

Menstrual Health in Ethiopia | Country Landscape Analysis

Executive Summary

Ethiopia has seen strong macroeconomic growth, with experts forecasting this trend to continue in coming years. The average annual GDP growth for the past decade has been nearly 11%, making the Ethiopian economy one of the fastest growing in the world.¹ Income inequality has also decreased significantly during that time.² However, **women and girls continue to face a broad set of gender inequities and are influenced by discriminatory social norms that negatively affect their health, empowerment, and well-being.**

Data suggests that many of these social norms and inequities become more pronounced with the onset of puberty. It is common for parents and family members to try to control her mobility and emerging sexuality. A 2010 study in the Amhara region shows that 52% of girls were married by age 15 and 80% of girls were married by age 18.³ A 2010 survey shows 74% of rural Ethiopian women have undergone female genital mutilation/cutting (FGM/C).⁴ Ethiopia has the second highest prevalence of FGM/C in Africa.⁵

Significant barriers to high-quality menstrual hygiene management (MHM) also persist across Ethiopia and remain particularly high in rural and remote areas. Girls do not consistently have access to education on puberty and menstrual health, and 67% of girls across Ethiopia reported receiving no education on menstruation at school.⁶ Approximately 80% of women and girls in rural areas use homemade alternatives, and just over a quarter of the population in both rural and urban settings has access to improved sanitation.^{7,8}

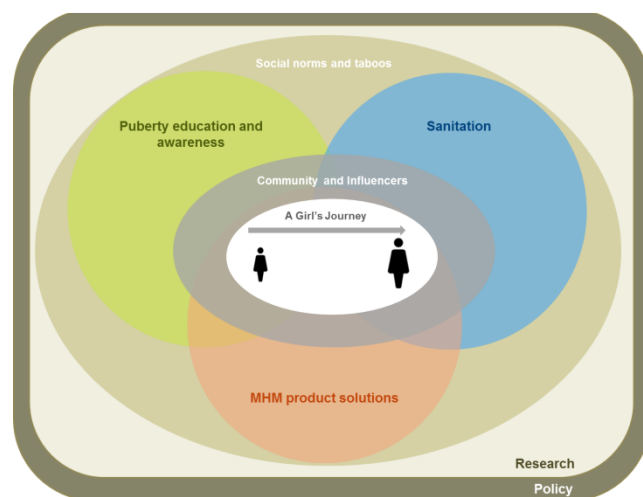
Although there is evidence in Ethiopia illustrating enablers and barriers to MHM, the evidence linking the impact of poor menstrual health, an encompassing term for menarche and MHM, to life outcomes is limited. Current studies have small sample sizes, and they rely on qualitative, self-reported, or anecdotal data making it difficult to generalize findings across different types of adolescent populations and diverse regions which have different cultural and socio-economic contexts.

There has been limited momentum from donors and NGOs to address problems related to MHM and only recent interest from the national government. Table 1 below provides an overview of responses to date:

Table 1: High-level Overview of Responses to Key Enablers to MHM in Ethiopia

Enablers	Overview of Current Challenges in Ethiopia
Education and Awareness	Girls receive inadequate education on menstruation . NGOs have begun to collect baseline data to better construct high-quality MHM curriculum; however, implementation has been slow.
Products	The vast majority of women and girls in rural Ethiopia use homemade alternatives to manage their menstruation. The Ethiopian government encourages domestic manufacturing, but challenges persist including distribution challenges and limited demand.
Sanitation	The majority of women and girls lack access to appropriate sanitation facilities . A small handful of NGOs at the national and regional level offer programs to support improved sanitation in schools; however, few of these programs have an MHM component.
Policy	There is growing interest and intention to address MHM through governmental action, as demonstrated by the National MHM guidelines currently under development.

Figure 1: Requirements for Menstrual Health



While immediate opportunities exist to better support menstrual health for women and girls in Ethiopia, including improving access to menstrual health education and MHM products, an MHM approach alone may not be enough. Given finite resources and prevailing issues of gender inequity, experts suggest that there is a need to prioritize research and programming on issues of gender inequality and the role of social norms to improve women and girls' health, development, and empowerment outcomes.

Methodology

This report seeks to understand: (1) the current state of girls' experience with menarche and MHM in Ethiopia, (2) the donor, government, and NGO responses to girls' needs, and (3) opportunities for research, advocacy, and programming to better address these needs. This complements a Global Landscape Analysis and is one of three Country Landscape Analyses focused on India, Kenya, and Ethiopia.

This report is the result of a review of over 50 peer-reviewed articles and grey literature, 30+ interviews with experts and practitioners in Ethiopia, and a review of relevant programming focused on menstruation and MHM. The country research for Ethiopia was also informed by 18 interviews with adolescent girls from Debre-Birhan, a rural area in Ethiopia, in the following categories: (1) early post-menarche 0 to 1 year post-menarche, (2) post-menarche 1 to 3 years post-menarche, and (3) late post-menarche 3+ years post-menarche to 18 years old. Interviews were also conducted with 7 influencers including mothers, sisters, teachers, and a community health care worker. The research location was chosen based on the following criteria: (1) proximity to Addis Ababa, (2) access to girls, and (3) feasible access to moderators.

Context | Gender Inequities in Ethiopia

The Broader Context for Women and Girls

Women and girls in Ethiopia have seen improvements in their health and development indicators in recent years, with positive trends.

Table 2: High-level Trends across Health and Development Indicators for Women and Girls in Ethiopia

Trend	Evidence
Greater female participation in the workforce⁹	From 1998 to 2013, the female-to-male labor force participation ratio increased from 80% to 88%.
Increased access to primary education¹⁰	In 1995, a boy in Ethiopia was more than 50% more likely than his girl counterpart to be enrolled in primary school, compared with 2008 when 97% of boys and 91% of girls were enrolled in school.

Increased access to secondary education ¹¹	Female attendance to secondary education has grown by an average of 10% annually from 2006 to 2011.
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Multiple forces are driving these improvements. **Ethiopia has seen strong macroeconomic growth, with experts forecasting this trend to continue in coming years.** The average annual GDP growth for the past decade has been nearly 11%, making the Ethiopian economy one of the fastest growing in the world.¹² Income inequality has also decreased significantly during that time.¹³ **Increased representation in government has brought women and girls' issues more to the forefront of the government's development agenda.** The number of Parliamentary seats held by women has increased from 2% in 1995 to 22% in 2010.¹⁴

The Role and Influence of Gender Disparities and Discriminatory Social Norms

Gender inequalities which are in part rooted in discriminatory social norms become more pronounced during puberty and can contribute to long-term negative outcomes for adolescent girls in Ethiopia. For example, when a girl reaches menarche, parents and family members will often seek to control her emerging sexuality. Methods of control include child marriage and female genital mutilation/cutting (FGM/C). In many communities, girls' sexuality is closely associated with family honor. A 2010 study in the Amhara region shows that 52% of girls were married by age 15, and 80% of girls were married by age 18.¹⁵ Ethiopia has the fifth highest absolute number of child brides¹⁶ and ranks 18th in overall prevalence rate worldwide.^{17,18} Nationally, however, child marriage is decreasing. A Population Council report shows that child marriage decreased from 14% in 2000 to 8% in 2011.¹⁹ A 2010 survey shows that 74% of rural Ethiopian women have undergone FGM/C.²⁰ With an estimated 23.8 million girls and women having undergone FGM/C, Ethiopia has the second highest prevalence in Africa.²¹

There is significant heterogeneity among Ethiopian adolescent girls and women, including geographic and socio-economic differences that affect their degree of access to services, goods, and opportunities and shape their long-term well-being and potential. While 59% of children aged 5–14 in Gambela and 82% of children in Addis Ababa are in school, only 17% of children in Somali and 30% of children in Amhara are in school.²² Further, child marriage varies significantly across the country: among rural girls, 33% were married by age 15 and 76% were married by age 18, compared with urban girls, where the respective figures were 14% and 40%.²³ These stark disparities need to be examined and should inform the development of tailored approaches to improve outcomes for unique sub-sets of girls.

