1. Title Page

Project title: Testing the Optimized AGI-K Models for Scale Up in Wajir County, Kenya

Principal Investigator: Karen Austrian, PhD MPH
Population Council-Kenya
Avenue 5, 3rd Floor
Rose Avenue
Nairobi, Kenya
+254-20-5134700
kaustrian@popcouncil.org

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Study Coordinator: Faith Mbushi, Program Officer
Population Council
Nairobi, Kenya
fmbushi@popcouncil.org

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2. Summary of Proposed Research

This research involves an evaluation of modified versions of the Adolescent Girls Initiative – Kenya intervention packages in Wajir County. The initial randomized controlled trial showed a successful impact of the intervention on increasing school enrollment and delaying marriage among originally out of school girls in Wajir County. The County government of Wajir has indicated their interest in and commitment to scaling up the intervention. Population Council Kenya (PC Kenya) has received funding from the Children's Investment Fund Foundation (CIFF) to test three versions of the original intervention to a) identify an optimized model and b) prepare the county government systems for implementation.

The evaluation will test three packages of interventions. All packages will include community level conversations addressing inequitable gender norms and barriers to girls education, weekly group meetings for girls ages 11-14 that cover a range of health, life skills and financial literacy topics and a government run school feeding program. One package will have only these three components. The second package will add in-kind individual and community level incentives conditioned on meeting school enrollment targets. The third package will add a household level cash transfer conditioned on girls' school enrollment. Throughout, the focus of the intervention design will be on a model that is feasible for implementation by the county government both vis-à-vis delivery channels and cost.

The study will take place in 30 villages in Wajir County located in the mainly rural, semi-arid region of Northern Kenya, and inhabited by a mainly pastoralist, Muslim population of Somali origin. Ten villages will be randomized to each study arm. Data collection activities will include a formative assessment, household listing, baseline and endline surveys, qualitative interviews and comprehensive monitoring of group attendance and school enrollment. The study will be led by PC Kenya and supported by the Wajir County Government and Save the Children.

Primary ethical concerns of this study include a) that participation in the study may put the respondent at risk of psychological trauma related to recounting violent or traumatic experiences, b) that this study includes minors, below the age of 18, c) a risk of breach of confidentiality due to the collection of contact information and identifying information for future survey rounds, d) the randomization may lead to some discontent as not all study villages will receive the in-kind or cash incentives and e) there may be some push back related to discussions of gender norms. These risks are perceived to be minimal and steps will be taken to reduce the risks to participants. As this intervention and study design have been implemented in this setting, we will be able to minimize the risks associated with randomization and gender norms related interventions.

Participants will benefit directly or indirectly from project interventions. All participants will be providing information that will directly inform the development of the interventions for adolescent girls in Kenya.

3. Study Relationships/Related Project

This protocol builds on p661 – the Adolescent Girls Initiative – Kenya, however it is a new sample and therefore a separate protocol. The original protocol covered the randomized controlled trial that tested a package of interventions in Nairobi and Wajir Counties. Due to the successful impact of the intervention (see below), the County government of Wajir has indicated their interest in and commitment to scaling up the intervention. Population Council Kenya (PC Kenya) has received funding from the Children's Investment Fund Foundation (CIFF) to test three versions of the original intervention to a) identify an optimized model and b) prepare the county government systems for implementation.

PC Kenya is leading this project in partnership with the Wajir County Government and Save the Children. PC Kenya will carry out all data collection, data management, and analysis, as well as provide overall oversight and technical assistance for the intervention. Wajir County Government will avail staff from the Ministry of Health to deliver the intervention, as well as make monitoring data available as indicated below collected by Community Health Assistants. The intervention has been designed with the current county government capacity in mind, however where needed training and technical support will be provided.

Save the Children is the world's leading independent organization for children, creating lasting change in the lives of children in need in 120 countries around the world. They have been operational in Kenya since the 1950s, and have had an office in Wajir County for over two decades. The role of Save the Children is to: 1) monitor interventions in Wajir County and 2) support the policy work needed to integrate AGI-K intervention components into Wajir County annual plans, budgets and necessary policy frameworks. The key personnel for Save the Children on AGI-K will be Abdullahi Aden.

4. Background

Literature

Although early marriage rates are declining worldwide, annually nearly 12 million girls are married before age 18, including 35% of girls in Sub-Saharan Africa (SSA) [1]. The practice is even more common in rural pastoralist settings [2,3].

Early marriage has multiple drivers including cultural and social norms underlying inequitable gender norms and a lack of educational and economic opportunities, that are exacerbated by poverty, economic instability and humanitarian crises [4-6]. In pastoralist communities, social norms promoting early marriage that limit female involvement in the marriage decision and economic incentives associated with marriage—including bride price—are particularly important [7]. The value of livestock given to the bride's family can be substantial and helps ensure that she will remain in the marriage by creating a social link with her economic inheritance [8].

There is a growing literature examining interventions to delay early marriage in low- and middle-income countries. A 2012 systematic review of such programs concluded that providing economic incentives or building girls empowerment are promising approaches [9]. A 2016 review identified a range of mechanisms, including education, economic support, life skills training for girls, and community engagement, that could successfully delay marriage [10]. Although there is

substantial literature characterizing the strong association between increased education and delayed marriage [11,12], however, interventions aimed at delaying marriage through the pathway of improving educational outcomes have had mixed results [13].

Programs addressing the economic drivers of early marriage have also had mixed results. In Malawi, short term conditional cash transfers (CCTs) delayed marriage and fertility in both the short-term and two years after the program ended, but only for girls not initially in school. Unconditional transfers for girls in school at baseline also had short-term effects on these outcomes but the effects did not persist after the transfers ended [14,15]. In qualitative work in Zambia, participants reported that early marriage declined because cash transfers increased the time girls could focus on schooling and allowed their parents to rely less on bride price [16]. A recent review concluded that interventions providing cash or in-kind support for girls' education had the highest likelihood of delaying marriage [17].

Given the interconnected drivers of early marriage and the limitations of single-sector interventions, multisectoral approaches that cover multiple levels in an adolescents' ecosystem (i.e. individual, household, community) should be explored [18], even if they may be more difficult to scale up [17]. Using a quasi-experimental research design, a program in Ethiopia combining mentorship, economic incentives and informal education was shown to delay marriage [19]. In Bangladesh, a randomized controlled trial tested several multiple component programs with training via community-based girls' groups in all packages, each having one of the three add-on components: tutoring, gender rights awareness or livelihoods training. The study found that all three programs delayed marriage [20]. There is little rigorous evidence, however, on programs that delay marriage in pastoralist settings in SSA.

