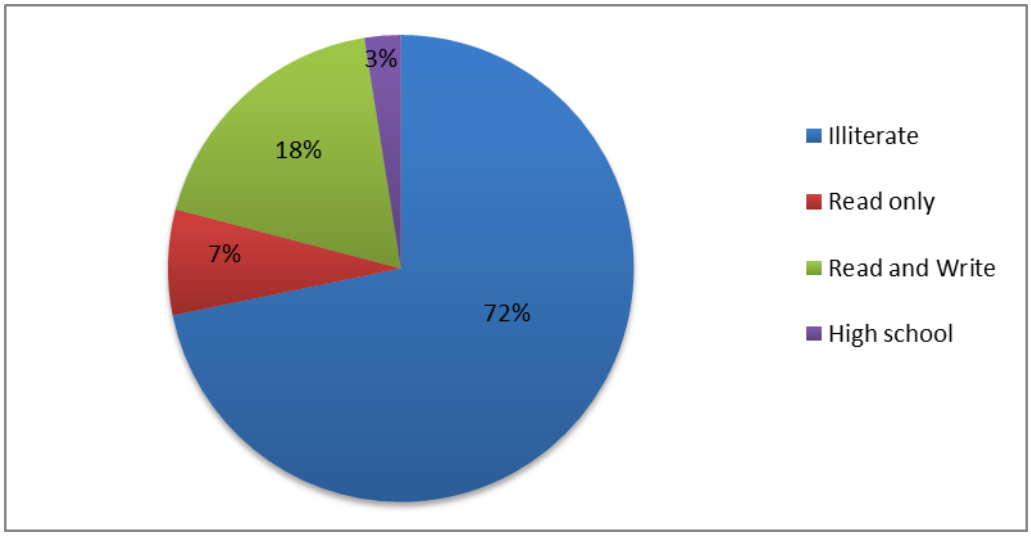


Figure 4.3 Educational levels of Households

Source: Own field survey 2020

Regarding the marital status of the survey households, the majority 80.3% of respondents were married, while the remaining 10.8% were separated and 7.6% were widowed (figure4.4). The marital status of the household has significant implications on WASH practice and its sustainability. Those who lost their husbands due to death and separated because of the different reason the majority have labor shortage to perform agricultural activities and toilet construction and maintenance. FGD participants also indicated that households who don't have a capable labor force commonly face the problem of labor to construct and maintain toilets, so they are obliged to practice open defecation.

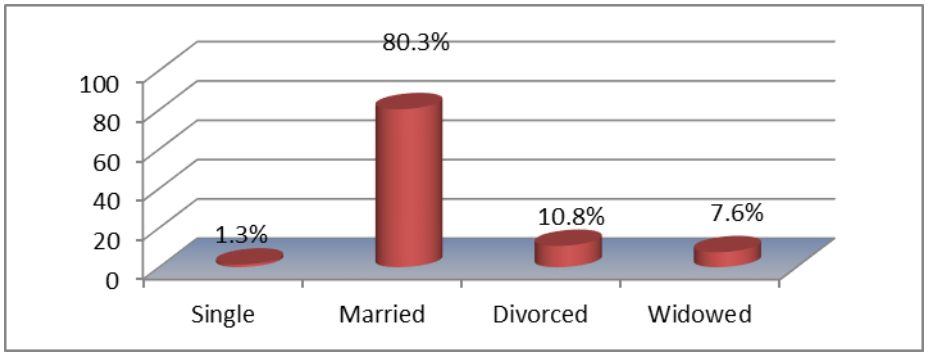


Figure 4.4 Marital status of the respondent
Source: Own field survey, 2020

The finding indicates that WASH practice adoption have gender dimension and according to 4.1 the household head finding shows that 63.2% of respondents are male-headed household and 36.8% of households are female-headed. The finding shows that households those are headed by males practice WASH properly as compared to the female-headed household. But nowadays due to the occurrence of the COVID-19 pandemic, all household members without sex differences properly practice hygienic activities and ensure its sustainability. Among the total sample households, 70% of households have school-age (7 years old) children, while the remaining 29.2% don't have school-age children. Hence, this implies that intervention on WASH at the household and school level will have a synergetic effect to improve community awareness.

Table 4.1 Respondent gender, household head and number of children go to school

HH character	Items	Frequency	%
Sex of respondents	Male	133	42.3
	Female	182	57.7
Total		315	100
Survey households headship	Male headed	199	63.2
	Female-headed	116	36.8
Total		315	100
Households having children old enough for school	Yes	223	70.8
	No	92	29.2
Total		315	100

Source: Own field survey, 2020

The livelihoods of large sample households depend on agriculture which covers about 90.2% of the total respondents (figure 4.5). In addition to agriculture, 7.9 % of households involved in trading activity mainly on petty treading and 1.9% of respondents engage in labor work. As per FGD households who engage in trading and casual labor work are mostly used to support income obtained from agriculture than depending entirely on income from these activities. The WASH practice of respondents was highly dependent on their source of income. The FGDs and KIIs show that respondent with a stable source of income uses soap for handwashing purposes continuously and keep their living environment clean as much as possible by building latrines with a better standard.

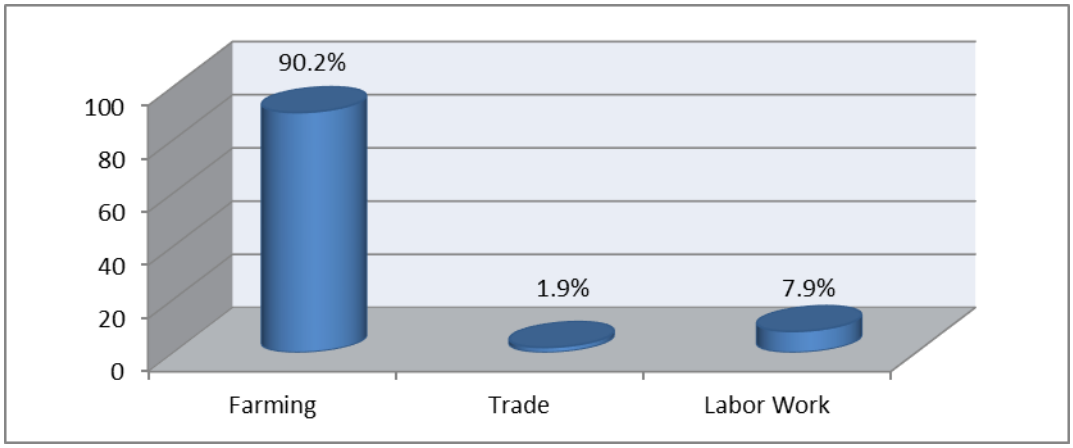


Figure 4.5 Source of Income

Source: Own field survey, 2020

Regarding the source of water used at a different time in the study area the majority 58.4% of respondent replied that the source of water used at different time throughout the year was developed hand-dug well and as (figure 4.6) shows below 41.6% of respondents suggests that the sources of water they used were developed spring without interruption.

According to the interview made with the woreda water and energy office head, the clean water supply coverage of Grar jarso woreda was 74.2%. Previously it is mentioned that Grar Jarso Woreda has 17 kebels of which 3 woredas namely Kola eyesus, Engual moti and Semi gjba have no water supply at all and the source water in the woreda used for distribution to certain kebeles were hand-dug well and spring. To ensure sustainable water accessibility of the community every skim has a committee having 7 members out of them about 4 members were female and based on the committee report maintenance of skims and continuous follow-up, monitoring and evaluation as well as the distribution of chlorine to purify the water every

six months were the main activities undertaken by the Woreda water and energy bureau. FGDs discussants express that water points particularly hand-dug wells exist near distance to their living area and they get sufficient water for washing, cooking and other activities.

KII depicts that site selection and construction of water points in near distance depends on family size and the availability of water source. Most of the time water points were built according to the standard which is 1 kilometer. But if sources were discovered in short distance water points are built between 10-20 meters distances. According to the standard 1 hand-dug well was built for 10 households and the Shallow well was made for 25-35 households. To ensure the sustainability of water point, activities like making woman participant and inclusive beginning from site selection up to managing the water points through creating a sense of belongings, working on capacity building and awareness on how to avoid wastage of water and increasing the number and performance of women in the committee was undertaken. On the other hand, the absence of water injures all parts of the community and members of household particularly Women and children were the primary victim and suffer a lot.

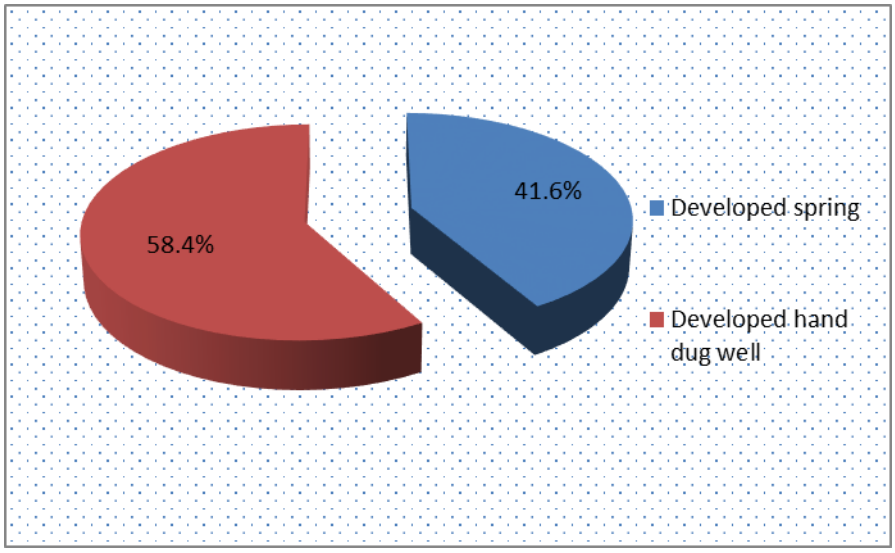


Figure 4.6 Source of water used at different time

Source: Own field survey, 2020

4.2. Source knowledge and awareness of the community about improved WASH practice

Certain hygienic activities were thought to be more significant than others, as evidenced by handwashing with soap after defecation but not before food handling. Transformation of hygiene-related knowledge into practice and practice into a habit is hindered by some factors: lack of interest in attending cluster meetings, traditional knowledge, poverty and lack of willingness to practice (Akter and Ali, 2014).

Despite this, there was an improvement in knowledge retention and practice of hygiene in most cases. Frequent cluster meetings and home visits could be a promising approach for creating awareness and encouraging unsuccessful households to adopt hygienic habits. This approach will help them to remain in a continuous learning process and to practice hygiene regardless of poverty and other barriers (Akter and Ali, 2014).