Menstrual Health | The Problem

Stories from the Field—A Glimpse into Girls' Experience

Adina is 17 years old and lives with her mother, two sisters, and three brothers. She is closest to her younger sister and mother. The family does have a toilet, but does not have a television or Internet. Adina wakes up at 6:00 am every day and helps, along with her sisters, with household chores. She is in charge of making breakfast for the family. Adina walks 30 minutes to school every day with her brothers and sisters.

When Adina reached menarche two years ago, she knew what it was but was still shocked. She did not want her brother to see that she had stained her clothes and she felt isolated. Her biology class had quickly covered the subject, but had not provided in-depth discussion as to what to expect or that there would be cramps. Few students had asked any questions; the topic was uncomfortable and students were too shy to ask questions.

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Adina asked her mother how to manage her period. Her mother taught her how to use a pad and told her how different her experience had been—when she got her period she had no idea what was happening and she was married shortly thereafter. Adina’s relationship with her family and her overall life did not change much day to day except she feels more grown up, she no longer sleeps next to her brother, and now wears underwear every day.

Adina has access to free pads at school. They are provided by an NGO, and while the quality is not great, it is better than the alternative—using rags or nothing at all. The school does have bathrooms, but Adina avoids using them if she can because they very dirty and there is no running water or waste bins. She changes her pads twice a day and so does not usually have to use the school bathroom. Instead she waits to use the bathroom in her home. She disposes of the pads in the garbage; otherwise it will clog the bathroom. Adina and her mother both view education as important and aspire for Adina to get married after completing her bachelor’s degree.

Menstrual Health and Links to Life Outcomes

Menstruation and menstrual hygiene management (MHM) continue to be a monthly challenge for women and girls across Ethiopia. Studies have found that 25% of girls in Ethiopia do not use any MHM products to manage their periods and isolate themselves during menstruation.²⁴ In Northeast Ethiopia, only 25% of schoolgirls had learned about menstruation and hygienic management in school.²⁵

While there is a growing evidence base on the state of girls’ MHM and related enablers and barriers in Ethiopia, existing data on the links to outcomes is limited. Formative studies have small sample sizes, are not representative, and predominantly rely on qualitative methods of self-reported and anecdotal data, making an assessment of the challenges at scale difficult. Limited studies have examined or quantified the impact of poor MHM on the health, development, and empowerment outcomes on Ethiopian adolescent girls, and results are not statistically significant and are largely inconclusive.

To date, studies have not found MHM to be a leading contributor to girls’ school absenteeism in Ethiopia relative to other factors. A study by Population Council found that 17% of girls reported having missed class due to menstruation in the last year, with a roughly equal proportion of urban and rural girls missing school. The most common reasons cited for missing class were pain/discomfort (69%), fear of having an accident at school (19%), embarrassment (15%), and having nothing to manage their periods (12%). The likelihood of absenteeism seemed to vary based on girls’ method for managing their periods. Girls who used clothing or nothing at all were more likely to miss school than girls who used rags or pads. However, this study found that the quality of toilets at school was not associated with increased likelihood of missing school due to menstruation.²⁶ Other studies have not found the lack of access to high-quality MHM to significantly impact school absenteeism.^{27,28}

The Current State of Menstrual Health

Over the last five years, there has been greater focus placed on improving women and girls’ MHM experience. Various sectors—the Ethiopian government, international donors, local NGOs, and social enterprises—are making efforts to improve MHM. Most of the efforts to date focus on providing products to manage menstruation and limited interventions to increase MHM awareness. Despite the limited evidence, donors and implementers do still

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cite educational outcomes as a key driver for investment in MHM. Although the state of sanitation remains a significant barrier, gendered approaches to sanitation remain limited.

Table 3: Key Menstrual Health Players in Ethiopia

Organization	Summary of Menstrual Health-related Activities
CARE	<p>Village Savings and Loan Association, 26 African countries</p> <ul style="list-style-type: none"> • Set up groups of people who save together and take small loans from those savings. <p>TESFA works to improve the sexual and reproductive health and economic well-being of adolescent girls by combining health programs, including modules on MHM, with economic empowerment interventions in Amhara, Ethiopia</p>
Dignity Period	<p>Dignity Period</p> <ul style="list-style-type: none"> • Works with a local manufacturer, Mariam Seba, to distribute reusable pads to school girls. • Conducts research related to menstrual hygiene management, including community taboos, models for extending latrine access, and product access.
Plan International	<p>Because I Am a Girl (BIAAG) Girls' Empowerment Through Education Program</p> <ul style="list-style-type: none"> • Provides primary education for over 5,000 girls in 8 schools in Yeka and Akaki Kaliti, sub-cities of Addis Ababa. The project provides MHM training for girls and teachers, combined with a free disposable sanitary pad service for girls.
SNV	<p>Girls in Control Ethiopia</p> <ul style="list-style-type: none"> • Conducted in-depth quantitative and qualitative research of menstrual hygiene management of school girls across five countries. • Supports the provision of appropriate, girl-friendly WASH (water, sanitation and hygiene) facilities in schools, timely information about MHM, and improved access to sanitary materials. • Targets national and local governments with evidence-based advocacy for policy change. • Aims to eliminate stigma around menstruation throughout communities.
UNICEF	<p>WASH programming and research</p> <ul style="list-style-type: none"> • Serves as a prominent partner in the development of national MHM guidelines, with guidance on MHM education, product access, supportive school environments, and necessary water and sanitation infrastructure. • Conducts ongoing research related to MHM pilot programs in schools and regional analysis of menstruation-related social taboos.
UNESCO	<p>Puberty education and menstrual hygiene management booklet, Global (focus on sub-Saharan Africa)</p> <ul style="list-style-type: none"> • Creates exemplary policies and practices and offers recommendations for diverse stakeholders to improve school health through puberty education inclusive of MHM.
WaterAid	<ul style="list-style-type: none"> • Practical toolkit and education resources for improving menstrual hygiene. <p>Menstrual hygiene programming</p> <ul style="list-style-type: none"> • Promotes menstruation education to address taboos and misinformation, and to teach safe and healthy MHM practices. • Supports the construction of gender-separated toilets for girls in school. • Supports the creation of hygiene clubs to increase access to vital health information and encourage creation of homemade, reusable sanitary pads.

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The next four sections present a deep analysis of the challenges, current efforts, and critical gaps related to (A) Education and Awareness, (B) MHM Products, (C) Sanitation, and (D) Policy (see Figure 2¹). In order to make significant progress, it is critical to understand the broader context of interventions targeting adolescent girls and her peers and influencers. Where possible, the analysis calls out broader links to issues of gender inequity and social norms and describes potential opportunities to further explore links to influence a broader cross-section of outcomes. A summary of the research findings on the state of MHM in Ethiopia is below.

Figure 2: Requirements for Menstrual Health

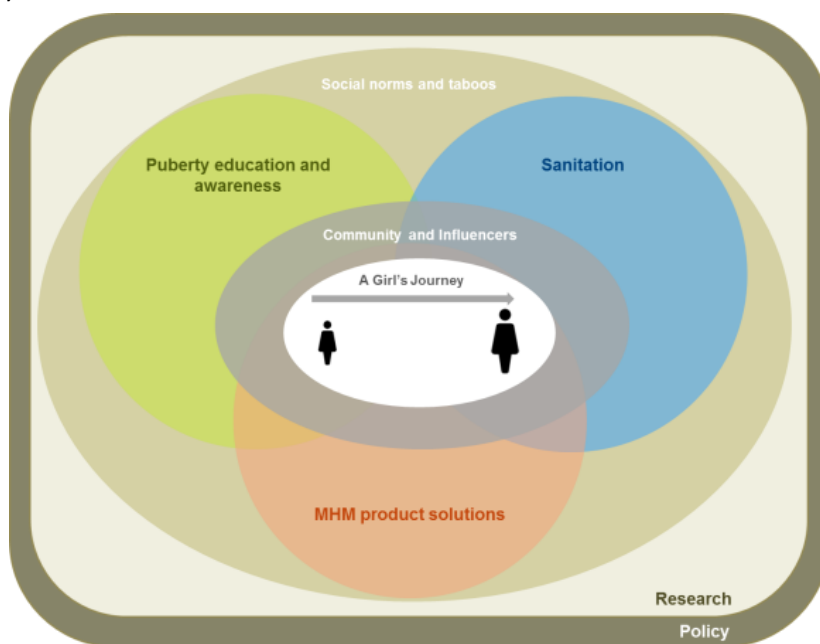


Table 4: High-level Overview of Menstrual Health Enablers and Barriers in Ethiopia