In addition to intervention content, timing also may be critical. Adolescence is a distinct phase of development during which significant physical and brain maturation takes place and skills related to social engagement and emotional control develop—changes that shape lifelong behaviors [21 22]. Early adolescence has been posited as a critical window for intervention because many life events—school leaving, marriage and childbirth—commonly happen in mid-adolescence. Earlier intervention offers the potential to delay such outcomes [23]. However, there is little experimental evidence on the impact of interventions in early adolescence on later marriage and fertility outcomes [24].

The Adolescent Girls Initiative-Kenya (AGI-K) was a randomized trial designed to test the short-term (at the end of the program) and longer-term (after four years) effects of two-year multisectoral and multilevel, "cash plus" programs for adolescent girls 11–14 years old at the start of the program. It was implemented in two different marginalized areas of Kenya where girls face many of the above challenges: 1) Kibera, an urban informal settlement in Nairobi and 2) Wajir, a pastoralist rural county [25]. The midline results from the end of the two-year intervention showed that a multi-sectoral approach was a cost-effective way to create positive change across a range of wellbeing factors for young adolescent girls, including education, health and economic outcomes [26]. It showed that education cash transfers worked, and impact varied depending on context. For example, in areas where enrollment is close to 100% such as Kibera, cash transfers significantly improved completion of primary school (from 84% to 91%) and transition to secondary school (from 81% to 89%). In Wajir where only 75% of girls were in

school at baseline, cash transfers increased enrollment to 95% - a huge improvement. Cash transfers also encouraged good will towards and participation in the health and wealth parts of the program, especially in low-resourced, socially-conservative settings. Furthermore, the two-year follow up results showed that in Wajir, the program had long-term, sustainable effects with girls who were out of school at baseline being three times more likely to still be enrolled in school, twenty percentage points less likely to be married and half as likely to have given birth. However, the cost-effectiveness evaluation showed that the true benefit of the program will likely be realized when it is able to operate at scale, at lower costs [27].

Therefore, with commitment from and in partnership with the Wajir County government, this study is aiming to identify the optimized model of AGI-K for implementation at scale, via government delivery channels, vis-à-vis impact and cost. While we hypothesize that the intervention package most similar to the original AGI-K design will have the greatest impact, we remain open to learn the limits of feasibility, as well as cost calculations, when implementing via government channels.

Research Design

These questions will be addressed through a quasi-experimental, longitudinal evaluation making use of multiple channels of data collection. These methods include qualitative formative work, baseline and endline surveys of girls and their heads of household, qualitative data collection during and after the intervention, community level assessments of the school feeding program, ongoing monitoring of program activities and cost-effectiveness analyses.

The study will use a cluster randomized controlled trial design. A sampling frame of villages in Wajir County that meet the following inclusion criteria will be constructed: a) have a functioning community health unit, b) have more male students enrolled in upper primary school levels (Classes 6, 7 and 8) as compared to girls, c) have at least one female teacher in the primary school and d) have a functioning school feeding program. Urban and peri-urban areas will be excluded. Ten villages, stratified by sub-county and village size will be randomized assigned to each study arm (see below for intervention components in each arm) for a total of 30 villages. The randomization will take place publicly with eligible village leaders in attendance to increase acceptance of the randomization results. Do to the vast geographical nature of Wajir County, the villages are quite far from one another, therefore there is little risk of contamination between study villages.

Geographical Setting

The study will take place in Wajir County, located in the mainly rural, semi-arid region of Northern Kenya, and inhabited by a mainly pastoralist, Muslim population of Somali origin. Less than a quarter of adults in Wajir are literate, half of women 20-24 were married by age 18 and the total fertility rate is 7.8 (over double the national average of 3.6) [28]. Girls' education outcomes are incredibly poor relative to national levels with two-thirds of girls ages 6-17 having never been to school [29].

5. *Intervention*

There are three intervention components being tested: a) community conversation groups, b) girls' safe spaces groups and c) monetary/material incentives conditioned on school enrollment. All schools will also have a pre-existing school feeding program in place. The main target are girls ages 11-14 years old. The intervention will start at the end of April 2022 with the start of the 2022 school year and end in March 2023 during the first term of the 2023 school year.

Community Conversation Groups: The community conversation groups will be implemented by the Community Health Units (CHUs) and the meetings facilitated by Community Health Volunteers (CHVs) and supervised by Community Health Assistants (CHAs). A committee will be established in each community and include a mix of men and women, religious and community leaders, parents, teachers, and young men and women who will participate on a volunteer basis. The groups will be taken through a facilitated process to identify key issues in the community that lead to the undervaluing of girls, inequitable gender norms, early marriage and the perpetuating of violence against girls and women. In addition to challenging inequitable gender norms in the community, the committee will develop an action plan to implement a project meant to address and alleviate the issues facing girls in their community that they identify. These groups meet 1-2 times per month over the 12 month intervention.

Girls' Safe Spaces Groups: The girls´ groups will be facilitated by female primary school teachers or CHVs, depending on what is most appropriate in each village. This intervention component will follow the Council's safe spaces model in which girls will meet in groups once a week under the guidance of a female mentor from that community. The groups will follow a structured curriculum, but also allow time for open discussion. The curricula will include topics on financial literacy, hygiene, nutrition, sexual and reproductive health, communication/negotiation skills, gender norms, sexual and gender based violence, female genital mutilation/cutting (FGM/C), early marriage, leadership skills and relationships. The curriculum will be adapted from the original AGI-K curriculum used in Wajir based on what was accepted and impactful from the original RCT.

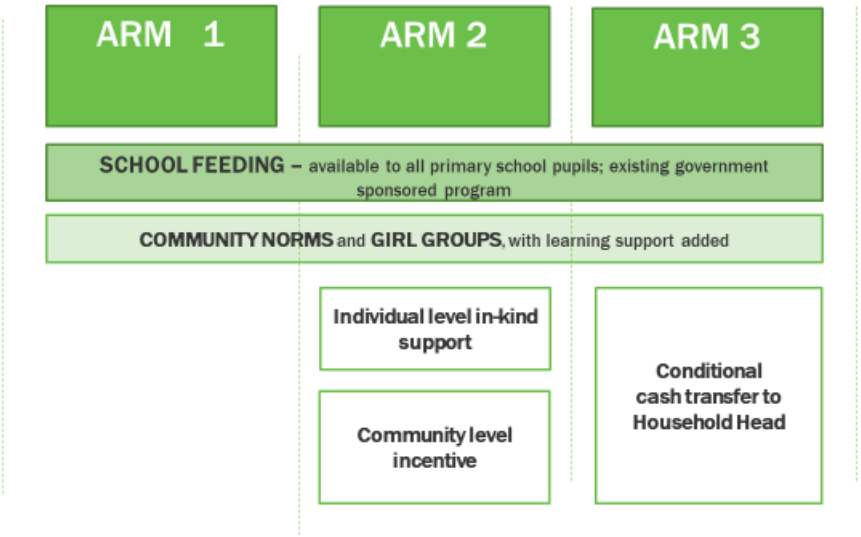
Groups will meet in spaces identified in the community as safe and appropriate for girls, which could be community halls, schools, mosques, community leaders' residences, and others. The groups will meet weekly over the course of one year.