The household survey indicates that among the total samples 83.5% of the respondent says that their source of knowledge about WASH practice was Mass media mainly from radio and few from TV, while 14.3% of the respondents replied that they get knowledge about WASH practice through health care institution and health extension experts as usual (Table 4.2). Also, FGD participants indicated that they are getting information about handwashing from mobile calling systems currently after the COVID-19 pandemic. FGD discussants suggest that information obtain about COVID-19 how to prevent the pandemic and way of expansion which was heard while making telephone calls. The discussants appreciated the application as it is good means to disseminate information about the pandemic.

Table 4.2 Source of knowledge or information about wash practice

Source of information	Frequency	Percent
Mass Media (radio, TV) and mobile	263	85.7
Awareness through health institutions like health extension offices, health care center	45	14.3
Total	315	100.0

Source: Own field survey, 2020

The FGDs participants say that Ethiopian Telecommunication plays a significant role through mobile calling system and the message transmitted about corona increase awareness and this shows amendments/progress than previous habit on hand washing and personal hygiene

activities. After the occurrence of COVID-19 participants says that even they were illiterate they understand the importance of hygienic activity relating to COVID-19, as they repeatedly hear the message while they make a telephone call through mobile. This helped them to get more reliable information about the disease and protect themselves by washing their hands and using hand sanitizer.

After the occurrence of the COVID-19 pandemic, the level of awareness delivered was highly increased and the communities followed the instruction given by health extension workers and apply it properly. This situation allows exercising hygiene practice without any sex difference, which intern also has synergetic effects on the wider hygiene and sanitation program. KII made with hand health extension workers (HEW) and other stake holds revealed that the HEW use a social platform like edir, ekub and different gatherings to create awareness on WASH besides home to home hygiene and sanitation extension as means of preventing communicable disease due to unhygienic practices.

As the education office head awareness about WASH in school was created by establishing hand washing club and they build capacity on WASH practice through different arts, like drama, music and poem form. This club encourages the participation of girls in different ways to sustain WASH practice adoption in schools and once a year the member of the club teaches the community by involving in the societies to create awareness about WASH and its long term benefit while prating sustainably.

4.2.1. Perception of the community about WASH practice adoption

An interview with household respondents upon the level of know-how of WASH practice was ranked as high, moderate, low and not at all (Table 4.3). Accordingly, 44.4% of respondents were moderately heard or have been told about the importance of WASH practice. The remaining 31.1% and 20.0% of respondents were heard and have knowhow about WASH practice adoption highly and at low level respectively. The least proportion 4.4% of respondents were not at all has been told about the importance of WASH practice adoption.

According to key informants' suggestion, the gender-based perception of WASH practice in Grar jarso woreda shows that community members aged between 20-49 years old have awareness about WASH. In most cases, women have a better understanding of WASH practice than men due to the division of role and responsibility. While heath extensions move

home to home to create awareness in the community most of the time they meet women than men because men devote their time to fieldwork and women engage in managing the home activity so not all but a small number of women said that they reflect what they heard and understand from health extension workers (HEW) to family member but still lag on practicing WASH continuously.

The FGDs participants depict that the roles of health agents on WASH practice adoption was high. Through involvement in the mass, community HEWs teach about constructing toilet and how to use it properly, about the importance of handwashing practice particularly at a critical time i.e before eating and after the toilet and about keeping the living environment safe.

Table 4.3 Level of respondent perception about WASH

Scales	Frequency	Percent
Not at all	14	4.4
Low	63	20.0
Moderate	140	44.4
High	98	31.1
Total	315	100.0

Source: Own field survey, 2020

4.2.2. Community understanding of the communicable disease and WASH practice

Poor conditions of WASH are associated with 6.6% of the global burden of disease and disability, and 2.4 million deaths annually due to diarrhea, subsequent malnutrition, and their consequences.22 Most of this disease burden falls on children in low-income countries (Ngure et al., 2014).

The survey result indicates that respondents' level of knowledge about communicable disease due to the lack of safe sanitation and hygiene practice varied from household to household. As table 4.4 below shows, the majority 78.4% of respondents have grate knowledge about the occurrence of different infection and communicable disease due to lack of water, safe sanitation and hygiene practice. Following this, the least proportion 20.3%, 0.6% and 0.6% of the respondents replied that they have moderate, low and not at all level of knowledge about

the communicable disease because of insufficient water, safe sanitation and hygiene practice respectively. This indicates that communities were highly knowledgeable about transmittable infections due to lack of clean water, safe sanitation and hygiene practice.

Regarding the exposure to communicable disease KII elaborate that due to bodily structure and their biological nature, women/girls were frequently become victims of unsafe sanitation, hygiene practice due to lack of water especially. Different preconditions are undertaken to tackle communicable disease by dealing with water bureau to make water available as much as possible near the living area, around toilets and through teaching the community to fence properly the area around the toilet and keeping clean the surrounding environment. FGDs participants suggest that the community undertake different precondition before they were exposed to such transmittable diseases much as possible by availing water in the house, using soap for washing purpose and cleaning their living environment.

Table 4.4 level communicable disease due to lack of WASH practice

scales	Frequency	Percent
not at all	2	.6
Low	2	.6
Moderate	64	20.3
High	247	78.4
Total	315	100.0

Source: Own field survey, 2020

4.2.3. Status of the community toward discussing and sharing information about WASH

The household survey shows a large proportion of 42.2% of the respondents suggest that they have a low level of practice upon a joint discussion on WASH practice adoption with neighbors and others. Following this 28.6 % and 15.2% of respondents replied that they undertake a moderate and high level of sharing information and different ideas about WASH practice adoption with others respectively and 14% of the respondents said that they never or not at all discuss WASH practice adoption with others (Table 4.5).

According to the FGDs participant suggestion, the reason behind the low level of discussion and sharing of ideas among neighbors depended on the location of households. As the rural households were sparsely populated the habit of coming together to share and discuss

different issues including WASH practice was low and this situation broaden the gap between the practice of WASH and its sustainability.

But currently after COVID- 19 pandemic and as it is a new issue they discuss the long-term benefit of frequent hand washing by soap when they meet at the different ceremony, market place and undertake a long journey together.

Table 4.5 Level of idea sharing and discussing WASH Practice

Scales	Frequency	Percent
not at all	44	14.0
Low	133	42.2
Moderate	90	28.6
High	48	15.2
Total	315	100.0

Source: Own field survey, 2020

4.3. Gender role and responsibility for sustainable improved WASH practices

In numerous rural areas of the developing world, women and children especially girls were the primary risk taker due to inadequate water supply and sanitation facilities. Poor women, particularly the poorest of the poor are generally more exposed to poverty and if clean water supplies are scarce, they have narrow opportunities to jump the cycle of poverty. Accessibility to clean potable water supplies means women can involve in small and medium scale productive uses of water such as back yard gardening, livestock watering, beer brewing and this improve their source of revenue options by making a substantial contribution to family income, food security, better nourishment and wellbeing. It was obvious that water use has gender dimensions. Women were very much concerned about water for domestic uses and small-scale productive uses (Katsi, 2008).

Gender plays a significant role and responsibility in sustaining improved WASH practice by performing different activities assigned to the different sex. Figure 4.6 below shows that 44.4% of the respondent replied that men and boys are moderately involved in fetching water, hygiene and sanitation activities in the household as compared to women and girls. A survey, the result indicates 34.9% and 19.4% of respondents were highly and at low level respectively involved in fetching water, hygiene and sanitation activities in the household as compared to women and girls and the minority 1.3% of respondents said that man and boys are not at all involved in WASH activity.

Regarding the role and responsibility assigned to women and men, KII expresses that division of role and responsibility is directly related to perception which is deeply rooted in our culture and still exists. Related to WASH fetching water and keeping the hygiene of family most dominantly assign to women to some extent men share the sanitation part by constructing a toilet.

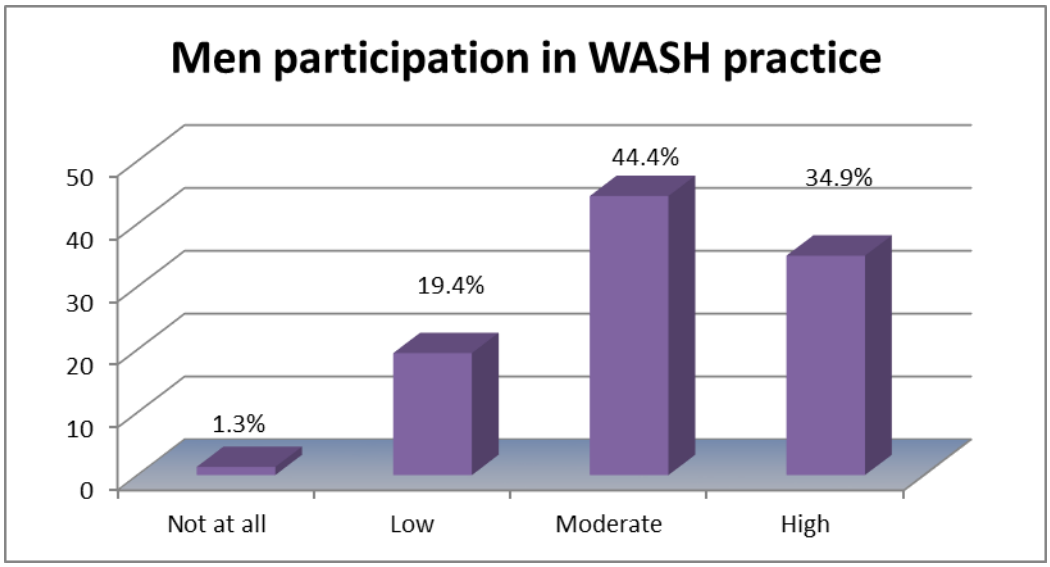


Figure 4.7 Men participation in WASH practice as compared to women

Source: Own field survey, 2020

4.3.1. Equal participation in construction and maintenance of toilet

As figure 4.7 shows more than half 78.1% of respondents replied that both men and women were not equally and actively participate in toilet construction and maintenance. This was due to cultural influence and perception of community that toilet construction and maintenance were considered as the only activity assigned to men. In long run, this understanding of communities was, directly and indirectly, affects WASH practice and its sustainable adoption. The remaining 21% of respondents said that both men and women were equally participating in toilet construction and maintenance. The attitude toward construction and maintenance of the toilet as the mandate of men pushes female-headed households to practice open defecation and this increases the family's exposure to communicable disease and environmental pollution.

