

BASELINE SURVEY ON MENSTRUAL HYGIENE MANAGEMENT (MHM) IN SCHOOL

**At
Tigray, Amhara, SNNPR and Oromia Regional State, Ethiopia.**



While School Girls Attending Orientation on Baseline
Questionnaires at SebetaHawas Secondary School



One of the Unsafe & Full of Dirty Female Toilet at Enseno
Secondary School (Meskan Woreda)



FGD with School Girls at Enseno Secondary School, Meskan Woreda

DRAFT REPORT

July, 2014, Addis Ababa, Ethiopia
Supported by: SNV-Netherlands Development Organization

Consultant (LCB): Tired Community Empowerment for Change Association (TCECA)



Tired Community Empowerment for Change Association (TCECA) is an Ethiopian Resident Charity established in May 2005 with a vision of building prosperous and enlightened society where disadvantaged and marginalized groups of the community have access to all basic needs and facilities of life on equitable basis. The organization has implemented an innovative project that addresses multifaceted aspects of health, education and micro-enterprise development through capacity building and producing of alternative and affordable reusable sanitary pads which has been used by disadvantaged groups of women/girls. This kind of good practice and innovation has selected as one of the winner for national Charities Good Practice Award through the competition that were held among several NGOs which had undertaken by the independent Steering Committee established by the Consortium of Christian Relief and Development Association (CCRDA). Thus, the applicant organization has received an Awarded Certificate of Appreciation and Trophy on 7th June 2012 during the ceremony Day of National Charities and Good Practice in the presence of His Excellency Ato Hailemariam Desalegn, the current Prime Minister of Ethiopia as guest of honor.

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We hope that this study will serve the purpose of informing the strategies and actions of any concerned stakeholders in improving the Menstrual Hygiene Management (MHM) of school girls; as a result of which different MDGs can be achieved, in particular the guaranteed right to education and the right to sexual and reproductive health.

**Tiret Community Empowerment
For Change Association (TCECA)**

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Executive Summary

Menstrual Hygiene Management (MHM) is an issue that is insufficiently acknowledged and has not received adequate attention in the Reproductive Health and Water, Sanitation and Hygiene (WaSH) sectors particularly in the Baseline Survey areas of Oromia, Amhara, Tigray and SNNPRS and generally in Ethiopia and its relationship with and impact on achieving national and Millennium Development Goals (MDGs) is rarely acknowledged. This baseline survey on MHM make the issue visible to the concerned policymakers and inform practical actions are very much warranted. This small scale survey was undertaken with the objective of determining the prevailing knowledge and experiences of Menstrual Hygiene Management (MHM), and their implications, among school girls in rural and urban settings of the baseline survey areas.

This is a descriptive cross-sectional study in which mixed methods (quantitative and qualitative) were applied. Data was collected from 769 school girls (respondents) from 12 primary and 6 secondary schools, of which three schools (one secondary and two primary schools) from each Woreda namely, Meskan Woreda (SNNPRS), Sebeta Hawas and Tole Woredas (Oromia), Wukro Woreda (Tigray), Bure and Mackakal Woreda (Amhara). By using self-administered structured close-ended questionnaires, Focus Group Discussions (FGDs), and Semi-structured in-depth interviews; primary data was collected from school girls, teachers, parents and key informants. Six main recurrent categories have been identified in the analysis: (a) General Information about Menstruation; (b) Perception and Beliefs on Menstruation (c) Practice of Menstrual Hygiene (d) Condition of Sanitation and Hygiene Facilities in Schools, (e) Information about Sanitary Materials, and, (f) Effects of Poor Menstruation Hygiene in Girls Education.

Out of the 650 Menstrual girl respondents 177(27.2%) have knowledge about menstruation during their Menarche which were obtained from family (33.8%), friends (31.2%), Schools(17.4), Reading (14.6) and any media (9.1%) in the multiple questions response of survey respondents. Majority of the respondents 650(84.5%) had experienced menstruation; of which 473(72.8%) were not aware about menstruation during their menarche time. In multiple questions response of respondents with regards to problems related to external reproductive organs; majority of them 225(29.3%) were reported discomforts around their external reproductive organs, particularly, skin burning (32%), skin itching (60%), and urinary infection (62.7%) for multiple response of respondents. Furthermore, the other problems of respondents during menstruation were lack of concentration for the case of (42.3%) respondents, psychological effects (28.2%) and absent from school (28.6%) were reported by respondents as the main obstacles during the attending of classes. In the multiple response questions in relation to ever faced problems during menstruation, isolation in the case of (48.8%), insult (26.7%) and discrimination (24.5%) were also reported. About 427(55.5%) survey respondents were observed some kinds of problems on other friends/colleagues such as isolation, bias, and insult due to menstruation that has been a contributing factor for one being abstaining from social activities.

Out of 650 menstrual school girls; about 327(50.3%) respondents were confirmed that they were absent from school, of which 278(85%) from 1-3 days and 49(15%) more than 4 days every month due to menstruation. Many girls though physically present in the school, were unable to perform well due to poor concentration and lack of attention resulting from the constant worry of menstrual flow. As result of this; majority of 530(81.5%) respondents were reported that lack of maintenance of privacy are the main challenges due to inadequate toilet (53.8%); common toilet for male and female (27%) lack of door and lock (40.4%) and lack of water (80.56%) in schools for changing sanitary pads and washing their genital organs were the major reasons identified by survey respondents in their multiple questions response for being absent during menstruation. Moreover, as per the observation checklists of school toilets; lack of water, full of faces (dirty), and minor issues, such as missing door and locks, even when infrastructure of toilet is present, were observed during baseline survey.

With regard to practice of sanitary pads; about 616 (94.8%) respondents confirmed that they have been used menstrual protection materials during menstruation, of which (41.2%), (51.4%) and (18.5%) and (4.3%) survey respondents used disposable sanitary pads, reusable cloths; disposable piece of rags and soft paper respectively. In this case, practices of disposable sanitary pads during menstruation were founded higher among urban (65.8%) respondents while the uses of reusable cloth were higher among rural (77.3%) school girls during menstruation. Significant numbers of 340(44.2%) respondents were not aware about the availability of sanitary pads at the local market. On the other hand, in the multiple questions response, high cost (unaffordability) and lack of long lasting on imported disposable sanitary pads were the major reasons for case of (47.6%) and (52.4%) respondents who have reasons not using disposable sanitary pads. That is way, the low cost and ease of availability of reusable cloths (rags/pieces of cloth) were seen commonly used by the most of school girls in rural settings, however many of them preferred disposable sanitary pads. The participating girls wash their genitals on an average 2 to 3 times a day during menstruation in the case of (30.4%) respondents. However, this may be difficult in school due to poor toilet facilities for cleaning and washing as well as disposing menstrual sanitary materials.

Most of baseline survey schools have toilet facilities within adequate privacy and not suitable for school girls due to lack of water, doors, locks and safety were reported by the majority of 530(81.5%) respondents. During the Focus Group Discussions (FGDs) with respondents were confirmed that they changed the absorbent material between 2 to 3 times in a day during menstruation. However, external genital organ washing, changing sanitary pads and disposed of sanitary pads were a challenge in both urban and rural girls due lack of water and inadequacy of school toilets. Abnormal physical conditions, particularly dysmenorrheal and excessive bleeding, as well as the mental stress, cramps and pain during menstruation affects the daily lives and routines of adolescent schoolgirls to a varying degree, particularly the quality of presence at school in terms of attention and concentration in curricular activities.

As per the findings of this baseline survey on MHM in School; the issue of Menstrual Hygiene Management (MHM) is a serious challenge amongst the school girls and is also attributed to the poor attendance in school. We therefore recommend that teachers, especially males be capacitated on MHM issues and life skills education so as to empower them in supporting school girls. In addition, enormous community awareness campaigns need to be undertaken targeting parents on MHM and value of education. There is lack of supplies on menstrual hygiene and hence there is need to explore cost effective methods of making locally produced reusable sanitary pads to improve access by girls and women. Encouragement is required in relation to designing appropriate sanitation structures that provide for MHM in schools.

In conclusion, this assessment reveals that MHM in school is far away from satisfactory among a large proportion of survey respondents while lack of knowledge, misperceptions and unsafe practices are also quite common among the survey respondents. Hence, the above findings reinforce the need to conduct awareness raising towards breaking the silence on MHM in line with promoting and designing of alternative and affordable sanitary pads at the local level. Such kinds of critical interventions would be significantly improved the personal hygiene, school attendance and educational achievements of girls.

Acronyms:

WaSH	Water Sanitation and Hygiene
HEP	Health Extension Packages
TCECA	Tiret Community Empowerment for Change Association
EMoE	Ethiopian Ministry of Education
EMoH	Ethiopian Ministry of Health
ESDP	Education Sector Development Program
UNICEF	United Nations Children's Fund
MHM	Menstrual Hygiene Management
FDGs	Focused Group Discussions
NGOs	Non-Governmental Organizations
SNV	Netherlands Development Organization
SNNPRS	South Nations, Nationalities and Peoples Regional State
MoE	Ministry of Education
MDGs	Millennium Development goals
HIV	Human Immunodeficiency Virus
SPSS	Statistical Package for Social Sciences
CSOs	Civil Society Organizations
HEW	Health Extension Worker
WWT	Woreda Wash Team

1.0. SECTION ONE: BACKGROUND OF THE STUDY

1.1. Introduction

Ethiopia is one of the signatory countries for MDGs; which the member states of the UN agreed on during the Millennium Summit in 2000, are important guiding principles for the policy on development co-operation. They are quantitative goals, which must be achieved by the efforts of governments of both developing and developed countries within a period of 25 years. In recognition of this; Ethiopia has formulating and implementing National Strategy on Water, Sanitation and Hygiene (WaSH) towards ensuring Sanitation for Dignity and Health. Among the priority action in the ESDP IV; School Water, Sanitation and Hygiene (WaSH); Gender and Education and School Health and Nutrition are included and the Key outcome targets to decrease the drop-out and repetition rates for both boys and girls throughout primary education (G1-8)¹. This will expected decrease to 1.0% and at least 70% of number of drop outs and repetition in primary education in all grade levels in all subjects and all type of assessments and exams will score at least 50% and at least 20% of the students will score 75%².

Although often not acknowledged, it is clear that measure to adequately address menstrual hygiene and management will directly contribute to MDG-7 on environmental sustainability. Additionally, due to its indirect effects on school absenteeism and gender discrepancy, poor menstrual hygiene and management may seriously hamper the realization of MDG-2 on Universal Education and MDG-3 on gender equality and women empowerment³. However, the attention on this issue is far from sufficient. Even the literature on gender mainstreaming in sanitation sector is silent on the issues of menstrual management.

The total population of Ethiopia in 2013 is estimated more than 86,225,821 of these, 43,506,492 (50.5%) are males and 42,719,328 (49.5%) which is projected from 2007 Census). The population of Ethiopia grew at an average annual rate of 2.6% between 1994 and 2007 and Ethiopia is the country of young population⁴. In Ethiopia 84% of the population are living in the rural areas and only 16% of the population are living in the urban areas. Ethiopia is among the African countries showing progress in achieving economic growth and development. Ethiopian Health and Education policy aims to access the population with Universal Primary Health Care and Primary Education coverage with particular emphasis to the rural areas.

The goal of the Education Policy is Education for All and improvement in student achievement through a consistent focus on the enhancement of the teaching/learning process. Transformation of the school into a motivational and child-friendly learning environment is among the plane of the Education Sector Development Program (ESDP) IV⁵. The main goal of the ESDP is to improve access to quality basic education in order to make sure that all children, youngsters and adults, with particular emphasis on females, acquire the competencies, skills, values and attitudes enabling them to participate fully in the social, economic and political development of Ethiopia.

¹Ethiopia Ministry of Education Statistics Annual Abstract 2011/12

²Ethiopia Ministry of Education, ed.al. 2011/12

³Menstrual Hygiene. ed.al. 2007

⁴Ethiopian Population and housing census 2007

⁵The Federal Democratic Republic of Ethiopia Health Sector Development Program IV (ESDP IV) 2010/2011 – 2014/2015, 2003 EC – 2007 EC

According to the ESDP IV the current enrolment stands at 83% of primary school aged children and ESDP IV will be a historic landmark in making free primary education compulsory in order to give a major boost to education and to reach the remaining 17%, the most vulnerable children who are still out of school. Although the 17% is not disaggregated by sex, it is clear that majorities are girls and it may also include victims of MHM which needs special attention.⁶

By 2012, the total number of school going pupils in Ethiopia was 18,755,795, out of which 8,929,951 were girls and 9,825,844 were boys. School girls of puberty age were about 3,744,214⁷. Approximately 84% of these girls attend primary schools in rural areas where access to standard sanitary pads is very limited and expensive option that is will not be indicted as part of their family monthly expenses, which is further complicated by women and girls lack of control over resources and limited discussion about menstruation between girls and their father the decision maker and who controls over household resources. These leave the adolescent school girls to use unhygienic pieces of old cloths which can expose them to genitourinary tract infections and or stay home during menstruation.

The goal of the Health Policy of Ethiopia is '*Health for All*'; and it focuses on providing quality services. Health Care services in an accessible and equitable manner to reach all Ethiopian through accelerating expansion of Primary Health Care Coverage; and the Health Extension Program (HEP) are the pillars of the universal access to Primary Health Care in Ethiopia. The Health Extension Program contains sixteen packages; seven of them are about Hygiene and Environmental Sanitation (but not included MHM); and five of them are about Family Health and the remaining are about disease prevention and control⁸. The Health Extension Program has included promoting gender equality in accessing health services as one of its objectives⁹. However, neither in the Personal Hygiene and Environmental Health nor in the family Health components; menstrual hygiene is clearly included; hence without the inclusion of MHM achieving the Health Extension program objectives as well as the Universal Access to Primary Health Care is never will be complete.

Among the priority action in the ESDP IV; Water, Sanitation and Hygiene(WASH) in School, Gender and Education and School Health and Nutrition are included and the Key outcome targets the drop-out and repetition rates for both boys and girls throughout primary education (G1-8) that will intend to decrease to 1.0% and at least 70% of students in all grade levels in all subjects and all type of assessments and exams will score at least 50% and at least 20% of the students will score 75%¹⁰. Unless the problems related to menstruation is treated within the school intervention; and HRW reducing the dropout rates and improving performance of girls might not be feasible, these objectives can only be achieved by including menstrual Hygiene Management in the school plan and budget.

Different studies were conducted by different agencies and professionals like, SNV, UNICEF and other international, and the studies established among other things that, primary school girls in rural areas who have reached puberty like their counterparts elsewhere suffer for lack of proper menstrual care, i.e. water, appropriate toilet facilities, appropriate sanitary wear, and guidance from school teachers or parents during their monthly menstrual cycle.

As per the study conducted by SNV Ethiopia in SNNPRS; 27 schools surveyed (4 secondary, 23 primary) 90% of the schools did not have adequate toilet and hygiene arrangements – ranging from no toilet or washing facilities to combined toilets for boys and girls, no privacy (e.g no doors) or at most very dirty latrines. Approx. 38% of girls do not attend school during menstruation. Absenteeism leads to critical loss

⁶The Federal Democratic Republic of Ethiopia Education Sector Development Program IV (ESDP IV) 2010/2011 – 2014/2015.

⁷Ethiopia Ministry of Education Statistics Annual Abstract 2011/12

⁸Baseline Survey on MHM in School, 2014.

⁹FMoH Health Sector Development Program IV (ESDP IV) 2010/2011 – 2014/2015, 2003 EC – 2007 EC

¹⁰FMoH, ed.al. 2011-2014.

of learning time. On average about 3-4 days per month can be lost for girl students. These girls are from poor communities where access to sanitary resources are limited, the purchase of sanitary pads is simply too expensive. They use unclean pieces of clothes which expose them for health risks including urinary and reproductive system infections¹¹.

Ethiopia, like other developing countries, is to reduce morbidity and mortality caused by exposure to agents of disease and exacerbated by environmental hazards. Priority areas include water supply and sanitation, solid waste management and hygiene education. Better excreta disposal facilities benefit men, women, girls and boys. They offer privacy, convenience and safety. But most sanitation programs necessarily do not mention the special needs of women and adolescent girls who use latrines to manage menstruation. It's a need that has been excluded from latrine design/construction as well as hygiene education packages¹². Hence, reproductive and preventive health programs in developing countries like Ethiopia often do not address the issue and moreover they focus mainly on the reproductive functions of married women. Menstruation, though a natural process, has often been dealt with secrecy in many parts of Ethiopia. Hence, knowledge and information about reproductive functioning and reproductive health problems amongst the adolescent is poor. A great deal of women's and girls' scant knowledge is informed by peers and female family members.

The gender unfriendly schools and infrastructure, and lack of adequate menstrual protection alternatives and / or clean, safe and private sanitation facilities for female girls and teachers, undermine the right of privacy, which results in fundamental infringement of the human rights of female students and teachers. Even in the homes, a culture of shame forces women to find well hidden places to dry the rags. These places are often damp, dark and unhealthy. Rags that are unclean can cause urinary, vaginal and perineal infection. Very often serious infections are left untreated and may sometimes lead to potentially fatal toxic shock syndrome¹³.

Literature review indicates that the practices coupled with poor knowledge is responsible for a significant proportion of school absenteeism, seclusion from social activities, illness and infection associated with female reproductive health of school going adolescents in developing countries¹⁴. Expectedly, such scenario is common in Ethiopia. Though many of the health programs have taken significant steps forward, particularly as they ensured community participation in developing sustainable and effective hygiene and sanitation program, usually these have failed to include the issues related to Menstrual Hygiene and Management. This exclusion is undoubtedly due to the prevailing culture of shame, which creates silence and inability of young girls to articulate demand.

Above all, studies documenting such situation in Ethiopia are lacking. The types and frequency of problems related to menstruation among adolescent girls and the effect of these problems on daily lives might be different in Ethiopia and implications may vary. In the current situation, where there is an absence of menstrual hygiene and management issues in the policy debate, and hence in investments and actions (Bhardwaj Patkar, 2004), studies that gather support confidence and an enabling environment in order to make the voices on this issues very much warranted - particularly to make the issue visible to concerned policymakers and to inform practitioners.

MHM in schools is receiving renewed attention as its impacts on girl education have been noted in terms of having long-lasting and far-reaching social and economic effects. Through the international day for Menstrual Hygiene Management it has become a primary focus of development efforts in many developing nations including Ethiopia. Over the years, the issue of school hygiene, sanitation and water

¹¹ SNV Netherlands Development Organization, Ethiopia, 2009.

¹² WaterAid- Menstrual Hygiene Management of Girls, 2009.

¹³ Varina Tjon A. Ten, Menstrual Hygiene of Girls is Neglected Condition, 2007.

¹⁴ Varina Tjon A. Ten, ed.al. 2007.

has been put high on the agenda of many, international donors, non-governmental organizations, international agencies including government as a way of promoting a conducive school environment for many girls. In line with girl's school attainment, menstrual hygiene management has on the other hand attained little or no attention and yet many scholars and actors have attributed it to be having far much reaching implications on overall children schools attainment.

Menstrual Hygiene Management is yet to be integrated effectively in overall hygiene promotion interventions in Ethiopia. Evidences from the field are imperative to emphasize the issues. Thus, this Baseline Survey on MHM in School focused on the current WaSH status in schools and how menstruation hygiene is being managed in view of collecting information that will form basis for future programming and current programme implementation. Hence, this small-scale descriptive cross-sectional study was sponsored by SNV-Netherlands Development Organization, Ethiopia, with the objectives given below.

1.2. Justification/Rationale of the Study

People often find it embarrassing to talk about menstruation, the monthly period when the unused lining of a woman's uterus, rich in blood to feed and protect a fertilized egg, is discharged. However, methods of sanitary protection are extremely important for health and dignity. Women and girls need to change their sanitary protection around three or four times a day during the period of menstruation¹⁵. In the Ethiopian context, what is available to them in terms of sanitary protection often varies according to their income. Poor women are likely to use a variety of inexpensive, reusable materials. In some rural areas of Ethiopia found that to purchase sanitary protection at market prices cost around a tenth of a poor family's monthly income – equivalent to the cost of enough paraffin for a month – which is prohibitively expensive.

As per the assessment conducted by TCECA/CARE Ethiopia (2012) on MHM in Amhara Regional State; Female Teachers are also face challenges due to inadequate sanitation facilities in schools. Many schools do not have adequate toilet facilities for men and women, and lack sanitary bins to dispose of sanitary products. In many social events; menstruation is associated with uncleanness which restricts the behavior of women at these times. Such taboo could reinforce a woman's sense of shame or low self-image. Hence, menstruation often causes physical discomfort, cramps, tiredness and nausea¹⁶. As a result of this; menstrual hygiene of girls and women has been insufficiently acknowledged as a problem. In several cultures of Ethiopia there are (cultural and or religious) taboos concerning blood, menstruating girls and women and menstrual hygiene. There is also structural gender inequality, which continues to exist through the widespread preservation of (sex-tied) preconceptions, stereotypes and cultural patriarchal attitudes, because of which the position of women as independent actors is being undermined daily¹⁷.

Furthermore, lack of attention to this issue is striking. Most of the Ethiopian women know from their own experience how important good menstrual hygiene is to be able to function optimally during menstruation. Yet this is hardly realized by in particular politicians, programmers and policy makers. This is also surprising in view of the explicit relation of this issue to water and sanitation and distribution of all kinds of diseases due to poor menstruation hygiene, which can be reduced considerably by good hygiene¹⁸. As per this assessment on MHM; the following facts were obtained:

- Few social-entrepreneurs have actively engaged in developing alternative and affordable sanitary pads to manage MHM issue although it has crossed many a mind in passing;

¹⁵ Menstrual Hygiene: A Neglected Condition for the Achievement of Several Millennium Development Goals, 2007.

¹⁶ TCECA-CARE Ethiopia: Assessment Report on Menstrual Hygiene Management (MHM), 2012.

¹⁷ TCECA-CARE Ethiopia: Assessment Report ed.al. 2012.

¹⁸ TCECA-CARE Ethiopia: Assessment Report ed.al. 2012.