Enablers	Conclusions
Education and Awareness	Girls, boys, and their influencers lack consistent access to high-quality menstrual health education. Puberty education is currently not mandated by the government, so many schools do not provide MHM education. ^{29,30} Teachers and health extension workers lack training on menstruation and MHM limiting access to accurate information in and out of school settings. ³¹ MHM and menstruation remain very taboo and are associated with girls' sexuality. Given its association with sex and sexuality, menstruation and MHM are rarely openly discussed. ³² Use of mass and social media may be an effective channel to normalize the issue. ³³
MHM Products	Despite recent energy from the Ethiopian government to support domestic manufacturing, access to MHM products varies considerably across the country and remains highly inconsistent in rural and remote regions. Women and girls, particularly in rural and remote areas, rely primarily on homemade alternatives. Among girls who had never bought sanitary pads, 44% say they do not buy them because they were not available in the local market. ³⁴
Sanitation	Poor sanitation infrastructure and discriminatory, gendered social norms related to sanitation remain significant barriers for women and girls. The low rates of improved sanitation access suggest a need for significant investment in the construction of and maintenance of existing toilet facilities. Additionally, in some areas, myths and taboos surrounding MHM make adequate sanitation and hygiene inaccessible to menstruating women and girls.
Policy	National government has just completed the draft for national guidelines for MHM

¹ Source: FSG with input from secondary research and key informant interviews.

A. Education and Awareness

The Current State



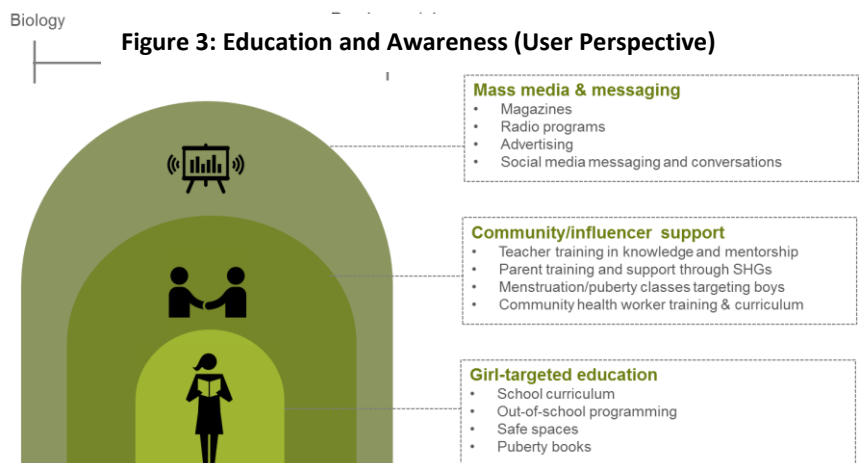
Despite the recent attention highlighting the need for menstrual health education and awareness by players such as SNV World and Dignity Period, access to menstrual health education and awareness still varies significantly across the country. Urban areas and the regions surrounding Addis Ababa report higher levels of access to MHM education and awareness. In Addis Ababa, 90% of girls had a class session on menstruation,³⁵ while the majority of the country’s rural areas lack any MHM education and awareness. Only 25% of schoolgirls in Northeast Ethiopia had learned about menstruation and MHM in school.³⁶

Menarche and menstruation are strongly associated with girls’ sexual debut and remain a taboo subject among most communities. A study by Population Council found that 87% of married girls in a sample from Amhara were married before their first menses (71%) or the same year they started menstruating (16%).³⁷ Experts suggested that due to the high rate of child marriage and correlation with menarche, menstruation is often associated with girls’ sexual debut.^{38,39,40} As a result, qualitative studies have found that in certain regions, such as Amhara, unmarried girls keep their menses a secret for fear of bringing shame to the family or being punished by their mothers.⁴¹ Population Council found that only 40% of rural girls across the country tell anyone about their first menstruation.⁴²

Taboos around menstruation and MHM have restricted girls’ mobility and caused shame and embarrassment. In some Ethiopian languages, menstruation is known as “dirt” or “disease of the abdomen.”⁴³ In a baseline report, SNV World surveyed 650-post-menarche girls about the problems they faced during menstruation and found that 48.8% were isolated, 26.7% were insulted, and 24.5% were discriminated in some way.⁴⁴ The same study found that 54% of respondents said they were not able to discuss menstrual issues due to fear (30.6%), shame (20.8%), taboos (17.3%), religious reasons (4.9%), or the fact that it is not customary to talk about it (24.6%).⁴⁵

Enablers for Improved Menstrual Health

As depicted in Figure 3, comprehensive education and awareness about menstruation and safe and hygienic MHM should provide girls and boys with accurate, timely information on the biological and psycho-social aspects of puberty, menstruation, and MHM. All three channels—**quality of girl-targeted education, capacity of community**



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influencers to provide support, and *mass media and messaging*—are critical enablers to improved menstrual health in Ethiopia, yet currently serve as barriers to girls' improved education and awareness. The key challenges are described below.ⁱⁱ

Girl-targeted education

Girls and boys do not have consistent access to accurate puberty education. One study found that **67%** of girls in Ethiopia reported receiving no education on menstruation at school.⁴⁶ The fact that MHM and puberty education is not mandated by the Ethiopian government is a contributing factor. Recommendations for puberty education are included in the draft MHM guidelines,⁴⁷ however, to date the government does not require schools to provide MHM education.^{48,49}

Adolescent boys are rarely included in efforts to empower girls and address her menstruation and MHM needs. Both experts^{50,51} and girls in focus groups⁵² indicated that they believed harassment from male students would decline if the male students were better educated on menstruation and puberty.

Community influencer support

Girls lack safe spaces to ask questions about and discuss menstruation and MHM. Girls' comfort with and willingness to discuss menstruation and MHM varies regionally: In Amhara, 34% of schoolgirls report never having discussed menstrual hygiene,⁵³ while 72% of schoolgirls in Northeast Ethiopia do not feel comfortable talking about menstruation.⁵⁴ Teachers and mothers are cited as critical influencers for girls, but studies show girls do not feel comfortable reaching out for support and/or information.

- **Girls do not feel comfortable discussing MHM and menstruation with teachers.** Even in regions where MHM education is more available, girls are uncomfortable discussing MHM and menstruation with their teachers. In Amhara, only 8% of schoolgirls discussed menstrual hygiene with their teacher.⁵⁵
- **Girls also do not feel comfortable discussing MHM and menstruation with their mothers.** Only 9% of schoolgirls from Amhara discussed menstrual hygiene with their mother.⁵⁶ A study by Population Council found that only 8% of mothers gave their daughters information on menstruation prior to menarche.⁵⁷

Teachers and health extension workers lack appropriate training on puberty and, at times, approval from the government to deliver menstrual health education to girls and their influencers. Focus groups across Ethiopia revealed that teachers and health extension workers reported that **menstruation is not covered** in their school curriculum and health packages, and **they cannot talk freely about the issue.**⁵⁸ Due to this lack of training, some teachers and health extension workers are neither knowledgeable about the subject nor view it as important.⁵⁹

The Field's Response

Key stakeholders in Ethiopia have acknowledged the lack of awareness about menstruation and MHM practices, but to date few interventions focus on providing high-quality MHM education and awareness. **Experts suggest that this gap in programming exists, in part, because the Ethiopian government, both at the federal and regional level, must approve any curriculum prior to implementation.**^{60,61,62} Recent momentum around MHM by several Ethiopian ministries to draft the MHM guidelines may signal an opportunity for collaboration with the government to improve conditions for girls and improve MHM.

While programming has been limited, about half a dozen organizations have engaged in the following.

ⁱⁱ See table 1 in Appendix for a detailed list of barriers and supporting evidence.