According to FGD discussants and KII WASH practice like toilet construction and maintenance is considered as main tasks of male. Whereas availing water for home use and keeping the hygiene of family is the burden of women. Most of the time women were

considered as house-made and they have many responsibilities at home and besides other activities they practices WASH but there was a gap in sustaining the practice. E.g. they try to feed their babies besides working another job so they forget to wash their hands. The same is true for boys and girls because they learn and practice ways of doing from their family. Ensuring the availability of water at home is also the continuous responsibility of women. Most of the time the sanitation part is given for male and still creates a gap in the sustainability of the practice

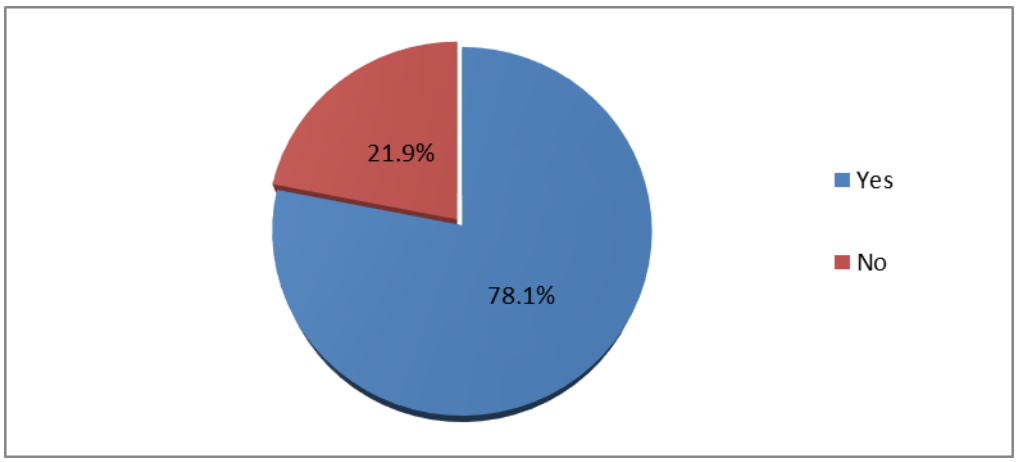


Figure 4.8 Equal participation in construction and maintenance of toilet

Source: Own field survey 2020

4.3.2. Mechanism to reduce the burden of women

Regarding the alleviation of the burden of women, FGDs discussants underlay that as food preparing and fetching water were core activities that are most dominantly undertaken by women they need a supporter to reduce their tiredness. As (Table 4.6) below show 17.1% of the respondents accept and apply equal division of tasks among family members as a good mechanism to reduce burdens of women and 2.9% of respondents suggest that availability of water point in near distance to some extent avoid tiredness resulted from the long journey to fetch water. Related to this KII depicts that the advantage of locating water point in villages or to the near distance of living area was not only to reduce the burden of women and girls but also to encourage girls to attend class on time and avoid absenteeism and for women to devote their time on another productive activity to increase family income. The very least proportion 0.6% replied better source of energy for cooking was to reduce the workload of women, but there were no facilitated options in a rural area like electricity to use the stove.

Table 4.6 Mechanism to reduce the burden of women

Mechanisms	Frequency	Percent
Encouraging women to use a better source of energy for cooking	2	0.6
make them access water at a near distance	9	2.9
Promotion equal division of tasks	54	17.1
0	250	79.4
Total	315	100.0

Source: Own field survey 2020

4.4. Contribution of improved WASH practice for human and environmental health

Environmental health was a situation or state of the optimal environment so that a positive influence on the realization of the finest health position as well. Science of environmental sanitation is part of environmental health disciplines and business, with how individuals or societies to control and to control the external environment that was injurious to health and which could threaten human survival. Sanitation is a public health effort that emphasizes the various environmental factors that affect or may affect the health of humans (Ronny and Basir, 2016).

WASH practice and its sustainability play a significant role in human and environmental health. Thus (table 4.7) below notifies that the majority 68.3% of respondents said that they have a high level of understanding about the contribution of WASH practice for the environment and human health and trying to practice it properly. Accordingly, 29.5% and 2.2% of respondents replied that their level of understanding about the contribution of WASH practice adoption for the environment and human health was moderate and low respectively.

The Woreda women, youth and children officers extensively explain that environment, sanitation and hygiene were highly interrelated core components. For instance, if there were no toilets in the compound and around the community in the near distance; there exists the extensive practice of open defecation which has a direct impact on human and environmental health. When our living environment was not clean or subject to dirty solid and liquid material sometimes it has a long-term impact on human health by exposing to respiratory and

communicable disease due to lack of personal hygienic activity like frequent hand washing practice.

Table 4.7 contribution of WASH practice for human and environmental health

Scales	Frequency	Percent
Low	7	2.2
Moderate	93	29.5
High	215	68.3
Total	315	100.0

Source: own field survey, 2020

4.4.1. Impacts of open defecation

Women with restricted or no access to the toilet mostly suffered from diarrheal diseases, a leading cause of undernutrition among women during their reproductive age. The interaction between disease and undernutrition can further uphold the vicious cycle of worsening infection and deterioration of women's health, particularly in pregnant women (Corburn and Hildebrand, 2015).

According to the survey the great majority 65.4% of respondents have a high level of understanding about the negative impacts of open defecation on the environment and human health. Following this 27.0% and 7.3% of respondents said that they have a moderate and low level of knowledge about the negative impact of practicing open defecation respectively. Most respondents confessed that attitude toward the adverse impacts of open defecation was built by health extensions.

As KII and FGDs participants express that the role of health extension was to bring about admirable change on households living style and environmental protection by recommending positive side of using and initiate toilet construction for avoiding open defecation, keeping the safe environment and recognizing sustainable health of living and non-living organs on the earth.

Table 4.8 Level of understanding about the impacts of open defecation

Scales	Frequency	Percent
not at all	1	.3
Low	23	7.3
Moderate	85	27.0
High	206	65.4
Total	315	100.0

Source: Own field survey, 2020

4.4.2. Coverage of latrines among household respondent

As figure 4.9 below shows more than half 69.8% of respondents replied that they have a latrine in their living compound and use it properly .basing on the figure 30.2% of households they have no toilet in their living compound. The health bureau officer said that the roles of health agents upon initiating and creating awareness about building, using properly and cleaning the toilet for the safety of family and surrounding community.

According to the KII interview, there were several problems while practicing WASH even if there are toilets near the distance or in the compound, there is no supply of water and needed facilities like soap. Sometimes interruption of water flow creates an obstacle on continuous practice on WASH hygienic activity. During water, scarcity households use the available water for drinking and food preparation. But on kebeles, the main challenges were households construct a toilet for short period and it became full and deteriorated during summer/rainy/ season after that family member except for a man and young boys who go far from home to the forest and around water body /river area/, women/girls including a child under five age has practice open defecation and urination in and around their living area and compound and exposed to a certain disease. FGDs discussants raised that households with extensive family might live together in one compound and their ways of living depended upon share /using in common like toilet, cooking area and materials, so cleanness of the toilet did not exist at the expected level.

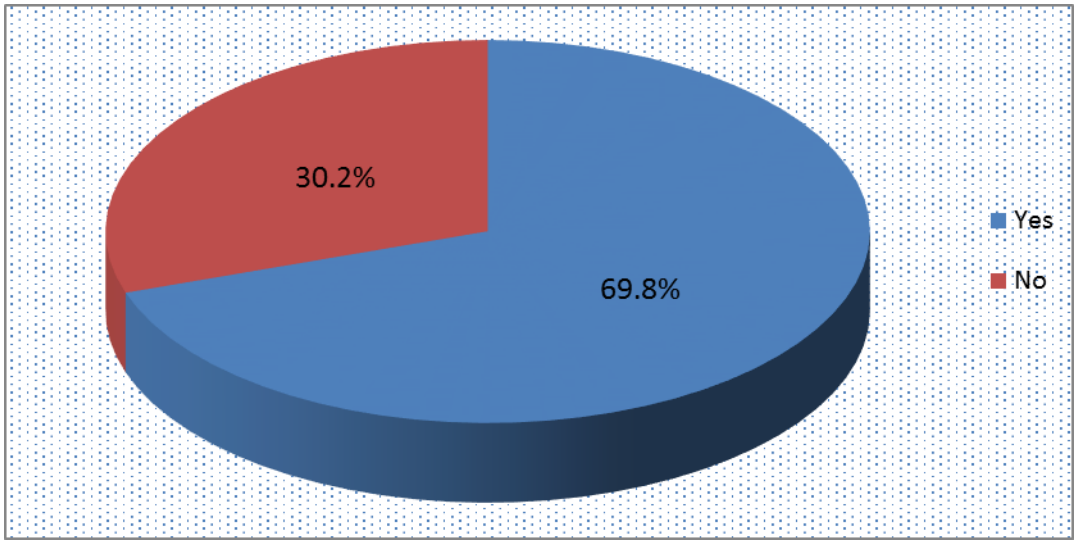


Figure 4.9 Household that has a latrine

Source: Own field survey, 2020

4.4.3. Mechanisms to cope with the lack of latrine

The household survey shows that a large number 85.8% of respondents practice open defecation to cope with the lack of toilet and the remaining 14.2% of respondents said that they use others latrine rather than practicing open defecation(table 4.9). Discussion with FGDs participant indicates that in rural area urinating and siting for feces everywhere was considered as normal activity especially when it was practiced by men and boys than women and girls. They use the open area as the ultimate option for urination and defecation rather than constructing a toilet for a long period. Open defecation was more practiced by men and boys than women and girls because it was considered taboo for women and more normal activity for men. Related to this discussants said that as their source of income was largely dependent on agricultural activity, men spend most of their time on the field for plow and cultivating, so they don't return to home to use the toilet rather they use open area near the farmland for defecation and urination.

According to the interview made with key informants, most of the time open defecation is practiced in the absence of a toilet and due to the construction of a very small /hole/ toilet for temporary use and the toilet become out of service or deteriorated during the summer season. Due to this reason, many peoples pushed to practice open defection around their village and far from home around the water body and forest area this again pollutes their living

environment, water bodies and finally affect family health particularly children whose resistance of disease was low as compared to a youngster.

Table 4.9 Mechanism to cope with the lack of latrine

Mechanism	Frequency	Percent
By practicing open defection	267	85.8
By using another latrine	48	14.2
Total	315	100.0

Source: Own field survey, 2020

4.4.4. Households condemnation of open defecation

As (Table 4.10) below shows almost have 49.8% of respondents replied that they condemn open defecation highly and 22.2% of households replied that at a very high level they condemn open defecation due to its long-term impact on the environment and human health.

Following this 20.3% of households said that they condemn open defecation lowly because households who have no latrine in their compound and to a near distance of living village forced to use the open area for urination as well as defecation and taken as normal activity.

The FGDs result shows that in the rural area open defecation is seen as a normal norm if households have no private or communal toilet. The community understands its adverse impact on human and environmental health, but many people except children practice open defecation by going far from home in the forest and around the river. Previously the community gets awareness about WASH which is given by health extension on the different event and the practice was to some extent subject to sex discrimination.