Education Conditional Transfers: We will be testing two types of transfers – one that employs a cash transfer approach and one that employs an in-kind approach.

> Cash: All payments will be conditioned on girls being enrolled in school. Enrollment will be verified during the second month of each term and payments made by the end of that month. Household heads that had an out of school girl ages 11-14 at the start of the intervention period will receive a one-time payment of 4500/ (~US$ 41). In addition, household heads of all girls 11-14, regardless of baseline school status, will receive 1500/ (~$13.50) each term thereafter (total of four payments). Cash transfers will be paid via Mpesa to the household head determined at the time of registration. If the household has more than one girl between the ages of 11-14, they will all be eligible for their own cash transfer.

In-Kind: Girls who are out of school at baseline will receive an in-kind incentive if they enroll in school during the first term of the 2022 school year. All girls still enrolled in school during the first term of the 2023 school year will receive another incentive. The exact incentive (e.g. a goat or a school supply kit) will be determined during the formative assessment to take place in Q1 2022. In addition, a community level enrollment target will be set at 10 percentage points above baseline enrollment. If the community meets the enrollment target at the end of the program, an in-kind project will be given that values approximately US$5000 (e.g. building classrooms or latrines at the school) which will be implemented and monitored by the community conversation group members.

The arms are as follows:



6. Study Goals/Objectives

The overall objective of this study is to determine which modified version of the original AGI-K intervention model is optimized for scale up based on effect, feasibility and cost of delivery via government channels.

The study involves the evaluation of three different packages of interventions to enrol and retain out of school girls aged 11-14 and change social norms related to girls' education and child marriage, in Wajir. All three packages will include girls´ empowerment groups and community engagement on gender attitudes, layered on top of existing school feeding programmes, plus:

1) In some communities, no additional incentive
2) In some communities, an in-kind incentive for the whole community for school enrolment and retention, as well as an in kind incentive for individual girls
3) In some communities, a financial incentive conditional cash for households with girls aged 11-14, conditional on school enrolment and retention.

Based on this intervention and study design, the project will seek to answer the following questions:

1. What are the effects on school enrollment and retention of three different packages of interventions?
2. What are the effects of the interventions on gender norms attitudes at community level and timing of marriage?
3. What are the costs of the three different packages of interventions relative to: a) one another, b) effects of each package, c) AGI-K original model and d) benefits
4. Which package is most feasible for efficient delivery via existing government and community structures?

Key outcomes of interest include: % of out-of-school girls enrolled, % of enrolled girls retained each term, % of enrolled girls transitioning to the next school year, literacy and numeracy scores, individual and community level gender norms attitudes, # of weekly meals accessed at school, perceived role of school feeding in school enrolment, retention and learning, % unmarried girls who are married during the study period, cost-per girl and incremental cost per educational outcome, and cost per marriage averted/additional year unmarried (via modelling). Key monitoring indicators to tracked are: # of community conversation meetings held, # of safe spaces group meetings held, average group attendance %, # of individual in-kind incentives delivered, # of community incentives delivered, and # of cash transfers disbursed.

7. Overview Table:

	Data Gathering Activities			
	Formative Assessment	**HH Listing**	**Baseline Survey**	**Endline Survey**
Study population	Girls aged 11-14, mothers and fathers of girls aged 11-14, teachers, CHAs, CHVs and additional key stakeholders	Adult member in the household, all households in study villages	Girls aged 11 to 14 and adult member in household in all study villages	Girls aged 11-14 and adult member interviewed at baseline
Sample size	8 girls, 8 parents, 2 male teachers, 2 female teachers, 8 community health workers and 8 additional key stakeholders	Approximately 15,000 households	1,500 girls & 1,500 parents/guardians in Wajir (50 girls per village)	1,500 girls & 1,500 parents/guardians in Wajir
Location of activity	Household	Household	Household	Household
Timing	February 2022	March/April 2022	March/April 2022	April/May 2023
Method	In-Depth Interviews	Short form	Interview	Interview
Informed Consent document (Appendix #)	Formative assessment consent/assent forms Annex 1	HH listing consent, Annex 1	Parental consent form, and adolescent assent form, Annex 1	To be submitted in amendment
Study Instrument (Appendix #)	To be submitted in amendment	HH listing form, Annex 2	Girls baseline survey Household baseline survey Annex 3	To be submitted in amendment

	Data Gathering Activities			
	Qualitative data collection	**Monitoring Data Collection**	**School Enrollment Data**	
Study population	Girls selected from baseline sample, community dialogue members and key stakeholders (from at least one village per study arm)	CC group and SS group attendees	School administrators	
Sample size	10-15 girls, 15-20 community members/key stakeholders at each round	All participants in 30 villages	All girls and boys 5-14 in study villages	
Location of activity	Household	Group Meeting	School	
Timing	R1: July – August 2022 R2: November – December 2022 R3: April – May 2023	Ongoing	May 2022 August 2022 October 2022	
Method	In-depth interviews	Attendance registers	Enrollment register	
Informed Consent document (Appendix #)	To be submitted in amendment	N/A	N/A	
Study Instrument (Appendix #)	To be submitted in amendment	To be submitted in amendment	To be submitted in amendment	

8. Data Gathering Activity 1: Formative Assessment

a. Subject Population

- ☐ The study population is adolescent girls living in villages in Wajir that will be similar to the villages selected for the study, as well as mothers, fathers, health care workers, teachers and other key stakeholders.
- ☐ Respondents for the in-depth interviews will be from villages selected by Save the Children and purposive sampling will be used to recruit participants based on pre-identified target profiles in collaboration with implementing partners and local leadership.