- Expert from the Health (Water & Sanitation) sector equally were amazed at the absence of MHM issue from both technical and rights based discourses, but unable in most cases to point out in the direction of substantive work on these issues;
- The study on gender mainstreaming in Water & Sanitation sector, is silent on MHM adequacy of water for washing and bathing, availability of hygienic materials and solid waste management of disposables. Interventions in this area are restricted to very small pilots, with extremely minimal follow-up and limited dissemination of results;
- Although poor sanitation is correlated with absenteeism and dropping-out of school girls in Ethiopia, efforts in school sanitation to address MHM issue have ignored menstrual management in educational curriculum, latrine design and construction. Wider aspects of MHM issue such as privacy, water availability and awareness-raising amongst boys and men remain largely unexplored by advance initiatives;
- Limited hygiene promotion efforts have recently started focusing on this area but mainly on the software aspects i.e. telling girls and women about correct practices. These efforts do not currently target men and adolescent boys, nor do they systematically inform infrastructure design;
- Absence of effort that has led into production and social marketing of low-cost sanitary pads, reusable materials, research into bio-degradable sanitary pads, etc. Research and development efforts have been limited to commercial ventures that even today are unable to market products that are affordable for the poorest of the poor.
- MHM issue on the package of washing of soiled materials and environmentally friendly disposal of sanitary pads is absent from waste management training, infrastructure design and impact evaluation;
- Need to have menstrual management as a priority in wash in schools. This seems to be relegated at the expense of water and toilets; and
- In short, Menstrual Management is missing from the literature and practical actions whether it is manuals to sensitize engineers to gender needs or technical manuals on latrine design, sanitation for secondary schools, solid waste issues, composting, bio-degradable materials or even simple training modules for health and sanitary workers.

On the other hand; in sub-Saharan Africa, adolescent girls' participation in school is generally very poor. Even in contexts where gender parity is achieved in the early grades, by late primary school (Grades 4 or 5) the numbers of girls in school has dropped significantly. In reviewing education data, enrollment rates are important. Yet retention and successful completion rates provide a stronger test of Education for All (EFA) achievements and more particularly of achievement of the MDG 2. In an International Rescue Committee study of primary schools in Guinea, although girls represented almost 50% of students in early grades, they made up only 34% of those who complete the cycle at Grade six¹⁹.

Similarly, as found by UNICEF in Southern Sudan, enrollment rates of girls in Grade 1 are already very low (an average of only 26% of total enrollment) with a drop to 21% at Grade 8 (an absolute drop of more than 20,000 girls). And in the reconstruction and development of the Somali educational system, gender related disparities are a key concern; only 35 % of the students enrolled in Grade 1 are girls, and this proportion declines with girls making up only 29% of Grade 8 pupils²⁰.

Such drops in girls' participation can be attributed to multiple factors, including the lack of female teachers, and therefore successful role models, curriculum content that is irrelevant to girls' lives, and the poor quality of schools, both the facilities and the instruction. Another under-explored factor, and hence the subject of this article, are the linkages between the onset of menarche, girls' response to sexual maturation, and the subsequent impacts on their educational access and experience. Anecdotal evidence

¹⁹UNICEF: Menarche, Menstruation and Adolescent Girlhood.2006.

²⁰UNICEF: Menarche, Menstruation and Adolescent Girlhood.2006.

from a number of countries suggests that a main reason the onset of menses disrupts schooling are familial expectations that a post-pubescent girl will marry and move to her new husband's home, thereby removing her from her school. In some societies, 'menarche' may be seen as shameful if occurring in unmarried girls due to beliefs that its onset is somehow linked to sexual intercourse²¹.

On the other hand, insufficient or inadequate sanitary protection can be very embarrassing for a girl attending school during her monthly Menstruation. This is made worse if her school clothing is flimsy, worn and/or too small for her. Soiled uniforms can provoke ridicule from boys as well as from other girls, putting her at great risk of experiencing stigma and discrimination. For girls who cannot afford to buy washing soap, regular cleaning of her uniform or school clothes may not be easy. This situation means that for many girls and young women it is preferable to stay at home during menstruation and not to attend school at all. At home they do not have to worry as much about sanitary protection, nor about having adequately concealing clothing. Few of the girls' mothers attended school and so they do not have experience to share with their daughters as to how to manage menstruation away from home. Regular absence from school for several days a month can – even in the short term - have a negative impact on a girl's learning and therefore on her academic performance in school²².

One study in Uganda found that 1 in 3 girls missed all or part of a school day during their menstrual cycle. Although data on the topic is scarce, similar patterns are likely to exist elsewhere. The issue of 'latrine safety' demonstrates the complexity of finding solutions, while simultaneously highlighting the importance of community and 'girl-driven' solutions. Recent reports have suggested that girls view latrines as extremely unsafe, given they are frequently the site of sexual attack. There is little information available regarding disabled girls' participation in education, and it is generally thought that very few such girls in the developing world attend school at all. Reports from Australia, Mexico and Uganda indicate that inaccessible toilets are a barrier to disabled girls' education²³. Thus, this is a factor which becomes even more critical at the onset of menstruation and may contribute to dropping out of school.

Poor sanitary facilities in schools also affect women teachers' experiences. Outside of Nepal where, as mentioned, there are cultural taboos operating which discourage women from teaching during menstruation, it is very likely that women teachers elsewhere are frequently absent during menstruation due to the inability of the school infrastructure to meet their health and hygiene needs. Given the unavailability of substitute teachers due to teacher shortages all over the developing world, this means that teachers' instruction time in school will be reduced by 10-20%²⁴. Therefore, these absences inevitably impact on the quality of children's education. They may also contribute to shaping children's attitudes about menstruation.

Where girls are able or determined to attend school throughout menstruation, the insufficient facilities and sanitary protection may nevertheless create discomfort for girls in the classroom and an inability to participate. For example, menstruating girls may hesitate to go up to the front of the class to write on the board, or to stand up as is often required for answering teachers' questions, due to fear of having an 'accident' and staining their uniforms. The very short skirts worn by girls in many African schools may add to these feelings of self-consciousness. This discomfort is augmented when male teachers and students show insensitivity to the challenges girls face in managing menstruation. Male teachers, for example, do not always understand a girl's urgent need to go to the bathroom, and may insist that she wait until the end of class. Worse still are the situations where male teachers and boy students tease the girls²⁵. This teasing may be fueled by the lack of knowledge about normal biological and maturational processes, and reinforced by local cultural myths or beliefs about menstrual blood.

²¹UNICEF et.al.2006

²²UNICEF et.al.2006

²³GAPS/ FAWEU,2008.

²⁴ World Bank, ed.al,2005

²⁵ Kirk Study on Girls Education ,2005

In recognition of the above and other related problems on MHM; SNV Netherlands Development Organization works in Amhara, Oromia, SNNP and Tigray regional states in the three global priority components such as WaSH, Agriculture and Energy. SNV is dedicated to build the capacity of local actors to increase access to safe water, sanitation and hygiene. One of the areas of the capacity development support is school WaSH program. An inquiry undertaken in pilot schools of some SNV supported woredas on management and use of school latrines revealed that adolescent girls find the school latrines inappropriate for providing the required sanitation and hygiene during menstruation periods. The latrines are poorly designed and lack of privacy, water is unavailable, there is limited guidance and support on how to hygienically manage menstruation.

SNV Ethiopia has planned to upscale its best practice obtained in SNNPR to Amhara, Oromia, and Tigray regions. Hence, it we would like to build the capacity of target schools, woreda stakeholders and the private sectors to facilitate sustainable access to MHM information and appropriate sanitary materials. Therefore, SNV has commissioned this baseline survey on MHM in School by providing technical and financial support to Tired Community Empowerment for Change Association (TCECA), as Local Capacity Building (LCB) to conduct this baseline survey at six targeted Woredas of 18 schools selected from SNNPRS, Oromia, Amhara and Tigray.

1.3. Objective of the Study

The overall objective of this baseline survey on MHM was to undertake a comprehensive assessment on menstrual hygiene in school through collecting, analyzing and documenting important information based on the verifiable and measurable data collecting tools and identify baseline information against which future changes due to the project intervention. The specific objectives of this baseline survey were to:

- a) Assess the prevailing knowledge and sources of information about MHM of school girls;
- b) Elaborate the experiences and factors that determine the prevailing practices of school girls vis-à-vis MHM practices;
- c) Identify key factors that have been contributed to poor MHM; and this baseline survey on MHM will intend to identify and assess approaches, strategies and key activities that would be helped for the achievement of girls' education; and
- d) Propose specific measures to improve Menstrual Hygiene Knowledge and Management of school girls.

1.4. Organization of Baseline Report

The baseline survey report on MHM in School is arranged into four sections. *Section one* presents introduction, background, objectives, rational and review of related literature. *Section two* provides an insight into the overall survey methodology that has been so far employed. *Section three* presents baseline survey findings and discussions. Finally, section four presents conclusion and recommendations based on the findings from this baseline survey and other related studies have been undertaken earlier.

1.5. Scope of the Work

The consultant (Tired Community Empowerment for Change Association) has undertaken baseline survey on MHM through addressing all relevant information that demonstrates the social, economic, cultural and environmental aspects of the study population. To this end, it has performed the following key activities but not limited to:

- Developed data collection tools, refining them in consultation with SNV and field testing of tools;
- Translated close-ended questionnaires, in-depth interview guides, FGDs checklist and informed consent forms into Amharic;
- Established database template for data entry using SPSS software;
- Entered quantitative data into computer software, cleaning and analyzing;
- Compiled and analysis of quantitative and qualitative data; and
- Analyzed baseline results, writing and submitting draft report, and producing final report after incorporation of feedback from SNV.

2.0. SECTION TWO: METHODOLOGY OF THE STUDY

2.1. Study Areas, Population and General Considerations

The study was carried out at six Woredas (Wukro, Sebeta Hawas, Tole, Bure, Machakel and Meskan) selected purposefully on primary and secondary schools. This short baseline survey was carried out from 16th -21th July 2014 within 18 randomly selected schools from these six woredas. A total of 12 primaries and six secondary schools (two primaries and one secondary school per woreda) were selected from SNV GiC MHM Project. This represents around 45% out of the total number of 40 SNV supported schools. The sample size per woreda was aimed at 128 closed-ended questionnaires in total, out of which, 41, 43 and 44 questionnaires distributed (for each woreda) to Grade 7-8, Grade 9-10 and Grade 11-12 (Prepatory) respectively. About 30 open ended questions were also distributed for Focus Group Discussions (FGDs). The respondents were selected from each Grade by using *Cluster Sampling* as groups, not individuals, are randomly selected. Since, all the respondents of selected groups from each Grade have similar characteristics on menstruation issues.

The target population for this baseline survey was school girls, boys, teachers, parents and other key informants. Relevant respondents at school level for this baseline survey have been identified in consultation with Woreda Education Offices and necessary arrangement has made to get information as relevant. Close-ended questionnaires, open-ended questions for Focus Group Discussions, and structured questions for in-depth interview for key informants were prepared for this baseline study. The contents of the data collection tools were based on standard questions on MHM KAP. These questionnaires prepared in English, and translated into Amharic for easy reference for data respondents and collectors.

Both primary and secondary data was collected for this baseline survey. Secondary data was obtained by reviewing relevant documents while primary data was analyzed through conducting quantitative data (close-ended questionnaires) and qualitative data (FGDs and key informants interview) methods. This study was analyzed based on descriptive cross-sectional in which mixed methods (quantitative as well qualitative) has been applied. A self-administered close-ended questionnaire survey (quantitative), and FGDs, and structured interviews (qualitative) was applied to collect the information on MHM in school. The school girls participated in the close-ended questionnaire within each school was selected based on cluster random sampling selection from adolescent school girls in the primary, secondary and Prepatory schools, most of whom have experienced with periods. The senior women teachers were facilitated the close-end questionnaires and school girls FGDs at each school.

2.2. Determination of Sampling Size

With regards to the calculations of the sample size population of 768; it was used the following formula in order to estimated the population study. Since there is no prior information about the Population (P) study; it was obtained a conservative estimate of the required sample size is calculated by considering as:

$P=Q=1/2$, i.e. $P=Q=1-P$. Thus, $n = \frac{Z^2 PQ}{(ME)^2}$, whereas 'ME' is Margin of Error;

Since, it is not known the size of P or Q; by taking the formula $P=Q=1/2$, i.e. $P=Q=1-P$; it is calculate the size of the sample population.

Therefore, by taking 95% of Confidence of Interval, 'n' is calculated as follows:

$$n = \frac{Z^2 PQ}{(ME)^2} = \text{Let Value of } Z = 1.96 \text{ and Value of } ME=0.05$$

$$n = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} = \frac{3.84 \times 0.25}{0.0025} = 384$$

Note: As per the above calculation, the exact sample size population for this study is 384. However, in order to make more representative sampling and minimize high errors in the filling of close-ended questionnaires by respondents, it was multiplied by two this sample size population i.e. $384 \times 2 = 768$. Therefore, this sample size was intentionally made double in order to obtain optimum results from the larger number of respondents.

2.3. Study Tools and Population Study Categories

The schools were selected in consultation with Woreda Education Offices using convenient and purposeful sampling technique. The sample population included students above Grade-7(girls and boys), parents (male and female), community leaders, Woreda WaSH Team, HEWs, School Directors, senior women and male teachers. *Cluster random* sampling technique was employed in the selection of school girls from Grade-7 and above (Grade 7 to 12) at both primary and secondary schools. Girls who were staying in the nearby homes surrounding the school and were willing to participate in the study were also included. *Convenient sampling technique* was used in the selection of boys, parents, and teachers for FGDs as well as their willingness to be involved in the study. *Purposive sampling technique* was also used in the section of key informants including School Directors, HEWs, WWT, Community Leaders, and Shop Keepers for in-depth interview depending on their availability, willingness and readiness to participate in this study.

2.3.1. Close-ended Questionnaires

Three (3) schools selected from each woreda which comprises; two Primary School (Grade 7-8) one from rural and one from peri-urban; and one Secondary School (Grade 9-10 and 11-12) from urban. These schools were chosen based on purposeful and convenience method to represent different terrains as well as rural-urban areas of the project site, and also to keep it within SNV Netherlands Development Organization project area. Experienced facilitators and enumerators assigned for the conducting of close-ended questionnaires; and Focus Group Discussions (FGDs). This data was analyzed by using computer software of SPSS version-20.

A total of 780 respondents (school girls) were targeted in the baseline survey for the Close-ended questionnaires. Out of these, 769 respondents were successfully attended and filling the questionnaires, yielding a response rate of 98.6%. Thus, the following table -1 is shown the selection of respondents from each school category:

Table 1: Distribution of Respondents for Close-ended questioner

School Location	School Category	# of Target Schools\ Category	Data Collection Tools	# of Respondents from each	Total Respondents from each
n					

				school category	School Category
Rural	Primary School (7-8)	6	Questionnaire	62	372
Peri-Urban	High School (9-10)	6	Questionnaire	45	270
Urban	Preparatory (11-12)	6	Questionnaire	21	127
Total		18		128	769

Note: Most of Grade 8, 10 and 12 students were not participated in this baseline survey due to the Regional/National Examination undertaken by the MoE

2.3.2. FGDs Participants and Key Information

About 30 FGDs (5 FGDs for each woreda); of which 12 FGDs for school girls and 12 FGDs for boys; and six(6) FGDs for parent and teachers were conducted; and a total of 300 participants (140girls, 120 boys and 40 teachers) were attended in the Focus Group Discussions (FGDs). Besides, 32 key informants, of which 6 School Directors, 5 WWT, 6 HEWs, 7 Community Leaders and 8 Shopkeepers, were interviewed during the baseline survey.

The following table-2 is shown the description of respondents for FGDs survey methods:

Table 2: Distribution of respondents for FGD at each Community group

Community Group	Date Collection Method	# of FGDs/ Community Group	# of Participants /FGD	Total
Parent & Teachers (Female & Male)	FGDs	6	10	60
Students (Boys)	FGDs	12	8	96
Students (Girls)	FGDs	12	12	144
Total		30		300

Note: Out of the 30FGDs, 6 parent and teachers FGDs (one FGD of parents and teachers jointly conducted at each high school or woreda); and about 12 boy students FGDs (six FGDs at primary and six FGDs at secondary schools); and similarly 12 school girls FGDs(six FGDs at primary and six FGDs at secondary schools) were conducted for this baseline survey.

2.4. Designs of the Baseline Survey

The Baseline Survey Report on MHM in School was used a descriptive cross-sectional study in which quantitative and qualitative methods were applied. Self-administered structured close-ended questionnaire survey, observation, Observation Checklist for school toilet facilities, Focus Group Discussions (FGDs) and Semi-structured in-depth interviews were applied to collect the information. All these tools were detected inconsistency, verified and revised accordingly before they were used for the study population. All the tools were prepared in English, and these tools (Close-ended Questionnaires, FGDs and Semi-structured in-depth interviews) were translated to Amharic language.

In each of the schools (primary and secondary), sets of close-ended questionnaires, FGDs and In-depth Interviews were used for this baseline survey on MHM in School. The close-ended questionnaires that we

redistributed to 768 respondents (school girls) were the main questionnaires to collect information on general knowledge on menstruation, perception, menstrual hygiene, sanitary pads, toilet facilities; condition of conducive learning environment in schools with focus on girls; and effects of menstruation in girls' education.. The FGDs and interview questions that were prepared for parents, teachers, male students, school girls and key informants used to collect detailed information about Menstrual Hygiene Management (MHM) in schools, homes and communities. For this purpose, five Focus Group Discussions (FGDs), one key Informant Interviews and one observation checklist were used in each school.

The respondents for the FGDs included students both boys and girls; teachers (female and male) and parents (mother and fathers) in the respective schools with whom discussions were separately held with. The Key Informant Interviews questionnaires were on the other hand administered to Community Leaders, HEWs, Woreda WaSH Team, School Directors, and Shop Keepers for the selling of Sanitary Pads.

2.5 Organization and Management of the Study

Four team leaders and 24 enumerators (one team leader for each region and four enumerators for each woreda) were assigned to conduct the quantitative and qualitative data from each targeted woreda and school. Before conducting the baseline survey; the following processes were undertaken in coordination with SNV Ethiopia technical staff:

- Identification and selection of schools for the baseline survey based on purposive methods and convenient;
- Reviewing and enriching of data collection tools, such as close-ended questionnaires, FGDs and in-depth interview;
- Identification of types of study categories, such as respondents for the questionnaires, and participants for FGDs and in-depth interview;
- Assigning of data collector teams and recruiting enumerators from the project sites; and
- Field plan and pre-arrangement to conduct the study.

The quantitative data of the baseline survey was entered/recorded, analyzed and interpreted by using SPSS Version 20.0 Software.

2.6. Primary and Secondary Data Analysis

2.6.1. Primary Data Analysis

Quantitative data from the survey was analyzed using SPSS 20.0 Software. Descriptive statistics were generated to show the socio-demographic characteristics as well as the distribution of knowledge and practices regarding menstrual hygiene and management. Cross-tabulation tests were run to see the association between some socio-demographic variables with knowledge or practice variables.

More than 780 closed-ended questionnaires were distributed on average about 43 questionnaires to each schools (18 schools * 43 questionnaires). This quantitative data was carried out in 18schools (six High School and 12Primary Schools) which were selected from six Woredas, namely Meskan (SNNPRS), Sebeta Hawas and Tole (Oromia), Bure and Machakel (Amhara) and Wukro (Tigray). Out of 780 questionnaires; a total of 769(98.6%) school girls above Grade 7 and aged from 14-20were provided valid responses to the questionnaires, and the remaining insignificant number of 11(1.4%) respondents given invalid response. The quantitative data was gathered through pre-designed and well-structured closed-end questionnaire which included information about menarche, believes and perceptions about menstrual issues practice of

menstrual hygiene, restrictions, and knowledge about sanitary pads. Hence, the quantitative findings of this baseline survey on MHM were analyzed based on the following six main themes:

- General Information about Menstruation;
- Perception about Menstruation
- Practice of Menstrual Hygiene;
- Sanitation , and hygiene facilities in school
- Information about sanitary pads;
- Effects of menstruation in girls education

The following table-1 shows the distribution of Questionnaires based on class categories at each woreda in the respective woredas/regions:

Table 3: Respondents distribution of questionnaires at each grade category/woreda

		No. of Questionnaires distributed at each Grade Category/Woreda/Region						Total
		Amhara R.		Oromia R.		SNNPR	Tigray	
Sr. No	Grade	Machakel Woreda	Bure Zuriya Woreda	Sebeta Hawas Woreda	Tole Woreda	Meskan Woreda	Wukro Woreda	
1	7-8	62	62	62	62	62	62	372
2	9-10	45	45	45	45	45	45	270
3	11-12	21	21	21	21	22	21	127
		128	128	128	128	129	128	769

Note: Survey Questionnaires weren't distributed to most of Grades 8, 10 and 12 students; due to the Conducting of National/Regional Exam before this Baseline Survey

On the other hand, Qualitative data were gathered through conducting FGDs and in-depth interviews in order to gain an understanding of the patterns and practices around menstruation. Influencing factors to menstruation management and health seeking behavior were also explored. Data from FGDs and in-depth interview was transcribed verbatim/precisely from the narrative reports. The data was then analyzed manually based on recurrent themes and patterns that were used for quantitative data collection.

About 30 Focus Group Discussions (FGDs) were conducted for the qualitative data; of which six FGDs for Parents and Teachers (one FGD jointly conducted at each woreda); and 24 FGDs for students (12 FGDs for each boy and girl students (four FGDs conducted at each woreda) were conducted for the qualitative data analysis. In this case, more than 240 students (144 girls and 96 boys) and 60 parents and teachers (35 parents and 25 teachers) were participated in FGDs. On the other hand; about 32 key informants, of which 6 School Directors, 5 WWT, 6 HEWs, 7 Community Leaders and 8 Shopkeepers, were interviewed during the baseline survey.