Table 4.10 Extent to which open defecation was condemened

Scales	Frequency	Persent
Not at all	7	2.2
Moderate	16	5.1
Low	64	20.3
High	157	49.8
Very High	71	22.5
Total	315	100.0

Source: Own field survey, 2020

4.4.5. Availability of toilet in schools and students performance

Educational institutions with adequate water, sanitation and hygiene (WASH) facilities have a consistent water supply that delivers clean and sufficient water for handwashing and drinking purpose, standardize toilets for students and teachers that are a private safety net and gender appropriate. Handwashing facilities including close to the toilet strengthen and encourage hygiene activities. WASH facilities, practice and adoption in many low-income countries, however, are inadequate with associated detrimental effects on health and school attendance. An evaluation by UNICEF [3] found that in schools in low-income countries, only 51% of schools had access to adequate water sources and only 45% had adequate sanitation. Globally school-based WASH intervention focus on (i) minimize the occurrence of infections and other hygiene-related diseases (ii) increase school enrolments, school performance and (iii) improve the sanitation and hygiene practice of parents whereby children act as agents of change in their family and societies (Buckley et al.,2004)

Environmental awareness leads to the maintenance of school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps. From this finding, several recommendations were made. (Anijaobi-Idem et al., 2015)

Environmental science and protection were broad issues and given to students as an independent subject. According to the survey, the majority 71.1% of respondents said that their children have a toilet in the school compound and it is separated for both sexes. Figure 4.9 depicts that 28.9% of households replied that their children have non-functional and

rubbish toilets in the school compound and their children forced to practice open defecation and urination under trees and around classrooms.

The interview made with the education bureau head shows the general status of sanitation and hygiene in school did not exist at the expected level and toilets are constructed with zero standard quality in the absence of water for hygienic activities at all. To keep the sanitation and hygiene of students in school compound different activities were undertaken in collaboration with different NGOs including the one WASH national program. Toilets are constructed in selected schools based on their need and number of students and some of the toilets are constructed with handwashing facilities but others do not have these facilities.

Regarding the delivery of sanitation and hygiene facility KII express that currently in the existing situation there was no restroom for ladies during the menstruation period, no delivery of sanitary pad. In this Woreda there were schools with no water coverage, so once a week students are ordered to bring water from their home to use for washing purposes during the menstruation period. Due to the absence of water and restroom for ladies, there were no records of student dropout from school, but there exists frequent absenteeism from class. Education bureau works jointly with WASH on toilet construction in school and water expansion from the source to toward school compound.

The availability of water and the existence of toilets in school was highly correlated with students' results and the educational system. Basic facilities in school like water, toilet, cafeteria and others increasing the quality of education and improve performance of students especially girls were ambitious to go to school if these facilities were fully addressed than staying at home. To avoid open defecation and to keep the safety of their student all schools have a toilet, but some of them were built below the required standard and not separated for girls and boys. Students who exist in zero class might practice open defecation and urination due to lack of care/follow-up from their teachers. FGDs participants said that in many schools toilets are not constructed by government expense, but it was through community participation in cash and kind. The proper usage of the toilet that exists in school and living compound was always under question because some people used it irregularly and no one pays attention to the sustainable cleanness of the toilet they use.

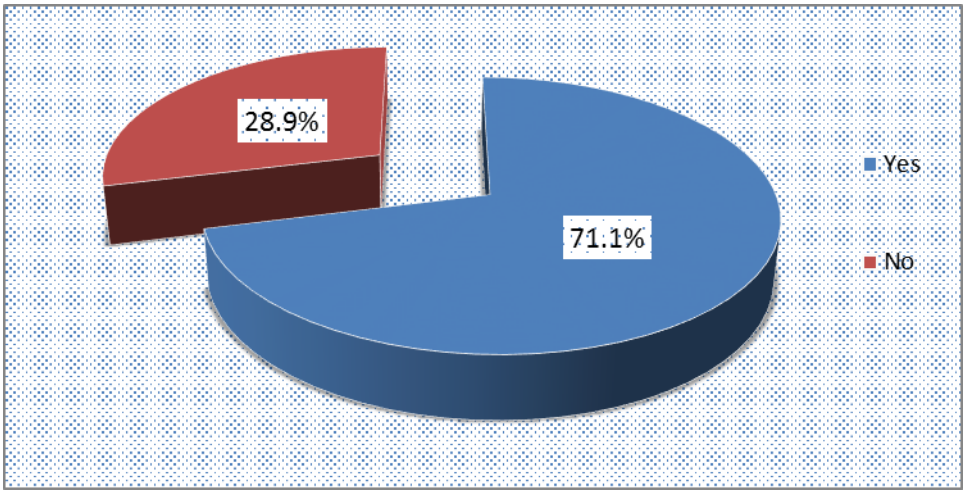


Figure 4.10 Coverage of toilet in schools

Source: Own field survey, 2020

4.5. Gender-based challenges of the community for adopting improved WASH practice

The practice of open defecation can lead to increased vulnerabilities and intensify violence such as verbal, physical and sexual, affecting women physically and psychologically. Lack of household toileting facilities pushes several women to travel long distances far from their house to find private open places to defecate, manage their menstrual necessities which makes them exposed to these varying forms of violence. Privacy considerations, cultural norms, or religious practices also bound many women to wait until dawn or dusk so they would not be seen while fulfilling their basic need of defecating (Saleem et al., 2019).

Culture plays an essential role in promoting and hindering WASH practice adoption. As (Table 4.11) below shows a large proportion of 71.7% of respondents replied that any cultures but not all affect WASH practice adoption exercised by women and girls as compared to men and boys. The remaining 25.1% of respondents said that differently, culture affects WASH practice at a low level and the influence of several cultures in long run is considered normal, accepted and practiced in day-to-day life. FGDs participants extensively discuss that cultures particularly in the rural area, it was forbidden by family when girls keep their hygiene and beautify extremely because family suspects their beauties expose girls children for different harassment and including abduction.

KII suggest that most cultures encourage wrongdoings more normal for male than for female. In most cases, men practice open defecation by considering it as it is their right and think that it was never allowed for women. Because of this women were the victim of several infections

because they hold their urine for a long period while they make long journeys and shying to urinate in an open area.

Table 4.11 Extent to which Culture affect WASH practice exercised by women & men

Scales	Frequency	Percent
Not at all	226	71.7
Moderate	10	3.2
Low	79	25.1
Total	315	100.0

Source: Own field survey, 2020

4.5.1. The role of culture in day-to-day WASH practice adoption

The last household survey question, discussion and interview focused on culture and the day to day WASH practice. As culture and WASH practices were highly interrelated (table 4.11) below shows that the majority 54.9% of respondents replied that various cultures depending on the location and ways of doing of community allows open defecation and urination as normal for men and boys whereas consider as taboo for women and girls. Following this less than half 45.1% of respondents confessed that most cultures assign more burdens as it was the only responsibility of women as compared to men.

According to the discussion made with FGDs participants, urinating in an open area was taken as a normal activity for men and considered taboo for a woman. Related to this issue there was the habit of washing by women early morning and at night but not practiced by men because the culture never allows this practice to exercise by men. Regarding the exposure to a communicable disease, KII depicts that various cultures promote and encouraged good practice whereas others were subject to sex discrimination and most norms favor men and demoralize women. The deep-rooted habit and practices of certain cultures need time and effort to equalize for both sex and awareness should build upon the mass community and concerned body to reduce influence created by cultures.

Table 4.12 Role of culture in day-today WASH practice adoption

Deferent Roles and right	Frequency	Percent
Assign more burden as the only responsibility of women	142	45.1
Allowing open defecation and urination for man/boy as normal whereas taboo for women/girls	173	54.9
Total	315	100.0

Source: Own field survey, 2020

4.5.2. Culture and share of burden among different sex

In most cases, roles and responsibilities were subject to cultural influence. As table 4.11 below shows that 34.6% of respondents said that their culture moderately affects the sharing of home activities among men and women. Regarding this 27.6% and 27.3 % of respondents answered that culture affects activity sharing at low and not at all levels respectively. The remaining 8.3% and 2.2% of respondents said that high and very high-level culture affects the division of tasks in the community. FGDs discussants raise that most of the time full and equal involvement of men in-home activity was seen as taboo and share activities based on their sex as a home activity for women and activity outside of the home for men.

As KII expresses life activities and cultures were highly interrelated, so time, civilized/educated power and budget were needed to change wrong attitudes, norms and habits that were deeply rooted in the community. Gradually day after days after awareness on different stages were created and various promotion activities about men and women equality have undertaken the idea of sex difference in activities were minimized. So the habit and different sayings related to assigning tasks for men and women were change over time and progress shows that burdens of women were reduced by half due to men involvement and men understanding about the impact of home activity and try to share these burdens at home.

Table 4.13 Level of home activity sharing among man and woman

Scales	Frequency	Percent
Not at all	86	27.3
Moderate	109	34.6
Low	87	27.6
High	26	8.3
very High	7	2.2
Total	315	100.0

Source: Own field survey, 2020

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

The study was conducted to assess the gender aspect of WASH practice adoption in Grar-Jarso woreda Eyeta Danisa and Dere Doyou kebeles. It sought to assess the awareness of the community toward the gender aspect of improved WASH practice adoption, to describe the role and responsibility of gender to sustain WASH practice, to analyze the contribution of improved WASH practice adoption for the environment as well as human health and finally to identify major challenges that hinder WASH practice adoption.This chapter includes interpretation of findings, conclusion and recommendation.

5.2. Interpretation of Findings

It was assessed that WASH, especially the hygiene activity was highly and frequently practiced in the community due to the occurrence of the COVID-19 pandemic. This situation completely changes the attitude of a community toward handwashing and personal hygienic activities. So the gender division of tasks that previously exits on WASH practice was avoided at a glance about hygiene. Related to this behavioral change toward hygiene activity was evident but the sustainability of the practice remains under question after coronavirus.

On the other hand, even if health extensions and health care institutions create awareness about WASH practice and the advantage of its sustainability for the environment and human health, there are extensive gaps up in the sanitation status of the community. It is not only the sex difference but also the type of livelihood of the household that has a great impact on the sanitation status of the environment and personal hygiene.

The source of income and means of livelihood of most households was farming and male spends their time on the field which is far from their living home or village. Once farmers go out for work they didn't return home to use the toilet until they complete their task and prefer to use the open area for urination and defecation around their farmland, under trees and around the water body. Evidence shows that men practice open defecation more as compared to women but the level of exposure to communicable disease was low as compared to women due to the biological inconvenience of their body structure to infect by different germs and bacteria's.