b. Research Protocol

- ☐ The formative assessment will take place in February 2022 so that it can inform the final intervention designs.
- ☐ Once participants are identified, trained interviewers will visit them in their homes or places of work, review the consent forms and conduct interviews in a private area, with visual and auditory privacy. Interviewers will follow moderator's guides and in-depth interview guides that will provide the main questions and possible probes to elicit in-depth responses.
- ☐ Adolescent girls will be interviewed by female interviewers.
- ☐ Parents will be sampled from among the adolescent girls selected for interviews.
- ☐ All interviews will be tape recorded and transcribed verbatim. The data analysis of the transcribed data will consist of multiple and iterative readings of the resulting transcripts as well as coding of emergent themes using ATLAS.ti or a similar qualitative analysis software.

c. Risks and Benefits to Subjects

RISKS

- ☐ There is minimal risk in the formative assessment as the questions will focus on views related to intervention design and implementation and understanding possible motivation for participation or non-participation. Therefore, there will be no questions that are sensitive in nature.
- ☐ There may be minimal risk if someone is seen to be participating in an in-depth interview and there is suspicion in the community about the exercise, in particular amongst parents. However, partners and research assistants will explain the purpose of the interviews and answer any questions among community leaders ahead of time to reduce possible suspicion.
- ☐ There is an additional risk of loss to privacy due to the tape-recording of interviews.

- ☐ There is a minimal risk of COVID-19 infection, however steps will be taken to minimize those risks.

BENEFITS

- ☐ All participants will benefit from the research experience through sharing experiences with others and being given the opportunity to express themselves by providing information that will be used to guide future programs.

d. Steps to Minimize Risks

- ☐ To minimize the risk of adolescents not being able to provide informed consent, we will also obtain written consent from a parent/guardian.
- ☐ To minimize the risk of exposure to violence, adolescent girls will be interviewed by female interviewers.
- ☐ To minimize the risk of community suspicion we will explain the activity to community leaders prior to commencing data collection.
- ☐ To minimize the risk of loss of privacy, respondents will be asked not to state names or give other identifying information on the recordings. The digital recordings will be stored on password-protected computers at the Population Council office, and will be identified using a serial number. They will not contain any identifying information.
- ☐ To minimize the risk of COVID-19 infection: 1) interviewers and respondents will wear masks, 2) hand sanitizers will be distributed and 3) the IDIs will be conducted outside or in large, well-ventilated halls. A COVID risk mitigation plan will be prepared and approved prior to the commencement of data collection. All research will be conducted within the county regulations for in-person research if available.

e. Confidentiality

- ☐ All interviews will be conducted in private, in a physical space in which other study participants cannot hear the questions or participant responses.
- ☐ All data collected as part of this project will be kept under lock and key at the Population Council offices in Nairobi, and stored in a secure facility. All electronic data will be stored on password-protected computers and back up files will be encrypted and stored on secure media. Computers, filing cabinets and related research equipment/facilities that could reveal identifying information will be only accessible to authorized research staff. The consent forms, along with identification information, will be kept separately so that names cannot be linked to the behavioral information collected during the study. Computer printouts and related documents will be disposed of properly. Research assistants and other study personnel will be educated on the importance of confidentiality. All reasonable efforts to ensure confidentiality is not breached will be made.

- ☐ Recordings will be destroyed at the end of the study period.
- ☐ No identifying information will be included in any reports or papers.
- ☐ Data collected in this study may be deposited and made publicly available to other researchers through the Population Council's Girl Innovation, Research, and Learning (GIRL) Center Adolescent Data Hub. The study team will de-identify data, including all names, addresses, and indirect identifiers, before depositing it in the Adolescent Data Hub. GPS coordinates will not be included in deposited data. The GIRL Center will conduct additional checks to confirm that all identifiable data are removed. If identifiable information are found, the GIRL Center will either remove or anonymize the identifiable data. Respondents will be informed about the possibility of data sharing as part of the consenting process. The GIRL Center's procedures for de-identifying data are attached (Annex 5).

f. Compensation

- ☐ Participants will receive a small compensation for their participation in the formative assessment. Adolescent respondents will receive KES 200 compensation for their participation in the study. Adult in-depth interview respondents will receive compensation in the amount of KES 500. Government employees will receive compensation in line with government circular outlining compensation for these activities.

g. Informed Consent Process

- ☐ Before the study commences, permission for the study will be obtained nationally by obtaining a research permit from the National Council of Science and Technology in Kenya. We will also seek local IRB approval from the AMREF Ethical & Scientific Review Committee. Study coordinators will also make courtesy calls to local government officials and the study team will work with village elders to identify areas in the community.
- ☐ Written informed consent will be obtained prior to all data collection activities by the interviewer in a private setting. Following established informed consent protocols, each respondent will be provided a thorough explanation of the purpose of the study, the privacy and confidentiality of their responses, and the process and extent of participation. The consent form will be read aloud by interviewers to the respondents, whereupon the respondent will be asked if they agree to participate. Before the interviewer records the consent, the respondent will be asked if they have any questions or concerns about the study, which will be recorded by the interviewer.
- ☐ As part of the Population Council's monitoring program, the subject will be asked to acknowledge the possibility that an interview may be requested by a representative of the Population Council to determine if informed consent occurred. If an interview is requested, the subject will have the option of accepting or declining the interview.

- ☐ If the girl is under 18 years of age, written informed consent from a parent or guardian will be obtained prior to the interview. Written assent from the girls will also be obtained separately for the interview. For married girls, who are considered to be emancipated minors, informed consent for the interview will be obtained only from the girl.
- ☐ Written consent from parents/guardians and participants will be obtained prior to conducting in-depth interviews. Consent forms will inform the respondents the purpose of the study, that the interviews will be recorded, and that the information will be transcribed, stored and analyzed without any identifying information.

8. Data Gathering Activity 2: Household Listing

a. Subject Population

- ☐ In the 30 villages selected for the study the research team will screen and list all members of households that have an adolescent girl between the ages of 10 and 15 (approximately 15,000 to 20,000 households). The respondents will be adults (age 18+) residing in each household, or an emancipated minor if they are the head of the household. The household listing will allow us to identify eligible adolescent girls, between the ages of 11 and 14 in each household. The listing form will also collect basic information on household characteristics that will be used to determine eligibility for the intervention and support program recruitment.

b. Research Protocol

- ☐ The household listing will be conducted between March and April 2022. Trained research assistants will visit every household, identify an adult who can answer questions about members of the household, and interview them using a short form (see Annex 2) to collect the required information. They will begin by asking several screener questions. If there is at least one girl between the ages of 10 and 15 residing in the household, they will complete the household roster and the brief background questionnaire on household characteristics. Interviewers will make up to three visits at different time schedules to each household if there is no one present.