Observation Check Lists for school toilets were also carried out by the Team Leaders/Field Coordinators/. Relevant information was collected by using a pre-designed checklist guided questions in relation to assess the conditions of school toilets including WaSH. These were included separate school toilets for boy, girls and teachers with access to water facilities, adequacy and functionality of school toilets, specifically for menstrual girls. *Please see the Annexed Observation Check List for School Toilets at end of this report.*

2.6.2. Secondary Data Analysis

In addition to primary data analysis; secondary data also included in this baseline survey by referring related Literatures and Articles on Menstrual Hygiene Management (MHM). These findings are included in the introduction and discussion sections of this document.

2.7. Data Assertion Mechanism

In this baseline study, quality of data has been given at most attention and the consultant organization used all means in order to obtain quality data. Since quality of data depends mainly on the clarity of data collection tools (close-ended questionnaires, FGDs checklist and key informant interview guide). The data collection tools were developed by skilled professionals and refined in consultation with SNV technical staff. In order to avoid language barrier during the filling of questionnaires and FGDs, these tools were translated into Amharic language. For this purpose, all the close-ended questionnaires were prepared in Amharic version in order to avoid ambiguity, and language barriers.

Experienced team leaders were assigned for the field work. Besides, they provided orientation on the data collection tools and every aspect of the tools was discussed in detail. In order to increase compliance of participants, the team leader explained the purpose of the baseline survey, ensure confidentiality and establish amity with the respondents' before asking questions. The filling of the questionnaires have started only after the enumerators reads out the consent and the respondent voluntarily agrees to participate. The team leaders/enumerators conducted in settings where questions and answers cannot be overheard by others and the interviewers have engaged in a rapport-building conversation before asking questions to reduce the likelihood that respondents may give socially desirable answers rather than tell the truth. The field work was closely supervised and monitored by the team leaders for smooth quality data collection.

2.8. Ethical Considerations

Privileges, secrecy and privacy of the respondents were respected in all phases of the baseline. Informed verbal consent with the respective school directors and the respondents were taken before data collection. Through verbal consent process, the type and purpose of the baseline survey, discussions or interviews; issues of vagueness and confidentiality; voluntary participation and freedom to discontinue the interviews/discussions at any stage; and absence of any known risk or benefit for participating in the study was briefed beforehand. Photos were made with due verbal permission from the respondents. To protect ambiguity, all findings are presented without mentioning respondentnames or identifiable personal depiction.

2.9. Data Compilation and Analysis

Primary quantitative data from the baseline survey was captured analyzed using SPSS software version-20. Explanatory statistics were produced to show the socio-demographic characteristics as well as the distribution of knowledge and practices regarding Menstrual Hygiene Management (MHM) using frequencies, tables and graphs. Cross-tabulation was run to see the association between some socio-demographic variables with knowledge or practice variables. This primary data was decoding, verified/detected some errors, analyzed and interpreted in narrative statement. On the other hand; Data from FGDs and in-depth interviews was captured during the discussions and processed manually based on recurrent themes and patterns.

2.10. Data Interpretationand Preparation of Report

In order to meet the general and specific objectives of the study; a descriptive quantitative and qualitative methods of data analysis were employed. Quantitative data was entered and analysed by the experienced statistician into a data template created for this analysis using SPSS Version 20.0 Software. This data was cleaned and analyzed by using this software. Cross tabulations, graphs and charts have been used for interpretation and display of the baseline survey findings. Relevant statistical analysis to the objectives of the baseline survey was also be made. Observation check lists for school toilet facilities and field notes has been taken on a face to face FGDs and interview which has been transformed to fair notes followed by a narrative type of report. Field reports on FGDs, in-depth interview and other observations undertaken by the Team Leaders as well as other non-verbal types of communication during the discussion and selected quotable quotes were included in this report.

Furthermore, information gathered from both quantitative and qualitative sources were summarized and presented in form of tables, graphs and narratives. This data was analyzed and interpreted based on the pre-designed thematic issues. The baseline survey analysis was provided by focusing on the important indicators to be used for impact assessment of GiC MHM Project. In addition to the describing of the baseline survey facts; the report was also drawn conclusions (what they mean), and lessons learned and their implications for future related programs.

2.11. Challenges/Limitations of the Study

This baseline survey has the following challenges and limitations:

- Lack of similar literatures and researches were conducted in Ethiopia on Menstrual Hygiene Management (MHM) of adolescent girls, specifically MHM in schools;
- Pessimistic perception of respondents about NGOs/CSOs on the basis that many NGOs go and collect information about them but they completely never get back;
- This baseline study was conducted at end of the academic year where class examination was undertaken as well as some schools were completed their final-semester examination. Due to this, some respondents/participants from Grade 8,10 and 12 were not able to include in this baseline study; and
- Language was also a challenge as respondents had a series of diverse languages; however, local enumerators/translators had to be involved at certain points of the study.

3.0. SECTIONTHREE: PRESENTATION OF DATA FINDING & DISCUSSIONS

3.1. Results/Findings

The findings obtained through different methods and tools used in the study have been organized and presented in this section under four main themes arising from the quantitative and qualitative data. The main themes are: knowledge and beliefs; experiences during menstruation; hygiene practices, sanitation and hygiene conditions in School; condition of isolation, exclusion and absenteeism; and effects of menstruation in girls' education.

3.2. Socio-demographic Characteristic of Respondents

The study was carried out at six woredas selected from the operational areas of SNV Netherlands Development Organization with schoolgirls in government primary and secondary schools. As shown in the table-4 below; a total of 769 respondents participated in the survey; of which about 144 respondents participated in the FGDs and 5 in the in-depth interview. Out of 769, 126 (16.4%) respondents are drawn from Wukro Woreda (Tigray Region); 256 (33.3%) from Tole and Sebeta Hawas Woredas (Oromia Region); 131 (17%) from Meskan Woreda (SNNPRS) and 256 (33.3%) from Bure and Machakel (Amhara Region).

Table 4: Percentage distribution of respondents classified by region

Percentage Distribution of Respondents Classified by Region, Residential Area and Educational level									
Back ground Characteristic	Regions				Residential Areas		Educational Level		
	Tigray	Oromia	SNNPR	Amhara	Urban	Rural	Primary (7- 8)	Secondary (9- 10)	Preparatory (11 -12)
	N=126	N=256	N=131	N=256	N=388	N=381	N=372	N=270	N=127
	16.4%	33.3%	17%	33.3%	50.5%	49.5%	48.4%	35.1%	16.5%

As shown in Figure 1 below in relation to the residential areas of respondents; about 388(50.5%) are living in urban area and the remaining 381(49.5%) are living in rural areas. The age groups of these respondents of the study were varied from 14-20 years; specifically, about 235(30.6%) above 14 years, 428(55.7%)

between 15-17 years, and 106(13.8%) between 18-20 age groups, and the average (mean) age of respondents were between 15.4 and 17.1 years (Figure 2).

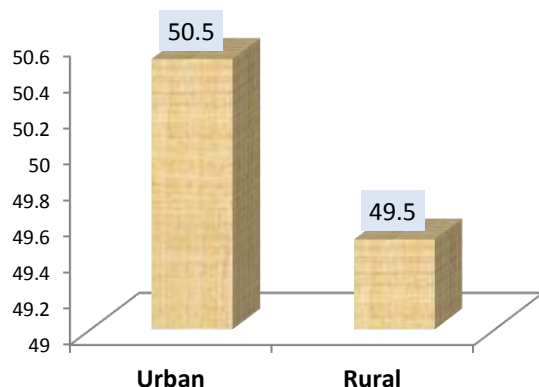


Figure 1: Percentage distribution of respondents by residential area

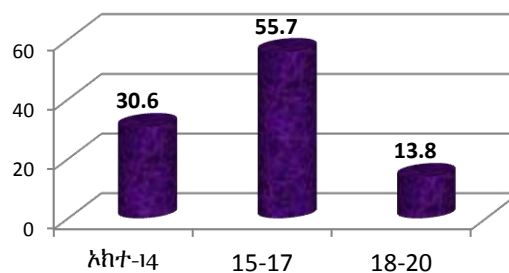


Figure 2: Percentage distribution of respondent by age

In Figure 3 below, a total of 769 respondents, of which 373(48.5%) from Grade 7-8, 270 (35%) from Grade 9-10 and 126 (16.5%) from Grade 11-12 were participated in this baseline survey. As result of this, majority of respondents were drawn from primary school for this study.

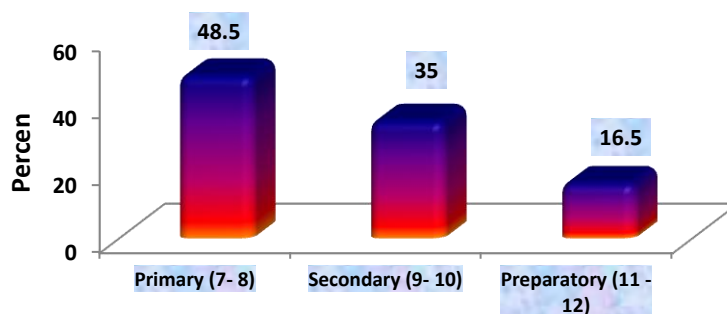


Figure 3: Percentage distribution of respondents by school category

3.3. General Information about Menstruation

As shown in Figure - 4 below, out of the 769 respondents, high majority of 650(84.5%) respondents started menstruation whereas the remaining 119(15.5) were not started menstruation. As indicated in Figure 5 below, majority (92.3%) of respondents had knowledge on menstruation and obtained information particularly, from family (54.2%), friends (53.4%), readings (32.5%), any media (22.1%) with respect to their multiple questions response. The remaining 59(7.7%) respondents confirmed that they had not knowledge about menstruation. FGDs with students, teachers and parents were conducted on this similar issue. Most of them confirmed that they obtained relevant information from families/parents, specifically from mothers and sisters, friends and any media. In this case, mothers and intimate friends were the best informants for menstruation prior and after menarche.

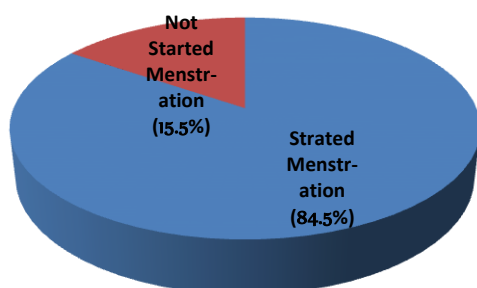


Figure 4: Percentage distribution of respondents by Menstruation

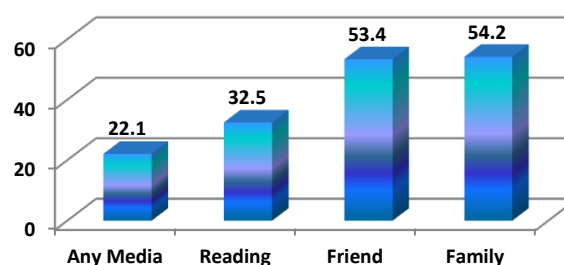


Figure 5: Percentage Distribution of source of information about

As indicated in the table 5 below, out of the 769 respondents, about 515 (67%) of respondents confirmed that there were not provided MHM education at school; whereas the remaining 254 (33%) respondents reported that there are some awareness raising education from various resources on menstruation. However, in the FGD a respondent from Ensena High School (Meskan Woreda) exemplified it by quoting what her teacher had said: "This topic no needs to be taught, you can exercise at home. It's like knowing to go to toilet with slippers/shoes." Marginal figures of respondents (33%) reported that they obtained information and feel comfortable with talking openly about menstruation with friends in the case of (32%), followed by School Mini-media (35%), reading materials (22.6%) and only (20.5%) mentioned teachers in relation to multiple questions response. Most of FGDs conducted with students and teachers on this similar issues confirmed that there were not specific plan on Menstrual Hygiene Management education provided at school.

Table 5: Percentage distribution of respondents on Menstruation education

	N=769	Percent
Is there MHM Education at school+?		
Yes	254	33.00
No	515	67.00
If Yes, who provide MHM Education + ?		
Teachers	158	20.5
Friends	247	32.0
School Mini-Media	269	35.0
Reading materials	174	22.6

Note: + Multiple Response Question (Participants were responded more than one option)

3.4. Perception about Menstruation

In the table-6 below, out of the 769 survey respondents; majority of 650(84.5%) have seen menstruation between the age of 13-14 (44.1%), 15-17(27.8%), 18-20(0.4%), and the remaining (12.2%) of respondents didn't remember their menarche. However, 473(72.8%) respondents were not aware about menstruation prior to their menarche. In the multiple questions response respondents; the survey identified that family (33.8%), friends (31.2%) and schools (17.4%); reading (14.6%) and Radio (9.1) were the main source of information about menstruation after their menarche. The result is fairly consistent with the source of information about menstrual hygiene and management. Only about 70(9.1%) respondents mentioned that they learnt about these issues from radio. However, many respondents in FGDs expressed that the teachers usually avoided teaching lessons related to menstrual hygiene management issues.

Table 6: Percentage distribution of respondents in relation perception on Menstruation

Did You Start Menstruation?			
Yes	650	84.5	
No	119	15.5	
If Yes, at what age your menarche started? n=650			
			14.1±1.2
13-14	339	44.1	
15-17	214	27.8	
18-20	3	0.4	
I do not Remember	94	12.2	
Did you aware at Menarche? n=650			
Yes	177	27.2	
No	473	72.8	
What is the source of information after menarche information?+			
Family	260	33.8	
Friends	240	31.2	
Radio	70	9.1	
Reading	112	14.6	
Schools	134	17.4	
From Where menstruation blood comes?			
Uterus	597	77.6	
Abdomen	47	6.1	
I don't know	142	18.5	

Note: + Multiple Response Question (Participants were responded more than one option)

As shown in Figure 6 below; survey indicated the different perceptions (beliefs) about menstruation issues among respondents. In the multiple questions response in relation to the way of calling/naming menstruation by local community; majority of (51.5%) and (41.6%) respondents confirmed that it has been called as ‘Period’ (Yewer Abeba) and Yetefetro Tsega respectively. The remaining (24.3%), (2.1%) and (0.5%) respondents reported that it is called as ‘Disease, Yewer Abeba and Edif/Turi (likewise. On the other hand, as it indicated in Figure 7 below, majority of (55.7%) recognized menstruation as normal physiological process, whereas (21.2%) reported that they didn’t know the cause of menstruation. The remaining (18.3%), (5.2%) and (3.0%) respondents believed that it is caused by Course of God, Sin, and Disease respectively. The findings of the FGDs that had conducted with students and parents on the perception about menstruation were also founded in the similar lines to the cause of menstruation. As it indicated in the above table 6, large number of the respondents(77.6%)identified from Uterus, and the remaining reported that they didn’t know (18.5%) and from Abdomen (6.1%), as where the menstrual blood comes from.

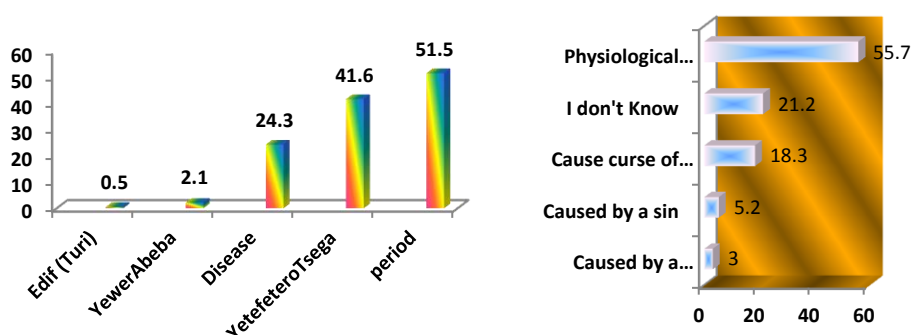


Figure 6: Percentage distribution local of Menstruation

Figure 7: Percentage distribution of perception about cause of Menstruation

3.5. Given Name of Menstruation at each region

Figure 8 below shows that the percentage distribution in relation to given name (local language for calling menstruation) at each region. In the case of Tigray, majority (76.2%) of respondents confirmed that menstrual is called as Yetefetro Tsega and the rest of (23.8%), (5.6%), and (0.8%) respondents reported Yewer Abeba, Edif, and disease respectively. Similarly, in Oromia most of respondents (52.9%) and (46.3%) reported that Yewer Ababa and Edif (Turi) likewise. Great number of respondents in Amhara Regional State described that about (66.7%), (28.5 %) and (21.7%) called as ‘Yewer Ababa’, ‘Yetefetro Tsega’, and ‘Edif’ correspondingly. Furthermore, similar trends has also happened in SNNPRS for the case of (64.9%), and (46.6%) as ‘Yetefetro Tsega’ and ‘Yewer Ababa’ respectively. Hence, it is observed that the local name for menstruation is a good practice in Tigray (Wukro) and SNNPR (in the case of Meskan Woreda) while in Oromia and Amhara Regions the local name for menstruation is encouraging, and to some extent affects the participation of women and girls. On the other hand, most of the FGDs with students, teachers and parents have also illustrated similar trends in this baseline survey region.

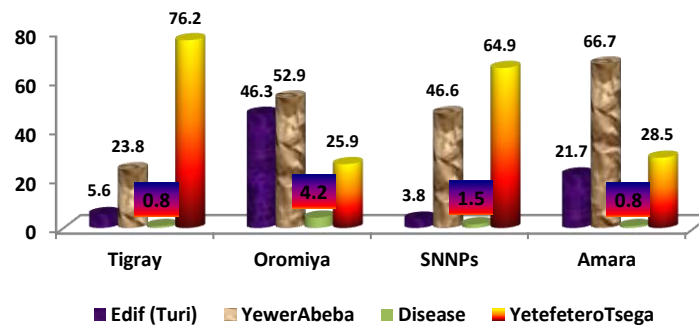


Figure 8: Percentage Distribution of given for Menstrual at each region

Focus Group Discussions (FGDs) with school girls revealed that menstruation is more intricate (complex) issues. Majority of school girls confirmed that they were not prepared in any way for their first menstruation. They also described the onset of menarche as a shocking or fearful event. Information was mainly provided about the use of cloth, the practice of rituals in the form of restrictions on their movements and behavior, and cautions about behavior towards males and, of course, the possible effects of her "polluting touch" and the equally polluting potential of the menstrual cloth. However, many respondents in FGDs were expressed that the teachers usually avoided teaching lessons related to menstruation and reproductive health, specifically, MHM. A respondent from Enseno High School (Meskan Woreda) exemplified neither it school communities like teachers, male students and parents had been nor understanding menstrual school girls' problems. Most of FGD respondents confirmed that they were missed classes during menstrual period due to lack of sanitary pads and adequate toilets in their schools.

On the other hand, FGDs with boys, teachers and parents, specifically female teachers and mothers confirmed that it was a shameful and forbidden to discuss about menstrual issues with their husbands and rarely with their daughters. During their menstruation, they had been sleeping separately until the end of their period. Some of the mother participated in this FGD believed that when their daughters have a menstrual; it is a time of her maturity to be married as soon as possible. Due to this reasons, most of school girls refrained and make secret their menstruation period.

3.6. Menstrual Hygiene Practices

As shown in the table 7 below, with regard to freely discussions about menstrual; most of 415(54%) respondents confirmed that they weren't discussion about menstrual issue; whereas the remaining 354(46%) respondents had been able to discuss freely about hygiene practices, menstrual issues, and sanitary pads in

the case of (36.2%), (27.4%) and (34.7%) respectively. The reasons of respondents that were provided response for no need of freely discussions on menstruation issues mainly due to shamefulness in case of (20.8%), fear (30.6%), taboos (17.3%), not habitual (24.6%) and religious 38(4.9%) reasons. In the multiple questions response of respondents in relation to the importance of breaking the silence on menstruation; about (88.0%); (69.8%), (59.6%), (46.0%) and (52.7%) respondents believed that it could be provided advantages on increasing educational participation of girls; avoiding of fear and shamefulness; decreasing school Absentism and drop-out; and increasing educational performance respectively.

Table 7: Percentage distribution of respondents in relation to practice of Menstruation

	N= 769	Percent
Do you believe menstruation is a secret?		
Yes	292	38.0
No	477	62.0
Do you Free Discussion about Menstruation?		
Yes	415	54.0
No	354	46.0
If Yes, what are the Issues of discussion? +		
About Menstruation	211	27.4
Menstrual Hygiene Management	278	36.2
Sanitary Pads	267	34.7
If No, reasons for not free discussion+		
Shame	160	20.8
Fear	136	30.6
Taboos	134	17.3
Not Habitual	189	24.6
Religious	38	4.9
If the Silence on MHM Broken, what will be its advantage?+		
Educational participation increase	677	88.0
Avoided fear and shamefulness	537	69.8
Decrease school absenteeism	458	59.6
Increase education performances	354	46.0
Decrease drop out of girls from school	405	52.7

Note:*Multiple Response Question (Participants were responded more than one option)

As shown in the above table 7, majority 477(62%) of respondents didn't believe menstruation is a secret. However, significant number of respondents in the case of 292(38%) reported that there could be needed secrecy on menstruation due to culture and beliefs in the case of (26%); taboos or forbidden (21.2%) and religious (10.9%) as indicated in Figure 9 below. With regards to the percentage distribution of respondents of secrecy on menstruation at each survey region/woreda; SNNPRS (87.8%), Oromia (34.4%), Tigray (23.8%) and Amhara (22.9%) were reported from high to low level of secrecy on menstruation (as indicated in Figure 10 below).