5.3. Conclusions

The study found out that the gender division of tasks has a long history and the community does not immediately able to leave the habit of doing things out of the circumstance they exist. The most community remains under the domination of their culture whether it is bad or good due to long term adaptation and strong adherence. Throughout time sex-based division of activity become one part of the culture and is followed by several. Modernization plays a significant role to understand the burden of women and move toward a solution. Now a day beginning from awareness creating until completely changing the attitude of a community toward gender division of tasks several movements were undertaken and bring remarkable change. The survey shows that the community has great access to clean water which was sufficient for WASH practice. Developed hand-dug well and spring were respectively source of water used by the community at different time throughout the year.

The sanitation status was the community shows moderate amendments, especially after heath extension in kebele and WASH program on woreda, involve and create awareness about the multi-dimensional advantage of the clean environment free from faence for living things at all. Related to this most rural households built non-standardized and construct toilets with a very small hole for temporary use and after a time it becomes out of service particularly during the summer season. The bare toilet was exposed to rain and the hole was directly filled by water, because from the beginning the toilet was not covered properly and easily exposed for flood, this again pollutes the surrounding environment and finally, households forced to practice open defecation.

On the other hand, the hygiene status of the community shows outstanding progress due to the widespread COVID-19 pandemic. Previously hygiene was the activity most dominantly undertaken by a woman as compared to men. In most cases, women carry abundant burden and responsibility at home related to child-caring, cooking and feeding, fetching water, washing clothes and bathing children. So this condition allows them to wash their hand while feeding Childs and keep their hygiene while feeding breast. Currently, hand washing after and before performing any activity was seen as a habit and undertaken without sex difference within 20-30 minute interval to survive and minimize the widespread of the disease by understanding the killing capacity of the virus unless properly and frequently washing hand touching nose, mouth and eyes with contaminated hands.

5.4. Recommendations

The recommendation was drawn for academicians, policymaker, and community

- Awareness gives about the environment and environmental protection by health extension and health care institution for a household was not enough. So including environment-related subjects as one component in the educational curriculum.
- Coronavirus ensures the necessity of frequent hand washing and avoids sex base gap up on hygiene practices. Heath extensions should work on behavioral change to sustain this activity after the virus gets a solution.
- Health extensions and the WASH program should not only tell the community to construct toilets to protect the environment but also undertake follow-up activities about the type and quality of toilets and water points constructed and used.
- Any stakeholders, NGOs and governmental institutions should not sometimes construct a toilet in the near distance for the community, it is better to build a toilet around farmland, dense tree and water body to be used by those whose work behavior allows them to return to home or village to use the toilet.
- Any work plan designed at federal, regional and woreda level should be gender and environment inclusive.
- The community should use communal latrines properly with a sense of ownership.
- To promote the sustainability of WASH practice adoption heath, education, water bureau should work jointly.
- Education bureau should make continuous follow up toilets exist in whether or not built with basic WASH facility to increase the quality of education, girls performance and reduce absenteeism.
- Encouraging and building the capacity of the WASH club exists at any level. The community should apply WASH practice as they heard from heath extension, health care institution and different Media properly to ensure the sustainability of WASH and benefit from the practice.

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Annex I: Data collection tools (English version)

Annex 1.1: Household survey questioner

ADDIS ABABA UNIVERSITY

COLLEGE OF DEVELOPMENT STUDIES

CENTER FOR ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Dear Participant,

Myname is Kidist Gizachew Ararsa. I am a student in the center of environment and sustainable development in the college of development studies at Addis Ababa University. The title of my research is Gender aspects of Water, sanitation and hygiene (WASH) practice adoption in Grar-Jarso woreda Oromia regional state, Ethiopia. The main objective of the study is to gather data on gender aspects of WASH practice adoption and to feed the specific objectives of the study. Your proper and honest response is crucial for the accomplishment of the research work.

Please note that:

- Your participation is entirely voluntary. You have a choice to participate or not to participate in the research as a data/information provider.
- Your views in this interview will be presented anonymously for the research hence neither your name nor identity will be disclosed in any form in the study.
- I confirm that all data will be treated confidentially.

In advance, I would like to thank you for your corporation!!

Name of Enumerators_____signature _____

Dateof interview _____ No. of question_____

Checked by _____ signature _____

Section 1: Respondents: Household background Information

Name of the Kebele_____

I. General Information

S.No	Items	Response
1.	Head of Household	1.F 2.M
2.	Age of respondent	1.18-25 2.25-35 3.35-45 4.45-55 5.>55
3.	Educational Level	1. Illiterate 2.Read only 3.Read and write 4.High school 5. other specify_____
4.	Marital status	1. single 2. Married 3. separate/divorced 4. widowed
5.	What is the family size of your household?	1.F 2.M 3.Total _____
6.	How many of your children are below 5 years old?	1. None 2.One 3.Two 4. More than two
7.	Do your children go to school, if they are old enough to go?	1 Yes M ------ F----- 2.No M ------- F------

Section 2: Household burden/Responsibilities

Questionnaire for Household

8. What is the role of women in the household?
    1. Child caring
    2. Food preparation
    3. Keeping animal
    4. Participation in crop production

5. Water fetching
6. Please specify other------

9. Do you think that the above activities are more the responsibility of women/girls?

1. Yes 2.No

10. If your answer to the question on 9 is yes, what are the mechanisms to reduce the burden of women at home?

1. Encouraging women to use better source energy for cooking
2. Make them access water at a near distance
3. Promoting equal division of tasks
4. Building the capacity of women
5. Please specify others----------

11. Do you think that both women/girls and man/boys equally participate in activities like toilet construction, cleaning and maintenance?

1. Yes 2.No

Section 3. Awareness/information

S.No	Questions	No at all	Low	Moderate	High
		1	2	3	4
12.	Have you ever been told about the importance of equally participating in the adoption of water sanitation and hygiene practice between Women /girls and men /boys?				
13.	How do you rate men/boys involvement (Participation) in water fetching, hygiene and sanitation practices at your household compared to women/girls?				
14.	What is the level of your understanding about the contribution of adopting WASH practice on environment and health?				
15.	What is the level of your know-how about Communicable disease due to lack of safe Sanitation and hygiene practice?				
16.	What is the level of your understanding of the negative impacts of open defecation on the environment and health?				
17.	what is the level of your practice to discuss with others and share ideas about WASH practice Adoption?				

18. What is the source of your knowledge about WASH practice?

1. Mass Media (radio, TV)

2. Newspaper

3. Awareness through health institutions like health extension offices, health care center

4. Please specify other

Section4. WASH contribution

19. What is the source of water in your household that has been in use at a different time of the year?

Multiple answers

No	Sources	1= yes, 0= no		
		Year-round	Rainy season	Dry season
A	Developed spring			
B	Developed hand dug well			
C	Shallow/deep wells			
D	Roof water			
E	Unsafe water sources like river, unprotected springs/wells, ponds			
F	Please specify other			

20. Do you get safe and sufficient water for the home, sanitation and hygienic activity?

1. Yes 2. No

21. If the answer to question no.20 is yes what kind of sanitation and hygienic activity undertake by using water?

1. Personal hygiene
2. Washing clothes
3. Cleaning home and utensils used for food preparation
4. Other please specify

22. What is the level of sanitation in your village?

1. High 2. Moderate 3. Low 4. Very low

23. Do your household have a latrine?

1. Yes 2. No

24. If the answer to Question number 23, is yes, what type,

1. Private latrine 2. Communal/shared latrine

25. How do you cope with the lack of latrine in your compound?

1. By practicing open defection
2. By using another latrine
3. Other please specify ----------

26. As per your view what are the advantage of having a communal latrine around and a personal latrine at home?

1. Avoiding communicable disease
2. Keeping the environment clean
3. Preventing women from discomfort during menstruation and while urinating?
4. Other please specify ----------

27. How do you rate the level of hygiene practicing at your home among all family members?

1. High 2.Moderate 3. Low 4.Very low

28. Do you have handwashing habit during food preparation, before eating food and during Catering food?

1. Yes 2. No

29. Do you have a handwashing habit after the toilet?

1. Yes 2. No

30. What is the source of your income?

1. Farming
2. Trade
3. Labor work
4. Other please specify

31. Do your household members use soap for washing purposes?

1. Yes 2. No

32. If the answer for question no, 31 is yes, do you have enough/constant income to buy soap frequently?

1. Yes 2. No

33. If the answer to question no. 32 is no do you use another option?

1. Yes 2. No

34. If the answer for question no 33 is yes and whenever you lack money to buy soap what

Options you use?

1. Use of ash 2. Use of Endod 3. Other please specify

35. Do your children have the latrine in the school compound?

1. Yes 2. No

36. If the answer for question no, 35 is yes is the toilet separated for boys and girls?

1. Yes 2. No

37. If the answer to question no, 38 is No what are the consequence on girls during Menstruation period?

1. Practicing absenteeism from class
2. School dropout
3. Facing health problem such as reproductive organ infection
4. Psychological problem
5. Other please specify

38. Do you think that having a toilet in the school compound have an impact on the environment and health?

a. Yes b. No

Section 6: cultural influence and challenges

S.No	Questions	Not at all	Moderate	Low	High	Very high
		1	2	3	4	5
39.	To what extent does your culture affect personal hygienic activities exercised by girls and women?					
40.	To what extent does your culture affect personal hygienic activities exercised by boys and men?					
41.	To what extent do you condemn open defecation					
42.	How do you rate the level of home activities sharing among female(women and girls) and Male(men and boys) in your household					

43. What are the challenges your household members facing due to practicing open defection?

1. Harassment
2. Alienation from society //feel ashamed
3. Being the victim of the disease
4. Other please specify

44. What is the role of culture in your day to day WASH practice adoption?

1. Encourage unequal division of activity like fetching water, preforming home activity
2. Assign more burden as the only responsibility of women
3. Allowing open defecation and urination for man/boy as normal whereas taboo for Women/girls
4. Please specify other

Annex 1.2: Key informants interviews (KII) checklist

Dear key informants

Myname is Kidist Gizachew Ararsa. I am a student in the center of environment and sustainable development in the college of development studies at Addis Ababa University. The title of my research is Gender aspects of Water, sanitation and hygiene (WASH) practice adoption in Grar-Jarso woreda, North Shewa Zone of Oromia regional state, Ethiopia. The main objective of the study is to gather data on gender aspects of WASH practice adoption and to feed the specific objectives of the study. Your proper and honest response is crucial for the accomplishment of the research work.

Please note that:

- Your participation is entirely voluntary. You have a choice to participate or not to participate in the research as a data/information provider.
- Your views in this interview will be presented anonymously for the research hence neither your name nor identity will be disclosed in any form in the study.
- I confirm that all data will be treated confidentially

In advance, I would like to thank you for your cooperation

Question for Woreda WASH gender officer (women's affair office)

Name of the interviewee _____

Position/title _____

Date ----------

1. What are roles and responsibilities that the society assigned to women and men in this kebele?
2. How do you rate WASH practice in your community?