c. Risks and Benefits to Subjects

- ☐ There is risk of breach of confidentiality, since the household listing form includes contact information and identifies the location of the household. However, no sensitive information will be collected as part of the listing activity.
- ☐ The benefit of participating in the listing is that if there is a girl residing in the household, between the ages of 11 and 14, she will be eligible to participate in the study and she, the household and/or the community may receive direct benefit from the interventions.

d. Steps to Minimize Risks

- ☐ To minimize the risk of loss of privacy, data will be collected using electronic data capture (tablets) and will be stored on password-protected computers at the Population Council office.

e. Confidentiality

- ☐ All data that includes identifying information will be stored on password-protected computers that will only be accessible by authorized research staff.
- ☐ Individual data will not be shared with Wajir County Government
- ☐ Records will be kept throughout the life of the study and will be kept for up to 10 years afterwards to allow researchers to follow-up with the girls for future survey rounds if external funding is obtained.
- ☐ The information collected in the household listing activity will be used to evaluate characteristics of eligible households (i.e. have girls ages 11-14 residing in them) whose girls chose to participate in the interventions, and those that did not.

f. Compensation

- ☐ The participants will not be paid for their participation in the household listing activity.

g. Informed Consent Process

- ☐ Verbal informed consent will be obtained at the time of the household listing. Interviewers will approach the household and read a brief statement (see Annex 1) explaining the purpose of the household listing, assuring respondents that participation is completely voluntary and that it is their right to refuse to answer any questions or stop the interview at any point. Written informed consent will not be collected for the household listing.
- ☐ Before the study commences, permission for the study will be obtained nationally by obtaining a research permit from the National Council of Science and Technology in Kenya. We will also obtain local IRB approval from the AMREF Ethical & Scientific Review Committee. Study coordinators will also make courtesy calls to local government officials and the chiefs in the selected villages. The study team will work with village elders to identify areas in the community.

8. Data Collection Activity 3: Baseline Survey

a. Subject Population

- ☐ The study population is girls between the ages of 11 to 14 residing in the 30 selected study villages in Wajir. The participants for the baseline survey will be approximately 1,500 girls between aged 11 to 14 (~500 per arm). In addition, in each household, the parent/guardian who provides consent for the girl to participate in the survey will also participate in a short interview on the household characteristics (1,500 parents/guardians in Wajir).

  All girls between the ages of 11 and 14 during the time of the survey, residing in study villages will be listed from the household listing above and households will be randomly selected for the baseline interview. In households with more than one eligible girl, only one will be interviewed.

- ☐ All eligible girls who consent to the interview will be interviewed at baseline. Once the survey is complete, villages will be randomly assigned to study arms during a public lottery. Once randomization is completed, girls, households and community members will be invited to participate in the various components of the programmes, based on their assigned study arms. Mentors and other programme staff will visit the girl in her home and discuss the benefits of the programme with both the girl and her parent/guardian. They will then invite the girl to participate in the programme, obtain the necessary consents and follow-up with the girl to ensure that she has enrolled in programme activities.

b. Research Protocol

- ☐ The baseline survey will be conducted between March and April 2022, before intervention activities take place. This period was chosen so that the intervention can start at the end of April which is the start of the 2022 school year (delayed because of COVID-19).
- ☐ Due to the sparse geography in Wajir, the research team will arrive in a village and use 1-2 days to complete the household listing. Immediately following they will spend the next 2-5 days completing the baseline survey.
- ☐ Trained interviewers will be grouped into teams of 5-8, each team with a supervisor to provide directly quality assurance at the time and location of interviewing. The data manager and study coordinator will be in the field during data collection, reviewing the quality of the surveys on a daily basis, addressing trouble areas, and sending the data to the investigators on a daily basis for review. Once respondents have been randomly selected, interviewers will visit households to conduct the interview with selected respondents. If the respondent is not present at the household on the day of the

interviewer visit, the interviewer will pay at least three visits on different time schedules to the household in order to locate and interview the selected respondent, similar to the procedure used in the Demographic and Health Surveys (DHS). No replacement will be undertaken, so as not to bias the sample toward 'stay-at-home' respondents. Before the surveys are conducted, informed consent will be obtained from parents/guardians of girls, and from girls themselves. Parental consent will not be required from emancipated minors (e.g. married girls) and girls of the age of 18 or older. To the extent possible, interviews will be conducted in a private area, with visual and auditory privacy.

- ☐ Adolescent girls will be interviewed by female interviewers
- ☐ Survey instruments (see Annex 3) will be implemented by electronic data capture: Computer-Assisted Personal-Interviewing (CAPI) on tablet computers. CAPI is a process of data capture in which the interviewer reads the question from a computer screen and enters the participant's response directly into a handheld or tablet device.

c. Risks and Benefits to Subjects

RISKS

- ☐ Primary ethical concerns of this study include a) that participation in the study may put the respondent at risk of increased violence or psychological trauma related to recounting violent or traumatic experiences, and b) that this study includes minors, below the age of 18. However, we believe that this risk in minimal and the benefits outweigh the risks. The WHO has produced ethical guidelines related to interviewing respondents on gender based violence; Population Council and FHI have produced ethical guidelines related to interviewing children and adolescents. Both volumes will be drawn upon to ensure that the most ethically sound research is conducted that protects the respondents and minimized harm, including psychological trauma. In addition, interviewer training will include sessions on research ethics and protection of subjects. All questions asked in the survey have been previously asked of similarly aged adolescent girls in this setting with no adverse effects.
- ☐ This study includes sensitive questions that might possibly cause adolescents to experience stress or anxiety. However, the elements of this survey have been used in other settings with girls of similar ages and circumstances with no evidence of distress. The information obtained through these questions is critical for understanding the relationship between education, marriage, economic assets, and gender norms. This study will make significant contributions to scientific knowledge and provide guidance for program managers and policy-makers as they design scalable interventions to improve the lives of adolescent girls.
- ☐ This study will include minors below the age of 18. In accordance with the UN Convention on the Rights of the Child (1989), which has been ratified by Kenya, a minor is defined as a person who has not reached the age of 18. As children, these participants are vulnerable and unable to make decisions about study participation without the consent

of a parent or guardian. Generally, there are no more than minimal psychological and health risks for the subject participating in the study. We will obtain signed permission from parents or guardians of all minors.

- ☐ Due to the fact that we will interview the same respondents at baseline and endline, personal identifying information will be collected and maintained from participants. While this information will be stored separately from the completed questionnaires, there is a minor risk of breach of confidentiality.
- ☐ There is a minimal risk of COVID-19 infection, however steps will be taken to minimize those risks.