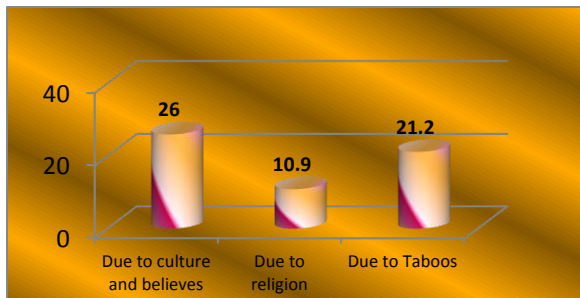


Figure 9: Percentage distribution of Menstruation is secret Menstruation by Region

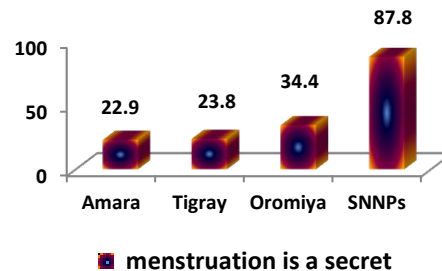


Figure 10: Percentage Distribution of residents for Secrecy on

With regards to percentage distributions of respondents on the issues of not freely discuss on menstruation at rural and urban areas; urban respondents had not freely discussion about menstruation issues than rural. As indicated in Figure 11 below, about (34.8%), 29.6%, (25.5%), and (19.6%) respondents from the urban areas were not freely discuss on menstruation due to fear, not habitual, shame and taboos respectively. About (26.2%), (19.7%), (16%) and (15.2%) were not freely discuss on menstrual issues because of fear, not usual, shame and taboos in the case of rural respondents respectively. In relation to percentage distribution of respondents at each survey region on these similar issues (as indicated in Figure 12 below); SNNPRS (Meskan Woreda) has reported high percentage of not freely discuss on menstruation due to taboos (69.5%) and fear (68.7%); whereas in Tigray (Wukro Woreda) has reported low percentage of fear (10.3%) and taboos (4%) while in Oromia (Sebeta and Tole Woredas) were reported on fear (17.8%) and taboos (5.8%). On the other hand, in Amhara (Bure and Mackakal Woredas) has also reported high percentage next to SNNPR due to fear (34%) and taboos (9.1%).

Furthermore, FGDs with students, teachers and parents on these similar issues confirmed that there is good understanding and feely discussion on menstrual issues in rural areas than urban due to better awareness creation conducted by HEWs. On the other hand, as per the FGDs of qualitative data, most of the participants were reported that there is low incidence of fear and taboos in the case of Tigray and Oromia where as high incidence of fear and taboos in case of SNNPRS and Amhara on the issues of not freely discuss on menstruation. This is because of deep rooted cultures and believes existing in the communities.

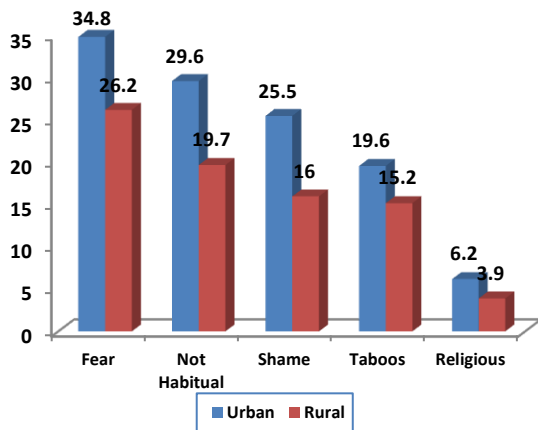


Figure 11: Percentage distribution of respondents on not freely Discussions on Menstruation by residual area

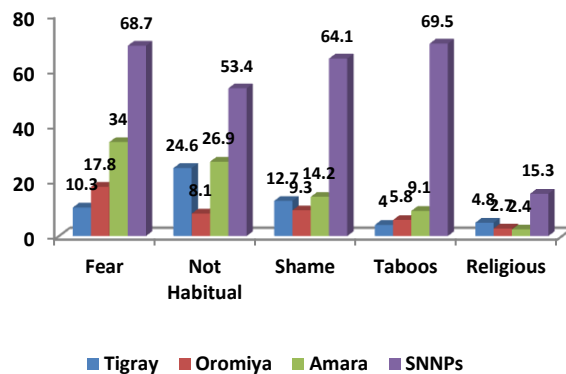


Figure 12: Percentage distribution of respondents not freely discussion on Menstruation by region

On the other hand, during the FGDs with some of school girls; most of the survey respondents mentioned that some kind of experiencing on abnormal and physical condition during menstrual. To mention some of them were- abdominal pain or discomfort is the commonest medical problem experienced by some of respondents. They also reported that abdominal pain, followed by excessive bleeding and breast pain. From these FGDs, it is evidenced that participants sought out both pharmacological and non-pharmacological interventions; Pharmacological interventions included taking pain-killers and visiting health workers. Participants also visited traditional healers and tried various alternative medicines. Some girls shared their experiences with healthcare providers which they did not find positive or encouraging.

Furthermore, FGDs with school girls shared that in addition to these physical symptoms they feel mentally stressed now and then during menstruation. They become very cautious about their mobility especially in the classroom. They take a lot of care when they stand, sit and walk - all due to the fear of accidental blood stain in the uniform or the place where they sit on. FGD participants in Hibret Primary School (Meskan Woreda), consistently shared the effects of the pain on regular and specifically during exams and

this is expressed through one of the participants' view -"Menstruation badly affects studies. The school does not give lesson notes. Students are expected to develop their own notes and hence when a student misses a class it can affect them a lot. We cannot miss the exams - but even when we come for the exams the excruciating pain can blank us out".



When School Girls are attending Orientation on the Baseline Survey Questionnaires at Sebeta Hawas Secondary School

As indicated in the table 8 below; hygiene practices were found to be not so satisfactory. In the survey, out of the 769 respondents; about (21.5%) mentioned having taken once a day, and about (23.8%) twice a day, only (30.4%) and (24.3%) washed their external genital more than twice a day and didn't wash on daily base during menstruation. In relation to uses of materials for cleaning purpose, majority of (61.8%) used soap and water and the remaining (38.2%) respondents were used only water to clean their external genital organ. However, survey respondents said that they were refrained from going to toilets when they were at schools for cleaning and washing or disposing absorbent cloth due to inadequacy of school toilets. Majority of the survey respondents in FGDs mentioned that they weren't maintained their privacy at school because the existing toilet facilities and infrastructure are not suitable for female students.

Most of (81.5%) respondents reported there are no secured their privacy at school that specifically; due to lack of water (55.5%), inadequate of toilet facilities in schools (37.1%); lack of doors and locks (27.8%), and common toilet for girls and boys (18.6%). On the other hand; most of the respondents (70.7%) reported that they have been faced some types of discomforts (skin problems) around their reproductive organs; and (29.3%) respondents confirmed didn't face any problems. In the multiple questions response of respondents to with regards to mentioning some of kinds discomforts/diseases are: skin burning (32%), skin itching/irritation (60.8%); and Urinary Infection (62.7%) were reported by the study respondents.

Table 8: Percentage distribution of respondents in relation to Hygienic practice

Frequency of Cleaning External Genital	N= 769	Percent
Once a day	165	21.5
Twice a day	183	23.8
More than Twice	234	30.4
I don't wash daily	187	24.3
What types of material used for cleaning external genital?		
Only Water	294	38.2
Soap and Water	475	61.8
Do you have feeling of discomfort around reproductive organ?		
Yes	225	29.3
No	544	70.7
If Yes, types of discomfort around reproductive organ ⁺		
Skin burning	72	32.0

Skin itching	137	60.8
Urinary Infection	141	62.7
Are your privacy maintained at school?		
Yes	120	18.5
No	530	81.5
What are the reason for no privacy^{1 2}		
Lack of adequate toilet in school	285	37.1
Common toilet for girls and boys	143	18.6
Lack of door and lock for toilets	214	27.8
Lack of water	427	55.5

Note:¹Multiple Response Question (Participants were responded more than one option)

In the FGD, however, most of the girls told that it is difficult to take bath daily in schools and usually take bath at home. Many respondents mentioned that, even if not on other days, they usually take bath on the third or fourth day of menstruation as a purifying ritual. Most participants in FGDs told that they wash their external genitals with water only when they go to toilet. Many of them were confused whether soap could be used or not. Most of them told that they wash their genitals two to three times a day; some told that they wash every time when they go to toilet. Survey also revealed that on an average, the girls clean their genitals twice a day during menstruation. However, girls particularly from the rural areas said that they refrain from going to toilet when they are at school because it is not well managed for cleaning and washing or disposing absorbent cloth – particularly due to the problems of lock, lack of water and disposal facility (as indicated in above table 9).

3.7. Practice of Sanitary Materials during Menstruation

In the table 9 below shows, out of 650 menstrual girls of which in the multiple questions response about ideally uses of absorbent materials during menstruation; (61.2%), (59.8%), and (25.2%) respondents confirmed that they would be preferred to be used disposable sanitary materials, reusable sanitary cloths, and dispensable rags (pieces of cloths) respectively. Moreover, greater number of (51.2%) respondents used reusable/washable sanitary pads and the remaining (41.2%), (18.5%), and (4.3%) of respondents were used disposable sanitary pads, and disposable piece of rags and soft paper during menstruation respectively. In the multiple questions response, majority of (91.1%) respondents reported that they were kept/put their reusable sanitary pads in hidden and the rest (25.6%), (20.5%), and (11.4%) kept their sanitary pads in side plastic bags, inside bed/cabinet and under mattress of bed respectively. The reasons for putting at hidden place were account for (46.9%), (35.6%), and (43.9%) due to shame/disgrace; soiling/dirtiness and taboos as well. Greater number of (51.8%) respondents were dry their reusable sanitary pads at hidden place while the rest (35.8%) and (12.4%) were dried their reusable sanitary pads at open sunlight and other place respectively.

Table 9: Percentage distribution of respondents related to MHM practice in six woreda Selected from Tigray, Oromia and SNNPR

Percentage Distribution of Respondents related to MHM Practice in Six Woreda selected from Tigray, Oromia, Amhara and SNNPR.		
	N= 650	Percent
What absorbent materials do you prefer during menstruation¹ ?		
Disposable sanitary pad	471	61.2
Reusable and washable cloth pad	460	59.8
Dispensable rag or pieces of cloth	194	25.2
Do you use Sanitary Materials to manage menstruation		
Yes	616	80.1
No	34	4.4

If Yes, what type of materials used ⁺		
Disposable sanitary pads	317	41.2
Reusable cloth	395	51.2
Disposable piece of rags	142	18.5
Soft /Toilet Paper	28	4.3
Place to put reusable sanitary pads ⁺ =395		
Hidden place	360	91.1
Under the mattress of a bed	46	11.4
Inside bed/cabinet	81	20.5
Inside plastic bags	101	25.6
Reason to put at hidden place ⁺		
Shame (Disgrace)	169	46.9
Soiling (Dirtiness of the rags)	128	35.6
Taboos	158	43.9
Place to dry reusable sanitary pads ⁺		
Open sunlight	275	35.8
Hidden place	398	51.8
Other	45	12.4

Note: ⁺Multiple Response Question (Participants were responded more than one option)

During the FGDs with school girls on this similar issues confirmed that most them kept and put their reusable cloth pads at hidden and unsafe place due to the reasons of fear and shame and to be protected from the observations of some body. Hence, the perceived deep rooted customs, habitual and taboos concerning menstruation are the prevailing challenges of menstrual hygiene for girls and women.

In indicated in Figure 13 below with regards to percentage distribution of respondents at each survey region (woreda); in the case of Tigray/Wukro, about (69.1%) , (38.2%) , (14.5%) and (9.1%) respondents were kept their reusable sanitary pads at hidden place, in side plastic bags, under mattress and inside bed/cabinet likewise. Similarly, greater majority (97.3%) of respondents put their washable sanitary pads unseen place in the case of SNNPRS/Meskan Woreda. Moreover, respondents from Amhara (74%) and Oromia (64.7%) were put their reusable menstrual cloths in the same places.

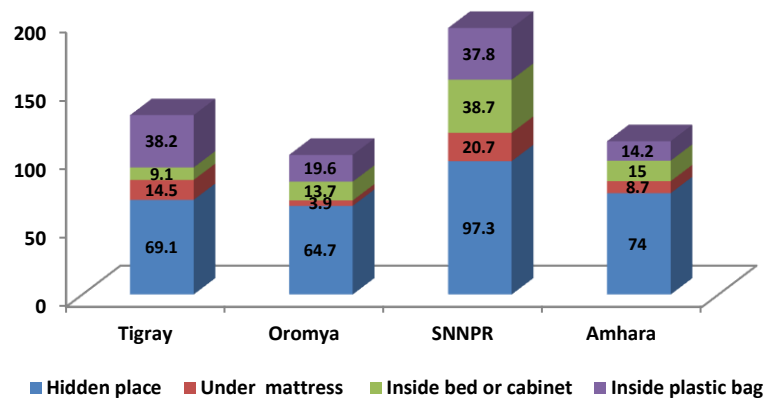


Figure 13: Percentage distribution of respondent place to keep sanitary materials by region

This finding is also consistent with the FGDs findings. In the FGDs it was clearly identified that the family income affects the use or the nonuse of disposable sanitary pads. The low cost and ease of availability of rags or reusable cloths make it the indispensable choice for the girls in both rural and urban, more in the former. Some girls in the FGDs explicitly mentioned that they prefer cloths to pad for use during

menstruation because it is cheap and can be reused as well. However, many FGDs participants made it clear that if they had the option to choose between disposable sanitary pads and rags (reusable cloths) they would want to use the disposable sanitary pad, like FGDs participants from Wukro and Tole Woredas rural primary schools highlighted: “If we had an option to choose between disposable sanitary pads and rag cloth (piece of cloth from sari or other cloth)... of course, we would choose the sanitary pad.”

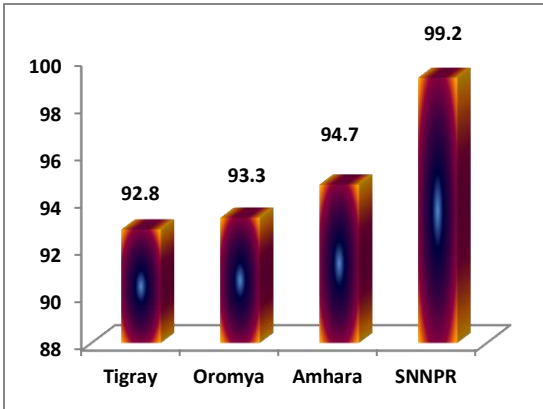


Figure 14: Percentage distribution of use of sanitary Material to manage Menstruation by region

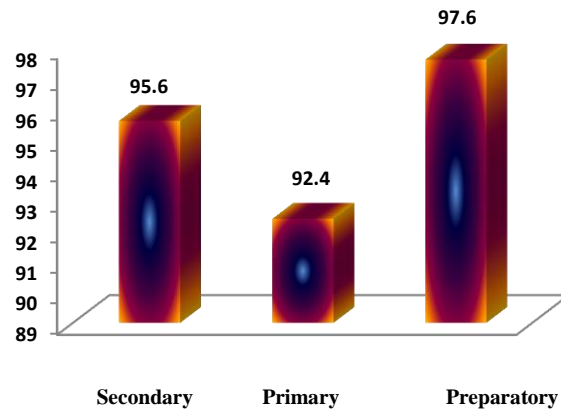


Figure 15: Percentage distribution of use of Sanitary Materials to manage Menstruation by education level

From above Figure 15 shows that percentage distribution of respondents in relation to practice of sanitary materials during menstruation at each study region; about (99.2%), (94.7%), (93.3%) and (92.8%) from SNNPRS, Amhara, Oromia and Tigray respondents were reported performing of sanitary materials during menstruation respectively. These percentages of distribution vary from region to region due to some respondents not started menstruation in the case of Tigray, Oromia and Amhara. Greater majority of respondents in SNNPRS (Meskan Woreda) have seen menstruation. As per the FGDs with female students and parents; the other reasons for this variations is economic; for instance, SNNPRS is a cash crop area than Tigray. On the other hand, as indicated in the above Figure 16 in relation to practice of sanitary materials by educational level, high majority of Preparatory schools (97.6%) were used menstrual materials during menstruation; and the remaining of (95.6%) and (92.4%) respondents from primary and secondary schools respectively.

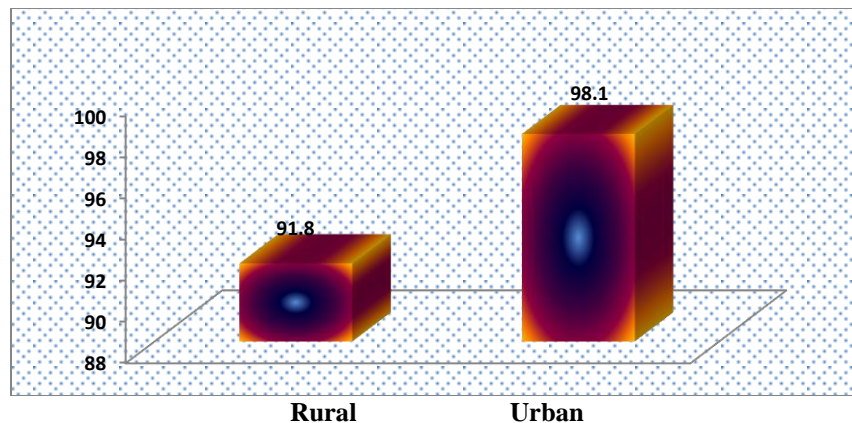


Figure 16: Percentage distribution of use of materials by Residential area

The above Figure 17 indicated that the percentage distribution of respondents in relation to practice of sanitary materials to manage menstruation at urban and rural areas. Majority (98.1%) of them from the urban area were confirmed the practice of sanitary materials during menstruation as compared with rural respondents (91.8%). During FGDs with school girls, some participants confirmed that they would prefer disposable sanitary pads because the cloth is thick and causes discomfort, especially during summer. As one participant from Enseno High School (Meskan Woreda) shared –“Cloth is ok during winter, however during summer it is very uncomfortable. It rubs against the skin and becomes smelly.” Disposable sanitary pads on the other hand are seen as easy to use and easy to carry as well. However, because they cannot afford sanitary pad always, most of them usually use cloth materials when staying at homeland use sanitary pad only when they need to go out or schools (in the case of urban and semi-rural girls). However, participants in the FGDs clarified that even if they dry their cloth outside it is usually in a separate place which cannot be noticed easily by others and many of them still continue to put over a thin piece of another cloth so that others cannot notice. This practice is unanimously voiced by most of the FGDs participants in all rural and urban schools girls. The girls jointly voiced giggling: “Yes, we dry the cloth under the sunlight. But most of the time we place it under some clothes. When we do it directly then it is in a slanted place - so no one can see it.”

As also cited in FGDs for the case study by this baseline survey at Hibret Primary School in Meskan Woreda (SNNPRS) on menstrual hygiene challenges, most of the girls said they used old cloth called a Cherk (Rags) which they would get from their mothers, while others stole used cloths from their younger sisters. With this they seemed to be happy as the Ckerk/Rag/don't soil easily, and as such they changed them twice: at break time and lunch time. In case of emergencies, the girls opted for paper/toilet paper or other materials until they could get home where they would find other means. The younger girls also found the older ones very helpful as they always carried an extra old cloth which they would willingly share in such a situation when a friend was in need.

3.8. Condition of Toilet Facilities at School

The following Figure 18 shows the percentage distribution of respondents reported on the availability of adequate toilets at school per region. In this regard; about (30.2%) of respondents from Tigray (Wukro Woreda) were described the presence of availability of adequate toilet at their schools. The remaining regions of Amhara (21.4%), SNNPRS (15%) and Oromia (5.4%) have reported insufficient toilets at school. In this case Tigray has relatively better availability of adequate toilets and followed by Amhara region. Oromia has the least availability of adequate toilet as compared with other survey regions.

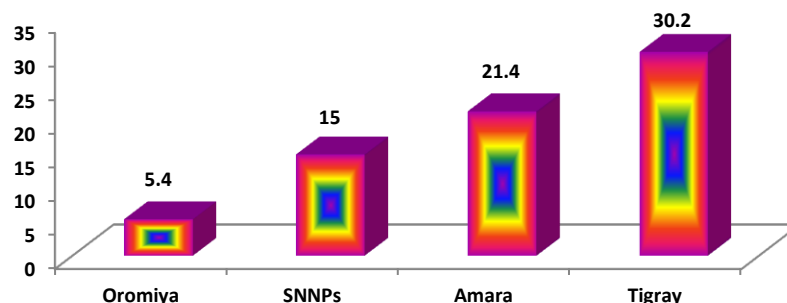


Figure 17: Percentage distribution of availability adequate of toilets

in school by region

With regard to percentage of respondents at urban and rural areas; rural schools (18.9%) have relatively better availability of adequate school toilets as compared with urban (11.9%) respondents. Furthermore, FGDs with students and teachers from the rural schools were also reported that sufficient numbers of toilets are available for girls and boys. As per the observation check list, however, the suitability and functionality of these rural school toilets were founded poor due to lack of water and maintenance. On other hand, availability of adequate toilets in urban schools is the main challenges due to high number of students' population and mismanagement of existing facilities.

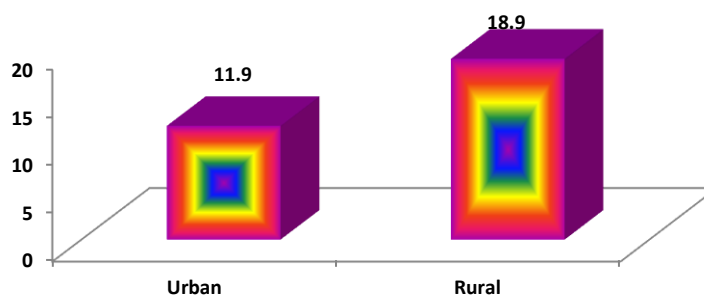


Figure 18: Percentage distribution of availability of adequate toilet in school by residual area

As indicated in the table-10 below in relation to the cumulative results of percentage distribution of respondents on the condition of sanitation and hygiene facilities at school in the baseline survey areas. Out of 769 respondents; majority of 651(84.6%) respondents confirmed that there were no availability of adequate school toilet facilities with access to water. The remaining minority 118(15.4%) respondents were reported that there is availability of adequate toilet facilities at their school. As a result of this, about 400(52%), 221(28.7%) and 148(19.3%) respondents were reported that they remained at home, used bush/open areas around schools; and missed some class hours during their menstruation respectively. In the multiple questions response with regards to disposable methods of sanitary pads; about (43.8%), (27.4%), (17.3%), and (6.2%) respondents were confirmed they have been thrown their disposable sanitary pads in latrines, put in rubbish pit, wash and reuse and take to home. With regards to suitability of toilets for girls at school; greater majority of 727(94.5) respondents were reported that there is no safe toilet facilities with access to water, specifically during menstruation.