   (Not at all, good, very good, little)
3. What are the major problems that the woreda women face while practicing WASH?
4. What is the community perception towards WASH practice?
5. How do you see the relationship between environmental sanitation and hygiene?
6. What is the impact of practicing open defecation and poor hygienic activities on environment and human health? What is the level (% practicing) of open defecation among the woreda community?
7. Do you think that WASH practice is subject to sex disaggregation? /How or How not/
8. Who do you think that women/girls and men/boys more responsible to sustain WASH practice?
9. What efforts are undertaken to adopt WASH practice and reduces gender division of WASH practice in the woreda?

Question for Woreda Water and Energy Office

Name of the interviewee _____

Position/title _____

Date_____

1. What is a clean water supply cover of the woreda disaggregated by urban and rural??
2. What is the source of water available in this woreda to be distributed for different kebele's?
3. How do you make available/distribute water for the community throughout the year without interruption?
4. What kinds of effort do you undertake to ensure the accessibility of the community to clean water?
5. To what distance do you construct water points to make water available in the near distance?
6. What do think that the consequence of constructing water points the near distance?
7. What activities do undertake to reduce the burdens of women about water point construction and water availability?
8. What kind of relationship do you have with the community particularly within women?
9. Who do you think suffer a lot due to lack of clean water among the community?
10. How do you work jointly with the WASH office?

Question for Woreda Education office

Name of the interviewee _____

Position/title _____

Date _____

1. What is the general status of sanitation and hygiene in schools in this woreda?
2. How do you keep the sanitation and hygiene of students in the school compound?
3. How do you deliver better sanitation and hygiene facilities /services? Like soap and restroom for ladies?
4. What efforts do you make to reduces girl's school dropout and absenteeism due to lack of water in the school compound?
5. What mechanism do you follow to create awareness about WASH in school?
6. How jointly and in what area you work with the WASH office to deliver water for schools and to promote sanitation and hygiene?
7. How you avoid the practice of open defecation in school? Do you think that all schools have a toilet and separate toilets?
8. What challenges do face during the delivery of sanitation and hygiene facility in the school
9. How do you work in collaboration with the health officials on distributing sanitary material for female students
10. What is the role of the availability of water and the existence of toilets in school on the education system especially on girl's performance?
11. What efforts are made to sustain the practice of WASH in school

Question for Health extension Agent

Name of the interviewee _____

Position/title _____

Date_____

1. What is the role of health extension service in creating awareness about WASH practice?
2. From what perspective most of the time health agents create awareness? Is that for personal health or environmental health?
3. How you create awareness about sanitation and hygiene in this kebele is that only in the health care centers or by involve in the community?
4. If your experience who is frequently the victim of communicable disease due to lack of water and safe sanitation? women/girls and man/boys
5. How you jointly work with the WASH office and Education office?
6. What are the preconditions you undertake to tackle communicable disease?

ANNEX II: DATA COLLECTION TOOLS (OROMIFA VERSION)

YUUNIVERSIITII FINFINNEETTI

KOOLLEEJJII DAGAAGINA QORANNOOTTI

GIGGUGALAA NAANNOO FI MISOOMAA ITTI FUFIINSAA

Miiltoo

1. Miiltoo-I

1.1 Kabajamoo hirmaataa/ttuu

Maqaan koo Barattuu Qidist Giaachew Araarsaan jedhama. Ani Yuuniversiitii Finfinneetti Koolleejjii Misoomaa Qo'annoo Gidduugala qorannoo Naannoo fi Misomaa itti fufiinsaatti baratattuudha.Qorannoon kiyyas Bulchiinsaa Mootummaa Naannoo Oromiyaa Godina Shawaa Kaabaa Aanaa Giraar Jaarsoo Itoophiyaatti mata-duree "Gender aspects of Water, sanitation and hygiene (WASH) practice adoption" jedhu irratti gaggeessuuf kanan yaadeedha.Kaayyoo gooroon qorannoo kanaas odeeffannoo iddattoo mata duree qorannoo kana irratti funanuu fi qorannichaa keessaatti kaayyoo gooreen duub-deebii qorannoo gaggeeffamee irratti kennuudha.Deebiin ati bar gaaffii fi af-gaaffii waraqaa maxxantuu kana irratti amantummaa fi qajeelummaan naaf kennitu xuruma qorannoo gaggeeffamuuf baayee murteessaadha.

1.2 Mee kana hubadhu:

- Hirmaannan kee fedhii kee irratti kan hundaa'eedha.
- Odeeffannoo qorannoo gaggeeffamuu kanaaf filannoo hirmaachuu ykn hirmaachuu dhisuu ni qabda.
- Ilaalcha kan kee af gaaffii keessaatti yoo dhiyeessituu maqaa kees ta'ee eenyummaa kee ibsuun dhorkaa fi haala kaminiyyuu qorannoo keessaattis iccitiidhaan cufamee kan qabamu ta'a.
- Ani kanan si fudhadhuu odeeffannoo kennituu hundumaa iccitiidhaan naan eega.

Deeggarsa naaf gooteef guddaan si galateeffadha!!

Maqaa hirmaataa ----------Mallattoo ---------- guyyaa af gaaffii _____

lakk. Gaaffannoo ----------

kan mirkaneessee _____ Mallattoo _____

Qajeelfamaa 1: Deebisaa/ttuu: Dudduubee Odeeffannoo haala maatii

Maqaa Gandaa_____

I. Odeeffannoo Waliigalaa (General Information)

Lakk.	**Gaafannoo**	**Deebiilee gaaffii**
1.	Haala Saala Abbaa Warraa ykn Haadha Warraa maatii	1.Dubartii 2.Dhiira
2.	Umurii Deebisaa/ttuu	1.18-25 2.25-35 3.35-45 4.45-55 5.>55
3.	Gulantaa Barumsaa	1. kan hin barannee 2.Dubbisuu qofa 3.Dubbisuu fi barreessuu 4.sadarkaa Ol'aanaa 5. kan biroo yoo jiraatee adda baasii ibsi
4.	Haala Maatii	1. Qeenxee(kan hin fuunee /hin heerumnee 2. kan fuudhee/heerume 3. kan adda bahe/tee/hiikee/tee 4. Kan abbaa warraa/ haati warraa jalaa du'e/te
5.	Hangi haala maatii keetii akkami?	1.Dubartii------ 2. Dhiira..... 3.Ida'ama---------
6.	Ijoolleen kee umuriin isaanii waggaa shanii gadi ta'anii baay'inni isaanii meeqa?	1. hin jiru 2.tokko 3.lama 4. lamaa oli
7.	Ijoolleen kee mana barumsaa ni deemuu ? yoo umuriidhaan Mana Barumsaa deemuuf gahaan ta'e,	1 Eeyyee Dhiirri ------ Dubartii----- 2.Lakkii Dhiira ------- Dubartii------

Qajeelfamaa 2: Dirqama/Itti Gaafatamummaa Haalaa Maatii Gaaffannoo Haadha Warraatiif

8. Gaheen dubartoota haadha warrummaa keessaatti qabdu maali?
    1. Ijoollee guddisuu
    2. Nyaata qopheessuu
    3. Horii tiksuu/eeguu
    4. Oomishaa midhaaniitti hirmaachuu
    5. Bishaan waraabuu
    6. Mee kan biraa yoo jiraatee adda baasii_____

9. Gochaa/hojiiwwan armaan olii kun hunduu itti gaafatummaa haadholee/ shamarraniiti jettee yaaddaa?
    1. Eeyyee 2. Lakkii

10. Yoo deebiin kee gaaffii lakk. 9^{ffaa} eeyyeenii kan jettuu ta'e, tooftaan/ malli dirqama haadholeen mana keessaatti qaban itti Hir'suun maalii?
    1. Madda annisaa fooyya'aa dubartoonni nyaata bilcheessuuf itti fayyadaman jajjabeessaa ta'etti akka tajaajilaman gochuu
    2. Bishaan fageenya dhihoo ta'eetti akka isaan argachuu danda'an gochuu
    3. Qoodinsa hojii wal qixatti guddisuu
    4. Dandeettii dubartoota ijaaruu
    5. Kan biraa yoo jiraatee mee adda baasii_____

11. Haadholii/shamarraan ykn abbotiin/ijooleen dhiiraa hojiiwwan akka mana fincaanii ijaaruu, qulqulleessuu fi suphuu lamaanuu wal qixa ni hirmaatuu jettee ni yaaddaa?
    1. Eeyyee 2. Lakkii

Qajeelfama 3. Hubannoo/Odeeffannoo (Awareness/information)

Gaafannoo	Yeroo Hunda miti	Gadi aanaa	Gidduu galeessaa	Ol'aanaa
	1	2	3	4
12. Barbaachisummaa walqixxummaan hirmaannaa shaakala qulqullinaa (saaniteeshinii) bishaanii fi haala dhiqannaa haadholii/shamarraan fi abbaa/ilmaa jidduu jiraachuu isaa tasuma sitti himamee beekaa?				
13. Hirmaannaa abbootiin/ilmii bishaan waraabuu, qulqulliinaa dhuunfaa fi naannoo akkasumas shaakala (gochoota) saaniteeshinii keessaatti qaban haadholii/ shamarraan miseensaa maatii keessaatti haala kamiin waliin dorgomsiistee hammeentaa isaa baastaa?				
14. Waa'ee hirmaannaa shaakala harkaa dhiqannaa barsiifata taasifaachuu irratti gulantaan hubaannoo ati naannoo fi fayyaa irratti qabdu maali?				
15. Waa'ee dhibee tutuqaa sababa hanqina saaniteeshinii fi qulqullinaa dhuunfa ofii fi naannoo jireenyaa shaakaluu dhabuu dhufuu irraatti haala kamiin akkamitti kan jedhuuf gulantaan beekumsa kee maal fakkaata?				
16. Gulantaa hubannoo waa'ee hurufa(dirree) irratti hagiinsa xurawaa jajjaboo qaama namaa keessaa bahuu raawwachuu miidhaan akkaamii naannoo fi fayyaa irratti qabuu maal fakkaata?				
17. Gulantaan waa'ee shaakala dhiqannaa amaleeffachuu, namaa biraa waliin mari'achuu fi yaada waliif qooduu irratti ati maal fakkaata?				