BENEFITS

- ☐ Participants will have the opportunity to experience mainly indirect benefits from the study, in the sense that the information they are providing will directly inform the development of the interventions to prevent violence improve health, increase economic assets and promote education. Participants in Wajir will directly benefit through the interventions that will be implemented in their communities or that they will participate directly based on their assigned study arm.
- ☐ Our experience in previous youth studies in the East African region suggests that many youth benefit from the research experience through sharing their experiences with others and being given the opportunity to express themselves. Youth respondents from prior studies in Ethiopia, Kenya, Zimbabwe, and South Africa often describe that people have rarely shown an interest in them or asked their experiences and opinions prior to the interview experience. Respondents may benefit from the experience of being given a platform to express themselves and recount their ideas and experiences. Results from their participation will also be shared with government, private, and NGO organizations, which will inform future programs and improve nuanced and context appropriate programs for adolescent girls.

d. Steps to Minimize Risks

- ☐ To minimize the risk of adolescents not being able to provide informed consent, we will also obtain written consent from a parent/guardian in addition to the girl's assent. Girls will only be allowed to participate in the survey if their parents agree and they also assent.
- ☐ To minimize the risk of psychological trauma a respondent can skip any question and/or end the survey at any time.
- ☐ To minimize the risk of psychological trauma, all girls who report traumatic events will be referred to local partner organizations that have gender-based violence response services, including psycho-social counseling, medical services and legal services. Contact

details will be available to provide to respondents upon request.

- ☐ To minimize the risk of loss of privacy, data will be collected using electronic data capture (tablets) and will be stored on password-protected computers at the Population Council office.
- ☐ Only the research team will have access to this information. The team of programmers will sign a Non-Disclosure Agreement regarding all information stored in the server.
- ☐ To minimize the risk of COVID-19 infection: 1) interviewers and respondents will wear masks, 2) hand sanitizers will be distributed and 3) the interviews will be conducted outside or in large, well-ventilated halls. A risk mitigation plan will be prepared and approved prior to the commencement of data collection. All research will be conducted within the county regulations for in-person research if available.

e. Confidentiality

- ☐ All interviews will be conducted in private, in a physical space in which other study participants cannot hear the questions or participant responses.
- ☐ All data collected as part of this project will be kept under lock and key at the Population Council offices in Nairobi, and stored in a secure facility. All electronic data will be stored on password-protected computers and back up files will be encrypted and stored on secure media. Computers, filing cabinets and related research equipment/facilities that could reveal identifying information will be only accessible to authorized research staff. The consent forms, along with identification information, will be kept separately so that names cannot be linked to the behavioral information collected during the study. Computer printouts and related documents will be disposed of properly. Research assistants and other study personnel will be educated on the importance of confidentiality. All reasonable efforts to ensure confidentiality is not breached will be made.
- ☐ Records will be kept throughout the life of the study and will be kept for up to 10 years afterwards to allow researchers to follow-up with the girls for future survey rounds if external funding is obtained.
- ☐ No identifying information will be included in any reports or papers.
- ☐ Data collected in this study may be deposited and made publicly available to other researchers through the Population Council's Girl Innovation, Research, and Learning (GIRL) Center Adolescent Data Hub. The study team will de-identify data, including all names, addresses, and indirect identifiers, before depositing it in the Adolescent Data Hub. GPS coordinates will not be included in deposited data. The GIRL Center will conduct additional checks to confirm that all identifiable data are removed. If identifiable information are found, the GIRL Center will either remove or anonymize the identifiable data. Respondents will be informed about the possibility of data sharing as part of the informed consent process. The GIRL Center's procedures for de-identifying data are attached (Annex 5).

f. Compensation

- ☐ The participants will receive a small reimbursement for participation in the survey, in the amount of KES 200 (USD $2).

g. Informed Consent Process

- ☐ Before the study commences, permission for the study will be obtained nationally by obtaining a research permit from the National Council of Science and Technology in Kenya. We will also seek local IRB approval from the AMREF Ethical & Scientific Review Committee. Study coordinators will also make courtesy calls to local government officials, including the District/Sub-County Commissioner, the District/Sub-County Officer, and the chiefs in the selected sub-locations. The study team will work with village elders to identify areas in the community.
- ☐ Written informed consent will be obtained prior to all data collection activities by the interviewer in a private setting. Following established informed consent protocols, each respondent will be provided a thorough explanation of the purpose of the study, the privacy and confidentiality of their responses, and the process and extent of participation. The consent form will be read aloud by interviewers to the respondents, whereupon the respondent will be asked if they agree to participate. Before the interviewer records the consent, the respondent will be asked if they have any questions or concerns about the study, which will be recorded by the interviewer.
- ☐ As part of the Population Council's monitoring program, the subject will be asked to acknowledge the possibility that an interview may be requested by a representative of the Population Council to determine if informed consent occurred. If an interview is requested, the subject will have the option of accepting or declining the interview.
- ☐ If the girl is under 18 years of age, written informed consent from a parent or guardian will be obtained prior to the interview. Written assent from the girls will also be obtained separately for the interview. For those 18 and older and for married girls, who are considered to be emancipated minors, informed consent for the interview will be obtained only from the girl.
- ☐ All face-to-face interviews (FTFI) will take place in a physical space in which other study participants cannot hear the questions or participant responses.

8. Data Collection Activity 4: Endline Survey

a. Subject Population

- ☐ The sample will include all girls who participated in the baseline survey, as well as a parent/guardian. Girls will be located and asked to participate in the second interview.

b. Research Protocol

- ☐ The endline survey will be conducted between April and May 2023.
- ☐ The procedures and locations are the same as for the Baseline Survey described above.

c. Risks and Benefits to Subjects

- ☐ The risks and benefits include those described in the Baseline Survey section above.

d. Steps to Minimize Risks

- ☐ The steps to minimize risks are the same as for the Baseline Survey described above.

e. Confidentiality

- ☐ The steps to ensure confidentiality are the same as for the Baseline Survey described above.

f. Compensation

- ☐ The participants will receive a small reimbursement for participation in the survey, in the amount of KES 200 (USD $2).

g. Informed Consent Process

- ☐ The informed consent procedures are the same as for the Baseline Survey described above.