Table 10: Percentage distribution of respondents related to toilet facilities in school

Percentage Distribution of Respondents related to toilet facilities in school			
	N=769		Percent
Is there availability of adequate Toilet Facilities in your Schools?			
Yes	118		15.4
No	651		84.6
If No , what are the alternatives you are using as a means of toilet'?			
Remain at Home	400		52.0
Use Bush or Open areas around school	221		28.7
Miss some class hours	148		19.3
Are there Safe toilets with water for girls in your school?			

Yes	42	5.5
No	727	94.5
Separate room for menstrual girls		
Yes	218	28.3
No	551	71.7
Disposing methods of sanitary pads ⁺		
Throw in latrine	337	43.8
Burning	52	6.8
Throw in rubbish pit	133	17.3
Wash and re-use	211	27.4
takes to home	48	6.2

Note: ⁺Multiple Response Question (Participants were responded more than one option)

As per the FGDs with parents, teachers and students; the baseline survey schools were founded lack of cleanness, full of faces, non-functionality, and unsafe and lack of access to water; specifically these school toilets are completely unfit for menstrual school girls. On the other hand; some schools from the survey have been tried to arrange separate rooms/class for menstrual girls, in the case of Dobie Primary and Enseno High Schools (Meskan Woreda). Furthermore, as per the observation checklists of school facilities; almost school toilet facilities were founded full of dirty and human faces; lack of privacy, lack of doors and locks and lack of access to water. These are the main challenges for school girls to manage their menstrual hygiene which have been aggravating and a contributing factor for poor attendance, poor performance, and high absent of school girls during menstruation(as indicated in table 16 below).

The following quotes from FGD at Bure Zuria Primary School rightly summarize the challenges of a girl during her menstruation when she attends school which lacks basic infrastructural amenities, hygienic sanitary pads and also the recurrent effect on attendance: “In our school there is no water facility in the toilet - it is so difficult during their menstrual period”. Also there is no arrangement of disposing the cloth/rags. Sometime the used cloth/rags have to be disposed off in the toilet-pan. Some days we bleed heavily, and we need to change clothes at least 2 or 3 times during the school hours. There is no place to change and dispose the cloth –there is question of putting back those used cloth in our pockets. So we just bunk/nonsense classes when we have to change the clothes”.



**When Respondents Filling Questionnaires at Sebata and Enseno Secondary Schools
(Sebata Hawas and Meskan Woredas)**

3.9. Availability, Usage and Management of Sanitary Materials

In the table 11 below sought the views of respondents, and women teachers on the kind of materials used during menstruation. Majority of female teacher FGDs confirmed that there are no menstrual pads available for girls in school. Pain killers are also needed in the schools although only minority groups of women teachers said they are provided. On the other hand, disposable pads are not available in rural area of Meskan, Tole, Bure and Machakel woredas due to lack of demand or supply. However, in the study of area of Butajira and Wukro Towns, out of ten visited shops, only four shops have disposable sanitary pads. During the in-depth interview with shop keeper, they confirmed that there is no such huge demand for disposable sanitary pads either lack of information or affordability problems. Due to this reasons; only few young girls/female have been visited the shops for buying disposable pads.

Out of 650 respondents who have confirmed started menstruation; majority of 429(66.0%) of respondents knew about availability of disposable sanitary pads at the local market; while 221(34%) respondents confirmed they weren't know the types and availability of sanitary pads. In the multiple questions response; Out of 429 respondents; about (66%), (24.4%) and (27.4%) respondents knew Eve, Comfort and Flexi at the local market. Moreover, out of 469 baseline survey respondents; only 226(52.7%) had ever bought disposable sanitary pads while the rest 203(47.3%) had never bought disposable sanitary pads from local market due to the reasons of expensiveness in the case of (65.3%), and not long lasting (49.4%). Majority of urban respondents had adequate information about the availability and types of sanitary pads at the local in the case of (61%). Moreover, majority (69.7%) of respondents from urban had also used disposable sanitary pads during menstruation. *(Please refer the annexed table 10 at end of this document for further information).*

Table 11: Percentage distribution of respondents with regards to availability of sanitary Materials

Percentage Distribution of Respondents with Regards to Availability, Usage and Management of Sanitary Materials			
		N=769	Percent
Do you know some sanitary pads?			
	Yes	429	55.8
	No	340	44.2
If Yes, what type of sanitary pads do you know at local market ⁺ ?			
	Eve	226	52.7
	Comfort	139	32.4
	Flexi	78	18.2
If Yes, have you ever bought and use sanitary pads? = 650			
	Yes	226	34.8
	No	424	65.2
If you answer is No, what are the reasons for not bought and use sanitary pads ⁺ ?			
	Expensive	200	47.6
	Not Long lasting	220	52.4
Who Provides Sanitary Pads ⁺ ?			
	Parents/family	287	49.2
	School	57	9.7
	NGOs/Charities	25	4.2
	Self	214	36.7
Is there emergency menstrual materials provided at your schools?			
	Yes	57	8.8
	No	593	91.2
If Yes, what types of Menstrual materials provided by your school ⁺ ?			
	Emergency Sanitary Pads	51	75.0
	Emergency Piece of Cloth	12	17.6
	Pain Relief Pills	5	7.4

Note:⁺Multiple Response Question (Participants were responded more than one option)

In the multiple questions response of respondents; out of 226(52.7%) disposable sanitary pad users, about (79.6%), (53%) and (57.6%) obtained sanitary pads from parents/families, schools and NGOs/charities organizations respectively. On other hand, very few schools, like Dobie Primary and Enseno were provided sanitary pads for the purpose of emergency cases, such as sanitary pads in the case of (72%) respondents, piece of cloths (20%) and Pain Killers (8%) respectively.

In the FGD with teachers, parents and girls; it was clearly identified that the family income affects the use or not use of sanitary pads. The low cost and ease of availability of rags/clothes make it the indispensable choice for the school girls in both rural and urban, more in the former. Some girls in the FGD explicitly mentioned that they prefer cloths to pad for use during menstruation because it is cheap and can be reused as well. However, many participants made it clear that if they had the option to choose between sanitary pads and rag clothes they would want to use the disposable sanitary pad, like FGDs participants from Wukro, Meskan, Bure and Tole Primary, and Secondary Schools. However, due to lack of finance hygienic reusable sanitary pads is not the best preferable during menstruation period for most of school girls. Minority of school girl from the urban area (Butajira, Wukro, and Sebeta Towns) used disposable sanitary pads which are seen as easy to use and easy to carry as well. However, because of unaffordability these disposable sanitary pads; they always use cloth material when staying at home and use sanitary pad only when they need to go school.

Most participants in FGD shared their experience on the using of reuse a single cloth for many menstrual cycles. However, the girls clarified that the number of times of use also depends on the nature of blood stain on the cloth – if the stain is strong they don't use it again. In survey majority of the respondents indicated that they dried their washed reusable absorbent material (cloth) at hidden and unsafe places. However, participants in the FGD clarified that even if they dry their cloth outside it is usually in a separate place which cannot be noticed easily by others and many of them still continue to put over a thin piece of another cloth so that others cannot notice. This practice is unanimously voiced by most of the FGD participants in all targeted schools. The girls jointly voiced laugh nervously: “Yes, we dry the cloth under the sunlight. But most of the time we place it under some clothes. When we do it directly then it is in a slanted or biased place - so no one can see it.”

On the other hand, FGDs revealed that in rural areas where there are no garbage collections system girls even dumped it in the stream. Disposal of used cloths and sanitary pads was a challenge in both urban and rural schools. Many FGDs participants said that they wrap it and carry it home with them either to throw it with other waste or to burn it. Some also mentioned flushing it in their home and school toilets. Some of the girls have even disposed it in school toilets, at times causing the toilet to clog. The FGD participant from targeted areas informed that: “In our school there is no specific place to dump the cloth, wish there was a dustbin. Many times we just throw it in the toilet pan.”

3.10. Effects of Menstruation in Girls Education

The first set of questions from the table-12 below indicates that some potential problems were reported by the survey respondents due to poor menstruation hygiene. Thus, out of 650(84.5%) respondents, majority of 468(72%) them were affected during menstruation while in school. As a result of these; in the multiple questions response, about (78.6%); (66.7%); and (69.9%) respondents were confirmed that they have been affected by lack of concentration; psychological effects and absent from classes respectively. Furthermore, of 650 baseline survey respondents (those who have menstrual experience); about 327(50.3%) were reported that they have been absent from class every month due to menstruation; specifically, about (85%) from 1-3 days and the remaining more than 4 days (15%) every month.

This was to establish the number of learning days that school girls miss while having their menstrual periods. As per the FGDs; both the school girls; and women teachers responded similar reflections to this issues. More than half of the respondents were reported that they have been missing averagely three days

every month. This translates into a loss of 24 to 30 school days per year. This means per term a school girl may miss up to 15 days of study. On average, there are 220 learning days in a year and missing from 24-30 days a year translates into 13% of the time a school girl will miss learning due to menstrual periods. On the other hand; about (55.5%) respondents told that they were noticed some kinds of problems during menstruation, specifically: isolation (67.5%), insult (37%) and discrimination (33.9%).

Table 12: Percentage distribution of respondents on the Effects of Menstruation in girls' education

Percentage Distribution of Respondents on the Effects of Menstruation in Girls Education			
	N=650	Percent	
Do you face some potential problems at school due to menstruation?			
Yes	468	72.0	
No	182	28.0	
If Yes, what types of problems due to Menstruation at School ⁺			
Can't concentrate	468	42.3	
Psychological effects	312	28.2	
Absent	327	28.6	
Do you miss class during menstruation?			
Yes	327	50.3	
No	323	49.7	
If Yes, for how many days do you miss classes?			
1-3 days	278	85.0	
>=4 days	49	15.0	
Faced problem due to menstruation at school = 769			
Yes	427	55.5	
No	342	44.5	
Problems due to menstruation ⁺			
Isolation	239	48.8	
insult	131	26.7	
discrimination	120	24.5	
Do you know somebody faced problem because of menstruation?			
Yes	354	54.5	
No	296	45.5	
If Yes, what are the problems you observed on others ⁺			
Isolated	260	42.7	
Insulted	169	27.8	
Discriminated	180	29.6	

Note: ⁺Multiple Response Question (Participants were responded more than one option)

The above table 12 indicated that about half of the survey respondents (50.3%) mentioned being ever absent due to menstruation. However, many girls in the FGDs shared that though physically present in the school they performed poorly in terms of concentration and attention. This was particularly due to constant worry that boys might figure out about their status by their movements and facial expressions. Many also expressed feeling exhausted and weak during menstruation. Another major worry expressed by the girls was having their menstruation coinciding with exams as they would not get adequate time and opportunity to clean and change timely. A girl of class from Amanuel Secondary School (Machakel Woreda) shared her utter despair by stating: "I wish I did not have to have this menstruation! But I know this is not possible." Among reasons highlighted by survey respondents for being absent in school during menstruation, lack of privacy for followed by lack of availability as well as affordability of disposal system and water supply. Pain/discomfort was also mentioned by some FGDs respondents. With regards to privacy girls noted in the FGD that even if infrastructure of toilet is present, in many instances basic lock system is missing or not functioning. So they usually go in pairs by taking turns to go to the toilet and wait on each other.

The following quotes from FGD in Bantu High School (Tole Woreda) summarize the challenges of a girl during her menstruation when she attends school which lacks basic infrastructural amenities and also the recurrent effect on attendance: “In our school there is no water facility in the toilet - it is so difficult..., sometimes I have to miss schools. The water supply is outside the bathroom. There is only one tap. We have to carry water to the toilet. Also there is no arrangement of disposing the cloth. Sometime the used cloth has to be disposed-off in the toilet-pan. During the interview with Health Extension Workers (HEWs) and teachers, specifically, Meskan and Tole Woredas; most of them confirmed that they were not aware about the menstrual issues; and even if female teachers and HEWs knew about it they were not talk freely due to unaware on challenges of menstruation in girls education. HEWs reported that MHM issue has not been covered in their health packages. HEWs and school teachers also added that MHM is not included in their health packages, and school curriculum; and they thought many school girls have been absent from school due to menstruation every month. They suggested that MHM should be mainstreamed with Health Extension Packages and school curriculum which could be a paramount importance for girls’ education.

3.11. Observation on School Toilets

3.11.1. Availability of Facilities for Menstrual School Girls

Of all schools visited in the study, arrangements of nominal changing rooms were observed at all 18 schools in the baseline areas. However, all these changing rooms weren’t founded functional due to lack of adequacy, privacy, sanitary pads, water. These changing rooms were nominal and most of school girls weren’t gone to these places due to lack of necessary sanitary facilities, fear of isolation, insulation and discrimination. The findings in this assessment relate well to the findings of Ezra et.al. (2014) who show that a lack of soap, hand wash facilities, emergency pads and privacy are important determinant for proper practice of menstrual hygiene and school attendance and have been identified as main problems²⁶ in many schools in developing countries. Mahon and Fernandes (2010) also show, that, MHM is neglected but there is an awareness that the problem exists but few have attempted to address it²⁷ while Devrain and Mathias (2011) state that inadequate access to WaSH impacts significantly on girls’ learning opportunities²⁸.

As per this Observation; most of the baseline survey schools weren’t arranged adequate and functional and accessibility of changing rooms for girls’, sanitary materials, wash rooms, and water availability with soaps in washing rooms. Generally speaking, all the baseline survey schools were founded that they have not suitable, adequate, functional, and safe and availability of water to be used by school girls during menstruation.

3.11.2. Functionality of School Toilet

As per our observation; most of baseline survey schools were founded very poor and lack of functionality and adequacy. Most of these schools were observed as full of human feces and urine in the floor and lack of access to water, open defecation not practices and full of flies and bad smelling. As results of these, the entire school girls have not been used these poor and inadequate toilet facilities. The FGDs with school girls and teachers were also confirmed this facts.

²⁶Ezra Guya, Aloyce W. Mayo, Richard Kimwaga, Menstrual Hygiene Management in Secondary schools in Tanzania, International Journal of Science and Technology, January 2014

²⁷Mahon T, & Fernandes M (2010); Menstrual hygiene in south Asia, a neglected issue for WASH programs, gender & development 18 (1) 99-113

²⁸DevnarainA&Sarkar M (2008); How hygienic is the adolescent girl? Indian Journal of community medicine, 33 (2), 77-80

Our observation findings have also revealed that most of the schools have separate latrines for girls; boys, and teachers. Majority of these school toilets were completely observed not functional due to lack of maintenance and water, uncleanness; full of dirty of human feces and urines, lack of safety and privacy. As Hence, as per the FGDs and quantitative data, most of the students were used for their sanitation at open areas of bushes around the school compounds. The assessment of 18 schools with regard to their condition existing toilet were revealed that in generally, about 12 rural primary schools hadn't water source in their compounds; whereas, all high schools (six) have water availability in their compound but weren't have water sources within the school toilets/latrines to be used for washing, and cleaning.

The following pictures are one of the school girls' toilets/latrines in Enseno Secondary School (Meskan Woreda) in SNNPRS. This school girls' toilet facility has not accessibility of water and not functional, as result of this, most of school girls weren't used it.



This Picture is one of the nominal and Non-functional Girls' Toilet Facilities at Enseno Secondary School (Meskan Woreda), SNNPRS.

The findings in the Focus Group Discussion further build on these findings. One of the girls from Bantu Secondary School (Tole Woreda), is quoted saying; "I cannot come to school during my menstrual periods because we do not have water, privacy, changing rooms, and sanitary pads at school that I can use to manage my menstruation; while a female teacher stated from this school that "sometimes also finds problems when I also experience my periods because there is no water at school. I prefer to remain at home. I cannot help myself at school".

Case Study- One

During the in-depth interview with one of interested school girl is 19 year old studying in Grade Nine in Enseno Secondary School at Meskan Woreda, SNNPRS, and she had attained menarche at 13. She currently has lower than average body weight and is suffering from anemia. She comes from Religious majority and follows Christianity. During her last menstruation, she suffered heavy bleeding for continuous six days and this has been consistent for several days. According to her perception "menstruation is a curse". It has affected her life tremendously. It was not always like this. Since her menarche, "things and life were ok" at least for the next 2 consecutive years – it has been only for last two years that experience with menstruation has been very bad. Menstruation has affected her wellbeing both physically and mentally.

Physically, she has suffered due to heavy bleeding, loss of appetite and loss of weight resulting into a sense of tiredness, which in turn influences her desire to be physically active and support mother in household

tasks. Mentally, it has been the constant fear of the associated pain, discomfort and the effects associated with menstruation – academic performance and especially getting through class ten. She shared that as a class eight student with preparing for National Exams she had restless nights over the possible pain carried out by her menstruation and thought of not being able to make it through her class ten along with her peers.

Her most terrible fear became exactly true when she had to forego her school exams once because of menstruation. According to her, she fainted in the classroom in the midst of the exams and then had to discontinue all her forthcoming exams. Miss A along with her mother has tried many places and people to bring relief to her situation. She has been to many faith-healers, sought alternative medicine from east to west, but of no avail. It has cost the family money, time and energy. The faith-healers claim that evil spirit has cast an eye on her that has made her weak and her “body shrink”. In all these excruciating times, “Mother” has been a pillar of support and she feels, it would have helped her more if only she knew where she could rightly go to a place or person, where she might be informed about the cause of her sufferings and means to relieve it. There are not many long wish lists, but places and people who can make her life less painful and “disease-free”.

3.12. Effects of Poor Menstruation Hygiene in Girls Education

One of the fundamental questions in the study focused on effects/impact of poor Menstrual Hygiene Management (MHM) in girls’ education. The table 13 below reflects the responses from respondents on the consequences of menstruation for school girls. In order to get a better impression of what school girls thought, this particular survey questionnaire was written slightly with different choice of questions. offer each group, as a means of getting different responses. FGDs with school girls, and female teachers confirmed that school girls absent themselves from school during their menstruation. As indicated in table below; out of 650 respondents (menstrual girls); majority of 327(50.3%) respondents were absent themselves every month from class due to menstrual period.

As disaggregated these results by each region/woreda; Wukro Woreda (Tigray)22(18.6%); Tole and Sebeta Hawas (Oromia) 153(64.3); Meskan Woreda (SNNPRS) 87(68.5%) and Bure and Machakel Woreda(Amhara) 73(38.8%) were reported absent from class because of menstruation. As a result of this, Wukro Woreda (Tigray) has recorded the lowest rate (18.6%)of absent, and next Bure and Machakel (38.8%). Oromia (64.3%) and SNNPR (68.5%) have registered the highest rate of absent of school girls. With regard to the aggregated number of days missed from classes at all woredas/regions; about (16.5%), (31.8%), (36.7%), (11.9%) and (3.1%) respondents were reported that they had missed classes for one day, two, three, four and five and above days every months respectively. From these findings; respondents from Tigray and Amhara had reported low absent of school girls while Oromia and SNNPRS were reported the highest rate of absent.

Table 13: Percentage distribution of respondents with regards to missed classes due to Menstruation

Main Indicators	Tigray		Oromia		SNNPR		Amhara		Total	
	N	%	N	%	N	%	N	%	N	%
Number of respondents missed class during menstruation	22	18.6	153	64.3	87	68.5	73	38.8	327	50.9
Number of days missed due to menstruation per month										
One day	6	11.1	26	17.2	15	17.4	11	15.3	54	16.5
Two day	8	44.4	50	33.1	31	36.0	15	20.8	104	31.8
Three day	5	27.8	55	36.4	34	39.5	26	36.1	120	36.7
Four day	2	11.1	14	9.3	4	4.7	19	26.4	39	11.9
Five day& above	1	5.6	6	4.0	2	2.3	1	1.4	10	3.1

As per the FGDs with teachers and female students; it is important to note from this baseline survey that a majority of the school girls who experience menstrual periods are in upper primary, and a higher majority of them in Grade 7-8. This FGDs with girls confirmed that they missed a minim of 12 days of school in each term, the implication is that they may be missing a lot that in terms of learning and there is a likelihood of losing interest in their education. Falling behind and not having the possibility to catch up with the help of a teacher may eventually led to drop out. This could be a contributing factor to the low completion rates. Grade 8 is the top most class in the primary education system in Ethiopia. As per the FGDs with parents and teachers; in addition to the problems of MHM in school; some parents/families, specially the fathers have been pushing, and enforcing their daughters to migrate to Middle East/Gulf and Arab Countries either legally or illegal; in most of the time illegal contract of employment. That is way, the number of school girls have been highly deteriorated/declined at the upper primary schools, specifically at secondary schools. Moreover, in the context of this study, when asking the female teachers FGDs if they thought there was a potential correlation between girls menstruating and staying away from school, it was clear that over half felt this to be the case. Majority of the female teachers said that school girls drop out due to menstrual management issues.

Similar study in Ghana reflected that post-pubescent girls were missing school as much as five days each month due to inadequate menstrual care at school and physical discomfort such as cramps²⁹. Another program entitled the SWASH+ project³⁰; a five-year applied research project to identify, develop, and test innovative approaches to school-based water, sanitation and hygiene in Nyanza, Province, Kenya revealed that there are several methods reported by school girls for managing one's period and avoiding embarrassing situations. A common remedy is to stay at home, leave school or drop out all together from school. A number of studies have focused on a linkage between girls who menstruate and potentially drop out of school. Girls' absence from school has both physical and psychological reasons which range from lack of menstrual hygiene management provision to menstrual pain. Once they are at home they often do not want to go back for fear of being scolded or found out³¹.

The implication of the above findings is that menstrual hygiene affects the majority of adolescent school girls; and this can potentially reflect that their ultimate educational performance will not be optimal. Based on the above results overview; it is interesting to reflect on other global research focusing on the effect of menstruation while at school. As a result of missing days at school, they are missing lessons and fall behind. This may cause shame, loss of interest and dropping out altogether. Other qualitative data of this baseline survey indicates that some school girls were missing school as many as four days each month due to inadequate menstrual care and cramping. In addition, the girls refrained from other activities, such as work, chores, and playing with other children.