18. Waa'een madda beekumsaa gochaa (shaakala) dhiqannaa keetii maali?

1. Midiyaa Hawaasaa (Raadiyoonii, TV)
2. Gaazeexaalee
3. Hubannoo karaa dhaabbilee fayyaa kanneen akka waajjiraa ekisteeshinii fayyaa, gidduu gala eegumsa fayyaatiin kennamu.
4. Kan biraa yoo jiraatee adda baasii_____

Qajeefama 4. Hirmaannaa Dhiqannaa (WASH contribution)

19. Maddi bishaan maatiin kee mana kee keessaatti waggaa guutuu yeroo adda addaa itti fayyadamanii maali?

Deebii adda addaa (multple Answer)

Lakk.	Maddoota	1= Eeyyee, 0= Lakkii		
		Waggaa guutuu (Year round)	Wayita roobaa (Rainy season)	Wayita gogaa (Dry season)
A	Bishaan saamsamee			
B	Bishaan wiilii harkaan qotamee			
C	Bishaan boollaa burqaa gadi fagoo wiiliin bahuu			
D	Bishaan baaxii			
E	Madda bishaanii qulqullinni hin eegamnee kan akka bishaan lagaa, bishaan hin saamsamnee bishaan boollaa			
F	Kan biraa yoo jiraatee adda baasii -------			

20. Bishaan mana keessaatti ittin fayyadamuuf, saaniteeshiniif, qulqullinaa dhuunfaa fi naannoo keeittin eeguuf gahaa fi qulqulluu ta'ee argachuu ni dandeessaa?

1. Eeyyee 2. Lakkii

21.Yoo deebiin kee gaaffii 20ffaaf eeyyee ta'e akaakuu saaniteeshinii fi qulqullinaa dhuunfaa naannoo akkami bishaan fayyadamee ittin hojjetta?

1. Qulqullina dhuunfaa
2. Uffata(huccuu) ittin miiccuu
3. Mana ittin qulqulleessuu nyaata ittin qophheessuuf fayyadamuu

4. Kan biraa yoo jiraatee adda baasii ibsi_____

22. Mandara ati jiraattuu keessaatti sadarkaan (gulantaan) saaiteeshinii maal fakaata?

1. Ol'aanaa 2. Jidduugaleessa 3. Gadi aanaa 4. Baay'ee gadi aanaa

23. Manni jireenyaa ati keessaa jiraattuu boollaa Mana fincaanii qabaa?

1. Eeyyee 2. Lakkii

24. Yoo deebiin kee gaaffii 23ffaaf "eeyyeen" ta'e boolla mana fincaanii akaakuu kami?

1. Mana fincaanii dhuunfaa 2. Mana fincanii waliin (namoonni baayeen waliin fayyadaman)

25. Hanqina mana fincaanii naannoo kee jiru akkamiin furuun danda'ama?

1. Dirree hurufa irratti qulqulleeffachuudhan (hagiinsa raawwchuudhaan)
2. Mana fincaanii/ iddoo xuraawa itti qulqulleeffatan kan biraa fayyadamuudhaan
3. Kan biraa yoo jiraatee adda baasii ibsi _____

26. Akka ilaalchaa keetitti faayidaan mana fincaanii kan namoota baayee waliin akka naannoottii fi manatti iddoo xurawaa itti qulqulleeffattuu kan dhuunfaa qabachuu maali?

1. Dhukkubaa tutuqaan daddarbuu ittisuuf
2. Qulqullina naannoo eeguuf
3. Dubartoota yeroo xuriin laguu itti dhufee fi fincaan fincaa'an haalli mijatan akka itti dhagahamuu eeguuf
4. Kan biraa yoo jiraatee adda baasii ibsi _____

27. Haala sochii (gochaa) qulqullinaa dhuunfaa fi naannoo kee eeguu keessaatti miseensoota maatiikee hundaa keessaa gulantaa dhuunfaa kee akkamitti madaaltaa?

1. Ol'aanaa 2. Jidduu galeessaa 3. gadi aanaa 4.baayee gadi aanaa

28. Amaleeffannaa harka dhiqachuu yeroo nyaata qopheessituu, nyaata nyaachuun duraa fi yeroo nyaata dhiyeessituu ni qabdaa?

1. Eeyyee 2. Lakkii

29. Amaleeffannaa ergaa mana fincaanii deemtee fayyadamtee booda harka dhiqachuu ni qabdaa?

1. Eeyyee 2. Lakkii

30. Maddi galii keetii maali?

1. Qonna
2. Daldala
3. Hojii Humana
4. Kan biraa yoo jiraatee adda baasii ibsi_____

31. Mana kee keessaatti miseensi maatii kee kaayyoo dhiqannaatiif saamunaa ni fayyadamuu?

1. Eeyyee 2. Lakkii

32. Yoo deebiin kee gaaffii lakk.31ffaa "eeyyeen kan jettuu ta'e galii gahaa/ dhaabbataa yeroo hundasaamunaa ittin bitattuu ni qabdaa?

1.Eeyyee 2. Lakkii

33. Yoo deebiin kee gaaffii lakk. 32ffaaf "lakkii" kan jettuu ta'e filannoo biraa ni fayyadamtaa?

1. Eeyyee 2. Lakkii

34. Yoo deebiin kee gaaffii lakk. 33ffaaf "eeyyeen" kan jettu ta'e fi yemmuu saamunaa bitachuuf maallaqaa dhabduu filannoon biraa ati fayyadamtu maalii?

1. Daaraa fayyadamuu 2. Andodee fayyadamuu 3. Kan biraa yoo jiraatee ibsi

35. Ijoolleen kee moraa mana barumsaa keessaa mana fincaanii xurawaa itti qulqulleeffatan niqabuu?

1. Eeyyee 2. Lakkii

36. Yoo deebiin kee gaaffii lakk. 35ffaaf "eeyyeen" ta'ee manni fincaanii dhiiraa fi dubaraaf addabahe jiraa?

1. Eeyyee 2. Lakkii

37. Yoo deebiin kee gaaffii lakk. 38ffaaf "lakkii" kan jettu ta'ee miidhaan dubartoota irraa yeroo marsaa xurii laguu gahuu maalii ta'uu danda'a jetta?

1.Mana barnootatti barumsaa irraa hafuu

2. Mana barnoota addaan kutuu

3. Rakkoon fayyaa kan akka miidhaa qaama saala hormaata muudahuu

4.Rakkoo saayikoolojii(xin-sammuu) muudachuu

5.Mee kan biraa yoo jiraatee adda baasii ibsi_____

38. Mooraa Mana Barumsaa keessaa mana fincaanii qabachuun naannoo fi fayyaa irratti Dhiibbaa ni qaba jettee yaaddaa?

1. Eeyyee 2. Lakkii

Qajeelfama 6: Dhiibbaa fi Danqii Aadaan fidu

Lak		Hunda miti	Jiddu galeessa	Gadi aanaa	Ol'aanaa	baayee ol'aanaa
		1	2	3	4	5
39.	Haadholii fi shamarranii sochii qulqullinaa dhuunfaa isaanii eeggachuudhaaf aadaan kee hanga isaanii irratti dhiibbaa uumaa?					
40	Abbootii fi ijoolleen dhiiraa sochii qulqullinaa dhuunfaa isaanii eeggachuudhaaf aadaan kee hanga isaanii irratti dhiibbaa uumaa?					
41	Hurufatti xuraawa qulqulleeffachuun hangam nama ciiga'aa?					
42.	Qoodinsa hojii mana keessaa dhiiraa fi dubartootai jidduutti maatii kee biratti raawwatama jiru?					

43. Dhiibbaawwan miseensoota maatii kee irraa sababa hurufa irratti xurawaa qulqulleeffachuu isaatiin irraa gahu maal fa'aadha?
    1. Cunqursaa/miidhama
    2. Hawaasa/ummata keessaa dhiibbamu /miirri qaanii itti dhagahamuu
    3. Nama dhibeen miidhame ta'uu
    4. Kan biraa yoo jiraatee adda baasii ibsi_____

44. Gochaa dhiqannaa guyyaa guyyaa ati raawwachaa ooltuu keessaatti gaheen aadaa keetii maali?
    1. Qoodinsa hojii wal qixa hin taanee kanneen akka bishaan waraabuu, hojii mana keessaa hojjechuu fa'aajajjabeessuu
    2. Dirqama irra caalaa akka dubartoota qofaaf itti gaafatamummaadhaan kennameetti murteessuu
    3. Dubartootaaf akka qaaniitti fudhachuun dhiiroonni hurufatti xurawaa akka qulqulleeffatan heyyamuu
    4. Kan biraa yoo jiraatee adda baasuun ibsi_____

YUUNIVERSIITII FINFINNEETTI

KOOLLEEJJII DAGAAGINA QORANNOOTTI

GIGGUGALAA NAANNOO FI MISOOMAA ITTI FUFIINSAA

2. Miiltoo-II

2.1. Kabajamoo Furtuu Odeeffaataawwanii (Dear key informants)

Maqaan koo Barattuu Qidist Giaachew Araarsaan jedhama. Ani Yuuniversiitii Finfinneetti Koolleejjii Misoomaa Qo'annoo Gidduugala qorannoo Naannoo fi Misomaa itti fufiinsaatti baratattuudha.Qorannoon kiyyas Bulchiinsaa Mootummaa Naannoo Oromiyaa Godina Shawaa Kaabaa Aanaa Giraar Jaarsoo Itoophiyaatti mata-duree "Gender aspects of Water, sanitation and hygiene (WASH) practice adoption" jedhu irratti gaggeessuuf kanan yaadeedha.Kaayyoo gooroon qorannoo kanaas odeeffannoo iddattoo mata duree qorannoo kana irratti funanuu fi qorannichaa keessaatti kaayyoo gooreen duub-deebii qorannoo gaggeeffamee irratti kennuudha. Deebiin ati bar gaaffii fi af-gaaffii waraqaa maxxantuu kana irratti amantummaa fi qajeelummaan naaf guuttuu kun xuruma qorannoo gaggeeffamuu kanaaf baayee murteessaadha.

Galatomi!

Mee kana hubadhu:

- Hirmaannan kee guutummaan fedhiidhaani.
- Odeeffannoo kennuuf qorannoo gaggeeffamuu kanaaf filannoo hirmaachuu ykn hirmaachuu dhiisuu ni qabda.
- Ilaalcha kan kee af gaaffii keessaatti yoo dhiyeessituu maqaa kees ta'ee eenyummaa kee ibsuun dhorkaa fi haala kaminiyyuu qorannoo keessaattis iccitiidhaan cufamee kan qabamu ta'a.
- Ani kanan si fudhadhuu odeeffannoo kennituu hundumaa iccitiidhaan naan eega.

Deeggarsa naaf taasisteef galata ol'aanaa qabda!