Table 5: Overview of Menstrual Health Education and Awareness Interventions in Ethiopia

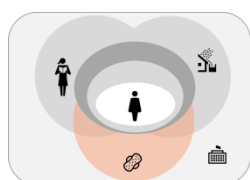
Primary Goal	Trends and Key Players
NGOs and research organizations collect data to understand needs and gaps in menstrual health education	Collect baseline understanding of the gaps in menstrual health education and awareness and create MHM curricula. ^{63,64,65} Based on these baseline reports, NGOs (e.g., Dignity Period, Tiret Community Empowerment Association) have begun to create puberty curricula; however, to date, implementation has been slow due to government approvals and ability to train teachers. ^{66,67}
MHM product organizations provide menstrual health education to improve product adoption	Smaller social enterprises and CBOs provide high-level menstrual health education (e.g., Eva Wear and Tiret Community Empowerment Association) and conduct awareness programs with their target users because they have seen MHM education and awareness as a barrier to product adoption. These programs remain small in scale with Tiret Community Empowerment Association having one of the largest scale programs, reaching 2,700 girls with the MHM curriculum. ⁶⁸

Conclusions

Experts suggest that in order for girls and their influencers to be willing to discuss and learn more about MHM and menstruation, the subject must be normalized.^{69,70} Access to high-quality MHM education varies regionally with students in urban areas having greater access to MHM and puberty education. The lack of government-approved high-quality MHM curricula limits girls’ and boys’ access to puberty education at scale.^{71,72} Currently, teachers and health extension workers receive little to no training on the biological or psycho-social aspects of puberty and MHM. Studies have found that training is particularly important for male teachers who have been found to be less sensitized to girls’ menstrual needs.⁷³

B. Menstrual Hygiene Management Products

Current State and Market Analysis





Approximately 80% of women and girls in rural areas use homemade alternatives as a primary or secondary method to manage their periods. Commercial disposable sanitary pads are used almost exclusively by women and girls in urban areas. Table 6 below provides an overview of MHM product use in Ethiopia.

The high price of disposable pads is due largely to high-import taxes, limited domestic manufacturing options, and distribution challenges. There are only four disposable pad companies in Ethiopia: Procter & Gamble (P&G)’s Always, Eve sanitary pads, Comfort pads, and Lady Style pads.^{74,75} P&G’s Always are imported while the rest are manufactured in-country. The recent increase in in-country manufacturing has been supported by the Ethiopian government which has provided significant subsidies—including low-cost leases for manufacturing plants to companies that manufacture in Ethiopia—and has levied significant taxes and strict regulations on all imported goods.^{76,77,78,79,80} Despite these efforts to increase the availability of locally produced disposable sanitary pads, disposable sanitary pads are only readily available in urban, peri-urban, and rural areas near major highways.

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Table 6: Overview of MHM Product Use in Ethiopia

MHM Product	Estimated Use
No protection	<ul style="list-style-type: none"> • 25% of rural girls and 4% of urban girls reported doing nothing to manage menstruation: simply washing or secluding themselves in the forest, desert, field, or at home.⁸¹
 Homemade solutions	<ul style="list-style-type: none"> • 65% of schoolgirls use homemade alternatives to manage their periods.⁸² • Small studies suggesting that the percentage of women and girls using homemade solutions is even higher in more remote and rural areas: a small scale study (210 school girls of Weserbi Nado Junior and Teji Secondary Schools) in Southwest Shoa, Oromia found that 89% of school girls used rags,⁸³ while a baseline survey in Tigray found that 99% of girls and women use rags or nothing at all.⁸⁴
 Sanitary pads	<ul style="list-style-type: none"> • 65.8% of urban respondents reported having used pads for going to school. However, due to the high-cost of disposable sanitary pads, girls primarily use rags for out of school time.⁸⁵ • 19% of girls use pads; however, pad use was almost exclusively in urban areas; 37% of urban girls and 2% of rural girls.⁸⁶

Small social enterprises and NGOs are targeting reusable products to fill the product gap in rural areas. Given significant distribution challenges and the high monthly cost of disposable pads, reusable pads are gaining momentum.^{87,88,89} SNV World has provided seed money to small social enterprises focused on creating reusable pads; however, to date there is only one large-scale reusable pad producer, Mariam Seba, located in Tigray. Due to the high upfront cost of reusable pads, the reach of reusable pads remains limited to NGO's (e.g., Save the Children, UNICEF) distribution of either free reusable pads or materials for making reusable pads.^{90,91,92}

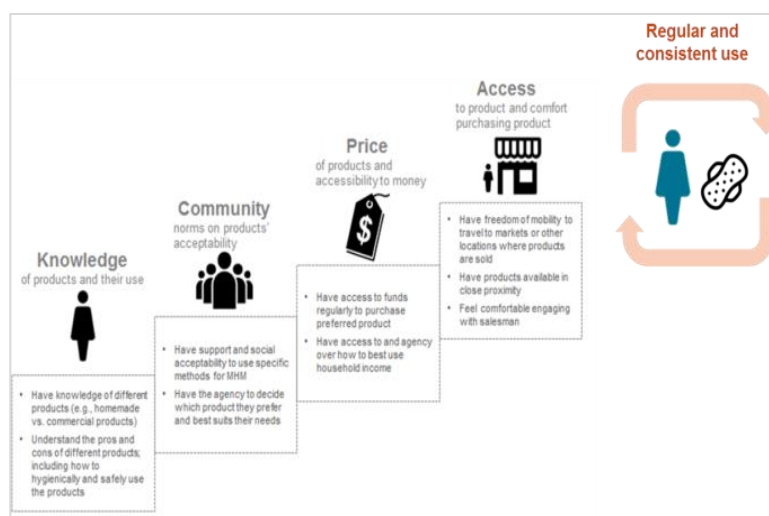
Insertable products (i.e., tampons and menstrual cups) are rarely used due to taboos associated with inserting a foreign object into a girl or woman's body, women's personal discomfort with inserting products, and the high cost of the product.^{93,94}

Enablers to Product Access and Uptake

Figure 4 depicts critical factors that contribute to the regular and consistent use of preferred MHM product(s): **lack of knowledge about product options and use, high price points, and limited access to money.**

Limited knowledge of products and their use, especially in rural areas: One study focused on Northeast Ethiopia found that only 48% of girls knew that disposable sanitary pads were used to soak up menstrual blood.⁹⁵

Figure 4: User Challenges to MHM Product Usage



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Community norms affect women and girls' MHM: Social sanctions around menstruation and MHM cause women and girls to feel shame. A study in Northeast Ethiopia found that 40% of school girls cited shame connected to buying disposable sanitary pads from a shop as the reason for not using sanitary pads.

Price of products and accessibility of money

- **High cost of disposable pads makes them inaccessible to the majority of women and girls.** More than 70% of girls surveyed mentioned a lack of financial resources as the main reason for not using sanitary pads.⁹⁶ In some rural areas of Ethiopia, the price of sanitary pads costs one tenth of a poor family's monthly income.⁹⁷ Higher cost sanitary pads, such as P&G's Always, are also not available in many rural and remote regions of the country because to date the company has not seen a market opportunity given the product's relatively high cost.⁹⁸
- **Limited control of family resources.** Social norms affect women and girls' access to and say over household money as well as the topics which girls and women feel comfortable discussing with their fathers and husbands. Only 10% of girls found it easy to communicate with their fathers about their need for sanitary pads,⁹⁹ which is necessary in Ethiopia since fathers are frequently the decision makers over household finances.¹⁰⁰

Access to products: Sanitary pads are inconsistently or not available in rural and remote areas across Ethiopia. In a baseline study, SNV World found that among girls who had never bought sanitary pads, 44% say they do not buy them because they are not available in the local market.¹⁰¹ A study in Northeast Ethiopia found that 36% of school girls cited unavailability of disposal sanitary pads as a reason for not using them.¹⁰²

The Field's Response

MHM product programs are the most common MHM intervention in Ethiopia but still have limited reach. Unlike the other priority countries, there is less of an emphasis on providing sanitary pads as a means of keeping girls in school. **Rigorous evaluation of MHM programming has been very limited.** More than half of the programs reviewed would benefit from further evaluation to better understand the impact and attribution of various interventions on girls and women. A review of the most effective and innovative/promising programs highlighted the following key takeaways.