Based on the Focus Group Discussions, girls have cited their discomfort around the time of menstruating. "I am embarrassed to come to school in case I spoil myself", says one girl from Ensano Secondary School in Meskan Woreda. If this happens, I have nowhere to change my clothes, so instead I do not come to school for a few days". As per the FGDs with teachers, students and school directors; there were many reasons for the dropping of girls from schools. To mention some, early marriage; unwanted pregnancy, lack of low priorities of parents to girls education; poor menstrual hygiene, lack of girls friendly schools; poverty, too much domestic workloads; pushing and pulling factors to send girls by parents for domestic work in Arab Countries. The reason for sending girls to Middle East and other Arab Countries and early forced marriages by parents was cited in FGDs and it came out very clearly that girls are generally viewed as a source of wealth. Some female teachers FGDs confirmed that menstruation as one the contributing factors to girls dropping out of school while poor performance in school and poverty was cited by FGDs respondents.

²⁹Montgomery P, Ryus CR, Dolan CS, Dopson S, Scott LM . 2012. Sanitary Pad Interventions for Girls' Education in Ghana

³⁰See <http://www.washinschools.info/swashplus>.

³¹ Kumar, R. 2012. Plan India- WASH learning fund, Menstrual hygiene management posting. January 13.

The opinion of girls during the FGDs on why menstruation makes girls' miss school was sought of the girls cited lack of sanitary pads and adequate toilet with water facilities as the major hindrance to school attendance. Other issues cited included feeling severe pain at, lack of a private changing room in school, afraid of being made fun of, feeling dirty, discomfort due to tiredness and not allowed by parents.

Case Study-Two

Miss B is a 17 year old girl studying in class seven in “Wukro Secondary School”, Wukro Woreda (Tigray). She was willingly interested to share her experiences, and challenges menstruation in her education/She had her first menstruation when she was 15. Her menstruation is regular except that she has experiences of heavy bleeding on 2nd and 3rd day of her menstruation. Similar to many experiences shared by girls of her age, she has had a frightening first experience with menstruation. Gradually, she got to know about menstruation and its management through her mother and sister-in-law. At home, she experiences several restrictions of what she can do and what she cannot do. Her mother even suggests that during menstruation she take care to play and stand in front of people. She claims that she does not pay attention to her mother's suggestions but restricts herself from performing religious activities. At home, she is fortunate enough to have some privacy –the family has their private toilet with water supply. It is in the cow shade that she manages to change the cloth used for menstruation, to clean and take shower.

However, unfortunately this is not possible in school, as the school environment is not very conducive – when she has menstruation she usually misses classes. She misses her classes especially during the 2nd and or 3rd day because that is when she bleeds heavily and needs to regularly change the pad. The school has a lavatory but lacks basic facilities. The door even does not have a latch, neither is there a water supply. To avoid all these inconveniences and difficulties, she prefers to stay at home and continue missing classes. She expresses that if basic amenities were ensured such as a bucket, a lock system at the toilet door, water and sanitary pads, managing menstruation at school would be much easier and she need not miss her classes.

4.0. SECTION FOUR: DISCUSSIONS

This study shows that the age of menstruating girls ranged from 13 to 20 years with maximum number of girls between 18 and 20 years of age. Similar study conducted by Dasgupta, A. and M. Sarkar reported that the age of menstruating girls ranged from 12 to 17 years with maximum number of girls between 16 and 19 years of age. In this baseline study, the mean age of menarche of the respondents was 13.7 years, whereas in a study conducted by Gynecologists, the mean age at menarche was found to be 13.2 years. Unfortunately, in this study about 61.5% of school girls were unaware about menstruation during menarche. However, each and every school girls should be aware about menstruation, which is an important event at the entrance of adolescence of girls and ideally a mother should be the main informant to their daughters at this tender age. However, family and friends were the first informant only in case of 260(33.8%) and 240(31.2 %) girls in the present study respectively.

This gap might be due to poor literacy and socio-economic status of families/parents, which have fuelled the inhibitions a mother has to talk to her daughter regarding the significance, hygienic practices and a healthy attitude towards menstruation. The latter will play a long way in maintaining a healthy reproductive tract for each and every adolescent girl who, after she becomes a mother, percolates the healthy message to her female offspring. In a study conducted among 664 school girls aged 14-18 in Mansoura, Egypt by El-Gilany, mass media were the main source of information about menstrual hygiene, followed by mothers. Another study conducted by Harvey P. reported that 40 (42.5%) urban and 41 (55.4%) rural girls were aware about menstruation prior to attainment of menarche. In urban girls, mother was the main source of information about menstruation (27.5%), whereas it was teacher in the rural counterparts (27.01%). Other sources of information were friends, relatives and books. In this present study, (61%) school girls were not aware prior to menarche or during menarche.

Another study conducted by Margaret, E.G., nearly 47.1% of the school girls were not aware about the natural phenomenon of menstruation among women and most of the girls got first information about menstruation from their mothers with other major informants being sisters and friends. It was observed in this study that only 428(55.7%) girls believed that menstruation is caused by Physiological process, whereas in a similar study conducted by Margaret, E.G., nearly 70% believed that menstruation was a natural or physiological process. It was very sad to observe in the present study that most of the girls 142(18.5%) did not know about the source of menstrual bleeding and a majority of the girls 415(54%) was not freely discussed about menstruation hygiene management. The above observations might be due to taboos, poor literacy level of mothers or absence of proper health education programmes in school, which should focus on menstrual hygiene among adolescent girls.

This study shows that majority of 80.1% school girls were used four kinds of materials include- disposable sanitary pads, toilet paper, piece of rags and reusable cloth pads as menstrual absorbent. In this study, only 217(33.4%) school girls (most of them from the urban area) used disposable sanitary pads during menstruation. Apparently, low socio-economic status, high cost of disposable sanitary pads and to some extent, ignorance dissuaded the study population from using the disposable menstrual absorbents available in the market. In a study conducted by Mehra, E.S., three-fourth (3/4th) of the girls used old cloth during their periods and only one-fifth(1/5th) reported using readymade disposable sanitary pads. It was observed in this

study that the usual practices of 520(80%) respondents were to put and kept dry their reusable cloth pads at hidden and unclean places.

To keep the cloth away from prying eyes, these are sometimes hidden in unhygienic places. Privacy for washing, changing or cleaning purpose is something very important for proper menstrual hygiene, but in this study, lack of privacy was an important problem since majority of 649(84.4%) respondents did not maintain privacy. Regarding different types of restrictions practiced during menstruation, majority of 427(55.5%) school girls were lack of water access during their menstruation; lack of adequate and missing of door/locks for toilets in the case of 285(37.1%), and 214(27.8%) school girls respectively. In relation to affordability of disposable sanitary pads, 370(78.9%) respondents were reported to this pessimistically or negatively.

Given the findings in the study and reflecting on the objective of the study, it is clear that MHM is an issue for adolescent school girls both in rural and urban settings. In this study, factors that directly or indirectly influence MHM have been identified for discussion. Knowledge about menstruation that large majority of girls participating in this study had before attaining menarche, and later too, was not correct. Their perceptions were heavily influenced by socio-cultural beliefs and symbolisms. Mothers have been identified as an important source of information on menstruation for the adolescent girls, as also shown by some other studies to a varying degree (Dasgupta and Sarkar, 2008; El-Gilany et al, 2005). However, information on menstruation given by mothers is often incomplete and incorrect, usually being based on cultural myths, and therefore probably perpetuating negative and distorted perceptions and practices of menstruation (Adinma and Adinma, 2008).

In view of the little information that the adolescent girls are equipped with, usually from mothers, family members and peers, it is not surprising that only about 55.6% of the participating girls knew correctly that the menstrual blood came from uterus. This already reflects that teachers do not sufficiently impart the knowledge, and seemingly girls themselves also do not make a self-effort to learn, even though such basic anatomical issues are part of their school curriculum. School teachers' hesitation in conducting the health classes and provide reproductive health information including menstruation confidently is evident in this study – which can be said to mirror the lack of skills and attitude of teachers to handle sensitive topics. It was clear that the level of awareness on menstruation amongst the respondents, though secondary school students, reflect that the majority still does not have right information to make decisions, and to take appropriate steps in terms of managing menstruation and related problems.

Seven out of ten school girls in the study observed at least one restriction during menstruation, which is consistent with a study done in India where 86% practiced some form of restriction (Dasgupta and Sarkar, 2008). Such restrictions, though varied, are practiced across the groups of different religion and culture – including Muslims, Christians, etc – and in most cases are related to the “impurity” of the females during menstruation (Ten, 2007). Restrictions symbolize a woman's ritually dangerous status (Narayan et al, 2001) that, as fuelled by myths, misconceptions, superstitions and taboos, is believed to have the potential to spoil food, plant, biological and social processes as exemplified by the respondents of this study. All pervasive the phenomenon of restrictions may be, however it was encouraging to note in this study the changing attitude of the adolescent school girls in terms of challenging the restrictions that limit their daily lives and routines.

Dysmenorrhoea manifesting as abdominal pain or discomfort has been found as the commonest medical problem, the finding being consistent with some other studies (Adinma and Adinma, 2008; Narayan et al,

2001). The abnormal physical condition during menstruation not only affects their daily lives and routines to a varying degree, it also makes the girls try different remedial measures from self-medication to visiting different types of health providers. As is evident in the study, girls many times do go through negative experiences with health worker in terms of the response and advice they provide, and this clearly highlights on the need for sensitivity on the part of the health workers to provide friendly health services taking into account the needs of this group of population.

Majority of respondents in this study reported that they having been absent from 1-3 days and more than 4 days every month from school due to a cause related to menstruation. More than physical absence during menstruation, this study pointed out an important aspect that can affect school performance equally –the quality of presence at school, particularly the attention and concentration in the curricular activities. This facet (aspect) of the implications of menstruation on school girls was found in some literatures referred to in this study. Lack of menstrual protecting things required for maintaining the menstrual hygiene, like sanitary pads, underwear/pants, privacy, lack or missing doors, and lack of water supply in school toilets, has been found as major reasons for absenteeism, though abnormal physical conditions (pain, discomfort, heavy bleeding) are also one. Lack of privacy has been pointed out by other studies also as a major problem (El-Gilany et al, 2005) and there's conclusive evidence that girls' attendance at school is increased through improved sanitation and hygiene (Bhardwaj and Patkar, 2004).

In the multiple response of majority of 460(59.8%), and 194(25.2%) of school girls in this study used reusable clothes, and dispensable rags/pieces of cloth as menstrual absorbent respectively. This figure is comparable with other studies in Nepal (Adhikari et al, 2007) and India (Narayan et al, 2001; Dasgupta and Sarkar, 2008) where large majority of 87.3% participants used reusable cloth, piece of rags, and paper/toilet papers respectively. The study clearly pointed out that the lack of information about disposable sanitary pad; its high cost and limited availability are the main reasons for school girls not using them. Similar observation that poverty, high cost of disposable sanitary pads and to some extent ignorance dissuaded the adolescent girls from using the menstrual absorbents available in the market was made in an Indian study (Dasgupta and Sarkar, 2008). The use of disposable sanitary pads was found to be significantly higher among urban school girls, whereas the use of reusable sanitary pads was significantly high among rural, which is consistent with an Egyptian study which found the correlation between rural residence and low socio-economic class with the use of unsanitary absorbents (El-Gilany et al, 2005).

It's evident in this study that those who knew about the sanitary pads are likely to use them instead of cloth if they could access and afford it. The disposable sanitary pads usually have better absorption, are meant for single use and, hence are considered sanitary. However, with the cloths there is a tendency towards reuse and have the potential of comparative advantage in terms of cost-benefit analysis. However, this study didn't explore much into the aspect of infections. Proper washing and drying of reused cloth does minimize the chance of infection, but it was explicit in the study that the drying practices were not optimal as they had to hide the cloth from others view. In this regard, intensive awareness raising on menstrual hygiene management should be required to minimize such kinds of infections.

The frequency of cleaning the genitalia and changing absorbent material; about 165(21.5%) once a day, 183(23.8%) twice a day and 234(30.4%) more than twice a day in average has been quite similar to the findings of an Egyptian study where the frequency was from one to three times a day (El-Gilany et al, 2005). Each woman decides for herself what is comfortable but for optimal hygiene menstrual absorbent should be changed at least three to five times a day, and more frequent may be necessary (Salem and Setty 2006). The

cleaning should also be at least equal to the number of times the pad is changed. Though the practice of cleaning and changing sounds fairly okay, rural menstrual women and school girls have pointed out that at village and school this is not always possible. Fortunately, all the schools in which the study was undertaken had provision of toilet, which is common in most of school in Ethiopia, but small issue like a broken lock or lack of tap or a bucket to carry water did result in poor hygiene and in some cases school absenteeism as well.

The problem of not having toilet with adequate privacy and water supply for managing menstrual hygiene also existed for many participant girls at home. Environmental impact of menstrual hygiene in the form of a growing waste problem has been noted (Ten, 2007). In that line, the problem of properly disposing the menstrual absorbent, mainly due to the lack of proper or no garbage collection system, both at school and home was evident in this study too – at times causing problems like blockage of toilet and polluting the local environment like streams in villages.

Other factors identified during the FGDs for girls dropping out of school included; lack of awareness among parents on the value of education and therefore they do not adequately provide for girls in school, lack of appropriate guidance and counselling about education from both teachers and parents, teachers using inappropriate child friendly teaching techniques like abusive language, and a heavy reliance on parents on girls on domestic issues. The findings of this assessment relate with the findings of UNICEF (2008) which cited that girls' lack of access to educational opportunity has been exacerbated by certain cultural practices. This report shows that poverty, insecurity, early marriage and pregnancy have been identified across the States as key causes of drop out from schools³². Morrison (2010) further builds on this argument by stating that 'each percentage point increase in poverty reduces a girl's chance of being enrolled at a primary school by 3%'³³.

The cultural norms that give girls not a chance of going to school is common in many communities. This assessment supports similar findings by DFID (2012) who showed that a cattle culture and economy is predominant in South Sudan and in many communities women are viewed as a household resource, commonly valued by the number of cows they would bring as dowry; and as a tool for domestic chores³⁴. These social views and the economic realities that underpin them result in further barriers for girls' education. Communities fear that girls will be 'spoilt' by going to school, mixing with boys and men unchaperoned, and that educated girls will not respect their menfolk and thus their future husbands and therefore they will be harder to marry off³⁵. In relation to this view, the School Director at one of the Hibret Primary Schools at Meskan Woreda, SNNPR is quoted saying *"Community here forcing girls to send them to Arab Countries for domestic works and more value also given to cattle so much that they can give away their daughters even at a young age just to get cows. So they will not take the girl to school but instead marry her off"*.

Findings of the assessment revealed that on average girls miss class about four (4) days during menstruation periods as shown in the above table. Shocking, some girls reported staying home for up to 7

³²Unicef, 2008. A Study on Socio-economic and Cultural Barriers to Schooling in South Sudan

³³Michael Morris, 2010. Analysis of Provincial Education Statistics of South Sudan. Unpublished. DFID Sudan 2010

³⁴ DFID, Business Case for the Girls Education South Sudan (GESS) Programme, December 2012

³⁵DFID, Business Case for the Girls Education South Sudan (GESS) Programme, December 2012

5. Recommendations and Conclusion

5.1. Recommendations

Given the short time frame for this brief study; it was not possible to cross-check results with class attendance records in schools over a longer period of time, or to include other aspects around the potential correlation between girls menstruating and school dropout. Within the context of possible further study; it would be interesting to observe class attendance during the academic year; and provide consistent short questionnaires to school girl who are missing a number of days from school. Other aspects that would be of interest include reflecting on the costs of menstrual management facilities, both in the form of hardware (e.g. changing rooms) and software (e.g. life skills training classes). Within this given context, more focus could be paid on the importance of keeping girl in school. From this baseline survey on MHM, it is recommended to take the following measures at different multi-sectoral levels towards improving Menstrual Hygiene and Management in schools:

5.2. Awareness Raising and Capacity Building on MHM

- Developing IEC/BCC materials and teaching guidelines on MHM;
- Creating awareness on hygiene and sanitary dignity and its impact on women and girls health and education;
- Exploring and sharing lessons of the management aspects of menstrual hygiene;
- Promoting the integration of MHM with ongoing sectors of Sexual Reproductive Health, and Water, Sanitation and Hygiene programs; and
- Producing alternative and affordable reusable sanitary pads at the local level by engaging women cooperatives.

5.3. Multi-sectoral Action Programme Approaches

5.3.1. Prompt Actions at Schools

To prevent girls from dropping out of school due to problems concerning menstruation; it is necessary to educate all students within the framework of ‘comprehensive sexual education’ about health issues in general; and Menstrual Hygiene Management (MHM) in particular. Moreover, it is important to have sufficient clean, private (separate) and safe sanitation facilities with accessible running water and effective waste management, which are not at an isolated location.

5.3.2. Accessibility, Availability, Affordability and Acceptability of Sanitary Pads

To produce local sanitary pads and other protection alternatives that are affordable, one must look critically at the price calculation in several areas of Ethiopia. The example of imported disposable sanitary pads shows us that high taxes not only discourage but also make the purchasing of sanitary pads impossible, in particular for handicapped and poor girls and women and girls and women from rural areas. To make sure that menstrual sanitary material is introduced in a culturally appropriate manner (acceptability) careful planning and involvement of actors who speak the local dialect or language, know

the cultural context and have in-depth knowledge of the local customs, habits and lifestyle of girls and women is essential.

Promising developments, such as in Ethiopia by SNV and TCECA and in other developing countries like Bangladesh and in the Indian Federal State of Tamil Nadu, must be supported and closely examined. These interventions offer girls and women better menstrual hygiene at an affordable price, and provide them with employment and economic independence. Both with regard to production and distribution, these best practices must therefore be fostered and encouraged, so that they can be applied at national wide.

5.3.4. Waste Management

Attention must be paid to ensure the disposal of sanitary pads and other protection materials hygienically and in an ecologically friendly way. The production of menstrual protection alternatives, which will not have negative environmental effects or be a hazard to the environment, must be encouraged. Disposable sanitary pads require the presence of closed waste bins or containers, which are emptied and cleaned on a regular basis, preferably located in a place that offers privacy. In several developing countries, various ecological sanitation systems (composting and burning) are used to manage waste material for menstrual hygiene. These best practices may serve as a model.

In order to improve MHM of school girls and women in Ethiopia through increasing the accessibility, availability, affordability and acceptability of sanitary pads and other protection materials for menstrual hygiene, as a result of which different MDGs can be achieved, in particular the guaranteed right to education and the right to sexual and reproductive health.

5.4. Practical Action is needed on MHM in Schools

- 5.4.1** The development of affordable sanitary pads and other protection materials used for menstrual hygiene of good quality, which can be produced at the local level of Ethiopia. For the production of local sanitary pads; the use of locally available materials must be sought and used as much as possible. Moreover, it is essential that innovators/producers of sanitary pads might be willing to transfer their advanced technology to locally established small businesses that will produce these local sanitary pads.
- 5.4.2** The search for 'new' markets (target groups) by active involvement of women's organizations and other stakeholders, such as community-based organizations (CBOs), local 'significant' women, health care staff, etc.
- 5.4.3** Connect as much as possible with existing, promising local initiatives and encourage the development, manufacturing and commercialization of locally produced menstrual protection products.
- 5.4.4** Provide information in schools about personal and menstrual hygiene within the framework of 'comprehensive sexual education', not only to boys and girls, but also to male and female teachers.
- 5.4.5** Provide girls who are starting to menstruate or have already begun their menstruation with menstrual hygiene protection material at least at an affordable price, particularly in the higher forms of primary and secondary education. This will encourage permanent school attendance of girls and contribute to the prevention of child marriages.

5.5. Important Partners for Sanitary Pads Production

For the production of locally affordable and ecologically–friendly sanitary pads and other protection alternatives used for menstrual hygiene, partners at different levels are needed:

- The **Women Self Help Groups and Private Sector**, in particular producers and exporters of sanitary pads and other sanitary materials. Their participation will be vital to accelerate success:
 - ✓ For the transfer of expertise and technology that need to be made locally applicable, by using simple, small–scale and easily operable machines;
 - ✓ To teach in particular interested women in different areas of Ethiopia about their technology;
 - ✓ To invest, so that women can establish businesses that produce and distribute sanitary pads;
 - ✓ To guide and coach the female entrepreneurs (eventually by bringing together), so that these businesses can make profit, pay back the investments and grow;
 - ✓ To develop links with educational institutions and encourage other producers of local sanitary products to do the same;
 - ✓ International organizations, like Dutch Embassy, to identify promising and reliable local partners with which one can co–operate, so that the lowest production and distribution costs can be realized;
 - ✓ **Governments** – at Federal, Regional and local level are also play a crucial role. They must:
 - Develop structures, especially in rural areas, that girls at school obtain sanitary pads for free or at an affordable price;
 - Invest in, ensure sufficient, safe, sustainable and good quality sanitation facilities when building new schools, and rehabilitate existing ones to fulfill the special (health and hygiene) needs of girls and women and with that assure full participation of all school girls;
 - Do their utmost to reduce tax on sanitary pads (not a luxury good but a necessary item); and
 - Provide support, in particular to local producers of sanitary pads, by sharing knowledge about appropriate local material that can be used to produce affordable sanitary pads and other menstrual protection alternatives.
- **NGOs/CSOs**, in particular women’s organizations, and other stakeholders, such as girls’ clubs, CBOs, women groups, health care staff, etc. to build an enabling environment and mobilize the different users groups. Their participation is essential in order to sensitize all relevant actors and encourage and promote positive attitudes towards the use of sanitary pads and other menstrual protection alternatives to maximize the advantages. This can be done by:
 - ✓ Building awareness on the importance and advantages of sanitary pads and other menstrual protection alternatives materials among girls, parents – both mothers and fathers – and others stakeholders from the own community;
 - ✓ Teaching girls and women how to use (and reuse in the case of washable) sanitary pads, the best washing and drying practices and other health and hygiene–related issues; and

- ✓ Teaching parents – both mothers and fathers – not to feel uncomfortable or ashamed when they educate their daughters (and sons) about significance of all issues concerning reproductive health, sexual maturation, knowledge and understanding about menstruation, etc.