8. Data Collection Activity 5: Qualitative Data Collection

a. Subject Population

- ☐ The study population is girls who participated in the Baseline Survey and participants of community dialogues, community health workers, teachers and key stakeholders. In each of the three rounds of qualitative data collection a total of 10-15 girls and 15-20 community members/key stakeholders from three study villages (one per arm) will be purposively selected to participate in in-depth interviews.
- ☐ Adolescent girls will be purposively sampled from the quantitative respondents for in-depth interviews and stratified by demographic and other characteristics that could influence study outcomes. For community dialogue members and all key stakeholders, purposive sampling will be used to recruit participants based on pre-identified target profiles in collaboration with implementing partners and local leadership.

b. Research Protocol

- ☐ The first round will be conducted between June and August 2022, during the second school term of intervention implementation. The second round will be conducted between November and December 2022, during the third school term of intervention implementation. The third round will be conducted between April and May 2023 – after the intervention has been completed and in conjunction with the endline survey. The study sample will be different, but the samples will be selected using the same method as in the first round. The timing of the qualitative data collection periods are meant to provide key process check-ins during the intervention to allow for course correction and to help interpret the results of the quantitative evaluation.
- ☐ Once participants are identified, trained interviewers will visit them in their homes or places of work, review the consent forms and conduct interviews in a private area, with visual and auditory privacy. Interviewers will follow in-depth interview guides that will provide the main questions and possible probes to elicit in-depth responses. For in-depth interviews, each respondent may be visited over two to three rounds of interview, progressively covering more sensitive topics on successful visits. This technique is valuable in promoting candour during the interview process, particularly on sensitive topics. In particular, respondents, at times, change their description of experiences on the third visit.
- ☐ All interviews will be tape recorded and transcribed verbatim. The data analysis of the transcribed data will consist of multiple and iterative readings of the resulting transcripts as well as coding of emergent themes using ATLAS.ti or a similar qualitative analysis software. Qualitative findings will complement and contextualize findings from quantitative survey through triangulation and mixed method approaches.

c. Risks and Benefits to Subjects

RISKS

- ☐ The risks are the same as those described above for the Baseline Survey, including the risk of increased trauma related to recounting violent or traumatic experiences and the participation of minors.
- ☐ There is an additional risk of loss to privacy due to the tape-recording of interviews.
- ☐ There is a minimal risk of COVID-19 infection, however steps will be taken to minimize those risks.

BENEFITS

- ☐ All participants will benefit from the research experience through sharing experiences with others and being given the opportunity to express themselves by providing information that will be used to guide future programs.

d. Steps to Minimize Risks

- ☐ To minimize the risk of adolescents not being able to provide informed consent, we will also obtain consent from a parent/guardian.
- ☐ To minimize the risk of psychological trauma, all girls who report traumatic events will be referred to local partner organizations that have gender-based violence response services, including psycho-social counseling, medical services and legal services.
- ☐ To minimize the risk of loss of privacy, respondents will be asked not to state names or give other identifying information on the recordings. The digital recordings will be stored on password-protected computers at the Population Council office, and will be identified using a serial number. They will not contain any identifying information.
- ☐ To minimize the risk of COVID-19 infection: 1) interviewers and respondents will wear masks, 2) hand sanitizers will be distributed and 3) the IDIs will be conducted outside or in large, well-ventilated halls. A risk mitigation plan will be prepared and approved prior to the commencement of data collection. All research will be conducted within the county regulations for in-person research if available.

e. Confidentiality

- ☐ Steps to ensure confidentiality are the same as those described for the Baseline Survey, above.
- ☐ Recordings will be destroyed at the end of the study period.
- ☐ No identifying information will be included in any reports or papers.

f. Compensation

- ☐ Participants will receive a small compensation for their participation in the qualitative study. Adolescent respondents will receive KES 200 compensation for their participation in the study. Adult in-depth interview respondents will receive compensation in the amount of KES 500. Government employees will receive compensation in line with government circular outlining compensation for these activities.

g. Informed Consent Process

- ☐ The informed consent process is the same as that described for the Baseline Survey above. Consent from parents/guardians and participants will be obtained prior to conducting in-depth interviews. Consent forms will inform the respondents that the interviews will be recorded, and that the information will be transcribed, stored and analyzed without any identifying information.

8. Data Collection Activity 6: Monitoring Data

a. Subject Population

- ☐ The study population is 1) all girls who participate in the safe space groups (~1500 girls) 2) all adults who participate in the community dialogues (~1500 adults).

b. Research Protocol

- ☐ Monitoring data will be collected throughout the intervention period.
- ☐ Regular monitoring data is critical for two main reasons: 1) using attendance data in real time is a critical programme management tool that allows for quality control of programme implementation and programme staff can identify areas that have low attendance, are off track in the programme timeline, etc. and make adjustments quickly; and 2) group attendance data can be merged into the longitudinal quantitative data described above through a unique serial number for each programme participant – this will allow for a dose-response analysis which will provide information on the relationship between level of exposure to a programme and level of impact. Consequently, these data will both facilitate programme implementation and supplement the quantitative analysis.
- ☐ For safe spaces groups, girls' attendance and topics covered during group meetings will be tracked by program mentors using a mobile application. Field staff will input attendance and participation data on mobile phones and upload it to the system. Site coordinators, implementing partners and the research team will be able to examine the progress of the implementation using these data as well as visually view graphs of attendance per girl, group, community, intervention package, among other monitoring outcomes. This database will highlight problem areas much faster than using attendance registers filled in by hand that need to then be transported to an office, entered into a system, and then analysed.
- ☐ Information on community dialogues participation will also be tracked by facilitators using a mobile app like the one described above. This will include attendance, topics covered, and objectives achieved.
- ☐ Cash transfer payments will be monitored by tracking the distribution and receipt of payments by project beneficiaries.

c. Risks and Benefits to Subjects

RISKS

- ☐ The collection of monitoring data will not increase risk for girls because their anonymity will be maintained using a unique ID, and no identifying information will be included in data provided by the financial institution.
- ☐ There is a minor risk of loss of privacy due to the collection of contact information for tracking purposes.

BENEFITS

- ☐ Participants will have the opportunity to experience mainly indirect benefits from the study, in the sense that the information they are providing will directly inform the development of scalable interventions to improve the lives of adolescent girls. Participants in Wajir and in intervention sites in Nairobi will directly benefit through the interventions that will be implemented in their communities or that they will participate directly based on their assigned study arm.

d. Steps to Minimize Risks

- ☐ To minimize the risk of loss of privacy, data will be collected using biometrics and mobile phones or electronic data capture and will be stored on password-protected computers at the Population Council office. In addition, no identifying information will be included in the data provided by the financial institution.

e. Confidentiality

- ☐ Steps to ensure confidentiality of monitoring data are the same as those described for the Baseline Survey, above.

f. Compensation

- ☐ The participants will not be paid for the collection of monitoring data.

g. Informed Consent Process

- ☐ After the completion of the baseline survey and randomization to study arms, girls and their parents/guardians will be invited to participate in the program and informed about the intervention activities and the types of monitoring data that will be collected as part of the intervention. Both parents/guardians and girls will be asked to sign consent/assent forms for program participation, that includes collection of monitoring data as described above. A separate form will be developed for each arm to describe the interventions/monitoring activities unique to each arm (i.e. education attendance, group attendance and account transactions).