2.2 .Gaafannoo Dhimmaa dhiqannaa koorniyaa (saala) irratti Waajjira

Dhimma Dubartootaa Aanaatiif Qophaa'ee

Maqaa gaafatamaa _____

Gita/ sadarkaa _____

Guyyaa ----------

1. Dhiirota fi dubartoota ganda kana keessaatti hawaasni gahee fi itti gaafatamummaadhaan ramadee maali?
2. Saffisa bartee/ Shaakala dhiqannaa hawaasa kee keessaa akkamitti safarta/ilaalta? (Yeroo hunda miti, gaariidha, baayee gaariidha, xiqqoodha)
3. Rakkoolee guddaan yeroo dubartoonni aanaa kana dhiqannaa shaakalan isaan muudatu maal fa'a?
4. Ilaalchi ummanni/hawaasni shaakala dhiqannaaf qabu maal fa'a?
5. Hariiroo saaniteeshinii naannoo fi waa'ee qulqullinaa jidduu jiru akkamitti ilaalta?
6. Dhiibbaa xurawaa hurufa irratti qulqulleeffachuun qabu fi hanqina qulqullinaa dhuunfaa eeguudhabuun naannoo fi fayyummaa namaa irratti qabu maal fa'a? Gulantaa/sadrkaan hurufa irratti xurawaqulqulleeffachuu hawaasa aanaa kana keessaa jiruu maal fakkaata?
7. Barteen/shaakalli dhiqannaa saalaa irratti xiyeeffachuun dhiibbaa ni uuma jettee yaadda? /akkamitti / uumaa? Akkamitti hin uumuu/?
8. Dhiiraa fi dubartoota eenyuutu shaakala dhiqannaa walitti fufiinsaa gochuuf irraa caalaa itti gaafatamummaa qaba jettee yaadda?
9. Dandeetti shaakala dhiqannaa guddifachuu fi qoodinsa dhiqannaa koorniyaan taasifamuu hir'isuuf ilaalcha akkamituu aanaa kana keessatti gabbifamuu fi raawwatamuu qaba?

2.3. Gaafannoo Waajjira Bishaanii fi Anniisaa Aanaatiif Qophaa'ee

Maqaa gaafatamaa _____

Gita/ sadarkaa _____

Guyyaa _____

1. Uwwisni dhiyeessi bishaan qulqulluu aanaan kun maagaalaa fi baadiyyaa adda baasuun/foo'uun taasisuu maal fakkataa?
2. Madda bishaan Aanaa kana keessaa argama irraa gandoota adda addaatiif rabsuuf maal fakkata?
3. Bishaan waggaa guutuu osoo addaan hin kutiin hawwasaaf dhiyeesuuf akkamitti hojjechaa jirtuu?
4. Bishaan qulqulluu ummata biraan gahuuf dandeettii/humna akaakuu isa akkamii fayyadamuun waliigahinsa isaa mirkaneessuun danda'ama?
5. Iddoo kuusaa bishaanii fageenyaa hanga irratti ijaaruun dhiyeessin bishaanii fageenya dhiyoo irraa akka ta'u taasifamee ?
6. Iddoo kuusaa bishaanii fageenyaa dhiyoo ta'ee irratti ijaaruun faayidaa maalii qaba jettanii yaadduu?
7. Sochiin dirqama dubartoonni iddoo kuusaa bishaanii ijaaruu qaban hir'isuu fi hariiroo dhiyeessii bishaanii gaarii ta'ee fiduuf akkamitti hojjechaa jirtuu?
8. Hariiroo akaakuu akkamii hawaasa waliin qabda, keessumattuu dubrtoota waliin wal qabatee?
9. Bishaan qulqulluun sababa hin jirreef dararaa/miidhama akkamituu hawaasa irraa gahaa jiraa jettee yaaddaa?
10. Waajjiraa dhiqannaaf haala mijeessuu waliin akkamitti qindoominaan hojjechaa jirtuu?

2.4. Gaafannoo Waajjira Barnootaatiif Qophaa'ee

Maqaa gaafatamaa _____

Gita/ sadarkaa _____

Guyyaa _____

1. Aanaa kana keessaatti sadarkaan waliigalaa saaniteeshinii fi qulqullinaa Mana barumsaa kana keessaa jiruu maala fakkaataa?
2. Mooraa Mana Barumsa keessatti saaniteeshinii fi qulqullinaa barattootaa akkamitti eegaa jirtaa?
3. Tajaailaa saaniiteeshinii fi qulqullinaa fooyya'aa ta'ee akkamitti dhiyeessaa jirtu? meeshaalee qulqullinaa kanneen akka saamunaa fi bakka dhiqannaa dubartootaaf qophaatti ni dhiyaataa?
4. Haqinni bishaanii yoo jiraatee fi sababa kanaan barattoonni dubartoota mana barumsaa akka addaan hin kunnee fi mana barumsaa irraa hin hafnee rakkoo jiru hir'isuuf humna akkamii fayyadamtee hir'isuu dandeessaa?
5. Mana barumsaa keessaatti mala akkamii fayyadamuun/hordofuun waa'ee shaakala dhiqannaa irratti hubannoo uumtaa?
6. Qindoominaa akkamii fi naannoo kam irratti xiyyeeffachuun bishaan dhiqannaa fi saaniiteeshinii fi qulqullinaaf ooluu Mana barumsaatiif dhiyeessuun shaakala dhiqannaa akka taasisaan beeksistaa?
7. Mana barumsaa keessaatti shaakala hurufa irratti xuraawaa qulqulleeffachuu raawwatamu akkamitti dhabamsiisuu dandeessaa? Manneen barnootaa hudinuu mana fincaanii adda adda bahee jiruu qaban jettee yaaddaa?
8. Yemmuu saaniteeshinii fi qulqullinaa mana barumsaa keessatti dhiyeessituu danqaawwan akkamittuu si muudata?
9. Waajjiraa Fayyaa waliin meeshaalee qulqullinaa barattoota shamarraniitiif dhiyeessuuf akkamitti qindoominaan hojjettuu?
10. Gaheen dhiyaachuu bishaan fi jiraachuu mana fincaanii mana barnootaa keessaatti sirnaa barnootaa irratti, keessaattuu raawwii barattoota shamarraniitiif qabu maalii?
11. Shaakallii dhiqannaa Mana barumsaa keessaa akka jiraatuuf dandeettiwwaan akkamii fayyadamuun itti fufsisuu dandeessuu?

2.5. Gaafannoo Ekisteenshinii Fayyaatiif Qophaa'ee

Maqaa gaafatamaa _____

Gita/Sadarkaa _____

Guyyaa_____

1. Gahee tajaajila Ekisteenshinii fayyaa waa'ee shaakala dhiqannaa irratti hubannoo uumuuf qabuu maali?
2. Yeroo hunda bakka bu'oonni fayyaa ilaalchaa isa kam irratti hubannoo uumuu? Waa'ee fayyaa dhuunfaa ilaalchisee moo fayyaa naannoo irratti hundaa'aniiti?
3. Waa'ee qulqullinaa dhuunfaa fi saaniteeshinii haala kamiin hubannoo uumaa jirta? buufata fayya keessaatti qofa moo kutaa hawaasa ganda kanaa keessaatti hirmaateeti?
4. Akka hubannoo fi muuxannoo ati qabduutti yeroo baay'ee dhibee wal qunnamuu/tutuqaatiin eenyutuu irraa caalatti miidhama dhiiroota moo dubartoota jetta?
5. Waajjiraa barnootaa fi Waajjiraa Eegumsaa fayyaa waliin qindoominaan akkamitti hojjetta?
6. Haal- dureewwaan ati dhibee tutuqaan daddarbuu dhabamsiisuuf hojjechuu/ gochuu qabduu maali?

3. Miiltoo-III

3.1 Gaaffiiwwan XiyyeeffannaaMarii Gareetiif Qophaa'ee

Kajamoo hirmaattota Marii (Dear discussion participants),

Maqaan koo Barattuu Qidist Giaachew Araarsaan jedhama. Ani Yuuniversiitii Finfinneetti Koolleejjii Misoomaa Qo'annoo Gidduugala qorannoo Naannoo fi Misomaa itti fufiinsaatti baratattuudha.Qorannoon kiyyas Bulchiinsaa Mootummaa Naannoo Oromiyaa Godina Shawaa Kaabaa Aanaa Giraar Jaarsoo Itoophiyaatti mata-duree "Gender aspects of Water, sanitation and hygiene (WASH) practice adoption" jedhu irratti gaggeessuuf kanan yaadeedha.Kaayyoo gooroon qorannoo kanaas odeeffannoo iddattoo mata duree qorannoo kana irratti funanuu fi qorannichaa keessaatti kaayyoo gooreen duub-deebii qorannoo gaggeeffamee irratti kennuudha. Deebiin ati bar gaaffii fi af-gaaffii waraqaa maxxantuu kana irratti amantummaa fi qajeelummaan naaf guuttuu kun xuruma qorannoo gaggeeffamuu kanaaf baayee murteessaadha.

Galatomi!

Mee kana hubadhu:

- Hirmaannan kee guutummaan fedhiidhaani.
- Odeeffannoo kennuuf qorannoo gaggeeffamuu kanaaf filannoo hirmaachuu ykn hirmaachuu dhiisuu ni qabda.
- Ilaalcha kan kee af gaaffii keessaatti yoo dhiyeessituu maqaa kees ta'ee eenyummaa kee ibsuun dhorkaa fi haala kaminiyyuu qorannoo keessaattis iccitiidhaan cufamee kan qabamu ta'a.
- Ani kanan si fudhadhuu odeeffannoo kennituu hundumaa iccitiidhaan naan eega.

Deeggarsa naaf taasisteef galata ol'aanaa qabda!

1. Yeroo hangamiif shaakala dhiqannaa taasifta?
2. Shaakallii itti fayyadama bakka xuraawa qulqulleeffatanii irratti hawaasni qabu maali? madaallii (%) matiin mana fincaanii dhuunfaa fayyadamu qaba?, mana fincaanii waliin and hurufa irratti xurawaa qulqulleeffachuu fayyadamuu?
3. Amaleeffannaan hawaasni kee nyaata dura harka dhiqachuu, yeroo nyaata bilcheessan, nyaata dhiyeessuu fi mana fincaanii erga fayyadamanii deebi'anii booda taasisan maal fakkata? (madaalliin /%)?
4. Madaalliin maatiiwwan mana tokkoo keessaa jiran tooraa mana finaanitti harka isaanii dhiqachuuf haalli mijataan isaan qaban (saamunaa, daaraa, bishaan) maal fakkaata?
5. Bartee dirree/hurufa irratti xuraawa qulqulleeffachuu hawaasa keessaa jiru akkamitti tilmamtaa?
6. Hurufa irrati xuraawa qulqulleeffachuun dhiibban inni naannoo fi fayyaa hawaasaa irraan gahu akkamitti madaaltaa?
7. Waa'een hubannoo dhiqannaa hawaasa keessaatti akkamitti ummama?
8. Hawaasa keessa jiraattuu kana keessaatti mana fincaanii ijaaruu fi suphuuf eenyutu itti gaafatamummaa qaba(dhiira moo dubartoota)?
9. Dhibee wal qunnamuun dhufu dhabamsiisuuf sirni fayyaa dabalataan saaniteeshinii fi qulqullinaa irratti waa'ee hubannoo diriirfamee ni jiraa? Akkamitti hojjetamaa jira?