There is clearly a need to have a further call of action for creating more awareness on hygienic menstrual management particularly in the study areas, and generally in Ethiopia. This study could also help to contribute in addressing some of the existing gap on MHM in schools. The following key elements need to be focused on to bring attention to proper menstrual management in schools at different levels:

➤ **At National Level:**

- There is a need to understand the broader societal responsibility for addressing MHM, as well as to consider ways in which girl students can be supported. This involves that there should be an inclusion of reproductive health education and life skills in the school curriculum targeting both girls and boys;
- There is a need for more standardized girl friendly toilet facilities that offer convenience and privacy. For example, the sanitary facility for girls should include a wash room and changing room during menstruation. There should also be a place to safely dispose of used sanitary pads;
- Menstrual hygiene should be captured in the Federal/Regional education sector quality assurance and performance report. This will directly involve that the Ministry/Bureau of Education needs to incorporate menstrual management indicators in monitoring and evaluation systems at schools.

➤ **At Woreda/District Level:**

- Education/Health inspectors should make menstrual hygiene management part of their periodic inspection and report to the woreda/district education or Water and Sanitation Coordination Committee on a quarterly basis;
- Woredas/districts should ensure that all schools have established and functional school WaSH clubs and girl-education movement clubs;
- More efforts should be made to assign motivated senior female teachers to work in the hard to reach menstrual school girls;
- Each school should have a trained and well-motivated senior woman teacher to support and advise school girls reaching puberty; and
- More focus is needed to include menstrual hygiene management as one of the quantifiable areas in the educational performance and quality improvement.

➤ **At School Level:**

- There is a need for support mechanisms in primary and secondary schools, for example, that:
- Allocation of some portion of budget specifically to menstrual hygiene management of school girls;
- Schools should ensure the availability of water, soap, emergency materials (e.g. menstrual pads), facilities for disposal of used sanitary pads and medication (e.g. pain killers);

- Girls as well as boys should be motivated to participate in school health clubs. The school health clubs and/or girl-education movement (GEM) clubs should in turn also focus the issues around menstrual hygiene management;
- Boys should become aware and sensitized to support school girls to cope with the challenges that they face during their period;
- The school girls should actively participate in school health clubs and GEM clubs and ensure that issues on menstrual hygiene are attended by the school; and
- Peer support should be available for the school girls to help them understand menstrual hygiene management.

➤ **NGOs and Civic Society Level:**

- There is a need to promote advocacy campaigns on the effects and coping mechanisms around MHM to policy makers;
- Building in budgets to support MHM at school level is of key importance;
- Involve community/cultural leaders and break the silence around MHM needs to get more attention;
- Advocate for further research around specific areas linked to menstrual hygiene management;
- Conduct further studies on MHM and suitability of school toilets.
- Explore further possibilities of manufacturing and marketing innovative low-cost sanitary pads e.g. working with village saving schemes and credit associations; and
- Improving the standards of local sanitary pads and up-scaling them in rural schools and communities.

6. Summary and Conclusion

Sanitation and hygiene is vitally important issues in the study area, with clear links to sexual reproductive health and WaSH programs. Educating girls and incorporating practical aspects; such as personal hygiene and sanitation in the school curriculum has not yet addressed in the school communities. School girls have been made more vulnerable by a lack of sanitation infrastructure at school. In the study area, it can be said that among the adolescent school girls both in urban and rural setting, menstrual knowledge and perceptions are poor and practices often not optimal for proper hygiene. Often ignored issues of privacy have been affecting the hygienic practices and daily lives, particularly school attendance of school girls.

The know-how, availability and affordability of sanitary products to manage menstruation are far from satisfactory. Schools, home, society and organizations of reproductive health as well as water, sanitation and hygiene sectors need to make an effort towards making menstrual hygiene and management better for adolescent girls' population. This baseline survey rapid need assessment study reveals that MHM is not adequately addressed among a large proportion of the school girls while ignorance, misperceptions, unsafe practices and unaware of teachers and parents/mothers to educate their school girls are also quite common among them.

The education of girls is a primary focus of development efforts, particularly in the study areas and generally in Ethiopia because school girls' achievement, especially at the secondary level, is believed to have long-lasting and far-reaching economic effects. Complex multiple factors work against girls' education in Ethiopia, including entrenched beliefs and practices that devalue girls' education. However, one simple contributing factor that has been supposed of having an impact on girls' remaining in school: poor girls often have no access to disposable sanitary products and, as a result of feared embarrassment, attend irregularly, perform poorly, and then drop out.

This study points to a number of important issues for policy makers and NGOs/CSOs in Ethiopia, how to integrate MHM with the ongoing related programs. Yet the benefits appear such that further research is warranted. It also observed that the onset of menstruation itself puts the girls at educational risk, bringing an array of negative practices, including sexual harassment (especially from boys, who, in such areas, are mostly young males), withdrawal of economic support from home, sudden pressure to marry or to leave the community to find work.

Noting that the respondents themselves consistently express a strong desire to finish their education, the study observed that, to overcome community beliefs about the unimportance of educating girls will take at least a generation of intense effort on the part of NGOs/CSOs and governments, but the simple intervention of educating the girl about her period and providing her with a reliable, clean, and privacy to manage it, could have a dramatic impact on female educational achievement within only a few years. The study indicated further to the accumulating evidence showing that higher female education levels have a rapid impact on a number of key, measurable indicators that positively affect the society, the economy, the health, and the environment in poor nations, like Ethiopia. If we can keep even a percentage of these girls in school only another year or two, it could pay off enormously, in terms of the effect on fertility rates, child mortality, disease transmission, and other matters of urgent concern for gender equality.

It is clear that the reproductive health implications of menstruation and its management, and its effect on quality of life permeating school and other social activities are many for the school girls. These invariably call for all stakeholders to urgently address the deep-rooted and incorrect menstrual perceptions, and enable proper hygiene practices amongst this segment of the population. There is no yet considered as

significant issues by parents and school communities as well as Reproductive Health and Water, Sanitation and Hygiene (WaSH) sectors on working concertedly towards developing appropriate policy and adequate actions on the hitherto neglected issue of MHM.

In the study areas the means of coping for school girls during their menstruation is the use of old cloth, dirty rags and other unhygienic materials. Very few schools have arranged separate classes/rooms for menstrual girls and provided sanitary pads and other protecting materials. However, most of the separated classes for menstrual girls have been founded non-functional due to lack of privacy, water and fear of isolation. The results of the study reflect that one key means of keeping girls in schools is the provision of better awareness, menstrual management materials and facilities. This study has revealed that a lack of sustainable menstrual hygiene management support for school girls, including suitable sanitary facilities, sanitary materials and psychological support for girls dealing with menstruation.

Many of the girls who took part in the survey preferred to stay at home during their period. If not addressed properly menstrual hygiene management will not only lead to more girls missing schools; but can potentially cause health complications and an increase in the number of girls dropping out of school altogether. This baseline survey on MHM has also revealed that the needs of school girls to have accurate and adequate information about menstruation and its appropriate management. Formal as well as informal channels of communication, such as mothers, female teachers, and peers, need to be emphasized for the delivery of such information – particularly linking instructions on menstrual hygiene to an expanded programme of health education in schools and in tandem with more informal means of dissemination channels. In view of the vital role of the mothers, it is utmost important that the mothers and female teachers to be armed with the correct and appropriate information on reproductive health, to give to their growing girl child on a ‘dose-related’ continuous basis.

To recapture, within the context of this study, the following facts were obtained:

- **Missing school:** About 327(50.3%) of the school girls in the study report missing 2-5 days of school per month. This translates into a loss of 16 to 32 school days per year. This means per term a school girl may miss up to 16 days of study. On average, there are 220 learning days in a year and missing 32 days a year translates into 14.4% of the time a girl student have been missed learning due to menstrual periods;
- **Effects of Menstruation on Girls Education:** Over 67.5% of the respondents (school girls) were confirmed that they have been absent themselves from school during their menstruation while other school girls noted that around 19.2% absent themselves from teaching during menstruation;
- **Inadequate Toilet Facilities in Schools:** Majority of the respondents (school girls) and most of boy students and teachers stated that they were highly unsatisfied with existing toilet/sanitation facilities at their schools;
- **Using of Menstrual Sanitary Pads during Menstruation:** Over 76.1% of the school girls confirmed that they have been used unhygienic reusable sanitary pads and rags during menstruation; and
- **Keeping Girls in School during Menstruation:** Majority of the school girls stated that they need better toilet facilities (hardware aspects). In addition, issues around sensitization of boy students and parents, and the role of the female teacher were also cited.

MHM in school is vitally important issues for school girls; with clear links to health, infant mortality and education. Educating girls and incorporating practical aspects such as personal hygiene and sanitation in the school curriculum can have massive impacts on keeping girls in school. School girls are made more vulnerable by a lack of sanitation infrastructure and must be included in decision-making to ensure that new sanitation initiatives including MHM are appropriate for all. There is a need for greater awareness of

the different community groups of women and men, and cultural stigmas and taboos around MHM issues must be broken.

To conclude, the baseline survey findings on MHM reinforce the need to encourage safe and hygienic practices among the adolescent school girls and bring them out of traditional beliefs, misconceptions and restrictions on menstruation issues through conducting awareness raising interventions to break the silence on MHM in line with developing alternative and affordable sanitary pads at the local level.

Annex One: Baseline Indicators on MHM in School for GiC Project

No.	Description	Baseline Outcome Indicators (Pre-interventions)		Endline Outcome Indicators (Post Assessment after interventions)		Remarks
		Number	Percent	Number	Percent	
1	# and percentage of school girls that miss classes days per month due to menstruation	327	50.3			
2	# and percentage of schools girls have availability and adequacy of toilets as well as timely rehabilitate and maintain sanitary facilities	118	15.4			
3	# and percentage of girls and boys provided MHM education at school	254	33.0			
4	# and percentage of girls aware about menstruation during menarche	177	27.2			
5	# and percentage of Health Extension Workers include MHM in their hygiene promotion plan	0	0.0			
6	# and percentage of school managements include MHM in their school activity and budget plan	0	0.0			
7	# and percentage of Woreda WASH team include MHM in their strategic and budget annual plan	0	0.0			
8	# and percentage of women self help groups and private sectors supplying appropriate sanitary pad	0	0.0			
9	# and percentage of good practices shared at national/international level for policy influencing	0	0.0			
10	# and percentage of national MHM guidelines developed as a result of multi-stakeholders dialogue	0	0.0			
11	# and percentage of girls' who have school friendly MHM facilities constructed/maintained (# of girls who have friendly toilets and available with ensuring privacy and secrecy)	120	18.5			
12	Number and percentage of schools who have MHM facilities with separate rooms for menstrual girls	218	28.3			
13	Number and percentage of girls reached through BCC on MHM issues	0	0.0			
14	# and percentage of school girls have adequate knowledge on MHM issues	177	27.2			
15	# and percentage of school girls freely discuss on MHM	354	46.0			

BASELINE SURVEY ON MHM IN SCHOOL June 2014

16	# and percentage of girls believed MHM should be secrete	292	38.0			
17	# and percentage of girls feel discomfort (some kinds of disease) on their external reproductive organs	544	70.7			
18	# and percentage of school girls affected by some types of menstruation while in schools	650	84.5			
19	# and percentage of school girls experienced some kinds of problems due to menstruation	427	55.5			
20	# and percentage of girls wash their bodies, hand and external genital with water and soap	475	61.8			
21	# and percentage of girls practiced hygienic conditions in terms of types of sanitary materials usage during menstruation	275	38.8			
22	# and percentage of girls used hygienic sanitary materials during menstruation	317	41.2			
23	# and percentage of school girls aware about the availability of sanitary materials at local market	429	66.0			
24	# and percentage of increased attendance/no absenteeism rate of adolescent girls during menstruation	0	0.0			
25	# and % of students (girls and boys) are trained as community/school hygiene change agents	0	0.0			
26	# and percentage of school girls clubs functional and actively involved in promoting MHM	0	0.0			
27	# and % of girls received good reactions from friends and relatives when talking to them about menstruation	0	0.0			
28	# and percentage of girls said they had made reusable sanitary pads after the training for themselves and families	0	0.0			
29	# and percentage of schools with gender-separated sanitation facilities on or near premises, with at least one toilet for every 25 girls, at least one toilet for female school staff, a minimum of one toilet and one urinal for every 50 boys and at least one toilet for male school staff	0	0.0			
30	# and percentage of schools with a hand washing facility with soap and water in or near school sanitation facilities	0	0.0			
31	# and percentage of schools with a private place for washing hands, private parts and clothes; drying reusable materials; and safe disposal of used menstrual materials for school girls	0	0.0			

ANNEX Two: Description of Respondents for Close-ended Questionnaires

Target School	School Category	# of target Schools\ Category	Data Collection Tools	# of Girls from each school	# of Respondents for each School Category
Urban	Secondary School	6	Questionnaires	42	252
Peri- Urban	Primary School	6	Questionnaires	44	264
Rural	Primary School	6	Questionnaires	44	264
Total		18		130	780

ANNEX Three: Description of Respondents for FGDs



Population Category	Date Collection Method	# of FGDs/ Population Category	# of Participants /FGD	Total
Parent & Teachers (Female & Male)	FGDs	6	10	60
Students (Boys)	FGDs	12	10	120
Students (Girls)	FGDs	12	10	120
Total		30		300






ANNEX Four: List of Schools Selected for the Baseline Survey per Woreda

Region	Woreda	Name of Sampled School
Amhara	Machakal	Amanuel No. 1 Primary School Amanuel No. 2 Primary School Amanuel Secondary School
	Bure Zuria	Kuch Secondary School Kuch Primary School Dil Chora Primary School
Oromia	Sebeta Hawas	Dima Granda Primary School Alemsgena Primary School Sebeta Secondary & Preparatory school
	Tolle	Bantu High School Bantu primary School Lideta Chirfa Primary School
SNNPR	Meskan	Ensena Secondary School Hibret Primary School Dobe Primary School
Tigray	Wukro	Wukro Preparatory school Negash Secondary School Agula Primary School

ANNEX Five: List of Enumerators/Data Collectors and Team Leaders/Woreda

Region	Woreda	Enumerators/Data Collectors		Team Leaders / Filed Coordinator
		Name	Education	
Amhara	Machakal	YengusAsnake HalimaSeid KasechNega MendereWagaw	Diploma Diploma BED Diploma	Yohannes Sisay
	BureZuria	MeskeremSisay Wodere Abate Ethiopia Wase ManalboshAsefa	BED Diploma Diploma Diploma	
Oromia	SebetaHawas	AlmazTerecha ElzabetWorku ZinashDebebe MegertuNesawo	Diploma Diploma BED Diploma	WorknehGudissa
	Tolle	KetemaTadesse AdanechDabesa Diboratadesse Hiwotteressa	BED Diploma Diploma Diploma	
SNNPR	Meskan	EzedinMustefa MehariGetaneh LemlemDessie KedjaMeyso	BED Diploma Diploma Diploma	H/Selassie Abraha
Tigray	Wukro	Haile Mezgebe AmanuelAraya BirhaneSiraj EteneshAweke	BED BED Diploma Diploma	TemesgenTefera

No	Question	Coding	Skip
1. General Information about Menstruation			
1.1	How old are you?	Age in Year ----	
1.2	What is the highest level of school you are attending currently?	Current Grade: _____	
1.3	Where are you living ?	1) Urban 2) Rural	
1.4	Do you know about menstruation?	1) Yes 2) No 	1.1.5
1.5	Where did you get the information about menstruation? (you can circle more than one response)	1)Family 2)Friend 3)Any Media 4)Reading 5)If Other(Specify) _____	
1.6	Is there MHM education in your school	1) Yes 2) No	
1.7	If your answer is 'Yes; by whom ? (you can circle more than one response)	1) Teachers 2) School Clubs 3) School Mini-media 4) Reading materials 5) Others, specify -----	
1.8	Did you start menstruation?	1) Yes 2) No 	1.9
1.9	At what age did you began Menstruation?	1) Age in Year 2) I Don't remember	
1.10	Were you aware about menstruation during your menarche?	1) Yes 2) No	
1.11	If yes what is the sources of the information?	1. Family 2. Friend 3. Radio 4. Reading 5. School 6. Other/specify ---	
2. Perception about Menstruation			
2.1	What is called menstruation in your locality? (you can circle one response only)	1) Edif /Turi/ 2) YewerAbaba 3) Disease 4) TefetroTsega 5) If Other, please specify ---	
2.2	What do you think the cause of menstruation? (you can circle one response only)	1) It is a physiological process 2) It is caused by a sin 3) It is curse of God 4) It is caused by a disease 5) I don't know	
2.3	From which organ do you thing is the menstrual blood come? (you can circle one response only)	1) Uterus 2) Abdomen 3) I don't know 4) If other, specify_____	
Sponsored by: SNV Netherlands Development Organization (Ethiopia) Conducted by: Tiret Community Empowerment for Change Association (TCECA)			Page 64

2.4	Do you think menstruation is a secret?	1) Yes 2) No 	2.6
2.5	Why do you think is menstruation secret?(<i>you can circle more than one response</i>)	1) Due to culture and believes of the society 2) Due to religion 3) Due to Taboos 4) If other, specify_____	
2.6	Do you freely discuss about menstruation issues with your family members or friends?	1) Yes 2) No 	2.8
2.7	If yes, What are the issues you are discussing on	1) About Menstrual Hygiene & Management 2) About use of sanitary pads 3) If other, please specify_____	
2.8	If you don't discuss freely, why? (<i>you can circle more than one response</i>)	1) Shame 2) Fear 3) Taboos 4) Not habitual 5) Religious 6) If other, specify-----	
2.9	What absorbent materials should be ideally used during menstruation? (<i>you can circle more than one response</i>)	1) Disposable sanitary pad 2) Reusable and washable cloth pad 3) Dispensable Rag or Pieces of cloth 4) If other, please specify_____	
2.10	If the silence on Menstrual issues was broken, do you think the educational participation of girls would be increased?	1) Yes 2) No 	3.13
2.11	In which factors do you think the women could be advantageous? (<i>you can circle more than one response</i>)	1) It could be avoided fear and shamefulness 2) School girls absenteeism will be decreased 3) Educational performance of school girls will be increased 4) School girls drop out will be decreased 5) School girls menstrual hygiene will be improved 6) IF other , specify -----	
3. Practice of Menstrual Hygiene:			
3.1	Do you use any material to manage menstruation?	1) Yes 2) No 	3.5
3.2	What types of material do you use to manage menstruation? (<i>you can circle more than one response</i>)	1) Disposable sanitary pads 2) Disposable piece of rags 3) Reusable cloth□ 4) Paper/toilet paper 5) If others, specify_____	
3.3	If you use reusable sanitary materials; where do put/keep your reusable materials after using or washing? (<i>you can circle more than one response</i>)	1) Hidden place 2) Under the mattress of a bed 3) Inside bag or cabinet 4) Inside plastic bag 5) If other, specify_____ 	3.5
3.4	If you put it in hidden places Why do you put in hidden place? (<i>you can circle more than one response</i>)	1) Shame/disgrace 2) Soiling/dirtiness of the rags 3) Taboos 4) If other, please specify_____	
3.5.	Where do you dry your reusable sanitary pads and underwear?	1. Open sunlight 2. Hidden place 3. Other	
3.6	How often do you clean your	1) Once a day	

	External Genitals?	2) Twice a day 3) More than twice in a day 4) I don't wash daily	
3.7	What do you use for your external genital cleaning purpose?	1) Only Water 2) Soap and water 3) If other specify_____	
3.8	Is there any feeling of discomfort in your skins/ reproductive organ?	1) Yes 2) No	3.9
3.9	What type of discomfort do you feel?(you can circle more than one response)	1) Skin burning 2) Skin itching 3) Urinary Infections 4) If other, please specify_____	
3.10	Do you think your privacy in school is maintained during menstruation?	1) Yes 2) No	3.11
3.11	Why do you think your privacy is not maintained in the school? (you can circle more than one response)	1) Lack of toilet in school 2) Common toilet for male and female students 3) Lack of door for toilets 4) Lack of water 5) If other, please specify_____	
4	Sanitation and Hygiene Facility in School		
4.1	Do you have toilet facilities in your school?	1) Yes 2) No	
4.2	If your answer is No, what other alternatives do you use?(you can circle more than one response)	1) Remain at home 2) Use Bush or Open Areas around school 3) If other, specify-----	
4.3	If your answer for question 4.1 is 'Yes'; does the school have separate toilet for girls and boys?	1) Yes 2) No	
4.4	Does the school have separate room for menstrual girls to change their sanitary materials?	1) Yes 2) No	
4.5	How do you dispose off the used menstrual materials? (you can circle more than one response)	1) Throw in latrine 2) Burning 3) Throw in rubbish pit 3) Wash and re-use	
5. Information about Sanitary Pads			
5.1	Do you know some sanitary pads at your local market?	1) Yes 2) No	End
5.2	If your answer is 'Yes', what types disposable sanitary pads do you know? (you can circle more than one response)	1) Eve 2) Comfort 3) Flexi 4) If others, specify -----	
5.3	Are disposable sanitary pads available at your local market?	1) Yes <input type="checkbox"/> 2) No	
5.4	If your answer is 'Yes' for the above question 5.3, have you ever bought disposable sanitary pads from local shops?	1) Yes 2) No	
5.5	If your answer is 'No' for Question No.5.4, why?(you can circle more than one response)	1) Expensiveness 2) Not long lasting 3) Both a and b 4) I didn't reach menarche	
5.6	Who is providing your menstrual protecting materials? (you can circle more than one response)	1) Parents/families 2) Schools 3) NGOs 4) Private If others, 5) specify-----	

5.7	Is there menstrual protection materials provided at your school?	1) Yes 2) No	
5.8	If your answer is 'Yes'; what type of menstrual materials is provided at the school? (<i>you can circle more than one response</i>)	1) Emergency menstrual pad 2) Emergency piece of cloth 3) Pain relief pills 4) If, others, specify -----	
6. Effects of Menstruation in Girls Education			
6.1	What are the problems that you faced at school during your menstruation period? (<i>you can circle more than one response</i>)	1) Cannot concentrate 2) Feel physically sick at school 3) Psychological effects 4) Absent from school 5) All of them 6) None	
6.2	Did you miss class during your menstruation period?	1) Yes 2) No	
6.3	If your answer is 'Yes'; how many class days do you miss schools due to menstruation per month?	1) 2-3 days 2) 4-5 days 3) More than a week 4) Not full days but classes (periods)	
6.4	Did you ever face any problem related to menstruation	1) Yes 2) No	
6.5	If yes what are there?	1) Isolation 2) Insult 3) Discrimination 4) Other /specify	
6.6	Do you know somebody faced problems related to menses?	1) Yes 2) No	
6.7	If yes what are there?	1) Isolation 2) Insult 3) Discrimination 4) Other /specify	

N.B.Each question will be interpreted in Amharic language during the filling of the questionnaire by the respondents in order to avoid miss interpretation and language barrier.