8. Data Collection Activity 7: School Enrollment Data

a. Subject Population

- ☐ The study population is all girls and boys 5-14 years old residing in the 30 study villages. This list will be derived from the household listing (see above). We are including

younger school aged children to be able to assess effects on enrolment of all children in the household.

b. Research Protocol

- ☐ School enrolment data will be verified three times throughout the life of the study – once per school term for the 2022 school year.
- ☐ School enrolment data will be used for two key purposes: 1) to determine eligibility for cash transfers and in-kind incentives and 2) track overall levels of school enrolment among 5-14 year olds in the study villages.
- ☐ Data collectors will visit the school administrator once per term with the enrolment register and confirm which students are enrolled.

c. Risks and Benefits to Subjects

RISKS

- ☐ The collection of monitoring data will not increase risk for girls or boys because their anonymity will be maintained using a unique ID, and no identifying information will be included in data provided by the financial institution.
- ☐ There is a minor risk of loss of privacy due to the collection of contact information for tracking purposes.

BENEFITS

- ☐ There is no direct benefit to the school administrators.

d. Steps to Minimize Risks

- ☐ To minimize the risk of loss of privacy, data will be collected using electronic data capture and will be stored on password-protected computers at the Population Council office.

e. Confidentiality

- ☐ Steps to ensure confidentiality of monitoring data are the same as those described for the monitoring data above.

f. Compensation

- ☐ The participants will not be paid for the collection of monitoring data.

g. Informed Consent Process

- ☐ After the completion of the baseline survey and randomization to study arms, girls and their parents/guardians will be invited to participate in the program and informed about

the intervention activities and the types of monitoring data that will be collected as part of the intervention. Both parents/guardians and girls will be asked to sign consent/assent forms for program participation, that includes collection of monitoring data as described above. A separate form will be developed for each arm to describe the interventions/monitoring activities unique to each arm (i.e. education attendance, group attendance and account transactions).

9. Data Management

Survey instruments will be implemented by electronic data capture using Computer-Assisted-Telephone-Interviewing (CATI) on tablet computers. The study coordinator and data manager will check all completed questionnaires for completeness and accuracy. Data will be exported into STATA for further internal consistency checks and analysis. There are no paper-based records of any kind to be stored or destroyed.

Electronic data will be collected and stored on secure tablet computers with multiple layers of security, requiring log-in at the computer and application level. The data will be backed- up daily on external media, encrypted and stored in a secure environment. No personal identifying information will be included with the participant's survey responses. The file that links participants to their responses will be stored in a password protected computer and available only to study investigators and coordinators.

All qualitative interviews will be tape recorded with the permission of the participants. No personal identifying information other than the participant IDs will be included on the recordings. All taped conversations will be transcribed in the language of the interview and the transcripts will then be translated into English; only the participant's ID will be included on the transcripts. A separate electronic file (Microsoft Excel) will be used to link the quantitative and qualitative data. Security and backup procedures for the electronic data produced for the qualitative data will follow the same protocols as discussed above.

Within one-year of data collection de-identified quantitative survey data will be made publicly available via the Adolescent Data Hub.

10. Training and Qualifications of Personnel

Quantitative female survey interviewers with at least a diploma or Bachelor's degree will be recruited. Supervisors with considerably more research experience will be recruited to oversee interviewers. Qualitative interviewers will have a university degree (preferably Masters Degrees in Anthropology and Sociology) and have previous experience conducting qualitative research. The Council will make use of the female data collectors and team leaders who have been part of AGI-K since 2015 and have been extensively trained and vetted over the years.

All interviewers will attend a ten-day training on the details of the survey instruments. Training will include an item by item review of the research instruments, mock interviews and a practice interview done outside the study area. There will also be training on child protection, COVID-19 mitigation protocols and the referral process. Interviewers will be grouped into teams of 5-8, each team with a supervisor to provide directly quality assurance at the time and location of interviewing. Supervisors will attend the training as well as an additional one-day training devoted to supervision, data quality, and troubleshooting issues in the field. Finally, the data manager and study coordinator will be in the field during data collection, reviewing the quality of the surveys on a daily basis, addressing trouble areas, and sending the data to the investigators on a daily basis for review.

11. Instrument Development

The instruments were/will be developed by the study investigators based on previous AGI-K surveys, study outcomes and indicators to be tested and gaps in the literature. The household listing tool was developed based on previous household listing tools used in AGI-K and other studies of adolescent girls in Kenya. The quantitative survey for girls will cover topics such as: household socio-demographic characteristics; schooling history; education attainment: social assets and networks, self-efficacy, financial literacy, savings and livelihoods, marital and child-bearing aspirations, birth history, reproductive health knowledge, comprehension in local language and English; excerpts from official mathematics assessments multiple standards (grades); and cognitive testing. The endline survey will include additional questions to measure exposure to the study interventions or other programs in the community. The household background survey was developed using questions from the Kenya Demographic and Health survey on household assets and living conditions. Other questions were added from previous tools used in the Kenyan context. The purpose of this tool is to collect background information that the girls might not be privy to. The tool also includes some questions on gender norms that will be used to assess changes attributable to the community-level intervention over time. The surveys will be translated into Somali. The surveys will be pilot-tested with similarly aged participants prior to the start of data collection and revised based on feedback from interviewers before data collection begins.

Qualitative data will be collected to provide a better understanding of the causal mechanisms and pathways identified using the quantitative analysis. It is expected to provide an in-depth explanation of what worked and why. Through this data, we will also learn how each intervention directly or indirectly impacted the individual girl as well as the household members and community at large. Furthermore, the data will highlight the strengths and weaknesses of the intervention implementation. Qualitative instruments will be developed by the study investigators in collaboration with the implementing partners. They will be pre-tested in communities within the study regions that were not selected as study sites and revised based on feedback before interviewers begin data collection. To ensure that the research is culturally sensitive, interviewers at both sites will speak the local languages and will be familiar with the local culture.

12. Annexes

Annex 1 – Informed Consent Forms – Formative Assessment and Baseline Survey
Annex 2 – HH Listing
Annex 3 – Baseline Survey
Annex 4 – Ethical Training Certificate: Karen Austrian and Faith Mbushi
Annex 5 – GIRL Center Data Sharing Guidelines

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