Table 7: Overview of MHM Product Interventions in Ethiopia

Primary Goal	Trends and Key Players
Teaching women and girls to make reusable MHM products	Several MHM product interventions focus on teaching girls and women how to make reusable pads to address issues related to environmental and financial sustainability. Several NGOs (e.g., SNV World, CARE Ethiopia, Tired Community Empower Association) have created modules in their puberty and MHM programming on how to create homemade reusable pads. ^{103,104,105} These programs vary from providing instructions on how to create the reusable pads (e.g., CARE Ethiopia) ¹⁰⁶ to providing girls with materials and in-person instruction for creating reusable pads (e.g., SNV World). ¹⁰⁷ All programs focus on building girls' and women's capacity to create their own MHM products.
Providing free or highly subsidized MHM products	Large NGOs (e.g., Save the Children, UNICEF) have focused on distributing reusable pads. Given the challenges with limited distribution channels and poor access to sanitation and disposal facilities in Ethiopia, several NGOs (e.g., Save the Children, UNICEF, Dignity Period) have opted to distribute reusable pads to women and girls in rural and remote areas of the country. ^{108,109,110} Distribution of free disposable pads near and within urban areas by smaller NGOs is also

gaining momentum. Increasingly, NGOs have begun to provide free disposable sanitary pads to rural schools near urban areas (e.g., Jerusalem Children and Community Development Organization).¹¹¹ Approximately 58% of girls who used pads had received them from NGOs or charitable organizations.¹¹²

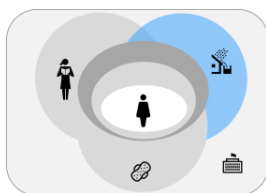
Conclusions

Limited access to low-cost, high-quality MHM products, particularly in remote and rural regions, remains a significant barrier to high-quality MHM across Ethiopia. Despite recent energy from the Ethiopian government to support manufacturing in-country, the reach of disposable sanitary pads remains low.

Limited research on user preferences, distribution obstacles, and other market challenges remains a barrier to providing girls with MHM product choices. Small studies suggest that school girls in Ethiopia preferredⁱⁱⁱ disposable pads, in part because they were easy to use and carry.¹¹³ However, given the scale of these studies, there is a need to better understand, across the country, what MHM products are preferred by women and girls and what factors influence their preference (e.g., access to sanitation). Experts have suggested that there are several challenges to providing a market-based solution for MHM products in Ethiopia, including presence of discriminatory social norms, issues with affordability, and distribution.¹¹⁴ Additional research is needed to properly understand these challenges, including: do social norms play a role in influencing women and girls' access to money, what conditions would make girls feel comfortable to ask for sanitary pads, at which price-point do sanitary pads become affordable, and how can MHM products be consistently available to all women and girls?

C. Sanitation

The Current State



respectively.^{116, 117}

There are significant gaps in access to improved sanitation facilities and water sources, severely limiting safe and healthy sanitation and hygiene practices across Ethiopia. Just over a quarter of the population in both rural and urban settings has access to improved sanitation.¹¹⁵ While more than half of the population has reliable access to safe water, there are large disparities between urban and rural water access at 93% and 49%,

Given this context, the focus of government, donors, and NGOs to date has largely been on improving basic access to sanitation facilities and safe water. MHM is just beginning to gain momentum within the WASH sector in Ethiopia. UNICEF is the largest contributor to rural water and sanitation projects in Ethiopia. UNICEF is working with WaterAid among others to further the MHM agenda within the broader WASH sector by partnering with the government on the development of national MHM guidelines (see [Policy section](#) for more information).¹¹⁸

The current drought and resulting water crisis and famine in Ethiopia underscore the urgency of WASH challenges in Ethiopia.^{iv} This ongoing emergency has diverted attention towards humanitarian relief and support for basic water access, relegating progress on MHM as a secondary priority in the near term until the crisis has subsided.¹¹⁹

ⁱⁱⁱ The baseline report does not provide the specific percentages which preferred disposable pads over homemade solutions.

^{iv} At the time of writing, March 2016, Ethiopia was experiencing a severe drought.

Enablers of Improved Menstrual Health

The key challenges to improved MHM and menstrual health more broadly in Ethiopia are described below. The analysis intends to position MHM within the broader context of widespread and substantial water and sanitation challenges in Ethiopia.

Existing sanitation facilities are poorly maintained and are not designed to meet the needs of menstruating girls and women. In Ethiopia, 95% of school girls noted they did not have access to safe toilet facilities with water access in their schools.¹²⁰ Among girls who were absent from school during menstruation, 31% cite a lack of private places to manage their period at school and 8% cite a lack of gender-separated bathrooms as the reason.¹²¹ In Amhara Province, 39% of schoolgirls say having no private place for changing sanitary pads makes them uncomfortable in school.¹²² While there is significant evidence that the quality of WASH facilities does impact school absenteeism, there remains conflicting evidence on the role of MHM as a contributing factor.

There are discriminatory social norms surrounding female sanitation use that may contribute to girls' poor hygiene and disempowerment. Adolescent girls in the South Gondar region indicated that their parents, especially their mothers, and male peers would yell at them or mock them if they went to use the latrine during the day. Mothers continued to ask them not to use the latrine during the day, justifying the request by saying it is not appropriate for girls or women to be seen using the latrine during the day time."¹²³ Of these schoolgirls, 45% did not feel comfortable using school latrines even if they were available and 15% refrained from using their latrine at home because they were afraid to be seen.¹²⁴

Girls in school do not have sustainable and safe disposal options. Only 4% of schoolgirls in Northeast Ethiopia report disposing of menstrual materials in a waste bin, while 33% report disposing in an open field and 78% in a latrine.¹²⁵ Among girls who were absent from school during menstruation, 8% cite no disposal system for cloths and pads as a reason.¹²⁶

The Field's Response

Overall, there is limited programming activity on MHM in the WASH sector in Ethiopia. The existing programming largely focuses on improving water access and reducing unhygienic sanitation practices such as open defecation. Table 8 below profiles major trends and illustrative players in the Ethiopian WASH arena, highlighting explicit linkages to MHM where appropriate.

Table 8: Overview of MHM Sanitation Interventions in Ethiopia

Primary Goal	Trends and Key Players
Improving access to sanitation in schools to improve education	A small group of NGOs at the national and regional level, such as WaterAid and Plan Ethiopia, offer programs to support improved sanitation in schools for both girls and boys. Some local organizations, including the Oromo Self Reliance Association, operate similar programs at the regional level. MHM is often a small component of these broader efforts.
Integrating girl-friendly elements into sanitation facilities	Few organizations are thinking intentionally about MHM needs for girls' sanitation. Experts report that the sanitation situation is so dire in Ethiopia that the current focus is on providing <i>any</i> accessible sanitation infrastructure. Particularly in rural areas, there is little progress towards integrating girl-friendly elements into infrastructure development in order to meet the needs of menstruating students. UNICEF's pilot to address MHM barriers in schools aims to ensure access to MHM-friendly WASH facilities in urban areas for girls (e.g., sinks, incinerators for disposal, gender-separated toilet facilities).

Conclusion

The current investment in sanitation facilities for all Ethiopians offers an opportunity to bring a gendered lens to sanitation infrastructure development. With low rates of improved sanitation access, significant investment is needed in the construction of new facilities and maintenance of existing toilet facilities, particularly those designed to meet the needs of menstruating girls and women.

Discriminatory, gendered social norms related to sanitation remain a significant barrier for girls and women. In addition to fostering positive behavior change related to hand washing, open defecation, and proper MHM, more progress is needed to address the myths, taboos, and norms that contribute to inaccessible or inadequate sanitation and hygiene for girls and women.