Thank you for your cooperation

Any other comments:

Name of Team Leader:

Name of Organization:

Signature:.....

Date:

ANNEX-Seven: Close-ended Questionnaires for School Girls (Translated Amharic Version)

በወርአበባንጽህናአጠባበቅላይ የሚደረግ የቅድመመለኪያ ጥናት

የጥናቱ ዓላማ - ከ 7ኛ - 12ኛ ክፍል የሚገኙ ሴት ተማሪዎች በወርአበባንጽህናአጠባበቅ ያላቸውን ግንዛቤ ልምድና አካባቢያዊ ሁኔታዎች ለመለካት የሚደረግ የመነሻ ጥናት ነው፡፡

- መልስ ሰጪዎች ስማችሁን መጻፍ አይኖርባችሁም፡፡
- መጠይቁ በፊቃ ደኝነት የሚሞላ ነው፡፡
- ይህ መጠይቅ የሚያገለግለው በወርአበባንጽህናአጠባበቅ ላይ ለሚሰራ ፕሮጀክት ብቻ ነው፡፡

ክልል _____
ወረዳ _____
የት/ቤተሰብ _____

ቁጥር	ጥያቄዎች	ክፍ
4. አጠቃላይ መረጃ		
1.1	ዕድሜ ሽህንት ነው?	_____ ዓመት
1.2	የትምህርት ደረጃ?	_____ ክፍል
1.3	የትውልድ ቦታ?	1- በገጠር 2- በከተማ
1.4	ስለ የወርአበባ ታውቁለሽ?	1 - አዎ 2 - አላውቅም
1.5	መልስ ሽህንት ሆኖ ስለወርአበባ ግንዛቤውን የት አገኘሽ (ከአንድ በላይ ማከብ ብይቻለል)	1- ከቤተሰብ 2 - ከጓደኛ 3- ከፊደላዊ ምሳሌ 4 - በማንበብ 5 - ሌላ ካለ ይገለጽ _____
1.6	በት/ቤታችሁ ውስጥ ስለወርአበባን ጽህፍት ምህርት ይሰጣል?	1 - አዎ 2- የለም
1.7	መልስ ሽህንት ሆኖ በማን ይሰጣል?	1 -ከመምህራን 2 - ከት/ቤት ከበባት 3 - ከት/ቤት ሚኒስቴር 4 - ከተለያዩ ጾታዊ ፎቶ 5 - ሌላ ካለ ይገለጽ _____
1.8	የወርአበባ ማየት ጀምረሻል?	1 -አዎ 2- አላየሁም
1.9	በስንት ዓመት ሽህንት የወርአበባ አየሽ?	1 በ _____ ዓመት 2 አላስታውስም
1.10	ለመጀመሪያ ጊዜ የሽህንት ወቅት ስለወርአበባ ግንዛቤው ነበረሽ ወይ?	1 -አዎ 2- አልነበረኝም
1.11	መልስ ሽህንት ሆኖ ስለወርአበባ ግንዛቤውን ከየት አገኘሽ	1- ከቤተሰብ 2 - ከጓደኛ 3- ከፊደላዊ ምሳሌ 4 - በማንበብ 5 - ከት/ቤት 6 - ሌላ ካለ ይገለጽ _____
5. ስለወርአበባ ግንዛቤ እና አመለካከት		
2.1	የወርአበባ በአካባቢያችሁ ምንተብሎ ይጠራል?	1 እድፍ ወይም ጡራ 2 የወርአበባ 3 በሽታ 4 የተፈጥሮ ጸጋ 5 ሌላ ካለ ይገለጽ _____
		1- አካላዊ ሂደት ነው

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2.2	የወርአበባሙንስኬምንድንነውበለሽታስቢያለሽ?	2 - በሀጢያትምከንያትየሚመጣነው 3 - የፈጣሪአርማማንነው 4 - በበሽታየሚመጣነው 5 - መንስኤውምንእንደሆነአላውቅም	
2.3	የወርአበባየሚመጣውከየትኛውየሰውነትአካልነውበለሽታስቢያለሽ ?	1- ከማህጸን 2- ከሆድ 3- አላውቅም	
2.4	የወርአበባሚስጥርነውበለሽታስቢያለሽ ?	1 -አዎ 2- አላስብም	መልስሽአላስብምከሆነወደጥያቄቁጥር 2.6 አለፈ
2.5	የወርአበባሚስጥርየሆነበትምከንያትምንድንነውበለሽታስቢያለሽ ? (ከንክድበላይማክበብይቻላል)	1- የአካባቢውማህበረሰብአምነትናአመለካከትስለሆነ 2 - በሃይማኖታዊምከንያት 3 - ነውርስለሆነ 4 - ሌላካለይገለጽ_____	
2.6	ከጓደኞቻችሽወይምከቤተሰቦችሽጋርስለየወርአበባግልጽትነጋገሪያለሽ ?	1 -አዎ 2- የለም	መልስሽየለምከሆነወደጥያቄቁጥር 2.8 አለፈ
2.7	ከላይበተራቁጥር2.6ለቀረበውጥያቄመልስሽአዎከሆነበየትኞቹጉዳዮች ላይትወያያለሽ? (ከንክድበላይማክበብይቻላል)	1- ስለየወርአበባምንነት 2 - ስለየወርአበባንጽህናአጠባበቅ 3 - ስለየወርአበባንጽህናመጠበቂያምዴስ 4 - ሌላካለይገለጽ_____	
2.8	በተራቁጥር 2.6 ለቀረበውጥያቄመልስሽየለምከሆነለምን? (ከንክድበላይማክበብይቻላል)	1 - አሳፋሪስለሆነ 2 - ስለምፈራ 3 - ነውርስለሆነ 4 - ስላልተለመደ 5 - ሀይማኖቴስለማይፈቅድ 6 - ሌላካለይገለጽ_____	
2.9	በወርአበባላይያለውዝምታቢሰበርወይምቢቀረፍየልጃገረዶችየትምህርትተሳትፎያድጋልበለሽታስቢያለሽ ?	1 -አዎ 2- የለም	
2.10	ለጥያቄቁጥር 2.9መልስሽአዎከሆነበምንሁኔታ? (ከንክድበላይማክበብይቻላል)	1 - የሴቶችንመሸማቀቅናሃፍረትያስወግዳል 2 - የሴቶችከትምህርትገቢታየመቅረትችግርይቀንሳል 3 - የልጃገረዶችየትምህርትውጤትይሻሻላል 4 - የሴቶችትምህርትየማቋረጥችግርይቀንሳል 5 - ሌላካለይገለጽ_____	
2.11	በወርአበባወቅትልጃገረዶች/ሴቶችምንዳይነትንጽህናመጠበቂያመጠቀምአለባቸውበለሽታምኛለሽ ? (ከንክድበላይማክበብይቻላል)	1 - ተጠቅሞየሚጣልየወርአበባንጽህናመጠበቂያምዴስ 2 - በየጊዜውየሚታጠብየወርአበባንጽህናመጠበቂያምዴስ 3 - ተጠቅሞየሚጣልቁርጥራጭጨርቅ 4 - ሌላካለይገለጽ_____	
6. የወርአበባንጽህናአያያዝ			
3.1	የወርአበባሽወቅትየወርአበባንጽህናመጠበቂያጨርቅወይምምዴስትጠቀሚያለሽ?	1 -አዎ 2- ምንምአልጠቀምም	መልስሽአልጠቀምከሆነወደጥያቄቁጥር 3.5 አለፈ
3.2	ከላይበተራቁጥር 3.1ለቀረበውጥያቄመልስሽአዎከሆነምንዳይነትየወርአበባንጽህናመጠበቂያትጠቀሚያለሽ?	1- ተጠቅሞየሚጣልየወርአበባንጽህናመጠበቂያምዴስ 2 - በየጊዜውየሚታጠብየወርአበባንጽህናመጠበቂያምዴስ 3 - ተጠቅሞየሚጣልቁርጥራጭጨርቅ □ 4 - የሽንትቢትሶፍትወረቀት 5 - ሌላካለይገለጽ_____	
3.3	በወርአበባጊዜየምትጠቀሚውየሚታጠብጨርቅከሆነየትነውአጥበሽየምታስቀምጭው ? (ከአንድበላይማክበብይቻላል)	1 - በሰዋራቦታ 2 - ከፍራሽስር 3 - ከቦርሳየወይምከሳጥንውስጥ 4 - በፌስታልውስጥ 5 - ሌላካለይገለጽ_____	
3.4	ለጥያቄቁጥር 3.3 መልስሽበሰዋራቦታከሆነለምን?	1 -ስለሚያሳፍር 2 -የቆሻሻጨርቅስለሆነ 3 - ነውርናሚስጥርስለሆነ 4 - ሌላካለይገለጽ_____	
3.5	የወርአበባንጽህናመጠበቂያጨርቅሽንእናየውስጥሱሪሽንካጠብሻቸውበኋላየትታሰጫቸዋለሽ?	1 - ጸሃይበሚያገኝበትግልጽቦታ 2 - ድብቅበሆነቦታ 3 ሌላካለይገለጽ_____	
3.6	ውጫዊየመራቢያካላትሽንበምንያህልግዜትታጠቢያለሽ ?	1 - በቀንአንድግዜ 2 - በቀንሁለትግዜ 3 - በቀንከሁለትግዜበላይ	

		4 - በየቀኑ አልታጠብም	
3.7	በወርአበባ ሂደቱ በምንት ታጠቢያለሽ ?	1 - በውሀብቻ 2 - በውሀና በሳሙና 3 - ሌላ ካለይ ገለጽ _____	
3.8	በብልት ሽላካ ባቢች ግርግር ጥምሽ ያውቃል ?	1 - አዎ 2 - ምንም ጥምሽ አያውቅም	
3.9	ለጥያቄቱ ርዕስ 3.7 መልስ ሽላካ ሆኖ ምን አይነት ?	1 - ፈንገስ 2 - ማሳከክ 3 - የመቆጥቆጥና ቆዳ የመላላጥ 4 - ሌላ ካለይ ገለጽ _____	
3.10	በወርአበባ ሂደቱ በት/ቤት የግልነት ሽይጦ በቃል ?	1 - አዎ 2 - የለም	መልስ ሽላካ ሆኖ ደግሞ የጥያቄቱ ርዕስ 3.11 አለፈ
3.11	ለጥያቄቱ ርዕስ 3.10 መልስ ሽላካ ሆኖ ምን ሆኖ ለምን ? (ካንድ በላይ ማክበብ ይቻላል)	1 - የተሟላ ሽንት ቤት አለመኖር 2 - የወንዶችና የሴቶች ሽንት ቤት በጋራ መሆኑ 3 - ሽንት ቤቱ መዝጊያ ስለሌለው 4 - ሽንት ቤት ውስጥ ውሃ አለመኖር 5 - ሌላ ካለይ ገለጽ _____	
7. ት/ቤት ውስጥ የንጽህና እና የመጻጻፊያ ሁኔታ			
4.1	በት/ቤታችሁ ውስጥ በቂ የመጻጻፊያ እና የውሃ አቅርቦት አለዎት ?	1 - አዎ 2 - የለም	መልስ ሽላካ ሆኖ ደግሞ የጥያቄቱ ርዕስ 4.2 አለፈ
4.2	ለጥያቄቱ ርዕስ 4.1 መልስ ሽላካ ሆኖ ወርአበባ ምን ዓይነት ውቅት ምን አማራጭ ተጠቅሟል ?	1 - አቤት እቀራለሁ 2 - በት/ቤቱ አካባቢ በሚገኝ ሜዳ ወይም ጫካ እጽዳለሁ 3 - ሌላ ካለይ ገለጽ _____	
4.3	ለጥያቄቱ ርዕስ 4.1 መልስ ሽላካ ሆኖ ለሴቶችና ለወንዶች ተለዩ ለዩ ምን ?	1 - አዎ 2 - የለም	
4.4	ት/ቤታችሁ ለሴት ተማሪዎች የሚሆን የወርአበባ ንጽህና መጠቀሚያ ስ/ጨርቅ መቀየሪያ የሚሆን የተለየ ክፍል አለው ወይ ?	1 - አዎ 2 - የለም	
4.5	የወርአበባ ንጽህና መጠቀሚያ ተጠቃሚ ሽንት ንጽህና ስ/ጨርቅ እንዴት ታስወግዳለሽ ?	1 - ሽንት ቤት እጥለዋለሁ 2 - አቃጥለዋለሁ 3 - የቆሻሻ መጣ ያውስጥ እጥለዋለሁ 4 - አጥቤብ ድጋሚ እጠቀመዋለሁ 5 - ወደ ቤት እወስደዋለሁ	
5. ስለ የወርአበባ ንጽህና መጠቀሚያ ስ/ጨርቅ			
5.1	ተጠቅሞ ስለሚጣል የወርአበባ ንጽህና መጠቀሚያ ስ/ጨርቅ ውቅት ስለሆነ ?	1 - አዎ 2 - የለም	
5.2	ለጥያቄቱ ርዕስ 5.1 መልስ ሽላካ ሆኖ ምን ዓይነት ?	1 - ኢቭ 2 - ኮምፎርት 3 - ፍሌክስ 4 - ምን አላውቅም	
5.3	ተጠቅሞ የሚጣል የወርአበባ ንጽህና መጠቀሚያ ስ/ጨርቅ አካባቢያችሁ በገበያ ላይ ይገኛል ?	1 - አዎ 2 - የለም	
5.4	ለጥያቄቱ ርዕስ 5.3 መልስ ሽላካ ሆኖ ምን ሆኖ ለምን ?	1 - አዎ 2 - የለም	
5.5	ለጥያቄቱ ርዕስ 5.3 መልስ ሽላካ ሆኖ ምን ሆኖ ለምን ? (ካንድ በላይ ማክበብ ይቻላል)	1 - ውድ ስለሆነ 2 - ረጅም ጊዜ ስለሚያስገልግል 3 - የወርአበባ ለማየት አልደረስኩም 4 - ሌላ ካለይ ገለጽ _____	

5.6	የወርአበባንጽህናመጠበቂያሞዴሰየምትጠቀሚከሆነማንይሰጥሻል/ይገዛልሻል ?	1 - ቤተሰብ 2 - ት/ቤቱ 3 - የበጎአድራጎትድርጅት 4 - በራሴእሸፍነዋለሁ	
5.7	በት/ቤታችሁውስጥየወርአበባንጽህናመጠበቂያሞዴሰለሴትተማሪዎችይሰጣልወይ ?	1 - አዎ 2 - የለም	
5.8	ለጥያቄቁጥር 5.7 መልስሽአዎከሆነምንአይነትየወርአበባንጽህናመጠበቂያሞዴሰይሰጣል ?	1 - ለድንገተኛየሚሆንሞዴሰ 2 - ለድንገተኛየሚሆንቁርጥራጭጨርቅ 3 - የህመምማስታገሻ	
6. የወርአበባበልጃገረድትምርትላይያለውውጤት			
6.1	በትምህርትገቢታሽላይሆነሽየወርአበባሽበሚመጣበትሰዓትምንአይነትትግርይገጥምሻል ?	1 - በትምህርትሽላይማተርያቅትሻል 2 - አካላዊህመምናምቶትማጣትይሰማኛል 3 - ያለመረጋጋትስነልበናዊትግርይገጥምኛል 4 - ከት/ቤትአቀራሰቡ 5 - ሁሉምአይገጥሙኝም	
6.2	የወርአበባሽበሚመጣበትሰዓትከት/ቤትትቀረያለሽወይ ?	1 - አዎ 2 - የለም	
6.3	ከላይለቀረበውጥያቄመልስሽአዎከሆነበወርምንያህልቀንከት/ቤትትቀረያለሽ?		
6.4	በወርአበባሽግዜትግርገጥሞሽያውቃልወይ?	1 - አዎ 2 - የለም	
6.5	መልስሽአዎከሆነምንዓይነትትግርገጥሞሽያውቃል ?	1 - ራስንመገለል 2 - ስድብ 3 - በሌሎችመገለል 4 - ሌላካለይገለጽ _____	
6.6	ከወርአበባጋርብተያያዘትግርየገጠማቸውሴቶችንታውቂያለሽ ?	1 - አዎ 2 - የለም	
6.7	መልስሽአዎከሆነምንዓይነትትግርገጥሞሽያውቃል ?	1 - ራስንመገለል 2 - ስድብ 3 - በሌሎችመገለል 4 - ሌላካለይገለጽ _____	

መጠይቁንያስሞላውሙሉ

ስም _____
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ANNEX Eight: List of FGDs Questions for School Girls

- a) What is the cause of Menstruation?
- b) Are there separate and safe toilets for girls and boys in your school?
- c) How is practicing Menstrual Hygiene Management (MHM) of girls in your school?
- d) What are the roles of teachers, parents and boys students on addressing MHM of schools girls?
- e) What are the types of taboos and cultural barriers on menstrual issues?
- f) How is affecting you poor MHM in attending schools?
- g) How many days you are missing class during menstruation per month?
- h) What types of sanitary materials you have been using during menstruation period?
- i) Are disposable sanitary pads available at shop? Is it affordable?
- j) What are the key important factors to keep you in school?
- k) What are the challenges that you face in accessing support in the MHM in school?
- l) What challenges do you face in accessing menstrual hygiene materials outside the school?
- m) What do you think is the sustainable way of managing menstrual hygiene for school girls?

ANNEX Nine: List of FGDs Questions for Boy Students

- a) What is the cause of Menstruation?
- b) Are there separate and safe toilets for girls and boys in your school?
- c) How is practicing Menstrual Hygiene Management (MHM) of girls in your school?
- d) What are the roles of boy students on addressing MHM of schools girls?
- e) What are the types of taboos and cultural barriers on menstrual issues?
- f) How is affecting poor MHM of school girls in attending schools?
- g) What is your suggestion and opinion towards improving MHM in school?

ANNEX-Ten: List of FGDs Questions for Parents and Teachers

- a) What is the cause of menstruation? – **(For parents)**
- b) What are the types of taboos and cultural barriers on menstrual? **(For both)**
- c) Do you provide relevant information on menstrual issues to school girls pre-menarche and after menarche? **(For both)**
- d) What is your role in Menstrual Hygiene Management (MHM)? **(For both)**
- e) What types of menstrual protection materials provided to your daughters? **(For parents)**
- f) Do you think poor Menstrual Hygiene Management (MHM) is affecting girls' education? **(For both)**
- g) How is practicing Menstrual Hygiene Management (MHM) of school girls? **(For both)**

- h) What is your suggestion and opinion towards improving the Menstrual Hygiene Management (MHM) of school girls to *keep them in school*? (For both)

ANNEX Eleven: List of Key Informative Interview Questions

Five key informants from each target group identified above will be selected in each of the survey woreda or school. In addition, a maximum of 5 other relevant key informants that include HEWs, WWT, Community Leaders, School Directors and Shop Keepers will be interviewed from each survey woreda. This implies that a total of 30 key informants (5informants/woreda x 6 woreda) will be interviewed. In-depth interview with the selected informants will be conducted by experienced and trained interviewers using structured questions which will be prepared for this purpose.

- a) Do you have Menstrual Hygiene Management (MHM) plan in your work plan?
- b) What activities are you included for MHM?
- c) How much budget did you allocated for MHM?
- d) How many days school girls missing class due menstruation?
- e) What is your role in addressing MHM?
- f) Is there Menstrual Hygiene Management (MHM) program interventions in your day to day activities?
- g) How is poor MHM affecting school girls' education and personal health?
- h) What are the types of taboos and cultural barriers on menstrual issues?
- i) How to make available the provision of menstrual materials?
- j) How to ensure the availability of toilets and other facilities at schools?
- k) How to keep school girls in attending their education?
- l) What is your suggestion and opinion towards improving the Menstrual Hygiene Management (MHM) of school girls?
- m) Are disposable sanitary pads available in your shop? What are your customers for the sanitary materials? Is it affordable for girls? What is the cost of a packet of sanitary pads?

Annex-Twelve: Observation Checklists for School Toilets/Latrines

1. Menstrual Hygiene Management Facilities/Materials

Category	YES	NO
Changing room for girls available		
Sanitary Materials Available		
Basins/Buckets Available		
Sickbay Available		
Wash rooms next to girls changing room/latrines		
Water Available		
Soap Available in Washrooms		

2. Latrines

Category	YES	NO
School Latrines Available		
Latrines in Good Condition and Functionality		
Separate Latrines for Boys, Girls and Teachers		
Latrines in sometimes/regular use		
Latrines Swept Clean		
Faeces on the Floor of the Latrines		
Full of faces and dirty		
Latrines with cover		
Flies and Bad Smell		
Open Defecation not Practiced		

3. Type of latrine

Type of Latrine	YES	NO
Latrines made from Permanent structure with bricks		
Made from Iron Sheet		
Hole No Superstructure		
Latrine with No Door and Key		
Larine Outdated/No functional		
Grass thatched/Mud Walls		
Latrines made of grass		
Latrine with wall but no roof		

4. Number of Latrine Stances/Seats

Category	Number
Boys	
Girls	
Teachers/support staff	

5. Water Sources

Category	YES	NO
Not available		
Rarely available but not functioning		
Rarely available and functioning		
Some Schools have water source within school compound		

Water source within 1KM		
Water source more than 1KM		
Water source environment clean		

6. Hand Washing

Category	YES	NO
Hand washing facility available		
Facility functioning and not damaged		
Soap/Detergent/Ash used		