D. Policy

Current State



National MHM guidelines have been developed under a cross-sector technical working group and are currently undergoing final approval from the Ministry of Health (MoH). The MoH and UNICEF have played a leading role in this process, with other partners including the World Bank Water and Sanitation Program (WSP), WaterAid, SNV World, the Ministry of Education, the Ministry of Water, and the Ministry of Women and Children. The

guidelines define clear objectives and principles to address MHM challenges within Ethiopia, with topics including:

- Access to necessary water and sanitation;
- Girl-friendly infrastructure improvements and WASH facilities;
- Improved access to safe and hygienic MHM materials and products;
- Advocacy and education to increase awareness of the issue among key stakeholders, promote hygienic practices, and address social taboos associated with menstruation;
- Consideration of waste management and disposal of used MHM solutions.

There are early plans to integrate messages on menstruation and MHM into the MoH network to improve awareness of the issue and bolster the health care system's capacity to address MHM. The government's Health Development Army, a female-driven 1-to-5 household network, and large cadre of Health Extension Workers (1 HEW per 2,500 people) create a strong decentralized system through which health information and services can be delivered. Following approval of the guidelines, the topic of menstruation is to be integrated into the HEW training package. This is a priority at the national level, but execution will require coordination at the regional level. In particular, there may be challenges in standardizing HEW training across the country and accounting for individual HEWs' differing abilities to deliver sensitive information related to MHM.¹²⁷

The Ethiopian government has articulated a robust development agenda in its most recent five-year plan. As part of this agenda, the government is striving to build in-country capacity for manufacturing and industry and imposes heavy duties on all imported goods (i.e., 15% VAT, 10% surtax, 3% withholding tax, as well as excise taxes) to incentivize local production and manufacturing.^{128,129}

While there is increasing governmental momentum on the issue of MHM in Ethiopia, qualitative surveys with girls and leading NGOs prioritize needs related to family planning, maternal and child health, skilled birth delivery, and communicable diseases over MHM.¹³⁰

Barriers and Gaps

The current focus is now to secure approval of the guidelines and strategy, and develop a robust implementation and action plan. There are lingering questions about execution and enforcement of the guidelines, budgetary allocation for MHM efforts at the local level, and means of effective collaboration with the NGO and private sectors.

Coordination between national and regional partners is critical for successful implementation of the guidelines. Regional governments operate with a high degree of autonomy, and their buy-in will be crucial to any action on MHM. Further, Ethiopia's large rural population and lack of infrastructure (e.g., poor quality or nonexistent roads outside of urban centers) introduce complications for implementation at the local level.

Limited private sector activity in the MHM product market puts the impetus on the government to address gaps in access to MHM products for menstruating girls and women. Heavy import duties, limited in-country manufacturing capacity, and poor consumer demand due to inaccessible and unaffordable products have stifled growth in the private sanitary pad market.¹³¹

At the time of authorship, Ethiopia is currently undergoing a severe drought which has resulted in famine across the nation. Governmental resources and energy will be diverted to addressing this growing crisis in the near term, slowing momentum to address menstruation-related challenges through governmental action.

Conclusion

Limited data exists to inform comprehensive policy development to address the interconnected enablers and barriers to safe, healthy, and dignified MHM for girls and women in Ethiopia. Additional research is needed to ensure policy efforts target the highest priority MHM needs of the most vulnerable girls and women across Ethiopia.

While there is growing momentum to address MHM through governmental action, reports from girls and women and community organizations suggest prioritization of other needs. Integration of menstruation and MHM into HEW training packages will make relevant information and services more accessible to girls and women, but additional networks could be considered to maximize the scale and impact of these efforts. Additionally, it will be crucial that any steps to improve MHM will build on and reinforce existing initiatives and programs related to sexual and reproductive health and promote gender equity overall.

Conclusions and Recommendations

Although barriers to adequate menstrual health remain significant throughout the rural and remote areas of the country, experts and data suggest that urban and peri-urban areas have seen progress. In Addis Ababa, 90% of girls had a class session on menstruation.¹³² In January 2016, Routes 2 Results conducted a small qualitative study of 18 girls and 7 influencers in Debre-Bihiran which suggests that while barriers still exist, menstrual health has significantly improved in a generation. Both mothers interviewed had been child brides and had no access to menstrual health education or MHM products, while their daughters had access to menstrual health education and free pads at school. Additionally, both mothers and daughters viewed education as important and aspired for the daughters to get married after completing university degrees.

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Given the diverse needs across the country, key stakeholders are divided on the importance of and need to prioritize menstrual health over other pressing issues. There is energy from the Ethiopian government to work on addressing barriers to and improving enablers for menstrual health, particularly access to MHM products. This momentum is evidenced by the drafting of MHM guidelines, government subsidies for manufacturing (including sanitary pads),¹³³ and a visit by the Prime Minister to a reusable sanitary pad manufacturer.¹³⁴

However, given the strong presence of discriminatory social norms and the context in which the majority of rural girls and women live, the majority of experts interviewed question prioritizing menstrual health given other pressing needs.^{135,136,137} A study of 154 adolescent girls in South Gondar Region echoed experts' assessment. Girls were asked to nominate the biggest causes of stress and the main reasons for school absences and rank them. Menstruation was not nominated by informants but was added on to the list for the ranking exercise. Early marriage was ranked as the main source of stress and reason for being absent from school, while menstruation was ranked 9th and 8th, respectively.¹³⁸

Recommendations for the Field

There are immediate opportunities for the field to better support girls' experience of menarche and MHM.

- 1. Train health extension workers to provide high-quality menstrual health education to all women and girls across Ethiopia.** NGOs can partner with the government to co-create holistic puberty/MHM education. To date, one of the major challenges to menstrual health education programming has been government approval; however, by working directly with the government, approval processes should be faster. Additionally, there is an opportunity to leverage the Women's Development Army, young women who are a part of the fleet of 35,000 frontline health extension workers, who already provide basic health services to women and girls around the country (e.g., CARE Ethiopia).^{139,140}
- 2. Facilitate a market-based solution for making MHM products accessible to all women and girls.** Work with the government to create appropriate standards for all domestically manufactured MHM products to ensure high-quality. Collaborate with both large multinational corporations (e.g., P&G) and provide seed money to smaller social enterprises (e.g., Mariam Seba, Eve Sanitary Pads) to create affordable high-quality MHM products that are accessible in all areas of the country. This will require experimentation with different distribution and manufacturing models.

Given finite resources and prevailing issues of gender inequity, a narrow focus exclusively on MHM may not be enough. Opportunities to potentially influence a cross-section of outcomes for girls include:

- 3. Integrate menstrual health programming into existing efforts focused on adolescents, rather than focusing on MHM as a singular intervention.** To shift longer term outcomes for girls, it is important to take a holistic approach to programming that aims to improve their safety, education, health, and overall empowerment. It is important for programs to include key influencers and gatekeepers. For example, programs similar to CARE Ethiopia's TESFA which targets and supports girls who had been child brides. Anecdotal evidence suggests that the program compelled community members to prevent more than 70 child marriages from taking place, but it is difficult to attribute that positive result directly to the program. The program has shown conclusively that it was possible to empower adolescent girls through direct programming (e.g., statistically significant increases in the percentage of husbands contributing to household chores and measured levels of decision-making by girls).^{141,142,143} Moreover, while MHM may not be the primary focus, additional modules focused on MHM (e.g., MHM education) should be included in these broader based programs.

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4. **Support and evaluate programs that seek to shift discriminatory social norms affecting adolescent girls and understand the links to poor menstrual health.** Research is needed to understand *how and when it makes sense to shift social norms* that influence girls' experience with puberty. For example, to date, CARE's TESFA program only has anecdotal evidence to suggest that social norms are shifting, but not conclusive evidence that greater community engagement has helped shift the overall social norms around child marriage. Research should also explore the drivers of poor menstrual health to guide the development of new integrated interventions targeting adolescents.
5. **Explore opportunities for menstrual health programming to serve as an opportunity to gain access to out-of-school girls.** Out-of-school girls in Ethiopia remain untouched by the public systems. Programs that offer Safe Spaces for girls to connect are aiming to bring education to out-of-school girls and help them form social networks with peers and mentors. Menstruation and MHM could serve as a platform for discussion within these groups, yet this intervention in Ethiopia is largely unexplored and would require operational research to understand the effectiveness of different culturally appropriate approaches to reach girls.

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References

- ¹ African Economic Outlook. "Ethiopia." Accessed on March 5, 2015. <http://www.africaneconomicoutlook.org/en/countries/east-africa/ethiopia/>
- ² UNDP. "Income Inequality and the Condition of Chronic Poverty." Accessed on March 5, 2015. http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Towards%20Human%20Resilience/Towards_SustainingMDGProgress_Ch6.pdf
- ³ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ⁴ *Ibid.*
- ⁵ *Ibid.*
- ⁶ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁷ "Improved Sanitation Facilities." *Data*, 2015. Accessed February 12, 2016. The World Bank.
- ⁸ *Ibid.*
- ⁹ Jones, Nicola, et al. "Early Marriage and Education: The Complex Role of Social Norms in Shaping Ethiopian Girls' Lives." London: ODI, 2014. Accessed March 4, 2015. <http://www.odi.org/publications/8849-early-marriage-adolescence-gender-development-vietnam-uganda-ethiopia-nepal-social-norms-education-girls>
- ¹⁰ Engel, J. "Ethiopia's Progress in Education: A Rapid and Equitable Expansion of Access." London: ODI Development Progress, 2010.
- ¹¹ Jones, Nicola, et al. "Early Marriage and Education: The Complex Role of Social Norms in Shaping Ethiopian Girls' Lives." London: ODI, 2014. Accessed March 4, 2015. <http://www.odi.org/publications/8849-early-marriage-adolescence-gender-development-vietnam-uganda-ethiopia-nepal-social-norms-education-girls>
- ¹² African Economic Outlook. "Ethiopia." Accessed on March 5, 2015. <http://www.africaneconomicoutlook.org/en/countries/east-africa/ethiopia/>
- ¹³ UNDP. "Income Inequality and the Condition of Chronic Poverty." Accessed on March 5, 2015. http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Towards%20Human%20Resilience/Towards_SustainingMDGProgress_Ch6.pdf
- ¹⁴ Ambassador Negash Kebret. Statement at 67th UN Assembly. October 16, 2012. Accessed March 27, 2015. <http://www.un.org/womenwatch/daw/documents/ga67/Ethiopia.pdf>
- ¹⁵ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ¹⁶ Vogelstein, R, "Ending Child Marriage, How Elevating the Status of Girls Advances US Foreign Policy Objectives," Council on Foreign Relations, 2013
- ¹⁷ "Ethiopia - Child Marriage Around the World. Girls Not Brides." Girls Not Brides. Web. 29 Feb. 2016. <<http://www.girlsnotbrides.org/child-marriage/ethiopia/>>
- ¹⁸ 28 Too Many. "Country Profile: FGM in Ethiopia." Accessed March 5, 2015. <http://www.28toomany.org/media/uploads/ethiopiafinal.pdf>
- ¹⁹ Population Council. Forthcoming.
- ²⁰ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ²¹ *Ibid.*
- ²² UNICEF, Ethiopian Ministry of Education. "Study on Situation of Out of School Children in Ethiopia." Addis Ababa: UNICEF, 2012. Accessed March 4, 2015. <http://www.unicef.org/ethiopia/OSCStudyReport2012.pdf>
- ²³ Erulkar, Annabel, et al. "Ethiopia Gender Survey: A Study in Seven Regions." Addis Ababa: Population Council, 2010. Accessed March 4, 2015. http://www.popcouncil.org/uploads/pdfs/2010PGY_EthiopiaGenderSurvey.pdf.
- ²⁴ Fehr, A. Ethiopia, Summary Report for Care. "Stress, Menstruation and School Attendance: Effects of Water Access among Adolescent Girls in South Gondar, Ethiopia," CARE Ethiopia, 2011. Web. <http://water.care2share.wikispaces.net/file/view/CARE_A.Fehr_REPORT.pdf>
- ²⁵ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ²⁶ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ²⁷ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ²⁸ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ²⁹ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ³⁰ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ³¹ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ³² Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ³³ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ³⁴ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ³⁵ Abera, Yared. *Menarche, Menstruation Related Problems and Practices among Adolescent High School Girls in Addis Ababa*. Master's thesis, Addis Ababa University, 2004. <http://etd.aau.edu.et/bitstream/123456789/3209/3/Yared%20Abera.pdf>

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Prepared for the Bill and Melinda Gates Foundation

- ³⁶ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ³⁷ Erulkar, Annabel S., et al. *The Experience of Adolescence in Rural Amhara Region Ethiopia*. Report. Population Council, 2004.
- ³⁸ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ³⁹ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁴⁰ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁴¹ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ⁴² *Ibid.*
- ⁴³ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁴⁴ *Ibid.*
- ⁴⁵ *Ibid.*
- ⁴⁶ *Ibid.*
- ⁴⁷ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁴⁸ *Ibid.*
- ⁴⁹ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁵⁰ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁵¹ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁵² Fehr, Alexandra. *Stress, Menstruation and School Attendance: Effects of Water Security on Adolescent Girls in South Gondar, Ethiopia*. Master's thesis, Emory University Hubert Department of Global Health, 2011.
- ⁵³ Gultie, Teklemariam, Desta Hailu, and Yinager Workineh. "Age of Menarche and Knowledge about Menstrual Hygiene Management among Adolescent School Girls in Amhara Province, Ethiopia: Implication to Health Care Workers & School Teachers." *PLoS ONE* 9, no. 9 (September 30, 2014).
- ⁵⁴ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ⁵⁵ Gultie, Teklemariam, Desta Hailu, and Yinager Workineh. "Age of Menarche and Knowledge about Menstrual Hygiene Management among Adolescent School Girls in Amhara Province, Ethiopia: Implication to Health Care Workers & School Teachers." *PLoS ONE* 9, no. 9 (September 30, 2014).
- ⁵⁶ *Ibid.*
- ⁵⁷ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ⁵⁸ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁵⁹ *Ibid.*
- ⁶⁰ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁶¹ Worsley, Stuart. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Mercy Corps." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ⁶² Lundine, John. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Save the Children." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ⁶³ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁶⁴ Abraha, Haileselassie. Interview by Francesca Mazzola, "FSG's Interview with Tired Community Empowerment Association." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ⁶⁵ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁶⁶ Abraha, Haileselassie. Interview by Francesca Mazzola, "FSG's Interview with Tired Community Empowerment Association." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ⁶⁷ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁶⁸ *Annual Performance Report*. Addis Ababa, Ethiopia: Tired Community Empowerment for Change Association, 2013.
- ⁶⁹ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁷⁰ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁷¹ Mamo, Kuribachew. Interview by Francesca Mazzola, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁷² Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.

- ⁷³ *Good Policy and Practice in Health Education Booklet 9: Puberty Education & Menstrual Hygiene Management*. Paris: United Nations Educational, Scientific and Cultural Organization, 2014.
- ⁷⁴ Abraha, Haileselassie. Interview by Francesca Mazzola, "FSG's Interview with Tired Community Empowerment Association." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ⁷⁵ Harrington, Rory. Interview by Francesca Mazzola, and Perri Kasen. "FSG's Interview with DKT International". Addis Ababa, Ethiopia. November 23, 2015.
- ⁷⁶ *Ibid.*
- ⁷⁷ Zedwu, Soloman. Interview by Alexandra Geertz, Francesca Mazzola, and Perri Kasen, "FSG's Interview with Gates Foundation." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ⁷⁸ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁷⁹ Gebreyesus, Mulu. *Industrial Policy and Development in Ethiopia: Evolution and Present Experimentation*. Working paper no. 6. Brookings Institute.
- ⁸⁰ Davidson, William. "Ethiopia Plans Export Hubs with \$10 Billion Factory Parks." *Bloomberg Business News*, May 18, 2015.
- ⁸¹ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ⁸² Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁸³ Abraha, Haileselassie. Interview by Francesca Mazzola, "FSG's Interview with Tired Community Empowerment Association." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ⁸⁴ "Understanding the Challenge." Dignity Period. <http://www.dignityperiod.org/what-we-do/research/>
- ⁸⁵ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁸⁶ Erulkar, Annabel, et al. *Ethiopia Young Adult Survey: A Study in Seven Regions*. Report. Population Council and United Nations Population Fund, 2010.
- ⁸⁷ Mamo, Kuribachew. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁸⁸ Harrington, Rory. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with DKT International". Addis Ababa, Ethiopia. November 23, 2015.
- ⁸⁹ Mamo, Kuribachew. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁹⁰ Lundine, John. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Save the Children." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ⁹¹ Godfrey, Samuel. Interview by Alexandra Geertz and Perri Kasen, "FSG's Interview with UNICEF." Personal interview. Addis Ababa, Ethiopia, November 26, 2015.
- ⁹² Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ⁹³ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ⁹⁴ Harrington, Rory. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with DKT International". Addis Ababa, Ethiopia. November 23, 2015.
- ⁹⁵ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ⁹⁶ Tamiru, Selamawit, et al. "Towards a Sustainable Solution for School Menstrual Hygiene Management: Cases of Ethiopia, Uganda, South-Sudan, Tanzania, and Zimbabwe." *Waterlines* 34, no. 1 (January 2015): 92-102. doi:10.3362/1756-3488.2015.009
- ⁹⁷ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ⁹⁸ Owuor, George. Interview by Alexandra Geertz and Francesca Mazzola "FSG's Interview with P&G." Telephone interview, January 12, 2016.
- ⁹⁹ Abera, Yared. *Menarche, Menstruation Related Problems and Practices among Adolescent High School Girls in Addis Ababa*. Master's thesis, Addis Ababa University, 2004. <http://etd.aau.edu.et/bitstream/123456789/3209/3/Yared%20Abera.pdf>
- ¹⁰⁰ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ¹⁰¹ *Ibid.*
- ¹⁰² Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ¹⁰³ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ¹⁰⁴ "Inaccessibility of Pads Challenge for Rural Girls." SNV. Accessed January 26, 2016. <http://www.snv.org/update/inaccessibility-pads-challenge-rural-girls>.
- ¹⁰⁵ Abraha, Haileselassie. Interview by Francesca Mazzola, "FSG's Interview with Tired Community Empowerment Association." Personal interview. Addis Ababa, Ethiopia, November 25, 2015.
- ¹⁰⁶ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ¹⁰⁷ Mamo, Kuribachew. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with SNV World." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ¹⁰⁸ Lundine, John. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Save the Children." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ¹⁰⁹ Godfrey, Samuel. Interview by Alexandra Geertz and Perri Kasen, "FSG's Interview with UNICEF." Personal interview. Addis Ababa, Ethiopia, November 26, 2015.

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Prepared for the Bill and Melinda Gates Foundation

- ¹¹⁰ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ¹¹¹ "Tiret Community Empowerment for Chance Association Wins Ethiopia's CSO Best Practice Award." TCECA: News. September 13, 2013. <http://www.tiretcommunity.org/News.html>.
- ¹¹² Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ¹¹³ *Ibid.*
- ¹¹⁴ Harrington, Rory. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with DKT International". Addis Ababa, Ethiopia. November 23, 2015.
- ¹¹⁵ "Improved Sanitation Facilities." *Data*, 2015. Accessed February 12, 2016. The World Bank.
- ¹¹⁶ "Improved Water Source." *Data*, 2015. Accessed February 12, 2016. The World Bank.
- ¹¹⁷ *Ibid.*
- ¹¹⁸ *Ethiopia: Water and Sanitation Profile*. USAID, 2010. <http://www.washplus.org/sites/default/files/ethiopia2010.pdf>
- ¹¹⁹ Lundine, John. Interview by Perri Kasen, "FSG's Interview with Save the Children Ethiopia". Addis Ababa, Ethiopia. November 24, 2015.
- ¹²⁰ Tamiru, Selamawit, comp. *Girls in Control: Compiled Findings from Studies on Menstrual Hygiene Management of Schoolgirls. Ethiopia, South Sudan, Tanzania, Uganda, Zimbabwe*. Addis Ababa: SNV, 2015.
- ¹²¹ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi:10.1186/1471-2458-14-1118
- ¹²² Gultie, Teklemariam, Desta Hailu, and Yinager Workineh. "Age of Menarche and Knowledge about Menstrual Hygiene Management among Adolescent School Girls in Amhara Province, Ethiopia: Implications to Health Care Workers & School Teachers." *PLoS ONE* 9, no. 9 (September 30, 2014).
- ¹²³ Fehr, Alexandra E. *Stress, Menstruation and School Attendance: Effects of Water Access among Adolescent Girls in South Gondar, Ethiopia*. CARE Ethiopia, 2010.
- ¹²⁴ *Ibid.*
- ¹²⁵ Tegegne, Teketo Kassaw, and Mitike Molla Sisay. "Menstrual Hygiene Management and School Absenteeism among Female Adolescent Students in Northeast Ethiopia." *BMC Public Health* 14, no. 1118 (October 29, 2014). doi: 10.1186/1471-2458-14-1118
- ¹²⁶ *Ibid.*
- ¹²⁷ Ethiopian Ministry of Health. Interview by Alexandra Geertz. Addis Ababa, Ethiopia. November 26, 2015.
- ¹²⁸ "2015 Worldwide Corporate Tax Guide: Ethiopia." *Ernst & Young*. Accessed February 09, 2016. <http://www.ey.com/GL/en/Services/Tax/Worldwide-Corporate-Tax-Guide---XMLQS?preview&XmlUrl=/ec1images/taxguides/WCTG-2015/WCTG-ET.xml>
- ¹²⁹ "Customs Duty, Tariff and Taxes in Ethiopia." 2merkato. Accessed February 09, 2016. <http://www.2merkato.com/articles/customs/69-customs-duty-tariff-and-taxes-in-ethiopia>
- ¹³⁰ Ethiopian Ministry of Health. Interview by Alexandra Geertz. Addis Ababa, Ethiopia. November 26, 2015.
- ¹³¹ Harrington, Rory. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with DKT International". Addis Ababa, Ethiopia. November 23, 2015.
- ¹³² Abera, Yared. *Menarche, Menstruation Related Problems and Practices among Adolescent High School Girls in Addis Ababa*. Master's thesis, Addis Ababa University, 2004. <http://etd.aau.edu.et/bitstream/123456789/3209/3/Yared%20Abera.pdf>
- ¹³³ *Sanitary Napkin*. Washington D.C.: Embassy of Ethiopia. http://www.ethiopianembassy.org/AboutEthiopia/InvestmentProjectProfiles/Manufacturing/Paper%20and%20Paper%20Products/Sanitary_Napkin.pdf
- ¹³⁴ Mebrahtom, Tesfahunegn. Interview by Francesca Mazzola, "FSG's Interview with Dignity Period." Personal interview. Makale, Ethiopia, November 26, 2015.
- ¹³⁵ Lundine, John. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Save the Children." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ¹³⁶ November 23, 2015. [NEEDS MORE INFO HERE]
- ¹³⁶ Worsley, Stuart. Interview by Francesca Mazzola and Perri Kasen, "FSG's Interview with Mercy Corps." Personal interview. Addis Ababa, Ethiopia, November 24, 2015.
- ¹³⁷ Agezi, Alem. Interview by Francesca Mazzola, "FSG's Interview with CARE Ethiopia." Personal interview. Addis Ababa, Ethiopia, November 23, 2015.
- ¹³⁸ Fehr, Alexandra E. *Stress, Menstruation and School Attendance: Effects of Water Access among Adolescent Girls in South Gondar, Ethiopia*. CARE Ethiopia, 2010.
- ¹³⁹ Ramundo, Kelly. "The Female 'Army' Leading Ethiopia's Health Revolution." *USAID Frontlines*, May/June 2012.
- ¹⁴⁰ Dolea, Carmen, Amy Gardiner, Gulin Gedik, and Yohannes Kebede. *Ethiopia's Human Resources for Health Programme*. World Health Organization, 2008.
- ¹⁴¹ "TESFA: Supporting Married, Widowed, and Divorced Adolescents." CARE. <http://www.care.org/our-work/womens-empowerment/child-marriage/tesfa>.
- ¹⁴² "Ending Early Child Marriage." CARE. <http://www.careinternational.org.uk/fighting-poverty/empowering-women-and-girls/ending-early-child-marriage>
- ¹⁴³ Edmeades, Jeffrey, Robin Hayes, and Gillian Gaynair. *Improving the Lives of Married Adolescent Girls in Amhara, Ethiopia: A Summary of the Evidence*. Report. CARE and International Center for Research on Women, 2014.